Consumers Power Company

Designated Original
RLP.

James W Cook
Vice President - Projects, Engineering and Construction

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

July 24, 1981

Director of Office of Inspection
and Enforcement
Att Mr Victor Stello
US Nuclear Regulatory Commission
Washington, DC 20555

MIDLAND PROJECT - ALAB-106 MONTHLY REPORT FOR JUNE 1981
DOCKET NOS 50-329 AND 50-330
FILE: 0.4.6 SERIAL: 12061

In accordance with Condition of Memorandum and Order ALAB-106, dated March 26, 1973, and Amendment No 1 of the Midland Plant Construction Permit, enclosed are ten copies of the following documents written or closed during the month; Bechtel Nonconformance Reports, sheets from the Bechtel Nonconformance Report Log; Bechtel Quality Action Requests; Bechtel Management Corrective Action Reports; Bechtel Quality Assurance Findings; Bechtel FLAGS Quality Action Requests; Babcock & Wilcox Reports of Nonconformity; Babcock & Wilcox Inservice Inspection Nonconformance Reports; Consumers Power Company Nonconformance Reports, Audit Finding Reports, Quality Action Requests, Corrective Action Reports, and Management Corrective Action Reports.

James W. Cook

WRB/lr

CC: JGKeppler, USNRC Region III (w/enc)
RJCook, USNRC Resident Inspector, Midland Site (w/enc)

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1/10

8108030371 810724
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Q PDR

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CPCo

Open NCR's

6/81

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Priority: 05 Start Up: 2EAC Trend: C-3 AI: S828 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-068
Midland 1 and 2	2HBC-1.9-S-619-1-10	Service Water System	2. DATE: 6/4/81
9. SERIAL NUMBER:	10. ORG. CONCETTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: NA
NA	Bechtel Constr/QC	Containment No 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Specification 7220-M-342(Q) states: "Parts or subassemblies that will have inaccessible surfaces after assembly shall be in their final cleanliness condition as far as possible before assembly or installation."

Specification 7220-M-204, Section 5.1.6, states: "All welds shall be identified with the welder's identifying symbol. Welds where more than one welder does welding shall be stamped by each welder."

Contrary to this, PQC/IR P-1.10, 619-1-3, Log No 13708, Rev 1, Act 2.4(E), cleanliness at F.W. 54, 55, 65 and 66 reference hanger was not signed off as being inspected, but welds are complete, thus, leaving the cleanliness of area indeterminate. Also, at F.W. 54, 55, 65 and 66, no welder identification exists.

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird SKT/CAC
JWCook MPQAD Routing
TCCooke(2)
JFFirlit
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart
GKWandling

13. QA RECOMMENDATION FOR PART CA:

1. Provide assurance that F.W. 54, 55, 65 and 66 meets Bechtel program cleanliness requirements. (ESmith)
2. Provide traceability and evidence of welder who performed above welds and apply appropriate identification on pipe as per procedure. (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1), Containment No 2, QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: July 3, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.9. Schaefer 6/8/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.: NA	27. PMO SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF ORG. RESP. FOR C/A:
30. PAB/CONST. SIG. AUTH. DMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-1-1-068

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown--to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCURMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown--to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend: C 2 SUS: 2 EAC Priority: 05 AI: S835

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-069
Midland	8" 2HBC-110-H26	Pipe Support	2. DATE: June 8, 1981
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF ESV: N/A
N/A	Bechtel Construction and Quality Control	Containment 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Spec. 7220-M-326- 5.1.1 states: "To the greatest extent possible, pipe supports shall be installed in strict compliance with the component pipe support design sketches/drawings."
Contrary to this: Sketch 2-619-2-28 shows to field cut grating to suit spring canister. However, grating and canister have no clearance in some areas.

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird
JWCook
TCCooke(2)
MADietrich
JFFirlet
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart
GKWandling
MPQAD Route
SKT/CAC

13. QA RECOMMENDATION FOR PART CA:

1. Rework grating to give adequate clearance for spring canister. (LEDavis)
2. Reinspect and document. (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1 Cont. #2 QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaeffer 6/9/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DISP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: N 01-1-1-06

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown: to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown: to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend: C3 SUS: 2EAC Priority: 05 AI:S836

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-070
Midland	8" 2HBC-90-H1	Pipe Support	2. DATE: 6/9/81
9. SERIAL NUMBER: N/A	10. ORG. CONNECTING NO: Bechtel Construction and Quality Control	11. AREA/LOC. OF NC: Containment 2	3. DATE OF REV: N/A
			4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

PQCIR P-2.10, Paragraph 3.2 states: "Prefabricated Vendor supplied functional components. Prefabricated components such as spring canisters and shock suppressors are to be identified with the applicable pipe support identification number."

Contrary to this, identification of hanger is illegible.

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird GKWandling
JWCook MPQAD Routing
TCCooke(2) SKT/CAC
MADietrich
JFFirlet
GSKeeley
WDGreenwell
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART QA:

1. Apply appropriate hanger identification number as per procedure and document. (ESmith) (LEDavis)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1 Cont. 2 QA

15. IS PROCESS QA REQUIRED: YES [Y] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [Y]

19. IF YES, DATE & TIME OF REPORT TO NRC: N/A

20. IF YES, WHO MADE REPORT TO NRC: N/A

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATOR:

23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH QA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: M. J. Schaffer 6/9/81

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMG SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
N/A	N/A	N/A	
30. FAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ACCEPT. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART QA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS QA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-D7(

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:	45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend: C3 SUS: 2BGD Priority: 05 AI: S837 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-071
Midland	2CCB-24-H14	Pipe Restraint	2. DATE: 6/9/81
9. SERIAL NUMBER:	10. ORG. CONNECTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Construction and Quality Control	Containment 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Specification 7220-M326, Section 4.2.4 states in part, "No welding across the flange or cover plate of an existing building framing structural beam shall be done without prior approval of project engineering. . . . ."
Contrary to this, welds do exist on flange of existing beam at item # 1 (typical), 4 places.
PQCIR P2.10, Para 3.2 states, "Prefabricated Vendor supplied functional components. Prefabricated components such as spring canisters and shock suppressors are to be identified with the applicable pipe support identification number."
Contrary to this, no identification exists.

5. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith

INFO COPY:
WRBird GKWandling
JWCook MPQAD Routing
TCCooke(2) SKT/CAC
MADietrich
JFFirlet
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1. Rework hanger to conform with procedure, reinspect and document. (ESmith) (LEDavis)
2. Apply appropriate hanger identification as per procedure and document.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X] (LEDavis) (ESmith)

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1 Cont. 2 QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A
22. NCR ORIGINATOR BY: [signature]	23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH CA COMPLETION DATE
24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaffer 6/9/81	

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - S.T. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-07

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK #1 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

Trend: C-2 Priority: 5 SUS: Indeterminate AI: S839 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-072
Midland 1 and 2	1-CCB-33-1	Vent from Make-up Pump 1P-58A to Drain 1" Line	2. DATE: 6/8/81
9. SERIAL NUMBER: N/A	10. ORG. CONCERNING NC: Bechtel Construction	11. AREA/LOC. OF NC: Auxiliary Building 599' Elev. Room 216	3. DATE OF REV. N/A
			4. FILE NO: 16.3.4

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A. Specification 7220-M-342, Para 6.4.2 states, "Surfaces cleaned to Class D requirements shall be inspected visually to ensure freedom from gross foreign materials and removal of cleaning media." Contrary to the above statement, the 90° elbow and welds between Field welds 7 & 8 have a coating of grout.

B. Specification 7220-M-203, Para 5.2.1 states, "Care shall be taken in handling and installation of piping to prevent surface damage." Spec. 7220-M-204, Para 5.1.4 states, "A weld is defective and shall be repaired if it does not meet the acceptance standards of each applicable non-destructive examination." Contrary to Spec. 7220-M-204, field weld joint 17 which joins 1CCB-33-1 and valve No. 363 has received damage both to the valve body & weld.

13. QA RECOMMENDATION FOR PART QA:

1. Restore piping to its required cleanliness. (LEDavis)
2. Inspect piping for damage, repair as necessary and document. (LEDavis)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

5. DISTRIBUTION

ACTION COPY:
LEDavis

INFO COPY:
WRBird GKWandling
JWCook MPQAD Routing
TCCooke(2) SKT/CAC
MADietrich ESmith
JFFirlet
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1), Auxiliary Bldg., 599' Elev., Room 216, Hold for QA Clearance

15. IS PROCESS QA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY: Greg R. Anderson	23. WRITTEN REPLY REQUIRED BY: 6/29/81 TO ESTABLISH QA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: Michael J Schaeffer 6/8/81

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART QA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS QA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-072

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK #1 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:	45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6A27-0 Trend: J-3 Priority: 3 SUS: Indeterminate AI: S838 PAGE 1 OF 4

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-073
Midland 1 & 2	Purchase Order M-93Q	125 Ton Auxiliary Building Crane	2. DATE: 6/15/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NO:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Procurement	Bechtel Warehouse #1 Midland Site	4. FILE NO: 16 3 2

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

See Attachment.

5. DISTRIBUTION

ACTION COPY:
RMCollins

INFO COPY:
WRBird GKWandling
JWCook MPQAD Routing
TCCooke(2) SKT/CAC
MADietrich LEDavis
JFFirlet
WDGreenwell
GSkeeley
BJMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1) Obtain proper documentation from vendor.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1. On trolley HOLD FOR QA CLEARANCE

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS N/ REPORTABLE PER PART 21: YES [ ] NO [ ]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY: Bruce R. Anderson	23. WRITTEN REPLY REQUIRED BY: July 15, 1981 (VENDOR) TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: W.J. Schaefer 6/15/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMG SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DSP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/ DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-073

38. QA ASSESSMENT OF ROOT CAUSE(S):

The subject documentation package was reviewed with insufficient detail by Receiving and Quality Control Departments.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [X] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1) Review similar packages for similar problems and document, and;
2) Provide corrective action for problems uncovered as a result of the above review.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A review of the EDERER, Inc, Quality Assurance Documentation Package for the 125-ton X-SAM trolley assembly, Purchase Order No. 7220-M-93-BC, Revision 9, was performed. Bechtel Specification 7220-M-93 was used as the reference document. The following nonconformances are referenced by EDERER purchase order number, heat number, document package section, and item number if applicable.

Section III: MATERIALS AND NDE DOCUMENTATION

Item No. H.1.4.K, PO No. 77615: The purchase order and Certificate of Compliance cannot be located in the document package.

Item No. H.1.4.K, PO No. 77685: The Certificate of Compliance fails to identify the correct part number as listed on the purchase order, and purchase order items one through ten have not been included on the Certificate of Compliance.

Item No. H.7.8, PO No. 78640: The Certificate of Compliance does not contain the identical part numbers as the purchase order.

Item Nos. H.8.1 through H.8.6, PO No. 76722: The purchase order is missing from the document package, therefore, the Certificates of Compliance that are included with the document package referencing the applicable purchase order number cannot be identified to an item number.

Item No. H.10.3, PO No. 77975: The purchase order is identified as a critical item, however, it does not request any documentation, and the documentation package does not contain the Certificate of Compliance.

Item No. 0.3, PO No. 78638: The Certificate of Compliance references the incorrect SAE grade number for the bolts and nuts. Purchase Order item numbers 8, 10, 11, 14 and 15 are incorrectly identified with grade 5 when the correct identification should be grade 8.

Item No. H.5.1.C: The purchase order requires the material to be ASME-A-36, 1/4-inch plate, however, the Material Test Report states that the material is ASME-A-36, 1/2-inch plate.

Item No. N/A, PO No. 77973: This purchase order is for an overspeed switch. The purchase order indicates that this switch is a critical item and the PO requires a Certificate of Compliance which was included. The switch is not identified on the critical items list.

SECTION IV: INSPECTION REPORTS

Item I: Electrical Data

Purchase Order No. 76444: This order contains seven items which require a Certificate of Conformance. However, only the motor has a Certificate of Compliance, the other six items do not.

SECTION V: SHOP NO-LOAD TEST

Procedure Number 260, Revision 4, Number 261, Revision 1:

Test Section 260.8, Trolley Electrical Drawing Number missing.
Test Section 260.10, Hoist Electrical Drawing Number missing.
Test Section 260.10.g: This test step was not performed during the final testing and was identified in the test procedure to be completed at the final installation testing. However, other than what was stated in the test section, no other written or visible means, such as an instruction tag, was used to document this required testing.
Test Section 260.1.4: This paragraph requires that the "Requirement Acceptance Criteria" column be completed with the applicable drawing number or Acceptance Criteria. This has not been done in the test procedure. In only one case has this column been completed.

SECTION VII: DEVIATION OR NONCONFORMANCE REPORTS

EDERER Nonconformance Report Numbers 25, 26 and 33 approved changes in material types without approval from the customer.

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

8427-0 Priority 1 Trend B-2 SUS Indeterminate AI S870

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-81-1-074
Midland 1 & 2	1C23 2C23	Control Panels	2. DATE: 6/15/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Construction	659' Elevation	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Bechtel Drawing 7.20-E-47, Section 5.6 outlines the internal separation requirements between Class IE and Non-class IE circuits in Control Panels.

Contrary to the above requirements, Non-class IE Cable 2NQ184F has been routed into Control Panel 2C23 through slot 2NJ118 and is cyrapped less than 1" from a flexible conduit containing class IE wiring.

In addition, it was observed in 1C23 that several cables (#81, 17, 7, 9, 4 and 6) routed from the enclosed wireway in the top of the Panel to TB's 23-N2 and 23-N4 in the bottom (Continued page 3)

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird
CAChien
JWCook
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood
MPQAD Routing

13. QA RECOMMENDATION FOR PART CA:

Adjust the routing of cables in 1C23 and 2C23 such that the separation requirements between Class IE and Non-class IE cables is maintained.

DESIGN/PROJECT ENG. DT/POSITION REQUIRED [X] NOT REQUIRED [ ]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 2 1C23 & 2C23

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 6/29/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: 6/15/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEME

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A VERIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-074

38. QA ASSESSMENT OF ROOT CAUSE(S):

Termination crews are not routing Non-class IE cabling in accordance with the requirements of Drawing E-47.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Train/retrain all termination crews in the separation requirements of E-47 especially where Control Panels are concerned. Notify MPQAD when such training has been completed. (LEDavis)

Comply with QAR-F-050 request. (Revise PQCI E-3.0) (ESmith)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK #1 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

12. CONTINUED

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

do not maintain the required 1" clearance with flexible conduit containing Class IE wiring. This same condition exists in 2C23.

Similar instances of this type of deficiency were noted by NRC during their inspection April 27 through May 1, 1981. As a result QAR F-050 was written.

Consumers Power Company
QA27-40

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AI: S857

Priority: 04 Trend: K-2 Start Up: 1PEA, 2PEA, 1PEB & 2PEB

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-075
Midland 1 and 2	1C111, 1C112, 2C111 and 2C112	Engineering Diesel Control Panel	2. DATE: 6/12/81
9. SERIAL NUMBER: NA	10. ORG. COMMITTING NC: BPCo Proj Engineering BPCo Procurement	11. AREA/LOC. OF NC: 634' 6"	3. DATE OF REV: NA
			4. FILE NO: 16.3.1 & 16.3.2

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Bechtel Specification 7220-M-18(Q) dictates the design requirements and applicable codes and standards for material and construction of Emergency Diesel Generator Control Panels.

Contrary to the above specification, numerous deficiencies in these panels were observed during a recent overinspection of vendor workmanship by MPQAD. Attachment #1 lists the deficiencies found with references.

5. DISTRIBUTION

ACTION COPY:

LHCurtis
*RMCollins

INFO COPY:

WRBird
CAChien
JWCook
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood
MPQAD Routing

13. QA RECOMMENDATION FOR PART CA:

1. Provide direction to Bechtel Construction for rework of the panels, so they meet the requirements of Specification 7220-M-18(Q)
*2. Evaluate and determine reportability per 10CFR50, Part 21.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [X] NOT REQUIRED [ ]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: Four (4) tags, Elevation 634' 6", DG Building, Bays 1, 2, 3 & 4

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [ ] *	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: *	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: Donald C. Hawkins	23. WRITTEN REPLY REQUIRED BY: July 1, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaffer 6/12/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DISP.: NA	31. SIG. OF TEST GROUP ACKNOWL. CONDITION: NA	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT
NCR SERIAL NUMBER: M-01-9-1-075

38. QA ASSESSMENT OF ROOT CAUSE(S):

Equipment was not properly surveyed at the vendor by the Bechtel SQR and/or all the specifications and standards that applied to this equipment were not properly reviewed/ imposed by the SQR or Bechtel Engineering.

39. ACT _ ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:
DESIGN [X] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [ ]
OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Provide written assurance, with justification, that the Emergency Diesel Generator Control Panels are built to all applicable specifications and will perform in service as required by the original design. (Project Engineering)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Specification 7220-M-18(Q), Revision 6, Paragraph 5.2.9.c:

A.1 control circuit wiring shall be color coded as follows:

IE Channel 1A or 2A = red
IE Channel 1B or 2B = green
Non-IE wiring = black

Color-coded wiring may be gray with color-coded stripe.

Contrary to the above, there is blue and white jacketed cable used in the panels--not color coded according to the above.

IEEE Standard 384-1977

Paragraph 5.65--Non-Class IE Wiring--Non-Class IE wiring not separated from Class IE or associated wiring by the minimum separation distance (determined in 5.6.2) or by a barrier shall become associated circuits and shall be subject to the requirements of 4.5.

Paragraph 5.6.2 states in part: "Where the control switchboard materials are flame retardant and analysis is not performed, the minimum separation distance shall be six inches (15.24 cm). In the event that the above separation distances are not maintained, barriers shall be installed between redundant Class IE equipment and wiring.

Contrary to the above, Class IE and non-IE wiring is not separated by the required minimum distances (with or without barriers) inside the cabinets. There are some terminal blocks (TS-1, TS-2 and TS-3) that have both color striped cable (Class IE) and no stripe cable (Class non-IE) terminated to the same points. (NOTE: Nuts used on States blocks appear to be steel, not cadnium-plated brass as supplied by States Company.)

Specification 7220-G-5, Revision 1

Paragraph 5.9

Design, material selection and workmanship shall be such as to result in a neat appearance outside and inside, with no welds, rivets or bolt heads apparent from the front faces of the boards and with all exterior surfaces true and smooth. Rivets shall not be used to attach any equipment to the control boards.

Contrary to the above, wire supports are riveted to the cabinet.

Paragraph 6.12

Unshielded wire shall be single conductor, soft drawn copper, ASTM Class B stranded. Wire size shall be No 14 AWG minimum, except annunciator wiring, which shall be No 18 AWG minimum. Insulation shall be IPCEA S-28-357 600 volt type TA, TBS or SIS, rated for 90C conductor temperature, and shall pass the IPCEA S-61-402 flame resisting test.

Contrary to the above, wiring used on undervoltage relays is No 18 AWG, and the following cables are not easily apparent if they meet the above IPCEA requirements:

A. Vulkene Supreme SIS

B. E-52305H-SIS

C. White jacket cable (appears to be teflon)

D. Delco-Link SIS E-18321

E. ITT surprenant EXANE

F. American Wire and Cable Company Machine Tool wire 105°C 600V oil resistant to 40°C CSATEW

G. Blue jacket cable (used as jumpers on contractors)

Paragraph 6.14

All exposed wiring within the boards shall be formed neatly with minimum radius bends, with wires grouped in packs using non-metallic wiring cleat or bands and with groups substantially supported along the board. Wires shall not be spliced or tapped between terminal points. Plastic wiring duct of a type approved by the Buyer may be used.

Contrary to the above, several cables are not tied down and are run outside existing wireways.

Paragraph 6.2 - Terminal Blocks

6.21

Terminal blocks shall be States Company type NT rated 600 volts and shall be of the screw type to accommodate the lugs described in paragraph 6.23 herein. A marking strip shall be provided for each block, permanently marked with Buyer's scheme number in accordance with requirement drawing 7220-E-50. Other appropriate terminal blocks may be acceptable for electronic circuit applications if the Seller deems them advantageous.

Contrary to the above, marking strips are not provided for all terminals.

Paragraph 6.22

Spare terminals equal in number to ten percent (10%) of the active terminals shall be provided. Arrangements of spares shall be such that each board or terminal block group will have its approximate proportion of spares. Buyer's wires connected to one wiring point, a sufficient number of terminals jumpered together shall be provided to allow connection of only one wire per terminal on the outgoing side of the terminal blocks. Any common connections required shall be provided for by the Seller on the side of the blocks nearest the board face. Not more than two wires shall be connected to each point on the board face side. Terminal blocks shall be grouped by services and segregated according to circuit voltage and field destination. Terminal blocks shall be mounted on the boards not less than ten inches from the bottom of the board.

Contrary to the above, there are terminations with more than two wires (or lugs) connected to a common point (as many as six on some).

Paragraph 6.23

All wire terminations except coaxial, triaxial, thermocouple and resistance termperature detector cables (which will be wired direct to instruments), shall be made with solderless ring-tongue compression-type connectors which firmly grip the conductors. Burndy, "Hylug" type "YAV" for No 9 and smaller and Burndy "YA-L" for larger wires are preferred. When installed, the indentation shall face out and a small gap shall separate the wire insulation from the lug barrel so it is evident by visual inspection that the wire, and not the insulation, is properly clamped in the lug.

Contrary to the above, many terminal lugs are insulated and are not of the correct type or size (some have been modified to fit).

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend B-3 Priority 1 SUS 1&2SFB AI S-873

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-076
Midland 1 & 2	1B-91A&C, 1B-92B&D 2B-91A&C, 2B-92B&D	CRD Primary AC Breakers	2. DATE: 6/18/81
9. SERIAL NUMBER: N/A	10. ORG. CONCERNING NC: Bechtel Construction	11. AREA/LOC. OF NC: 674' 6"	3. DATE OF REV: N/A
			4. FILE NO: 16.3.4

12. AS IS NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

Vendor Instruction Manual M1.04-35, Section 2, and Bechtel Maintenance Form F10-160 specify CRD Breaker storage area should be maintained within 30% and 60% humidity range. Components should be covered with plastic fire retardent material.

Contrary to the above, on 6/15/81 both Units 1 & 2 CRD Breaker areas were found to be in the 80% to 90% humidity range. In addition, the Unit #2 area had no dehumidifiers operating, the plastic fire retardent covering was torn, the top was open, and there was a pool of water on the floor, apparently due to leakage through a temporary ceiling cover. Unit #1 area was in a similar condition, except there was no water or temporary cover.

13. QA RECOMMENDATION FOR PART QA:

1. Clean up the area.
2. Replace or repair the fire retardent covers. (LEDavis)
3. Install desiccant inside breakers.
4. Install operable dehumidifiers. (5) Seal temporary roof.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [X] NOT REQUIRED [ ]

5. DISTRIBUTION

ACTION COPY:
LEDavis

INFO COPY:
WRBird
CAChien
JWCook
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood
MPQAD Routing
DANott
MJSchaeffer
TCCooke(2)

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 8, on CRD Breakers QA Hold

15. IS PROCESS QA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW: --

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 7/2/81 TO ESTABLISH QA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaeffer 6/19/81

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. IMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART QA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS QA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER M01-9-1-076

38. QA ASSESSMENT OF ROOT CAUSE(S):

Temporary ceiling not sealed allowing leakage.
Dehumidifiers were inadvertantly deenergized.
Covers were torn during cable installation and termination.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1) Evaluate and determine if the excess humidity will have any detrimental effects on the life or operation of the CRD AC Breakers.
2) Determine how maintenance requirements were allowed to deteriorate to such an extent in these two areas. Inform MPQAD of results of this investigation and what actions are being taken to prevent its recurrence.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Priority: 5 Trend: 0-3 SUS: N/A AI: S876

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-03-81-1-078
Midland 1 & 2	(See attached sheet)	Field Construction Procedures	2. DATE: 6/18/81
9. SERIAL NUMBER: --	10. ORG. COMMITTING NC: B&W Construction Co	11. AREA/LOC. OF NC: ---	3. DATE OF REV: N/A
			4. FILE NO: 16.4.4

12. 'AS IS' NONCONFORMING CONDITION VERSUS 'AS REQUIRED' CONDITION WITH REFS:

As Required: In B&WCC QC Procedure Manual, Section 9-QPP-102, Paragraph 6.6 states: "The original issue of the FCP shall indicate on page one the latest revision number of all drawings, procedures and specifications referenced in the FCP. A change of the revision number on any of the documents listed on page one does not require a revision of the FCP unless the reference document requires a change in the work sequence.

When the field copy of the FCP is released, the Field Project Engineer shall review the revision numbers listed and update as needed by indicating the latest revision number and initialing (Cont'd page 3)

13. QA RECOMMENDATION FOR PART CA:

Revise the FCP's listed in Block 7 to list the current revisions and incorporate any hardware changes in the body of the FCP.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

5. DISTRIBUTION

ACTION COPY:
LEDavis

INFO COPY:
WRBird TCCooke(2)
CAChien
JWCook
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood
WJLee
MPQAD Routing

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

---

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC:
20. IF YES, WHO MADE REPORT TO NRC:	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED:

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY:	24. SUPERVISOR'S SIGNATURE/DATE:
Alan R. Gart	July 6, 1981 TO ESTABLISH CA COMPLETION DATE	RE Whitaker 6/18/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
	N/A	N/A	
30. FAB/CONST. SIG. AUTH. DISP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
	N/A	N/A	

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M03-8-1-078

38. QA ASSESSMENT OF ROOT CAUSE(S):

1. Field Project Engineering not reviewing for revisions to applicable drawings.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN ☐ FABRICATION ☐ CONSTRUCTION ☐ PROCUREMENT ☐ INSPECTION ☐

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1. Review all open FCPs for requirements in B&W QC Procedure Manual, Section 9-QPP-102, Paragraph 6.6.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

7. NONCONFORMING PART NO.:

Unit #2 FCP-293, Rev 1
Unit #1 FCP-251, Rev 1
Unit #1 FCP-303, Rev 2
Unit #1 FCP-25, Rev 4
Unit #1 FCP-38, Rev 2

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

and dating the change. When a document change is received, it shall be the Field Project Engineer's responsibility to update all field copies of the FCP in the same manner.

As is: The FCPs listed in Block 7 do not list and/or incorporate the most recent revision to the applicable drawing.

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0

Priority: 02 Trend: 0-3 SUS: Indeterminate AI: S-878 PAGE 1 OF 3

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-079
Midland 1 & 2	Exam. Report 8821	B&WCC QC Mag. Part Report	2. DATE: 6/22/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: NA
NA	B&WCC QC	659' El. Unit 2 Contain.	4. FILE NO: 16.4.4

12. AS IS NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

Section 5.1 of B&WCC Magnetic Particle Examination Procedure 9-MT-101-Rev 3 requires that "any cracks and linear indications" found in the inspection zone be reported on the Magnetic Particle Inspection Report, Attachment 1, Rev 2. Contrary to the above, while performing NDE on the Unit 2 RPV Service Structure, Mag. Part. Inspection Report #8821 did not document indications found while performing that examination.

5. DISTRIBUTION:

ACTION COPY: LE Davis

INFO COPY:

WRBird DATaggart
REBlackinton JLWood
CAChien MPQAD Route
JWCook
TCCooke(2)
JRDecker
MADietrich
BWMarguglio
DBMiller
JARutgers
MJSchaeffer

13. QA RECOMMENDATION FOR PART CA:

*a) B&W should evaluate this nonconformance and determine reportability per 10CFR50.55(e).

b) Reexamination of entire welded areas (FCP64, Sequence 090) and

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [X] NOT REQUIRED [ ] (Cont'd on page 3)

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [ ] *
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: *
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: *

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 7/2/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M J Schaeffer 6/22/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMG SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF VEND CAUSE ACKNOW. CONDITION: NA	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-9-1-079

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown; to be determined

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown; to be determined

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Cont'd

13. QA RECOMMENDATION FOR PART CA:

b) adjacent metal as per 9-MT-101 Rev 3.
c) Provide documented evidence to preclude reoccurrence of the above stated deficiency in block 12.

TREND: M-4

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QASF-0 Trend: M-2 Priority: 05 Start Up: 2BBB AI: 877 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-03-9-1-080
Midland	2CCA-25-U-1 #1	In-core Instrument Tube Weld	2. DATE: 6/23/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Procurement	Unit #2 In-core Instrument Piping	4. FILE NO: 16.3.2

12. AS IS NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

ASME Section III, Paragraph NB-5320 (1974) states in part: "Welds that are shown by radiography to have any of the following types of discontinuities are unacceptable:
(a) Any type of crack or zone of incomplete fusion or penetration."

Contrary to the above requirement, weld number 2CCA-25-U-1, #1 has incomplete fusion as shown on B&WCC RT No. FCP332, Seq. 110B, #2 (Unit #2).

5. DISTRIBUTION

ACTION COPY:
RMCollins

INFO COPY:
WRBird MPQAD Routing
CAChien MJSchaeffer
JWCook
TCCooke(2)
RDDavis
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood

13. QA RECOMMENDATION FOR PART CA:

1) Cut out joint 2CCA-25-U-1 Weld #1 and reweld.
2) Radiograph new joint 2CCA-25-U-1 Weld #1 for conformance to ASME Section III, Paragraph NB-5320.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA

15. IS PROCESS CA REQUIRED: YES [ ] NO [X] IF NO, ENTER JUSTIFICATION BELOW:

Isolated occurrence; review of 15 other B&W radiographs (approximately 30 welds) associated with FCP 332 revealed no rejectable weld defects.

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY:	24. SUPERVISOR'S SIGNATURE/DATE:
R D Davis	8/6/81 TO ESTABLISH CA COMPLETION DATE	M. J. Schaeffer 6/23/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. IMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M03-9-1-080

38. QA ASSESSMENT OF ROOT CAUSE(S):

Original acceptance radiographs (ITT-Grinnell, for Mercury Co, ID# 2CCA-25-U1, Weld #1) were justifiably accepted. Due to source-defect orientation (defect long axis perpendicular to radiation beam), the defect appears as an acceptable "root condition". However, the B&WCO radiographs of the same area (Unit 2, FCP 332, Seq. 110 B, #25) were made with an ideal source-defect orientation (defect long axis parallel to radiation beam), clearly showing a cross sectional view of the defect, proving incomplete fusion.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN ☐ FABRICATION ☐ CONSTRUCTION ☐ PROCUREMENT ☐ INSPECTION ☐

OTHER NA

41. QA RECOMMENDATION FOR PROCESS CA:

None required.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

NA

43. METHOD OF PROCESS CA VERIFICATION:

NA

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0

Trend: C-3 Priority: 06 SUS: 2 ABA AI: S881

6. PROJECT NAME:	7. NONCONFORMING PART NO.	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-081
Midland	26" ELB-10-H33	Variable Spring Support Hanger	2. DATE: 6/26/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Construction and Quality Control	Containment 2 Elevation 696'	4. REF NO: 16.3.4. & 16.3.6

12. AS IS' NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

1) PQCI 7220-P2.10, 3.3.B states: "Minimum thread engagement shall be that amount necessary to engage all the threads of the nut or threaded component. Hanger load devices which have internally threaded adjustable components are to have sight holes provided to verify adequate thread engagement where required." Contrary to this, at sight holes of both spring canister support rods, no threads are visible.

2) Spec. 7220 M-326, 5.1.1 states: "To the greatest extent possible, pipe supports shall be installed in strict compliance with the component pipe support design sketches/drawings." Contrary to this, location of hanger weld attachments on pipe do not conform to sketch (2-632-1-38) (See attached drawing.)

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird JLWood
CAChien MPQAD Route
JWCook
TCCooke(2)
MADietrich
BWMarguglio
DBMiller
JARutgers
FHSchulmeister
MJSchaeffer
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1) Rework hanger threaded components to conform with specifications and procedures. Record & Document. (ESmith & LEDavis)

2) Provide technical justification to use as is or rework to conform with design sketch (2-632-1-38). Record & Document.) (ESmith & LEDavis)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1. Containment 2 QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: N/A

20. IF YES, WHO MADE REPORT TO NRC: N/A

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:

23. WRITTEN REPLY REQUIRED BY: 7/9/81 TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: Michael J Schaeffer 6/26/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMG SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
N/A	N/A	N/A	
30. FAB/CONST. SIG. AUTH. IMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-08.

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown - to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown - to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-6 Priority: 6 Trend: O-2 SUS: N/A AI: S885

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-03-3-1-082
Midland 1 & 2	2E2-1 & 2I2-2	Hydraulic Snubbers	2. DATE: 6/26/81
9. SERIAL NUMBER:	10. ORG. CONCERNED NO:	11. AREA/LOC. OF NC:	3. DATE OF REV:
22651 & 22649	Bechtel	Warehouse #2	4. FILE NO: 16.3.4

12. AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

As required: In PHD-522-2MBI Rev 4, Snubbers shall not be stroked at a rate greater than 0.15 in/min and/or retracted at a rate greater than 1 in/min.
As is: Snubber pistons are not restrained and snubbers have been stroked and/or retracted at an unknown rate, leaving the snubber in an indeterminate state.

5. DISTRIBUTION:

ACTION COPY:

LEDavis

INFO COPY:

WRBird MPQAD Routing
CAChien
JWCook
TCCooke(2)
MADietrich
ARGort
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood

13. QA RECOMMENDATION FOR PART CA:

Bechtel to consult ITT on status of snubbers.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION, & TYPE OF HOLD TAGS APPLIED: 2/ Warehouse #27 Hold for disposition

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC:
20. IF YES, WHO MADE REPORT TO NRC:	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED:

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: July 13, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE:
Alan R. Gort		RE Whitaker 6/26/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
N/A			
30. FAB/CONST. SIG. AUTH. DISP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. OF DISPOSITION DISP.:
		N/A	

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M03-3-1-

38. QA ASSESSMENT OF ROOT CAUSE(S):

Improper handling of snubbers in Warehouse #2.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Bechtel to provide Warehouse Personnel with proper handling procedures.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK #1 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

CPCo

Closed NCR's

6/81

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-4-9-052
Midland 1 & 2	NA	Structural Steel	2. DATE: 5-23-79
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: CLOSED: 6-8-81
NA	Bechtel Const - C Quality Control - A,B,C	Structural Steel Erection Unit #1 Elev 659'	4. FILE NO: 16.3.4, 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

The Note in the Special Instructions on PQCI/IR C-2.10 "Structural Steel Erection" states, "Reference criteria shall be reviewed daily and changes in a revision recorded on the IR. Evidence of this review shall be documented on the inspection assignment record".

A. Contrary to these requirements, the Inspection Assignment Record for PQCI C-2.10-C383-78 "Structural Steel Erection Unit #1 Elev 659' (Elev 640' to 659'):

(1) Did not indicate "inactive" in Column 6 while the PQCI/IR was in the "inactive" file.

(Contd on Page 3)

5. DISTRIBUTION

ACTION COPY:

~~LADreisbach~~
MADietrich

INFO COPY:

~~WBBarclay~~	DBMiller
WRBird	~~WGMoring~~
TCCooke	~~JFNowgon~~
~~JLCorley~~	~~RASimanek~~
~~RHermeston~~	DATaggart
~~GHowell~~	JWCook
~~DRJohnson~~	DDaniels
GSKeeley	LEDavis
BWMarguglio	JFFirlit
~~PAMartinez~~	WDGreenwell
~~JMilandrit~~	JARutgers
ESmith	SKT/CAC

MPQAD Routing

13. QA RECOMMENDATION FOR PART CA:

See Page 3.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [X] NOT REQUIRED [ ]

14. HOLD TAGS APPLIED: YES [X] NO [ ]

NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1) Bechtel Hold Tag applied to beam 715-B1A

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: Donald E Horn	23. WRITTEN REPLY REQUIRED BY: 6-8-79 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: Donald E. Horn/5-23-79

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

See attached response, MAD-1788 dated January 7, 1981.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMD SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
NA	NA	NA	See MAD-1788 of 1/7/81
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
MAD-1788 of 1/7/81	NA	NA	RC Hizey

34. METHOD OF PART CA VERIFICATION:

Reviewed PQCI/IR 2.10 plans to verify revisions had been incorporated as required. Verify reinspection of bolted connections per A.2, A.3, B.2 and C.1. No further action is required.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART A PROCESS CA COMPLETE)
MAD-1788 of 1/7/81	RC Hizey 6-8-81	RC Hizey 6-8-81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECT ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-4-9-052

38. QA ASSESSMENT OF ROOT CAUSE(S):

A (1) - (3), B & C unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

For items A and B, the QCEs were not following Bechtel QC Administrative Instruction No 1, nor the Bolting Inspection Record Instruction. The root cause for item C is indeterminate (MAD-1788).

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] C PROCUREMENT [ ] INSPECTION [X] A, B, C

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

A (1) - (3), B & C unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

For items A and B, training of the QCEs presently working in this area is documented in 10M QCFM-6092, dated May 29, 1979. Emphasis was placed on the proper implementation of the inspection assignment records. There is no process corrective action for item C because it is considered to be an isolated case (MAD-1788).

43. METHOD OF PROCESS CA VERIFICATION:

Reviewed 10M QCFM-6092 and found it adequately showing evidence of training of QCEs to Administrative Instruction No 1, Revision 1. Also reviewed QCFM 8183, dated July 7, 1980, for training of personnel in the use of the PQCI C-2.10 plan. No further action is required.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:	45. PROCESS CA COMPLETION VERIFIED BY/DATE:
MAD-1788 dated 1/7/81	6-8-81

NCR SERIAL NO: M-01-4-9-052
DATE: 5-23-79
DATE OF REV: NA
FILE NO: 16.3.4, 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

A. (2) Did not indicate the plan being used 10/16/78, 11/13/78 and 3/9/79 while QC performed torque testing of bolts on these days.

(3) Did not indicate the updating of drawing C-383 with FCR C-1673 (sent to QC 9/6/78), FCN C-27 (sent to QC 9/18/78), Revision 5 (sent to QC 11/7/78), and FCN C-50 (sent to QC 12/1/78).

B. Bolting Inspection Record 11-C-2 of 3 for PQCI/IR C-2.10-C383-78 did not indicate the number of bolts torque tested.

C. Section 2.2b of PQCI/IR C-2.10-C383-78 states in part, "A hardened washer shall be placed under the turned member (nut or bolt head) for all A325 connectors..." Contrary to this requirement, at the connection of beams 715-B1A and 711-B4 one washer is missing.

13. QA RECOMMENDATION FOR PART CA:

The letters and recommended corrective action given below correspond to the nonconforming conditions listed in block 12.

A. (1) Implement the Note in the Special Instructions for the PQCI/IR C-2.10 plans.

A. (2) & (3) Compare the criteria used against the correct criteria and document this review and any conflicts. If there are any conflicts, re-inspect the work performed on 10/16/78, 11/13/78 and 3/9/79 and document the re-inspection. Review all open C-2.10 plans for similar problems and document the results/re-inspections in the same manner.

B. 1. Determine the number of bolts torque tested on this Bolting Inspection Record. If this cannot be determined, retest this connection and correct the documentation to read accordingly.

2. Review all open C-2.10 plans for similar problems with the Bolting Inspection Reports and document this review. If similar problems exist, implement B. 1. above.

C. 1. Re-inspect all completed connections scoped on this plan for similar problems and document the re-inspection.

2. Get Engineering disposition on the problem identified in this NCR and any found in the re-inspection.

File 16.3.4 Dkt

Bechtel Power Corporation

ATTACHMENT TO NCR M-01-4-9-052

Post Office Box 2167
Midland, Michigan 48640

January 7, 1981

CONSUMERS POWER COMPANY
RECEIVED
JAN 8
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Consumers Power Company
P.O. Box 1963
Midland, MI 48640

Attention: D. M. Turnbull

Job 7220 Midland Project
CPCo NCR M-01-4-9-052
Revised Complete Response
MAD-1788 Action Item 791

Dear Mr. Turnbull:

Reference: a) W. L. Barclay IOM QCFM-6092, dated May 29, 1979

The subject CPCo NCR identified the following nonconformances on PQCI/IR C-2.10-C383-78:

Item A Special Instructions to PQCI/IR C-2.10 "Structural Steel Erection" were not followed.

Item B Bolting Inspection Record did not indicate the number of bolts torque tested.

Item C One washer was missing at the connection of beams 715-B1A and 711-B4.

Part Corrective Action (Block 25): For items A & B; a reinspection was completed and no new discrepancies were noted. For item C, the missing washer was installed.

Root Cause (Block 39): For items A & B; the QCE's were not following Bechtel QC Administrative Instruction No. 1, nor the Bolting Inspection Record Instruction. The root cause for item C is indeterminate.

Process Corrective Action (Block 42): For items A & B; training of the QCE's presently working in this area is documented in reference a). Emphasis was placed on the proper implementation of the inspection assignment records. There is no process corrective action for item C, because it is considered to be an isolated case. A final "walk-down" will be accomplished when all the structural steel scoped on PQCI/IR C-2.10 is complete, which would have identified such items.

The results of Quality Control's review of this area is summarized below:

A. (1) RESPONSE:

The QCE using the C-2.10-C-383-78 PQCI has been retrained in Bechtel QC Administrative Instruction No. 601 Rev. 2. Emphasis was placed on the proper implementation of the Inspection Assignment Records. See QCFM-6092, dated May 29, 1979, for training documentation. This will correct the discrepancies noted in reference a) above part A(1).

(2&3)

The Inspection Assignment Record (I.A.R.) was not updated on 10/16/78, 11/13/78, or 3/9/79 to indicate usage of the IR for inspections on these dates.

A reinspection using the latest reference material in comparison to the actual in-place configuration of the structural steel revealed no discrepancies.

Changes made to Drawing C-383, that were not indicated on the I.A.R. or the IR reference criteria were picked up at a later date and were used as acceptance criteria. A further review of document control records, in comparison to our I.A.R. and IR reference criteria, indicate that all inspections other than those days listed above were made to the latest available inspection criteria.

FCR C-1673, to Drawing C-383, changed the connection of a W24X120 beam to an E-5 embed at the refueling canal wall. This change is now completed and accepted. FCN-27 substituted a W24X68 beam for a W18X50, because of material availability. FCN C-50 added a W12X40 beam between columns 16 and 17 at Elev. 658'9 1/2". The beam has been installed and the bolted connections inspected and verified by Quality Control.

It should be noted that although the bolted connections for a particular beam have been checked and accepted on a given day, the final acceptance for beam size and configuration is not verified until a final walkdown of all the erected structural steel scoped on a particular IR is accomplished just prior to closing the plan.

A total of 46 open structural steel inspection records were reviewed for problems similar to those listed above. Fifteen of the IRs reviewed had all reference criteria correctly updated, and the I.A.R. were correctly used each time the plan was used in the field for bolting inspections. Eleven IRs have no bolted connections in the scope of the work and the I.A.R. shows the correct reference criteria was updated when the plan was used. Eleven IRs have had very little work performed on them, no bolting inspections have been made. The remaining nine IRs reviewed have various discrepancies similar to those found in C-2.10-78 as described above.

The largest single discrepancy found in these nine IRs appears to be in the use of the I.A.R.s. Reference criteria was often not recorded on the I.A.R.s, but many times was updated on the reference continuation sheets attached to the IRs.

We have compared criteria used against criteria indicated on the I.A.R.s and IRs for the nine IRs effected. In many cases, a re-inspection was required to verify that changes had been incorporated properly into field erected steel. In some instances a review of PQCIR C-1.20, Pre-Placement of Concrete, for structual welding inspection records and embed continuation sheets was necessary for verification of embedded items.

As indicated on the following pages, a great majority of the changes, to criteria, were not applicable either to the scope of the work area or to the scope of the inspections required by the PQCI. Our re-inspection and review shows; that some field erected steel and no indeterminate items.

IR-C2.10-77

Containment No. 2 Elev. 659' I.A.R. did not indicate the plan being used on 4/3/78, 4/24/78, 8/11/78 and 10/25/78, although bolting inspections were performed on those dates.

IR-C-2.10-57

Containment No. 2 Elev. 640' I.A.R. did not indicate the plan being used on 12/21/77, 1/3/78, 3/20/78, and 12/4/78, although bolting inspections were performed on those dates.

IR-C-2.10-65

Containment No. 1 Elev. 640' I.A.R. did not indicate the plan being used on 1/12/78, 2/22/78, 5/2/78, and 8/15/78, although bolting inspections were performed on those dates.

IR-C-2.10-56

Aux. Bldg. Elev. 685' I.A.R. did not indicate the plan being used on 4/25/78, 7/13/78, and 7/25/78, although bolting inspections were performed on those dates.

IR-C-2.10-49

Aux. Bldg. Rigid Frame Elev. 704' I.A.R. did not indicate the plan being used on 2/20/78, 2/23/78, 2/27/78, 3/1/78, 3/2/78, 3/4/78, 3/31/78, 4/11/78, 4/24/78, and 7/28/78, although bolting inspections were performed on those dates.

IR-C-2.10-45

Aux. Bldg. Elev. 674' I.A.R. did not indicate the plan being used on 3/24/78, 3/31/78, and 8/23/78, although bolting inspections were performed on those dates.

IR-C-2.10-61

Containment No. 2 Elev. 626' I.A.R. did not indicate the plan being used on 9/17/77 and 12/16/77, although bolting inspections were performed on those dates.

IR-C-2.10-72

Aux. Bldg. Partial 614' I.A.R. did not indicate the plan being used on 12/29/77, although bolting inspections were performed on that date. There were no changes to criteria on that date.

IR-C-2.10-68

Aux. Bldg. Elev. 687' I.A.R. did not indicate the plan being used on 9/12/77 and 9/13/77, although bolting inspections were performed on those dates. There were no changes to criteria on those dates.

B. 1&2) PROBLEM STATEMENT:

Bolting Record 11-C-2 to PQCI/IR C-2.10-78 did not indicate the number of bolts torque tested. Review all open C-2.10 PQCI/IRs for similar problems and retest connections as needed and correct documentation.

B. (1) RESPONSE:

The 15 bolted connections identified on bolting Inspection Record Sheet 11-C-2 have been re-inspected to verify minimum tension. In accordance with activity 2.5 of the PQCI/IR C-2.10, two bolts or a minimum of 10% were checked in each connection, with no failures being found.

(2)

A review of the open C-2.10 PQCI/IRs has indicated similar discrepancies with "in-complete forms". The most common inconsistency the lack of an entry in the column indicating the number of bolts in the connection. Other discrepancies included the exclusion of entries for the size and type of bolts installed. No further occurrences of the problem identified in part "B" of CPCo NCR M-01-4-9-052 were encountered. Re-inspections were made as necessary to correct the documentation.

Form, QCF-3, Bolting Inspection Records, will be revised to provide for a Level II review for completeness.

C. PROBLEM STATEMENT:

Contrary to PQCI/IR C-2.10 requirements, one washer in the connection of beam 715-B1A to 711-B4, was found missing.

RESPONSE:

(1)

All accessible bolted connections for the elevation 659' deck in Containment No. 1 have been re-inspected for proper placement of washers under the turned member. No discrepancies were found.

(2)

The primary function of a washer is to provide a non-galling surface under the member turned during tightening. A re-inspection of the connection mentioned above indicated that the nut installed was only "snug-tight". No reworking of the steel surface beneath the nut is required. See A.I.S.C., Structural Joints using ASTM Bolts, Section C-5. Quality Control originally inspected and accepted that particular connection on sheet 10Y 20F3 on 10/16/78. Quality Control has verified the re-torquing of the referenced nut and bolt.

A total of 2,627 fasteners were re-inspected for missing washers. None of the connections were missing washers. Based on the above information, Quality Control feels that this was an isolated case and that no further action is required.

A final "walk-down" will be accomplished when all the structural steel scoped on the PQCI/IRs C-2.10 are complete.

I believe these responses address all of your concerns expressed in the subject NCR. Should you have additional questions, please contact Mr. R. E. Davis of this office.

Very truly yours,

M. A. Dietrich

M. A. Dietrich
Project Quality Assurance
Engineer

MAD/RED/lcp

cc: W. Bird
B. Marguglio
D. Miller

Start Up System: 2-GMA

Consumers Power Company

NONCONFORMANCE REPORT

PROJECT ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 5

6. PROJECT NAME:	7. DESCRIPTION PART NO:	8. DESCRIPTION PART NAME:	1. NCR SERIAL NO:
Midland 1 & 2	NA	Anchor Bolt Installation	N-01-79-122
5. SERIAL NUMBER:	**10. SUBC. CONTRACT NO:**	**11. AREA/LOC. OF NC:**	**2. DATE: 10-29-79 CLOSED 6/16/81**
NA	Bechtel Construction	Diesel Generator Bldg Bay 2G12 Approx Elev 669'	**3. DATE OF NCR: NA**
			4. REF NO: 16.3.4, 16.3.6

12. DESCRIPTION OF NONCONFORMANCE (USE ADDITIONAL SHEETS IF NECESSARY):

1. Anchor bolts securing the support structure steel for fans 2VV85B and 2VV85D were installed with resulting obliteration of the length code on five of the ten accessible anchors.

2. Further, one of the anchors had an angle of 6^{C}-7^{O}.

3. Also, two of the anchors are installed with less than 6 in. cc.

These conditions do not conform to the following references:

1. Spec C-305 Rev 9, paragraph 3.4 states in part, "Each stud

(Contd on Page 3)

5. DISTRIBUTION:

ACTION COPY:

~~LADreisbach~~
MADietrich

INFO COPY:

MPQAD R.	CAChien
~~WLBarclay~~	DDaniels
WRBird	~~JMilandin~~
TCCooke(2)	DBMiller
~~JLCorley~~	~~WCMoring~~
LEDavis	JARutgers
RHermeston	~~RASimanek~~
~~SHHowell~~	DATaggart
~~DRJohnson~~	ESmith
GSKeeley	JWCook
BWMarguglio	WDGreenwell
	GEagle
	JLWood

13. RECOMMENDATION FOR PART DISPOSITION:
1. Rework/repair per specification/applicable codes.

SUPPLIER/PROJECT DISPOSITION RECEIVED [X] NOT RECEIVED [ ]

14. HOLD TAG APPLIED: YES [ ] NO [X] TAGGED, LOCATION & DATE OF HOLD TAG APPLIED: NA

15. IS PROCESS CONTROL REQUIRED: YES [X] NO [ ] IF NO, EXPLAIN JUSTIFICATION BELOW:

16. NEED TO AFFECT 4-DIGIT ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, NRC NCR REPORT TO NRC: NA

21. IF YES, DATE OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR GENERATED BY: Donald K. Martin

23. NCR DATA ENTERED BY: 11-12-79
TO DISPOSITION COMPLETION DATE:

24. SUPERVISOR'S SIGNATURE/DATE: DK Keating 10-29-79

25. PART OR DISPOSITION, RECTIFICATION & COMPLETION DATE:

See attached.

26. RESPONSIBLE PROJECT ENG. ACTION:	27. NSS ENG. ACTION:	28. RESPONSIBLE ENG. ACTION:	29. ENG. OF REC. ACTION:
N/A	N/A	N/A	See LAD 1255
30. NSS/CONST. ENG. ACTION:	**31. ENG. OF REC. DISP. CONCUR:**	**32. NSS MGR OR PROJ. ENG. ACTION:**	**33. QA ACTION: IS DISPOSITION USE?**
See LAD 1255	N/A	N/A	R.E. Lewo

34. DETAILS OF PART OR RECTIFICATION:

See attached.

35. ENG. OF REC. VERIFICATION OF PART OR DISPOSITION COMPLETION:	36. ENG. VERIFIED PART OR A SEC. NO REMOVAL DATE:	37. QA SIGNATURE/DATE: PART & DISPOSITION COMPLETE:
See LAD 1255 & 1382	N/A	R.E. Lewo 6/16/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-4-9-1

18. (A ASSESSMENT OF ROOT CAUSE(S):)

Unknown, to be determined.

19. (ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):)

See attached.

20. (PROCESS CA INITIATED FROM:)

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

21. (CA RECOMMENDATION FOR PROCESS CA:)

1. Determine root cause for failure of QC to identify nonconformance and take corrective action to preclude repetition.
2. Reinspect those expansion anchors inspected by the individual/group since August 18, 1979. Provide evidence that this is/is not an isolated case. Based on evidence, recommend corrective action to preclude repetition.
3. Determine root cause of nonconforming installation and take corrective action to preclude repetition.

22. (PROCESS CA TO BE TAKEN BY ORG.(S) CITED IN BLOCK 21 & DATE OF COMPLETION:)

See attached.

23. (METHOD OF PROCESS CA VERIFICATION:)

See attached.

24. (ORG. OR ORG. RESPONSIBLE FOR PROCESS CA VERIFICATION COMPLETION:)

See LAD 1255 & 1382

25. (PROCESS CA COMPLETION VERIFIED BY/DATE:)

R. E. Swo 6/16/81

NCR SERIAL NO: M-01-4-9-122
DATE: 10-29-79
DATE OF REV: NA
FILE NO: 16.3.4, 16.3.6

12 "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED CONDITION WITH REFS:

(Contd from Page 1)

1. anchor shall be marked and coded to provide a positive method of identifying the length of the stud anchor after it has been installed".

2. Spec C-305 Rev 9, Appendix A shows a tolerance for the hole angle to be $\pm 3^{\circ}$.

3. Table 4.1 of Spec C-305 Rev 9 shows minimum spacing to be 6 in. cc.

NOTE: A total of twelve (12) anchors were installed. Ten were accessible for inspection. Subsequently, twelve were core drilled and removed. The installation of these anchors was inspected by Bechtel Quality Control.

DATE: 6/16/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

1. All fan support expansion anchors have been removed and reinstalled. Re-inspection was accomplished by QCIR C-1.50-41 completed 5/15/80 (refer to NCR 2970 and LAD-1255).

2. FCR C-2171 to Drawing C-1004, Rev 6, along with subsequent Rev 9 of Drawing C-1004 (Q), Rev 9 now correctly describes the structural connections and anchor spacings actually utilized for the DG Building fan supports. (Refer to NCR 3061 closed 8/27/80 and LAD-1255 and LAD 1382).

3. Length code and C to C spacing of anchors have been resolved by reinstallation/reinspection described in Item #1.

4. Reinspection documented CPCo PIPR C-6B No. 5 dated 7/11/80 identified unsatisfactory retest for test torque of subject expansion anchors. All anchors were reinspected on 5/13/81 with final test torque and reseating of one unsatisfactory anchor accomplished on 5/20/81. Satisfactory inspection and test torque was documented on FIR dated 5/20/81.

5. A review of Quality Control Records has verified that the QCE in question has not performed any other quality verification inspections of expansion anchors installations since August 18, 1979.

34. METHOD OF PART CA VERIFICATION:

Verified retest and reseating of expansion anchors was accomplished and documented by FIR dated 5/20/81.

Verified completion and closeout of QCIR C-1.50-41, NCR 2970, NCR 3061 and Rev 9 of Drawing C-1004.

Verified part corrective action adequacy as addressed in LAD 1255 and LAD 1382.

39. ACTUAL ROOT CAUSE(S):

1. The root cause appears to be the unclear interpretation of when discrepancies should be controlled by use of an open IR or the use of a DR, by the QCE. (Refer to LAD 1255).

2. Because the design drawing did not show any spacing for the referenced expansion anchors, the QCE involved questioned the responsible Field Engineer as to why the center to center spacing of the Table 4.1 criteria was reduced by 50%. It has been determined that the references to Drawing C-147 and AISC standards did not constitute prior approval of Project Engineer. Quality Control originally considered Specification C-305 Table 3.1 criteria met by these references. (Refer to LAD 1255 and 1382.)

3. Identification of concerns was premature in that the installation was not complete and final inspection was not accomplished.

42. PROCESS CORRECTIVE ACTION:

1. Training session on proper method of identifying and documenting deficiencies discovered during construction, testing and documentation was conducted on 1/29/79 for responsible QCEs. (Refer to LAD 1255.)

2. Training session on proper method of obtaining drawing/specification interpretations and clarifications was conducted for applicable QCEs on 1/28/80. (Refer to LAD 1382).

3. Construction has issued directions to field personnel prohibiting the installation of all anchors without mark/coded to provide positive method to identify length of stud anchor after installation. (Refer to IOM 0-2406.)

4. Reinspection of records for other similar activities inspected was accomplished by Item 5, Block 25.

5. Root cause identified in Block 39.

6. Additional training was received by the QCE involved on 11/27/79 per QCFM 7122 on proper methods of controlling nonconforming conditions. Additionally, direction was provided on 12/3/79 on proper utilization of QC Form D12-1. (Refer to LAD 1255).

43. METHOD OF PROCESS CA VERIFICATION:

Verified root cause(s) and corrective actions respectively were completed and adequate.

Verified LAD 1255 and LAD 1382 include retraining of applicable QCEs and other discipline personnel.

Verified IOM O-2406 direction to field personnel for removal of uncoded expansion anchors.

Verified current revisions of Specification C-305 and PQCI C-1.50 provides clear in-process instructions and similar concerns are not recurring.

Start Up System: Indeterminate

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-4-0-049
Midland 1 & 2	NA	Reactor Sump Grid - Structural Steel	2. DATE: 6-18-80 CLOSED 6-30-81
9. SERIAL NUMBER:	10. ORG. CONCERNED: Wiltse & Company Bechtel SQR	11. AREA/LOC. OF NC: Elevation 598' Containment 1 & 2	3. DATE OF REV: NA
NA			4. FILE NO: 16.3.16.7

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

CPCo IE&TV surveillance of Unit 1 and 2 reactor sump area structural steel fabrication indicates the following items of nonconformance:

1) Section B on Drawing C496 specifies that an arrow side only, 1/4" fillet weld be placed on the 1/4" stiffener plates. This weld to be done by the vendor, Wiltse & Co. Contrary to the above, both sides of the 1/4" plate are welded.
2) Section G on Drawing C496 requires the 1/2" x 3 7/8" stiffener plate to have a 5/16" fillet weld all around one side only. Contrary to the above requirement:

(Contd on Page 3)

5. DISTRIBUTION

ACTION COPY:
~~LADreisbach~~
MADietrich

INFO COPY:

~~WLBarclay~~	BWMarguglio
WRBird	~~JDHilendin~~
~~RBCherba~~	DBMiller
JWCook	~~RLRixford~~
TCCooke(2)	JARutgers
~~JLCorley~~	~~RASimanek~~
LEDavis	DATaggart
~~PKHansen~~	CAChien
~~SHHowell~~	JLWood
~~DRJohnson~~	MPQAD Route
~~GSKeeley~~	

13. QA RECOMMENDATION FOR PART CA:

a) Repair all unacceptable welds performed by vendor (Wiltse & Co).
b) Take corrective action as required to preclude and alleviate referenced deviations.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 7-7-80 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: DRKeating 6-18-80

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

All unacceptable welds addressed in NCR have been repaired and accepted by Bechtel QC.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
9/25/80 BPCo Letter LEDavis to LADreisbach	N/A	N/A	See Block 26.
30. FAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ACCEPT. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO DOCUMENT DISP.:
N/A	N/A	N/A	See Block 26.

34. METHOD OF PART CA VERIFICATION:

Review of repairs made on discreptant weldments, and review of Project Engineering's disposition of NCR.

See Block 25.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)
See Block 26.	N/A	6-30-81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-4-0-049

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Unknown, to be determined.

40. PROCESS CA REQUIRED FROM:

DESIGN [X] FABRICATION [X] CONSTRUCTION [X] PROCUREMENT [X] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See Block 26

43. METHOD OF PROCESS CA VERIFICATION:

By receipt of attached memorandum, dated 7/7/80, (from Steve Harvey to M A Dietrich), stating "All unacceptable welds will be repaired using approved repair procedures", and follow-up response, dated 9/25/80, (L E Davis memorandum to L Dreisbach) stating, "All unacceptable welds addressed in the subject NCR have been repaired and accepted by QC."

MPQAD considers the subject closed with no outstanding findings.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:	45. PROCESS CA COMPLETION VERIFIED BY/DATE:
See Block 26	John Dietrich 6-30-81

NCR SERIAL NO: M-01-4-0-049
DATE: 6-18-80
DATE OF REV: NA
FILE NO: 16.3, 16.7

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

2) (Contd)

a) The welding has been accomplished by welding all around both sides on three beam ends out of eight.

b) Vendor print #10282-2 (F7220-C233A-F3103-222-2) indicates the stiffener for Section G should be 3 1/4" x 1/2" x 7" plate and the welds are to be three (3) separate 5/16" fillet weld one side only.

3) A review of construction for the grids for Units 1 and 2 revealed approximately 40 welds with unacceptable undercut, lack of fusion and arc strikes.

MEMORANDUM

TO M. A. DIETRICH LOCATION Q.A.

FROM STEVE HARVEY DATE 7-7-80

SUBJECT Q.A. ACTION ITEM NO. > 328 JOB NO 7220

RESPONSE TO CONSUMERS N.C.R. FILE

M-01-4-0-049

THIS MEMO IS IN RESPONSE TO THE SUBJECT Q.A. RESPONSE REQUEST FOR BLOCK 13, ITEM A, OF CONSUMERS N.C.R M-01-4-0-049

ALL UNACCEPTABLE WELDS WILL BE REPAIRED USING APPROVED REPAIR PROCEDURES OR PER E.C.R. C-2599 WHICH UTILIZES ADDITION STIFF PLATES.

S. Harvey P.E.

MEMORANDUM

TO L. DREISBACH LOCATION

FROM L. DAVIS DATE 9-25-80 19

SUBJECT Q.A. ACTION ITEM # S-328 JOB NO 7220

RESPONSE TO CONSUMERS N.C.R FILE

M-01-4-0-049 · (ATTACHED)

THIS MEMO IS WRITTEN TO ADVISE THAT ALL UNACCEPTABL WELD ADDRESSED IN THE SUBJECT N.C.R. HAVE BEEN REPAIRE AND ACCEPTED BY Q.C.

Paul Rogers 9/25/8

Start Up System: 2ABA

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-4-0-052
Midland Project	2-632-1-17 (2ELB-10-H23)	Hanger	2. DATE: 7-21-80 CLOSED 6/24/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NO:	11. AREA/LOC. OF NC:	3. DATE OF REV: NA
NA	BPCo	NA	4. FILE NO: 16.3.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

1. FSAR, paragraph 10.3.6.1 states in part, "The test methods and acceptance criteria of Subarticles NC/ND 2300 (Fracture Toughness Requirements for Materials) are complied with for materials for Class 2 and 3 components".
2. ASME Section III, Subsection NF, paragraph NF-2311 states in part, "Supports integral with components shall meet the requirements for impact testing stipulated for such components in the applicable Subsection".

Contrary to the above, a review of the Documentation Package (AEO-12150) for the shear lugs that are provided with hanger 2-632-1-17, indicates that there is no evidence impact testing was performed on the subject lugs as required.

13. QA RECOMMENDATION FOR PART CA:

1. Provide impact tested lugs for subject hanger.
2. Review other hangers for similar problems and document.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [ ]

9. DISTRIBUTION

ACTION COPY:
~~LADreisbach~~
MADietrich

INFO COPY:

WRBird	DBMiller
~~RBCherba~~	~~EDNewman~~
JWCook	~~RLRixford~~
TCCooke(2)	JARutgers
~~JLCorley~~	~~RAGinnack~~
LEDavis	DATaggart
~~PKHansen~~	CAChien
~~SHHowell~~	JLWood
GSKeeley	MPQAD Route
BWMarguglio	LRHowell
~~JPMilendin~~	

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [X] 7-29-80

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, WHO MADE REPORT TO NRC: NA

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: SHHowell 7-21-80

23. WRITTEN REPLY REQUIRED BY: 8-6-80 TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: SHHowell 7-21-80

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Based upon information provided in BPCo letter MAD-1820 (dated 5/15/81), and due to an additional review of the code (which changed the earlier interpretation), it has been determined that the subject lugs do not require impact testing. Therefore, the subject lugs are not nonconforming. This NCR is considered closed.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
NA	NA	NA	NA
30. FAB/CONST. SIG. AUTH. IMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
NA	NA	NA	NA

34. METHOD OF PART CA VERIFICATION:

See Block 25.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)
NA	NA	SHHowell 6-24-81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PRODUCTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-4-0-05

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

See Block 25.

40. PROCESS CA REQUIRED FROM:

DESIGN [X] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See Block 25.

43. METHOD OF PROCESS CA VERIFICATION:

See Block 25.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See Block 25.

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

See Block 25.

Start Up System: Indeterminate

Consumers Power Company
QA27-0

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NONCONFORMANCE REPORT

Trend Code K3

AI S-558 PAGE 1 OF 3

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-0-0-089
Midland 1 & 2	Spec C-305 Rev 12	N/A	2. DATE: 12/29/80 CLOSED 6/26/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NO:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Project Engineering	N/A	4. FILE NO: 16.3.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A. EDPI 4.49.1 Rev 4, Para 3.5 requires a specification revision for more than five (5) SCN's and also states the interval between specification revisions not to exceed ninety (90) days if there are unincorporated SCN's. Contrary to the above, specification 7220-C-305 Rev 12 has seven (7) unincorporated SCN's and Rev 12 of subject specification is dated 5/30/80.

B. EDPI 4.49.1 Rev 4, Para 3.1 requires the same preparation, review and approval criteria for SCN's as for Specifications in EDP 4.49. MED 4.49-0 Rev 16, Para 4.3 requires the PQE to review all specifications for completeness, inspectability, compliance to codes, quality considerations, etc prior to approval by the project engineer. Contrary to the above, FCR's such as C-2579, C-2699, C-2761 revise unincorporated SCN's to Spec C-305 and do not receive the same review cycle required by EDP/MED 4.49 as do specification & SCN's.

5. DISTRIBUTION

ACTION COPY:
LHCurtis
R C Hollar

INFO COPY:
WRBird CAChien
JWCook GREagle
TCCooke(2) MPQAD Route
MADietrich RESevo
~~JFFirlit~~
~~CSKeeley~~
~~HPLeonard~~
BWMarguglio
DBMiller
JARutgers
~~SKThuron~~
~~DMTurnbull~~

13. QA RECOMMENDATION FOR PART CA:

Part corrective action will be accomplished by revision 13 of Spec C-305 incorporating subject SCN's and FCR's.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: N/A

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: January 16, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: 12-29-80
R. E. Sevo		

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Responses provided by Project Engineering dated 6/3/81, 4/17/81, 3/5/81 and 1/14/81 with entries in Block 26 respectively are attached.
*NOTE: Correct all references to MED & EDP 6.62 to read 4.62 per telecom RCHollar on 6/17/81.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMC SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
See attached copies of NCRs referenced Block25	NA	NA	RCHollar for LHCurtis
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
NA	NA	NA	R. E. Sevo

34. METHOD OF PART CA VERIFICATION:

See page 3.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)
RCHollar for LHCurtis	NA	R E Sevo 6/26/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-0-

38. QA ASSESSMENT OF ROOT CAUSE(S):

A. Mechanism to initiate specification revision as required by section 3.5 of EDPI 4.49.1 Rev 4 did not function.

B. Project Engineering review cycle for SCN's and specifications does not scope FCR's as described in block 12.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Refer to 6/3/81 response by Project Engineering.

40. PROCESS CA REQUIRED FROM:

DESIGN [X] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [ ]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

1. Project Engineering to review other specifications currently in use for SCN's in excess of five or exceeding the ninety day period as appropriate and based upon this review determine action necessary to assure implementation of EDPI 4.49.1 requirements.

2. Project Engineering to determine necessary level of reviews for FCR's impacting unincorporated SCN's and include directions as applicable in engineering procedures.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

MED 4.62-0 Rev 15, issued on 3/6/81, provided for PQE reviews of one time FCRs and QA reviews of FCRs affecting Q Specifications. Refer to Paragraph 3.4 of MED 4.62-0.

43. METHOD OF PROCESS CA VERIFICATION:

See page 3.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

RCHollar for LHCurtis

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

RESevo 6/26/81

34. METHOD OF PART CA VERIFICATION:

1. Verified Rev 13 of Spec. C-305, dated 12/30/80. Provided incorporation of subject SCNs and FCRs.

2. On 6/24/81, Ann Arbor MPQAE verified documentation of the PQE 10/15/80 survey to include identification of Spec. C-305. Survey scoped Mechanical, Electrical, Civil and Control System documents.

3. Reviewed all responses provided by Project Engineering and signed per Block 26 with the following dates: 6/3/81, 4/17/81, 3/5/81 and 1/14/81. Action taken adequate to close this item.

4. QE survey conducted in October 1980 has some open items with next survey scheduled for second week of September 1981.

35. METHOD OF PROCESS CA VERIFICATION:

1. Verified MED 4.62-0, Rev 15, Paragraph 3.4 issued on 3/6/81 provided for PQE reviews of FCRs considered one time deviations as well as QA review of FCRs affecting Q specifications.

2. Corrective action suggested per Block 38 (Item B) was revised by Project Engineering response dated 3/5/81. EDP 4.49 will be unaffected. However, EDP 4.62 was revised as indicated on Item 1.

TO: D. Turnbull

Consumers Power Company QAPT-40

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NONCONFORMANCE REPORT

09346

Trend Code K3 AI S-558 PAGE 1 OF 2

5. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-C-00099
Midland 1 & 2	Spec C-305 Rev 12	N/A	2. DATE: 12/29/80
9. SERIAL NUMBER:	10. ORG. CONCERNED NO:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Project Engineering	N/A	4. FILE NO: 16.3.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A. EDPI 4.49.1 Rev 4, Para 3.5 requires a specification revision for more than five (5) SCN's and also states the interval between specification revisions not to exceed ninety (90) days if there are unincorporated SCN's. Contrary to the above, specification 7220-C-305 Rev 12 has seven (7) unincorporated SCN's and Rev 12 of subject specification is dated 5/30/80.

B. EDPI 4.49.1 Rev 4, Para 3.1 requires the same preparation, review and approval criteria for SCN's as for Specifications in EDP 4.49. MED 4.49-0 Rev 16, Para 4.3 requires the PQE to review all specifications for completeness, inspectability, compliance to codes, quality considerations, etc prior to approval by the project engineer. Contrary to the above, FCR's such as C-2579, C-2699, C-2761 revise unincorporated SCN's to Spec C-305 and do not receive the same review cycle required by EDP/MED 4.49 as do specifications & SCN's.

5. DISTRIBUTION:

ACTION COPY: LHCurtis

INFO COPY: WRBird, JWCook, TCCooke(2), MADietrich, JFFirlit, GSKeeley, HPLeonard, BWMarguglio, DBMiller, JARutgers, SKThurow, DMTurnbull

MIDLAND 7220 JAN 5 1981 QE

13. QA RECOMMENDATION FOR PART CA:

Part corrective action will be accomplished by revision ~~13~~ of Spec C-305 incorporating subject SCN's and FCR's.

PRINT	ROUTE
DMT	
[illegible]	

R.C. Hollaa B.R. Kappel

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: N/A

MJS / RES

IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

MJS SCI DRG.

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 10 CFR 50.55(e)? YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: N/A

20. IF YES, WHO MADE REPORT TO NRC: N/A

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY: R. E. Lewis

23. WRITTEN REPLY REQUIRED BY: January 16, 1981 TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: 12-31-8 [illegible] for DR Kap

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

This is engineering's complete response to the above NCR and attachment. The response numbers below correspond to the item numbers on the attached "Request For Further Response."

1) Block 39 is complete on this NCR response.
2) As mentioned in our response of 1/14/81, the 10/15/80 "survey covered all disciplines." Other discrepancies were identified in the survey. The subject report may be reviewed in Ann Arbor at your request.

(Continued on next sheet)

26. DESIGN/PROJECT SIG. AUTH. DISP.: 6/3/81 R.C. Hollaa for L.H. Curtis	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A: 6/3/8 R.C. Hollaa for L.H. Curtis
30. P&B/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO DISPOSITION

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: 19346 M01-9-0-

39. QA ASSESSMENT OF ROOT CAUSE(S):

A. Mechanism to initiate specification revision as required by section 3.5 of EDPI 4 9.1 Rev 4 did not function.

B. Project Engineering review cycle for SCN's and specifications does not scope FCR's as described in block 12.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Root Cause A Is Valid.
Root Cause B Is Not Considered Valid.

40. PROCESS CA RESULTED FROM:

DESIGN [X] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1. Project Engineering to review other specifications currently in use for SCN's in excess of five or exceeding the ninety day period as appropriate and based upon this review determin action necessary to assure implementation of EDPI 4.49.1 requirements.

2. Project Engineering to determine necessary level of reviews for FCR's impacting unincorporated SCN's and include directions as applicable in engineering procedures.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

019346

NCR M-01-9-0-089
Block 25 (cont.)

3) Project engineering's response dated 3/5/81 delineates the changes made to MED 6.62-0. Project engineering's response dated 4/17/81 indicated that the MED had been revised. The MED was issued 3/6/81.

Written Reply Requested: No
Com Use: Closes Com 019346

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

019346

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

Trend Code K3

AI S-558 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-0-0-089
Midland 1 & 2	Spec C-305 Rev 12	N/A	2. DATE: 12/29/80
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Project Engineering	N/A	4. FILE NO: 16.2.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A. EDPI 4.49.1 Rev 4, Para 3.5 requires a specification revision for more than five (5) SCN's and also states the interval between specification revisions not to exceed ninety (90) days if there are unincorporated SCN's. Contrary to the above, specification 7220-C-305 Rev 12 has seven (7) unincorporated SCN's and Rev 12 of subject specification is dated 5/30/80.

B. EDPI 4.49.1 Rev 4, Para 3.1 requires the same preparation, review and approval criteria for SCN's as for Specifications in EDP 4.49. MED 4.49-0 Rev 16, Para 4.3 requires the PQE to review all specifications for completeness, inspectability, compliance to codes, quality considerations, etc prior to approval by the project engineer. Contrary to the above, FCR's such as C-2579, C-2699, C-2761 revise unincorporated SCN's to Spec C-305 and do not receive the same review cycle required by EDP/MED 4.49 as do specifications & SCN's.

5. DISTRIBUTION

ACTION COPY:
LHCurtis

INFO COPY:
WRBird
JWCook
TCCooke(2)
MADietrich
JFFirlit
GSKeeley
H Leonard
BWMarguglio
DBMiller
JARutgers
SKThurow
DMTurnbull
RCHOLZAR

MIDLAND 7220
JAN 5 1981
QE

13. QA RECOMMENDATION FOR PART CA:

Part corrective action will be accomplished by revision 13 of Spec C-305 incorporating subject SCN's and FCR's.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS AFFIXED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS AFFIXED: N/A

IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: January 16, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: 12-29-80
R. E. Lewis		

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

This is engineering's complete response to the above NCR.
As stated in our previous partial responses, engineering committed to revising MED 4.62-0. The MED has been revised. This completes engineering's actions.

Written Reply Requested: No
Com Use: Closes Com 019346

26. DESIGN/PROJECT SIG. AUTH. DISP.: 4-17-81 R C Hollan for L H Curtis	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. AUTH. DISP.:	29. SIG. OF ORG. RESP. FOR C/A: 4-17-81 R C Hollan for L H Curtis
30. PAB/CONST. SIG. AUTH. DISP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.

METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company
GA27-40

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

D 4946 Trend Code K3 AI S-558 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-80-089
Midland 1 & 2	Spec C-305 Rev 12	N/A	2. DATE: 12/29/80
9. SERIAL NUMBER:	10. ORG. CONSTITUTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Project Engineering	N/A	4. FILE NO: 1A.2.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A. EDPI 4.49.1 Rev 4, Para 3.5 requires a specification revision for more than five (5) SCN's and also states the interval between specification revisions not to exceed ninety (90) days if there are unincorporated SCN's. Contrary to the above, specification 7220-C-305 Rev 12 has seven (7) unincorporated SCN's and Rev 12 of subject specification is dated 5/30/80.

B. EDPI 4.49.1 Rev 4, Para 3.1 requires the same preparation, review and approval criteria for SCN's as for Specifications in EDP 4.49. MED 4.49-0 Rev 16, Para 4.3 requires the PQE to review all specifications for completeness, inspectability, compliance to codes, quality considerations, etc prior to approval by the project engineer. Contrary to the above, FCR's such as C-2579, C-2699, C-2761 revise unincorporated SCN's to Spec C-305 and do not receive the same [illegible]

9. DISTRIBUTION

ACTION COPY:
LHCurtis

INFO COPY:
WRBird
JWCook
TCCooke(2)
MADietrich
JFFirlit
GSKeeley
HPLeonard
BWMarguglio
DBMiller
JARutgers
SKThurow
DMTurnbull

MIDLAND 7220
JAN 5 1981
QE

13. QA RECOMMENDATION FOR PART CA:

Part corrective action will be accomplished by revision 13 of Spec C-305 incorporating subject SCN's and FCR's.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: N/A

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY: R. E. Lewis	23. WRITTEN REPLY REQUIRED BY: January 16, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: 12-29-80

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

This is project engineering's partial response to the above NCR.

This response is in reply to Question 2 of "QA Recommendation for Process CA".

Project engineering disagrees with your suggested corrective action. An approved SCN and FCR that are incorporated in a specification are subjected to the same level of internal project controls as applied to the original documents. Therefore, any further approval stages for FCRs are not required.

(SEE ATTACHED SHEET)

26. DESIGN/PROJECT SIG. AUTH. DISP.: 3/5/81 R.C. Holler for L.H. Curtis	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A: 3/5/81 R.C. Holler for L.H. Curtis
30. PAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE (Cont).

However further analysis of the FCR/FCN approval process has determined that revisions to the EDP are required regarding one time FCR/FCN deviations to specifications. The following are changes due to be incorporated into MED 6.62-0 by May 15, 1981.

Add to Section 3.4:

> The Project Quality Engineer shall review FCRs considered one time deviations to specifications for completeness and quality consideration prior to approval by the PE. Those FCRs affecting Q specifications shall also be submitted to QA for review of quality considerations.

New Section 3.7 added.

Section 6.5, add the following:

> The Project Quality Engineer (PQE) shall review all FCNs considered one time deviations to specifications for completeness and quality considerations prior to approval by the PE. These FCNs issued for Q specifications shall also be submitted to QA for review of quality considerations.

Project engineering's complete response to this NCR will be issued on May 15, 1981.

approved by RES

Written Response Requested: No
Com Use: Partial Response to Com 019346

Start Up System: Indeterminate

Consumers Power Company
QA27-0

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NONCONFORMANCE REPORT

Trend Code K3

AI S-558 PAGE 1 OF 1

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-0-089
Midland 1 & 2	Spec C-305 Rev 12	Dig N/A 46	2. DATE: 12/29/80
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Project Engineering	N/A	4. FILE NO: 16.3.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A. EDPI 4.49.1 Rev 4, Para 3.5 requires a specification revision for more than five (5) SCN's and also states the interval between specification revisions not to exceed ninety (90) days if there are unincorporated SCN's. Contrary to the above, specification 7220-C-305 Rev 12 has seven (7) unincorporated SCN's and Rev 12 of subject specification is dated 5/30/80.

B. EDPI 4.49.1 Rev 4, Para 3.1 requires the same preparation, review and approval criteria for SCN's as for Specifications in EDP 4.49. MED 4.49-0 Rev 16, Para 4.3 requires the PQE to review all specifications for completeness, inspectability, compliance to codes, quality considerations, etc prior to approval by the project engineer. Contrary to the above, FCR's such as C-2579, C-2699, C-2761 revise unincorporated SCN's to Spec C-305 and do not receive the same review cycle required by EDP/MED 4.49 as do specifications & SCN's

5. DISTRIBUTION

ACTION COPY:
LHCurtis

INFO COPY:
WRBird
JWCook
TCCooke(2)
MADietrich
JFFirlit
GSKeeley
HPLeonard
BWMarguglio
DBMiller
JARutgers
SKThurow
DMTurnbull

13. QA RECOMMENDATION FOR PART CA:
Part corrective action will be accomplished by revision 13 of Spec C-305 incorporating subject SCN's and FCR's.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS AFFIXED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS AFFIXED: N/A

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: January 16, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: 12-30-80
R. E. Lewis		

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

This is project engineering's partial response to the above NCR. Specification C-305 Rev. 13 incorporated SCNs 10002 through 10008 and FCRs C-2699, 2761, and 2795. C-305 Rev. 13 was signed by the project engineer on 12-30-80.

SCN discrepancies to C-305 were previously identified during a quality engineering survey on 10-15-80. This survey covered all disciplines. Since QE monitors all disciplines on a regular basis, additional SCN reviews are not required. Because coordination is required with other groups, engineering's (see attached sheet)

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
4/14/81 R.C Hollan for L.H. Curtis			1/4/81 R.C. Hollan for L.H. Curtis
30. FAB/CONST. SIG. AUTH. IMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: 01-9-

38. QA ASSESSMENT OF ROOT CAUSE(S):

A. Mechanism to initiate specification revision as required by section 3.5 of EDPI 4.49.1 Rev 4 did not function.

B. Project Engineering review cycle for SCN's and specifications does not scope FCR's as described in block 12.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [X] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [ ]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

1. Project Engineering to review other specifications currently in use for SCN's in excess of five or exceeding the ninety day period as appropriate and based upon this review determine action necessary to assure implementation of EDPI 4.49.1 requirements.

2. Project Engineering to determine necessary level of reviews for FCR's impacting unincorporated SCN's and include directions as applicable in engineering procedures.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

response to item 2 of process CA is scheduled for Feb. 27, 1981.

Written Reply Requested: No
Com Use: Partial response to 019346

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Priority: 5 Trend: B-3 AI: S 750 Start Up System: 1EAD PAGE 1 OF 8

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-C-1-026
Midland 1 & 2	1BB 2428 D	Electrical Cable	2. DATE: 4-21-81 CLOSED 6/17/81
9. SERIAL NUMBER: N/A	10. ORG. COMMITTING NC: Bechtel Construction Bechtel QC	11. AREA/LOC. OF NC: Upper Spreader Room & 659' elevation	3. DATE OF REV: N/A
			4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Bechtel Power Corporation procedure FPE 4.000 Rev 2 Para 6.3 states: "In horizontal runs, cables shall be neatly trained and tied down where necessary."
Bechtel PQCI E-4.0 Rev 6, activities 2.5, 2.6 and 3.2 require verification that the cable is protected from physical damage, installed in the correct vias and is neatly trained within the cable tray.
(continued on page 3)

5. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith

INFO COPY:
WRBird ~~GKWandling~~
JWCook MPQAD Routing
~~PGCooke~~ ~~SKT~~/CAC
MADietrich
~~JPPirlet~~
~~GSKeeley~~
BWMarguglio
~~JMilandin~~
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

Route Cable 1BB 2428 D neatly into the correct vias, tie down as required and protect from physical damage. (L E Davis)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [X] NO [ ]
18. IS NC REPORTABLE PER PART 21: YES [X] NO [ ]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 5-5-81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: DR Keating 4-21-81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Transmittal Form 20888 dated May 4, 1981. (Attachment 1)

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: Transmittal #20888
30. FAB/CONST. SIG. AUTH. IMP. DISP.: Transmittal #20888	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.: W.G. Matt

34. METHOD OF PART CA VERIFICATION:

Visually inspected rework of Cable 1BB2428D.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: Transmittal #20999	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: W. Matt 6/17/81	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) W.G. Matt 6/17/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-026

38. QA ASSESSMENT OF ROOT CAUSE(S):

Construction did not follow the requirements of FPE 4.000.

Bechtel QCE was inattentive in the inspection of this cable pull.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

N/A

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1) Determine why this cable pull was not installed properly.
2) Review FPE 4.000 "Installation of Electrical Cables", with crew responsible for this pull. 1) & 2) L E Davis
3) Determine why QCE was remiss in his inspection.
4) Recertify the QCE to PQCE E-4.0 3) & 4) E Smith

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

Transmittal Form #20888 dated May 4, 1981. (Attachment 1)
Transmittal Form #22824 dated June 10, 1981. (Attachment 2)
FQCL-714/AI 1131 dated May 12, 1981. (Attachment 3)

43. METHOD OF PROCESS CA VERIFICATION:

Discussed orientation and training of cabling pulling crews with Electrical Supervisor.
Verified training of QCE by reviewing his training record.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

Transmittal Forms #20888, #22824
FQCL-714/AI 1131

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

W. A. Watt 6/17/81

Continued:

12) "As is" nonconforming condition versus "as required" condition with refs:

Contrary to the above, during an overinspection of Cable #1BB 2428 D the following deficiencies were noted:

(a) Cable was routed into cable tray BFC instead of BFH as required by Drawing E-37 and the cable pull card.
(b) Cable was outside of horizontal tray BFF 13 rather than neatly trained and tied inside.
(c) Cable crossed over split tray barrier and into tray BTG 01 at junction box BJ 470.
(d) Cable was not protected from physical damage (sharp edges).

JOB 7220 MIDLAND PROJECT

BECHTEL POWER CORP.

TRANSMITTAL FORM

№ 20888

PLEASE RECEIPT AND RETURN BLUE COPY IMMEDIATELY

DATE May 4, 1981

ATTACHMENT 1
NCR M-01-9-1-026

* ACTION

ACTION FOR VENDORS	ACTION FOR OTHERS
1. ☐ APPROVED - MFG. MAY PROCEED	6. ☐ FOR APPROVAL
2. ☐ APPROVED SUBMIT FINAL DWG. MFG. MAY PROCEED	7. ☐ CONSTRUCTION
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED	8. ☐ PRELIMINARY USE
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT	9. ☐ REFERENCE
5. ☐ REVIEW NOT REQUIRED MFG. MAY PROCEED	10. ☒ complete response

SUBJECT	CODE
☐ BECHTEL DRAWINGS	B
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

QTY.	F. P. PREFIX	BECHTEL FOREIGN PR. NO. ☐ / BECHTEL DRAWING NO. ☐	REV. NO.	TITLE	VENDOR NO.	ACTION	CODE
				NCR M-01-9-1-026 A.I. S-750			

(FAX)

RECEIVED
MAY 06 1981
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

PRINT	ROUTE
Dea.	
VO DAN	
16.0	

COMMENTS: _____

TO
QA Superintendent MPQAD
Midland Jobsite

FROM
L. E. Davis
Midland Jobsite

☐ VENDOR PRINT
☐ OTHER

BY L E Davis

ATTACHMENT 1
(continued)

NCR M-01-9-1-026 A.I. S-750

The discrepancies noted on this NCR were noted by Field Engineering and QC prior to April 21, 1981. Cable rework 961 was issued April 15, 1981, and the work was completed on April 21, 1981.

In determining why this cable pull was not installed properly, it was due to new personnel. A review of FPE 4.000, "Installation of Electrical Cables" was made by the Electrical Superintendent with the General Foreman.

JEANS PROJECT

BECHTEL POWER CORP.

TRANSMITTAL FORM

№ 22824

PLEASE RECEIPT AND RETURN BLUE COPY IMMEDIATELY

DATE June 10, 1981

ATTACHMENT 2
NCR M-01-9-1-026

* ACTION

ACTION FOR VENDORS

1. ☐ APPROVED. MFG. MAY PROCEED
2. ☐ APPROVED. SUBMIT FINAL DWG. MFG. MAY PROCEED
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT
5. ☐ REVIEW NOT REQUIRED. MFG. MAY PROCEED

ACTION FOR OTHERS

6. ☐ FOR APPROVAL
7. ☐ CONSTRUCTION
8. ☐ PRELIMINARY USE
9. ☐ REFERENCE
10. ☒ complete response

SUBJECT — **CODE**

☐ BECHTEL DRAWINGS	B
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

QTY.	T. P. PREFIX	BECHTEL FOREIGN PE. NO. ☐ / BECHTEL DRAWING NO. ☐	REV. NO.	TITLE	VENDOR NO.	* ACTION	CODE
				Request For Further Response NCR M-01-9-1-026 AI 5750			

CONSUMERS POWER COMPANY
RECEIVED
JUN 12 1981
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

PRINT ROUTE
CMT
DRM
MPL
QA
✓ DAN ← THIS COPY FOR
FILE 16.0

COMMENTS: _____

TO
QA Superintendent MPQAD
Midland Jobsite

FROM
L. E. Davis
Midland Jobsite

☐ VENDOR PRINT
☐ OTHER

BY L E Davis

ORIGINAL

NCR M-01-9-1-026 A.I. S-750

New cable pulling personnel are given orientation and review the cable pulling procedures with their foremen and general foremen prior to pulling cable.

CONSUMERS POWER COMPANY
RECEIVED
MAY 12 1981
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Bechtel Power Corporation
NCR M-01-9-1-026

Post Office Box 2167
Midland, Michigan 48640

May 12, 1981

Consumers Power Company
P. O. Box 1963
Midland, MI. 48640

Attention: D. M. Turnbull

Ref: Midland Units 1&2
CPCo NCR M-01-9-1-026,
dated 4/21/81
QA Action Item S-750
FQCL-714/AI-1131

Dear Mr. Turnbull:

This is considered to be Quality Control's complete response to the above reference.

Cable 1BB2428D was rerouted into the correct vias, retrained, tied down where necessary and tray edging applied to protect the cable from sharp edges.

In lieu of recertification to PQCI E-4.0 the QCE was given specific training in that the QCE is not to make engineering judgements and to report any discrepancies that do not agree with the established criteria in the design documents, field engineering documents applicable reference codes and standards. This training is documented in the individuals training record files and is available for your review.

If you have any further questions concerning the above, please contact this office.

Sincerely,

E. Smith

E. SMITH
PROJECT FIELD QUALITY CONTROL
ENGINEER

ES/BTF/NWA/jmk

Trend: I-2 AI: S 760 Priority: 4 Start Up System: Indeterminate

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-029
Midland 1 & 2	2AJ 632	Junction box	2. DATE: 4-21-81 Closed 6/24/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV:
NA	Bechtel QC/ Bechtel Construction	Unit 2 RB inside Secondary Shield wall el. 640' to 680'	NA
			4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A) E-42 B Sheet 601 shows detail for installing concrete anchors to secure P1001 for a box support. The detail calls for 3/8" Ø concrete anchors at 1'0" max. (separation)
Contrary to the above, the anchors securing the P1001 for 2AJ 632 were separated more than 13".
B) E-42 Sheet 100 Para 3.0.A states in part "Install unistrut and power strut bolts....using the following torque value: ½" bolts 50 ft-lbs. min."
Contrary to the above, the top, east, bolt of box 2AJ 632 was checked and broke loose at under 40 ft-lbs.

5. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith

INFO COPY:
WRBird ~~GKWandling~~
JWCook MPQAD Routing
TCCooke(2) ~~SKP~~/CAC
MADietrich EROswood
~~JPPiplet~~
~~GSKeeley~~
BWMarguglio
~~JMilandin~~
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1) Construction rework installation to meet requirements. (LEDavis)
2) QC reinspect rework (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY:	24. SUPERVISOR'S SIGNATURE/DATE:
Larry D Seamans	5/5/81 TO ESTABLISH CA COMPLETION DATE	LKK acting 4-22-81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

See attached Transmittals No 22801 and 22822; and Bechtel QC response letter dated May 1, 1981.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
NA	NA	NA	See attachment
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
See attachment.	NA	NA	Eric R. Oswood

34. METHOD OF PART CA VERIFICATION:

It was determined, after a review of Drawing E-42B, Sheet 601, and inspection of ZAJ632, that no nonconformance exists.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)
See attachment.	Eric R Oswood 6/24/81	Eric R. Oswood 6/24/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-029

38. QA ASSESSMENT OF ROOT CAUSE(S):

1) Construction was not done in accordance with drawing.
2) QC inspection was not done in accordance with PQCI activities 3.1 and 3.2

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

NA

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1) Cognizant QC personnel to be instructed on the above requirements and document training. (ESmith)
2) Cognizant Construction personnel to be instructed on the above requirements and document training. (LEDavis)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See attachment.

43. METHOD OF PROCESS CA VERIFICATION:

See attachment.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See attachment.

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Eric R. Dawson 4/24/81

JOB 7220 MIDLAND PROJECT

BECHTEL POWER CORP.

TRANSMITTAL FORM

№ 22801

PLEASE RECEIPT AND RETURN BLUE COPY IMMEDIATELY

DATE [illegible]

*** ACTION**

ACTION FOR VENDORS	ACTION FOR OTHERS
1. ☐ APPROVED. MFG. MAY PROCEED	6. ☐ FOR APPROVAL
2. ☐ APPROVED SUBMIT FINAL DWG. MFG. MAY PROCEED	7. ☐ CONSTRUCTION
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED	8. ☐ PRELIMINARY USE
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT	9. ☐ REFERENCE
5. ☐ REVIEW NOT REQUIRED MFG. MAY PROCEED	10. ☒ Complete response

SUBJECT	CODE
☐ BECHTEL DRAWINGS	B
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

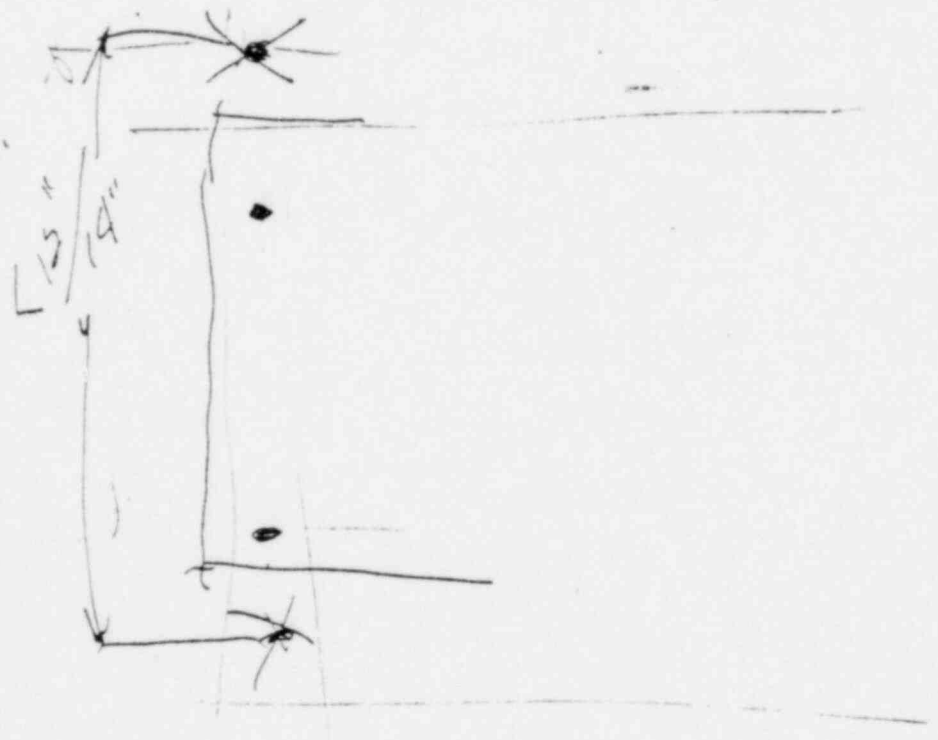
QTY	F. P. PREFIX / BECHTEL FORSIGN PR. NO. ☐ / BECHTEL DRAWING NO. ☐	REV. NO.	TITLE	VENDOR NO.	* ACTION	CODE
			[illegible]			
			[illegible]			
			[illegible]			

NCR M-01-9-1-029 AI: S-760

Block 13: No nonconformance exists. Drawing E42B, Sh. 601, Note 2 states, "four expansion anchors and attachment bolts per box (one at each corner) may be used provided the maximum dimension from attachment point to both box edges is less than or equal to 3 inches".

The anchor was rechecked to 50 ft. lbs. on April 27, 1981, and found to be acceptable. Therefore, no further action is required.

Block 41: Construction personnel will not be reinstructed because at the time of Field Engineering's reinspection, no nonconforming conditions were noted.



T'end: I-2 AI: S 760 Priority: 4 Start Up System: Indeterminate

Consumers Power Company QA27-40

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

1. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-81-04-029
Midland 1 & 2	2AJ 632	Junction box	2. DATE: 4-21-81
9. SERIAL NUMBER: NA	10. ORG. CONCERNED NO: Bechtel QC/ Bechtel Construction	11. AREA/LOC. OF NC: Unit 2 RB inside Secondary Shield wall el. 640' to 680'	3. DATE OF REV: NA
			4. FILE NO: 16.3.4 & 16.2.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

A) E-42 B Sheet 601 shows detail for installing concrete anchors to secure P1001 for a box support. The detail calls for 3/8" Ø concrete anchors at 1'0" max. (separation) per welding [illegible]
Contrary to the above, the anchors securing the P1001 for 2AJ 632 were separated more than 13".
B) E-42 Sheet 100 Para 3.0.A states in part "Install unistrut and power strut bolts....using the following torque value: ½" bolts 50 ft-lbs. min."
Contrary to the above, the top, east, bolt of box 2AJ 632 was checked and broke loose at under 40 ft-lbs.

5. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith

INFO COPY:
WF[illegible]d GKWandling
JWCook MPQAD Routing
TCCooke(2) SKT/CAC
MADietrich
JFFirlet
GSKeeley
BWMarguglio
JMilandin
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART QA:

1) Construction rework installation to meet requirements. (LEDavis)
2) QC reinspect rework (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS AFFIXED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS AFFIXED:

IS PROCESS QA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 5/5/81 TO ESTABLISH QA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE:
Larry D Seaman		[illegible] 4-22-81

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ACTION. CONDITION: NA	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO DISPOSITION DISP.:

34. METHOD OF PART QA VERIFICATION:

35. SIG. OF OPS. RESP. FOR PART C/A VERIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS QA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-C

39. ASSIGNMENT OF ROOT CAUSE(S):

1) Construction was not done in accordance with drawing.
2) QC inspection was not done in accordance with PQCI activities 3.1 and 3.2

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA ROUTED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

1) Cognizant QC personnel to be instructed on the above requirements and document training. (DSmith)

2) Cognizant Construction personnel to be instructed on the above requirements and document training. (LEDavis)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

May 1, 1981

RECEIVED
MAY 7 1981
BECHTEL POWER CORP.

Consumers Power Company
P. O. Box 1963
Midland, MI. 48640

JOB 7220
Ser. 36803 (2) 0576

Attention: D. M. Turnbull

Ref: Midland, Units 1&2
a) CPCo NCR M-01-9-1-029, dated April 21, 1981
b) QA Action Item S-760 FQCL-695/AI-1130

Dear Mr. Turnbull:

This is considered Quality Controls complete response to the above reference.

Item A) 2AJ632 Box Support anchor separation is acceptable in accordance with E-42, Sheet 601, Notes 1 and 2 which states that 4 bolts (one for each corner) may be used.

Item B) Bolts for box 2AJ632 were initially irstalled at 50 ft. lbs. as required. A reinspection of this box indicated that all bolts held at 50 ft. lb. torque. Although the drawing does not require to torque to repeat at a later time. No further action required.

If you have any further questions concerning the above, please contact this office.

Sincerely,

E. SMITH
PROJECT FIELD QUALITY CONTROL ENGINEER

ES/BTF/JER/jm

JOB 7220 HOUTING	ACTN TKN
Site Mgr.	
Proj. Supt.	
Serv. Supt.	X
P.F. Engr.	X
APF. Eng. 1	X
APF. Eng. 2	
S.U. Turnover	
Cost. Sche.	
Inst. Engr.	
Civ. Sup.	
Civ. Eng.	
Mech. Sup.	
Mech. Eng.	
Elec. Sup.	
Elec. Eng.	X
Arch. Eng.	
Gen. Eng.	
A & A	
QC	
Purch.	
Sub Con.	
Doc. Con.	
[illegible]	X

JOB 7220 MIDLAND PROJECT

BECHTEL POWER CORP.

TRANSMITTAL FORM

№ 22822

PLEASE RECEIPT AND RETURN BLUE COPY IMMEDIATELY

DATE June 9, 1981

* ACTION

ACTION FOR VENDORS	ACTION FOR OTHERS
1. ☐ APPROVED. MFG. MAY PROCEED	6. ☐ FOR APPROVAL
2. ☐ APPROVED SUBMIT FINAL DWG. MFG. MAY PROCEED	7. ☐ CONSTRUCTION
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED	8. ☐ PRELIMINARY USE
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT	9. ☐ REFERENCE
5. ☐ REVIEW NOT REQUIRED MFG. MAY PROCEED	10. ☒ complete response

SUBJECT	CODE
☐ BECHTEL DRAWINGS	B
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

QTY	F.P. PREFIX / BECHTEL FOREIGN PE. NO. ☐ / BECHTEL DRAWING NO. ☐	REV. NO.	TITLE	VENDOR NO.	* ACTION	CODE
			NRR M-01-9-1-629 M.I. 5-760			

COMMENTS: _____

TO: QA Superintendent - MPQAD
Midland Jobsite

FROM: L.E. Davis
Midland Jobsite

☐ VENDOR PRINT
☐ OTHER

BY _____

BBS FORM 16751 GROUP COPY

NCR M-01-9-1-029 A.I. S-760

This is to be considered a complete and final response to the subject NCR. Note #2 on Sh. 601 of E42B, Rev. 2, states, "for boxes with a max. dim. of 36", four expansion anchors and attachment bolts per box (one at each corner) may be used, provided the maximum dimension from attachment bolt to both edges of box is $\leq$ 3 inches". Because the box 2AJ632 is within the size limitation of, and has been mounted in accordance with this note, no non-conformance exists. Because no non-conformance exists, no process corrective action needs to be taken.

REQUEST FOR FURTHER RESPONSE

ACTION ITEM NO: S-760

TO	DEPT	COMPANY	
LE Davis	Construction	Bechtel	
ACTION ITEM		DATE	FILE
Junction Box - 2AJ632		4-21-81	16.3.6
RESPONSE DATE	TO-DAY'S DATE	EVALUATOR	PHONE NO
May 6, 1981	May 21, 1981	LD Seamans	Ext. 536

EVALUATION OF EARLIER RESPONSE

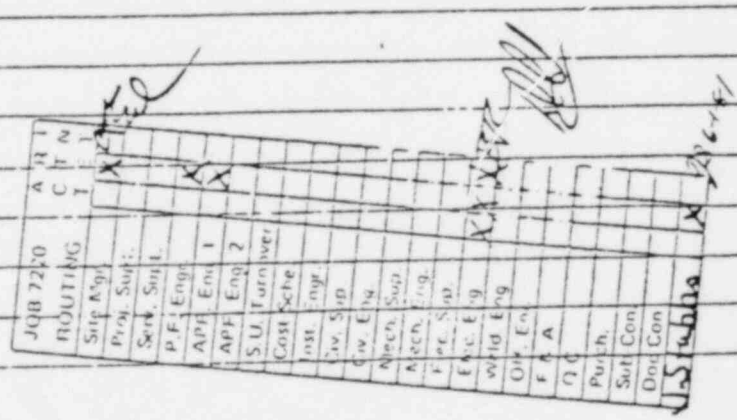
1. Your answer to Item A of NCR addressed the mounting of the box using AB's, the problem as stated in the NCR was with the mounting of the unistrut using AB's. The box is then secured to the unistrut.
2. Item B was answered satisfactorly.
3. No process corrective action was taken.

RECEIVED
MAY 22 1981
BECHTEL POWER CORP.
JOB 7220
PWR 36260 AJ 0573

ADDITIONAL DATA / ACTION REQUIRED

1. Construction needs to address the mounting of the unistrut using AB's as stated in the NCR.
2. Process corrective action needs to be taken as stated in the NCR.

DISTRIBUTION
ADDRESSEE
DB MILLER
WR BIRD
DM TURNBULL
ORIGINATOR
SUBJECT FILE
TICKLER



[X] DISCUSSED WITH Dave Scott ON (DATE) 5/19/81

[X] NEXT REPLY AGREED TO BY (DATE) June 2, 1981

[ ] PLEASE REPLY BY (DATE) _____ GIVING DATE BY WHICH NEXT REPLY CAN BE EXPECTED.

SIGNATURE Larry D Seamans DATE 5/21/81 PHONE Ext. 536

FIELD SITE SUPERINTENDANT.

Priority: 03 Trend: D-3 Start Up System: Indeterminate AI: 5762

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 2

6. PROJECT NAME: Midland 1 and 2	7. IDENTIFICATION PART NO: See Block #8	8. IDENTIFICATION PART NAME: Welding Materials Issued in Field	1. NCR LOCAL NO: M-01-9-1-030
3. SERIAL NUMBER: NA	10. ORG. CONTROLLING NC: Bechtel Construction	11. AREA/DEPT. OF NC: Weld Rod Storage & Disbursement Unit	2. DATE: 4/22/81 CLOSED 6/22/81
			5. DATE OF DET: 6/22/81
		(Field Issue)	4. ITEM NO: 16.3.4

12. AS IT PRESENTLY EXISTS (DESCRIBE AS REQUIRED AND ATTACH ANY DATA):

1. Welding materials are not being controlled and stored per requirements of approved procedures.
2. Welding materials are being issued out of portable rod warmers.
3. Welding materials returned after end of shift are not being placed in holding oven prior to re-issue.

Items 1, 2 and 3 are contrary to requirements of approved Procedure WFMC-1, Rev 6, Table 2, Amendment 2.
See Attachment #1 for requirements.

9. INITIATED ACTION BY:

LEDavis

CC'D BY:

WRBird
JWCook
TCCooke(2)
MADietrich
~~JFFiriite~~
~~GSKeeley~~
BWMarguglio
~~JMGlendin~~
DBMiller
JARutgers
DATaggart
~~GKWendling~~
SKT/CAC
MPQAD Routing
TRCharette

13. A RECOMMENDATION FOR DISPOSITION:

1. Comply with existing approved procedure requirements.
2. Recall welding materials issued and insert in holding ovens for minimum time required prior to re-issue.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] TAGS, LOCATION & DATE IF HOLD TAGS APPLIED:

15. IS PROCESS TO BE REVISED: YES [X] NO [ ] IF NO, GIVE JUSTIFICATION BELOW:

16. DOES NC AFFECT T-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, NRC TASK REPORT TO NRC: NA

21. IF YES, DATE OF NRC APPROVAL TO CLOSE REPORT: NA

22. NCR RECOMMENDED BY: TR Charette — T.R. Charette

23. RECOMMENDED DISPOSITION ACCEPTABLE AS: 05/04/81

24. DISPOSITION APPROVED BY: D.K. Keating 4/22/81

25. PART OR DISPOSITION, RECTIFICATION & INSPECTION DATA:

6/15/81 See Bechtel Transmittal, Complete response, #22810, Attachment #2.

26. DESIGN PROJECT ENG. ACTUAL DISP.: NA	27. QAE ENG. ACTUAL DISP.: NA	28. CONSTRUCT. ENG. ACTUAL DISP.: NA	29. ENG. IF REQ. FOR PART 21: NA
30. PART/CONST. ENG. ACTUAL DISP. VERIF.: NA	31. ENG. IF CHG TO DESIGN DOCUMENTS: NA	32. ENG WHO CLOSED - PROJ. ENGR. ACTUAL VERIF.: NA	33. QA ACTUAL VERIF & DISPOSITION VERIFIED: 6/22/81 Tony R. Charette

34. METHOD OF PART 21 EVALUATION:

1) Reviewed Bechtel complete response BPCo Transmittal # 22810.
2) See Overinspection Record #2 PIP # 01-W-1A, dated 6/15/81. (Attachment #3.)

35. ENG. IF REQ. FOR PART 21 EVALUATION: SEE BECHTEL TRANSMITTAL # 22810	36. ENG. VERIFICATION DATE & SIGN OFF APPROVAL DATE: Tony R. Charette 6/22/81	37. QA CLOSE OUT DATE & PART 21 EVALUATION: Tony R. Charette 6/22/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

M-01-9-1-030

18. [illegible]:

Unknown--to be determined.

19. [illegible]:

Parties involved at time the change occurred considered that a calibrated rod warmer maintaining temperature of 200° to 350° was equivalent to a stationary rod oven.

20. [illegible]:

[ ] [illegible] [ ] [illegible] [X] [illegible] [ ] [illegible] [ ]

21. [illegible]:

Unknown--to be determined.

22. [illegible]:

Corrective action has been initiated immediately after this deviation was reported by the audit team. Filler metal control is and will continue to be as required by the WFM C-1.

23. [illegible]:

See Attachment #3, CPCo Overinspection Report #2 for Project Inspection Plan No. 01-W-1A, Rev 1.

24. [illegible]:

See BPCo Transmittal #22810

25. [illegible]:

Terry R. Charette 6/22/81

ATTACHMENT #1 (5)

REQUIREMENTS FOR THE ISSUE, USE AND RETURN OF WELD FILLER MATERIALS

	(1)	(2)	(3)	(4)
Type of Filler Material		Cellulosic type covered electrodes Bare rod Bare wire Flux core wire	Austenitic, high nickel ~~and carbon steel~~, ~~low hydrogen~~ covered electrodes (E308, ENiCrFe-3, ~~E7018~~, E312, etc.)	Low alloy steel, low hydrogen covered electrodes (E7016-A1, E8018-C3, etc.) E7018 when used with P3, P4, P5, P6, P7, P9, P10, P11 and ferritic base metal with YS greater than 50,000 psi minimum specified
Requirements for issue		Note 1	Note 1	Note 2
Maximum time out of the holding oven		No time limit. Return unused portion at the end of the shift Note 6	12 hours or the end of the shift,	No time limit. Return unused portion at the end of the shift.
Requirements to return material to storage		Note 3	Note 3, 4	Note 3, 5

MQS-WPS-009-2
Revision 0, 1/1/76

SPECIFICATION NO. WFMC-1 REV. 6 SHEET 4 OF 6

Notes to Table 2:

(1) Covered electrodes shall be issued in a container. Bare wire in straight lengths shall be issued per the instructions of the LFWE. Wire on spools or in drums shall be issued as-is.

(2) Electrodes shall be issued in portable rod warmers. See para 6.4 thru 6.5.7

(3) Electrodes with cracked, chipped or contaminated coatings shall be discarded.

(4) Electrodes out of the holding oven more than 12 hours shall be discarded or reconditioned per the manufacturer's instructions. Electrodes out of the holding oven less than 12 hours shall be placed in a holding oven for a minimum of eight hours prior to re-issue. The holding oven shall be at 200 F.

(5) Electrodes shall be taken from the rod warmer and placed in the holding oven a minimum of one hour prior to re-issue. The holding oven shall be at 200 F minimum.

(6) See paragraph 7.2.

ATTACHMENT #1
PAGE 10f2

Revise Note 2.

In the third column heading, delete, "and carbon steel, low hydrogen" and "E7018."

In the fourth column heading, at the end, add, "minimum specified."

Sheet 1 of 2

SHEET 2 of 2

Add a new (fifth) column with the following heading, "E7018 covered electrodes for welding P1 material and other carbon steels with 50,000 psi minimum specified yield strength or less."

In this column, first row, add, "Note 7"; in the second row, add, "No time limit. Return unused portion at the end of the shift." In this same column, row three, add, "Note 3, 5".

In the Notes to Table 2, revise the following:

(2) Add, "(See paragraphs 6.4 through 6.5.7.)

Add Note (7) Electrodes shall be issued in portable warmers in compliance with paragraph 6.5.8.

ATTACHMENT NO.1
PAGE 2 of 2

1/1/76

JOB 7220 MIDLAND PROJECT

BECHTEL POWER CORP.

TRANSMITTAL FORM

№ 22810
PLEASE RECEIPT AND RETURN
BLUE COPY IMMEDIATELY

DATE May 22, 1981

* ATTACHMENT # 2 PAGE 1 OF 2

* ACTION

ACTION FOR VENDORS	ACTION FOR OTHERS
1. ☐ APPROVED. MFG. MAY PROCEED	6. ☐ FOR APPROVAL
2. ☐ APPROVED. SUBMIT FINAL DWG. MFG. MAY PROCEED	7. ☐ CONSTRUCTION
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED	8. ☐ PRELIMINARY USE
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT	9. ☐ REFERENCE
5. ☐ REVIEW NOT REQUIRED. MFG. MAY PROCEED.	10. ☒ complete response

SUBJECT / CODE

☐ BECHTEL DRAWINGS	B
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

QTY.	E. P. PREFIX / BECHTEL FOREIGN PR. NO. / BECHTEL DRAWING NO.	REV. NO.	TITLE	VENDOR NO.	ACTION	CODE
			NCR M-01-9-1-030 A.I.S-762			

CONSUMERS POWER COMPANY
RECEIVED
MAY 27 1981
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

PRINT ROUTE
DMT
MQ
RC
FILE 16.01

COMMENTS: _____

TO
QA Superintendent MPQAD
Midland Jobsite

FROM
L. E. Davis
Midland Jobsite

☐ VENDOR PRINT
☐ OTHER

BY _____

BBS FORM 16751

ORIGINAL

NCR M-01-9-1-030 A.I. S-762

Block 13

Disbursal and retrieval of filler material has been implemented and meet current welding standard procedure requirements WFMC-1, Rev. 6.

Prior to complete implementation of procedure WFMC-1, filler material issued to the field was kept in a portable electrode warmer energized at all times maintaining a temperature at above 200°F. and returned to the rod room at the end of the shift. Deviation of the procedure did not have detrimental effects on the quality of the filler material or the work performed.

Block 39

Parties involved at time the change occurred, considered that a calibrated rod warmer maintaining temperature of 200° to 350° was equivalent to a stationary rod oven.

Block 42

Corrective action has been initiated immediately after this deviation was reported. Filler metal control is and will continue to be as required by the WFMC-1.

Attachment # 3

Record No. 2

Project Inspection Plan No. 01-W-1A Rev. 1

Project MIDLAND 1 & 2

Scope BECHTEL WELDING MATERIALS ISSUANCE AND STORAGE FACILITY

Title WELDING/INPROCESS VERIFICATION

Characteristic No.	Reference Criteria: Dwg/Spec No.	Rev.	Zone/Paragraph	Concur W/PS'I Decision	Reject PS'I Decision	Nonconformances or Deficiencies	Inspector Identification & Date
1.2b	WFMC-1	6	Table 2 Notes Para. (5)	X		NONE	6/17/81

Remarks Overinspection performed as follow up to NCR M-01-9-1-030 for verification of corrective action implementation by Bechtel Welding Engineering.

Attachments

Date 6-22-81

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

Priority: 1 Trend: 03 Start Up: 2BBC AI: S-774 PAGE 1 OF 3

6. PROJECT NAME: Midland	7. NONCONFORMING PART NO: RC Pump, B Driver Mount, Unit 2	8. NONCONFORMING PART NAME: Heat Exchanger area	1. NCR SERIAL NO: MCD3-3-1-039
9. SERIAL NO(S): 2P51-B	10. DEPT. RESPONSIBLE FOR NC: B&W Construction	11. AREA DEPT. OF NC: Interior of motor Motor mount	2. DATE: 4/28/81 CLOSED 7/15/81
			3. DATE OF NCT: NA
			4. FILE NO: 16.4.4

12. AS OF NONCONFORMANCE DESCRIBES TODAY AS REQUIRED UNDER CRITERION VIII, 10CFR50.

During inspection of hydraulic snubber installation, it was noted that the interior of drive mount and heat exchanger area was being utilized as a storage container for surplus tools. Cans of oil and solvent were also being stored in the same area.

The condition stated above is contrary to storage and maintenance requirements, per B&W Field Spec 9SS-100 Rev 3, Storage Requirements Par 3 Responsibility, states in part, "Supervisor shall be responsible for inspecting and examining the item to assure that quality level of the item is being maintained (cleanliness)". Continued on page 3.

5. DISTRIBUTION
ACTION DEPT: LEDavis

INFO DEPT:
WRBird, JWCook, TCCooke(2), MADietrich, JFFirlit, GSKeeley, BWMarguglio, ~~JMilendin~~, DBMiller, JARutgers, DATaggart, GKWandling, SKT/CAC, MPQAD Routing, WLee, ~~JWLillywhite~~, RCAsh, WDGreenwell

13. IS CORRECTIVE ACTION REQUIRED: YES [ ] NO [ ] NOT REQUIRED [ ] (CONT. ON PAGE 3)

1. Inspect subject area for improper tool storage practices.
2. Assure cleanliness level is maintained in accordance with 9CP-100.

14. HOLD TAGS APPLIED: YES [ ] NO [X] TAGS, LOCATION & DATE OF HOLD TAGS APPLIED:

15. IS PROCESS CONTROL REQUIRED: YES [X] NO [ ] IF NO, EXPLAIN REASONS BELOW:

16. WILL NCT AFFECT 4-HOUR RPTG: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WAS WRITTEN REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: Harold L. Allen	23. NONCONFORMING ITEM RECEIVED BY: May 15, 1981 DATE NONCONFORMING ITEM ENTERED QA CONTROL	24. SUPERVISOR'S SIGNATURE/DATE: DR Keating 4-30-81

25. PART OR DISPOSITION, RECTIFICATION & COMPLETION DATE:

Individually inspected all subject areas for compliance with cleanliness and maintenance requirements and found them to be satisfactory.
Reviewed training records for B&W superintendents, general foreman and foreman.

26. DESIGN/PROJECT ENG. ACTUAL DISP. AGREE: NA	27. QAD ENG. ACTUAL DISP. AGREE: NA	28. ENGINEERING ENG. DISP. AGREE: NA	29. ENG. IF DISP. REQ. PER N/A: B&W letter dated 5/13/81 B&W response dated 5/14/81
30. PAR/CONST. ENG. ACTUAL DISP. AGREE: B&W letter of 5/13/81 B&W response of 5/14/81	31. ENG. IF CONT ROOT ACTION. RECOMMEND: NA	32. ENG ACTUAL DISP. & FULL DISP. REQ. ACTUAL INSP.: NA	33. QA ACTUAL INSP. OF DISPOSITION: Harold L Allen

34. METHOD OF PART OR VERIFICATION:
Reviewed training records 6/2/81.
Reviewed B&W letter to Craft supervision dated May 13, 1981.
Reviewed B&W response letter dated May 14, 1981.

35. ENG. IF DISP. REQ. PER PART 21/A REPORTING COMPLETED: B&W letter of 5/13/81 Bw& response letter of 5/14/81	36. ENG. VERIFICATION PART 21/A & HOLD TAG REMOVAL DATE: Harold L. Allen 6/4/81	37. NCR CLOSED BY DATE: (DATE & PROCESS QA DISPOSITION) Harold L. Allen 6/4/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR LOCAL NUMBER: M-03-3-1-039

38. (A ASSESSMENT OF ROOT CAUSE(S)):

Inadequate supervision by craft ~~and~~ superintendents in the proper storage of tools and care of installed equipment.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Same as block 38.

40. PROCESS CA RESULTED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCEDURE [ ] OTHER [ ]

OTHER: _____

41. CA IMPLEMENTATION FOR PROCESS CA:

Enforce cleanliness, maintenance/storage requirements for installed NSSS components.

42. PROCESS CA TO BE TAKEN BY ORG(S) CITED IN BLOCK 41 & DATE OF COMPLETION:

1. B&W letter dated May 13, 1981, to superintendents, general foreman and foreman.

2. B&W letter of response dated May 14, 1981.

43. METHOD OF PROCESS CA VERIFICATION:

1. Verified by reinspection of each individual driver mount heat exchange area that cleanliness is acceptable.

2. Verified training documentation June 2, 1981.

44. ORG. IF ORG. RESPONSIBLE FOR PROCESS CA IMPLEMENTATION COMPLETED:

B&W letter dated May 13, 1981.

45. PROCESS CA COMPLETION VERIFIED BY, DATE:

Harold L. Allen 6/4/81

NCR: M-03-3-1-039
DATE: 04/28/81
FILE: 16.4.4

12. "AS IS" NONCONFORMING CONDITIONS VERSUS "AS REQUIRED" CONDITION WITH REFS: (Continued from page one).

Maintenance of items during storage - the care and maintenance of components during storage shall be in accordance with Mfg recommendations. ANSI N45.2.2 Para 6.4 thru 6.4.2 (8) N45.2.3 Par 3.2

13. QA RECOMMENDATION FOR PART CA (CONTINUED):

3. Review interior of remaining RC pump motor mounts for similar problems.

4. Provide sufficient training to supervisors to preclude recurrence of this problem.

Priority: 2 Trend: C3 · AI: S 778 Start Up System: 1 BGC

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 2

6. PROJECT NAME: Midland	7. DESCRIPTION PART ID: 1P58-A 2P58-B	8. DESCRIPTION PART NAME: Pri. M.U. Pump	9. NCR SERIAL ID: MCD 1-3-I-040
			4. DATE: 5/1/81 (16528) 6-24-81
5. SERIAL NUMBER: 70363; 70361	10. DES. CONTRACTOR: Bechtel Storage Installed Equipment	11. AREA LOC. OF NC: El-599 Rooms 215 & 216	3. DATE OF DET:
			2. ITEM NO: 16.3.4

12. AS IT PRESENTLY EXISTS (DESCRIBE AS REQUIRED, ATTACH SKETCHES):

During evening surveillance inspection, Auxiliary Building noted lube oil lines on 1P58-A and oil header and lube oil lines on 2P58-B were removed and left uncapped.

The conditions stated above are contrary to storage and maintenance requirements per ANSI N45.2.2, Para 6.4, 6.4.1, 6.4.2(1) and M-204 Para 6.4 which states in part, "All access openings and all open ended pipes shall be covered with dust proof covers when ever work is not actually in progress."

1. INITIATED BY: LEDavis

DIST:
WRBird DATaggart
JWCook ~~GWvandling~~
TCCooke MPQAD Route
MADietrich CAChien
~~JFPirlet~~ JLWood
~~WDGreenwell~~ HLAllen
~~GSHeeley~~
BWMarguglio
DBMiller
JARutgers

13. AS IT SHOULD BE (ATTACH SKETCHES):

Inspect subject piping and header to insure all foreign material has been removed prior to reinstallation.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. FIELD DISP. APPLIES: YES [ ] NO [X] FORMS, DRAWINGS & DOCS OF FIELD DISP. APPLIES:

15. IS PROCESS OR SPECIFICATION: YES [X] NO [ ] IF NO, EXPLAIN DISPOSITION BELOW:

16. NEED TO UPDATE A-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, NRC PART 21 REPORT TO NRC:

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR INITIATED BY: Harold I. Allen

23. NCR/DISP RECEIVED BY: 5/15/81 (DETAILED DISPOSITION DATE)

24. SUPERVISOR'S SIGNATURE/DATE: DRKeating 5-1-81

25. PART OR DISPOSITION, RECTIFICATION & COMPLETION DATE:

1. Inspected subject oil header piping for proper assembly and cleanliness.
2. Received and reviewed documented maintenance Form F-20-5071.
3. Training document--superintendents and general foreman.

26. FIELD PROJECT ENG. ACTUAL DISP.: NA	27. QAS ENG. ACTUAL DISP.: NA	28. DESIGNATED ENG. ACTUAL DISP.: NA	29. ENG. IF REQ. APPR. FOR N/A: Special Maintenance Form F-20-5071, 6/19/81
30. FAB/CONST. ENG. ACTUAL DISP.: Special Maintenance Form F-20-5071, 6/19/81	31. ENG. IF REQ. APPR. DISP.: NA	32. FIELD ENG. ACTUAL DISP.: NA	33. QA ACTUAL ENG. IF DISPOSITION: H.I. Allen

34. DESCRIPTION OF PART 25 RECTIFICATION:

1. Reviewed training documentation dated June 2, 1981.
2. Reviewed Special Maintenance Form F-20-5071 dated June 19, 1981.

35. ENG. IF REQ. VERIF. FOR PART 25A RECTIFICATION DISPOSITION: F-20-5071 dated 6/19/81	36. ENG. DISPOSITION PART 25A & SIGN OFF: H.I. Allen 6/24/81	37. QA CLOSE OUT DATE: H.I. Allen 6/24/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: N-03-3-1-0-

38. ROOT CAUSE(S):

Inadequate attention to proper maintenance procedures during maintenance activities. (Ref. Block 12)

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Same as block #38 above.

40. PROCESS CA INITIATED FROM:

DESIGN ☐ FABRICATION ☐ CONSTRUCTION ☒ PROCUREMENT ☐ OPERATION ☐

OTHER _____

41. CA RECOMMENDATION FOR PROCESS CA:

Enforce cleanliness and proper maintenance procedures for installed equipment during maintenance activities.

42. PROCESS CA TO BE TAKEN BY ORG(S) CITED IN BLOCK 41 & DATE OF COMPLETION:

1. Bechtel Special Maintenance Form F-20-5071, description of maintenance and inspection performed.

2. Training session for superintendents and general foreman.

43. METHOD OF PROCESS CA VERIFICATION:

1. Verified by reinspection, proper reassembly and cleanliness is acceptable.

2. Verified F-10 maintenance requirements were implemented June 24, 1981.

44. ID. OF ORG. RESPONSIBLE FOR PROCESS CA VERIFICATION COMPLETION:
Special Maintenance Form F-20-5071 dated June 19, 1981

45. PROCESS CA COMPLETION VERIFIED BY, DATE:
H. L. Allen 6/24/81

Trend: C 3 Priority: 05 AI: S-801 SWAB Start Up System: 1GJA

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

TS. ENGINEERING AND CONSTRUCTION - JALITY ASSURANCE DEPARTMENT

PAGE 1 OF 3

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-81-050
Midland	1HBC-232-S-657-2-4 1HBC-248-S-657-2-3	Chilled Water System	2. DATE: 5/11/81
9. SERIAL NUMBER: N/A	10. ORG. COMMITTING NC: Bechtel Construction & Quality Control	11. AREA/LOC. OF NC: Auxiliary Building Elevation 643'	3. DATE OF REV: N/A
			4. FILE NO: 16.3.4 & 16.3.6

12. AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

M204 states: "Pipe, fittings and valves shall be marked with a heat number or a heat code and shall retain this identification until it is fabricated into subassemblies or installed in the piping system and the identification has been recorded in the record isometric or other record document. Material identification markings shall be transferred (before cutting) to all pieces where part is cut to make more than one component.
Contrary to this, Lines in Block 7, each have a 7" pup piece welded in with no record of traceability on QC/IR, no heat numbers exist on the pup pieces and controlling isometrics show pup pieces but no identification.

9. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith

INFO COPY:
WRBird GKWandling
JWCook MPQAD Route
TCCooke(2) [redacted]
MADietrich FHSchulmeister
JFFirlet
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1) Investigate traceability of pup pieces, record & document. (ESmith)
2) Mark pup pieces as per Spec. M204. (ESmith)
3) Revise isometric drawings to properly identify pieces. (LEDavis)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X] (Continued page 3)

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 01 Aux. Bldg. QA Hold

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 6/1/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: DRKeaten 5-12-81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

As per Transmittal No 23327 dated June 10, 1981, Inspection Record was corrected and traceability was confirmed.

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: Transmittal No 23327
30. PART INST. SIG. AUTH. DISP. DISP.: Transmittal No 23327	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:
Review of Transmittal No 23327 and referenced Inspection Record and visual inspection of pipe.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: Transmittal No 23327	36. SIG. VERIFYING PARTS C/A & HOLD TAG REMOVAL/DATE: 6-22-81	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) 6-22-81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-1-1

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Inspection error (documentation) by Quality Control and improper marking by Construction.

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See blocks 25 and 43.

43. METHOD OF PROCESS CA VERIFICATION:

Conducting training as per QCT 243 and 244 (Transmittal No 23327).

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

6-22-81

NCR Serial No: M-01-1-1-050

Date: 5/11/81

File No: 16.3.4 & 16.3.6

CONTINUED

13. QA RECOMMENDATION FOR PART CA:

4) Conduct and document training for appropriate Quality Control and Construction personnel, including crafts of the necessity of adhering to inspection procedures. (ESmith & LEDavis)

— Priority: 7 Trend: D2 AI: S802 Start Up System: 1EGA

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PSC CTS. ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-51
Midland 1 & 2	FW 29	ISO M512 Sheet 3 System 1HBB	2. DATE: 5/12/81 CLOSED 6/18/81
9. SERIAL NUMBER:	10. ORG. CONCERNING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV.: N/A
N/A	Bechtel QC	Auxiliary 685'	4. FILE NO: 16.3.6

12. AS IS NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

Peabody RT Procedure 3.20.A.1 Appendix 1 Paragraph B.4 ASME Section III, NB 5320 and Appendix VI, Paragraph VI - 1124 states in part: "Aligned porosity shall be acceptable providing the summation of the diameters of the pores is no more than "T" in a length 12T, or 6 in., whichever is less, providing each pore is separated by a distance at least 6 times the diameter of the largest adjacent pore." Contrary to these requirements; Radiograph film, Seq 94-108 inclusive for FW 29, exibits aligned porosity at 104 marker which will not meet the separation requirements stated in Paragraph VI-1124. (5) pores aligned for length of 3/8" largest pore 3/64" diameter.

5. DISTRIBUTION

ACTION COPY:

ESmith

INFO COPY:

WRBird ~~CERHandling~~
JWCook MPQAD Route
TCCooke(2) SKT/CAC
MADietrich
~~JTTirlet~~
~~WDGreenwell~~
~~GSKeeley~~
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1) Bechtel QC Reject Film.
2) Repair in accordance with apprc ed welding procedures.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY: 5/12/81 Tony R. Charette	23. WRITTEN REPLY REQUIRED BY: 5/22/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: DRKeaton 5-12-81

25. PART CA/DISPOSITION, JUSTIFICATION & COMPLETION DATE:

6/18/81 See Bechtel Letter FQCL 724/AI 1154 Complete response, attached.

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: N/A
30. FAB/CONST. SIG. AUTH. IMP. DISP.: N/A	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.: Tony R. Charette

34. METHOD OF PART CA VERIFICATION:

1) Reviewed FQCL 724/AI 1154
2) Visual, inspection of weldment utilizing film overlay.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: See FQCL 724/AI 1154	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: Tony R. Charette 6/18/81	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) Tony R. Charette 6/18/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Indoctrinate personnel to requirements of ASME Section III, Appendix VI.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

Not applicable based on FQCL 724/AI 1154.

43. METHOD OF PROCESS CA VERIFICATION:

Not applicable. See Block 42 above.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See FQCL 724/AI 1154

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Tony R. Chaville 6/18/81

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

May 22, 1981

Consumers Power Company
P. O. Box 1963
Midland, MI. 48640

Attention: D. M. Turnbull

Ref: Midland, Units 1&2
CPCo NCR M-01-9-1-051
QA Action Item S-802
FQCL-724/AI-1154

Dear Mr. Turnbull:

This is considered Quality Control's complete response to the above reference.

A visual inspection of the inside diameter of Field Weld 29 on drawing M-512 sheet 3, was conducted on May 19, 1981. The radiographic film was used to lay out the location of the porosity at the 104 marker. This inspection showed that the 3/64" indications on the film were not porosity, but rather rounded surface indications in the root of the weld. The root was accepted visually by the SNT Level II film interpreter and the ANI at the time of the original radiographic review, as shown on the radiographic review form. The radiographic review form has been corrected to reflect the actual condition of the weld.

If you have any further questions concerning the above, please contact this office.

Sincerely,

E. Smith
Project Field Quality Control
Engineer

ES/BTF/LAH/RTR/jmk

Consumers Power Company
QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

Priority: 6 Trend: C-3 Start Up: Indeterminate AI: S805 PAGE 1 OF 3

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-3-1-055
Midland 1 and 2	NA	NA	2. DATE: 5/13/81 CLOSED 6/17/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: NA
NA	Bechtel Const/QC	Poseyville Laydown Area	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Specification M-204, Paragraph 6.2, states: "Field fabricated and random length pipe may be stored outside on racks and cribbing. Cribbing shall be of sufficient height to eliminate direct contact between the soil or rock of the laydown area."

Bechtel Specification F-10-100, Paragraph 2.1, states: "All material and equipment is to be placed on cribbing, pallets or concrete slabs to prevent degradation."

Contrary to the above, the laydown area where fittings are being removed from "Q"-listed piping was found to be in violation of these requirements. Six lengths of stainless steel pipe was observed to be

(CONTINUED ON PAGE 3 OF 3)

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird
JWCook
TCCooke(2)
MADietrich
~~JTFirlit~~
~~WDGreenwell~~
~~GSKeeley~~
BWMarguglio
DBMiller
JARutgers
DATaggart
~~GKHandling~~
SKT/CAC
MPQAD Routing

13. QA RECOMMENDATION FOR PART CA:

1. Store piping as required in M-204. (LEDavis)
2. Inspect piping for damage; clean and repair as necessary and document. (LEDavis & ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC:	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: May 23, 1981 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE:
Bruce R. Anderson		DRKeating 5-13-81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

1) As per Transmittal Form #23310 dated 5/29/81, the subject pipe was returned to proper storage.
2) In addition, Transmittal Form #23310, dated 5/29/81, states Quality Control has verified this work, and documented the work on F-1-390 and F-2-16515.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
NA	NA	NA	Transmittal #23310
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
Transmittal #23310	NA	NA	Bruce R. Anderson

34. METHOD OF PART CA VERIFICATION:

1) By review of comments on Transmittal Form #23310 and visual inspection of referenced area.
2) Also reviewed were Quality Control's verification reports F-1-390 and F-2-16515.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)
Transmittal #23310	(N/A - SEE-14.) Bruce R. Anderson June 17, 1981	Bruce R. Anderson June 17, 1981

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-3-1-05.

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown--to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Inadvertent procedure violation.

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown--to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See Blocks 25 & 43.

43. METHOD OF PROCESS CA VERIFICATION:

Reviewed storage area weekly since first finding, and have found no subsequent violation.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

Transmittal # 23310

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Gregg R. Andre — June 17, 1997

12. "AS IS" NONCONFORMING CONDITION VS "AS REQUIRED" CONDITION WITH REFS: (CONTINUED)

laying on muddy soil. In addition, this same piping and other lengths of piping in the area are, in some cases, uncapped.

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Priority: 5 Trend: I-3 AI: S818 Start Up System: Indet. PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-060
Midland 1 & 2	Conduit 1ADA026	Conduit	2. DATE: 5/21/81
9. SERIAL NUMBER: N/A	10. ORG. COMMITTING NC: Bechtel Construction Bechtel QC	11. AREA/LOC. OF NC: D.G. Building, Bay 2 634' 6" Elevation	3. DATE OF REV: N/A
			4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

E-42, Rev 49, Sheet 10B, Paragraph 17 states in part: "After installation, exposed male threads shall be cleaned with a grease cutting solvent and coated with zinc-rich paint type LPS, ZINC-IT or equal."

Contrary to the above, exposed male threads on conduit 1ADA026 for coupling have not been painted as specified in Drawing E-42. PQCI E-1.0 Activity No. 3.6 states in part "Verify that all exposed threads are coated with zinc-rich paint." This record was closed with Activity 3.6; was signed as being complete.

5. DISTRIBUTION

ACTION COPY:
ESmith
LEDavis

INFO COPY:
WRBird ~~GEHandling~~
JWCook MPQAD Routing
~~TGGeske(2)~~ ~~SNP~~/CAC
MADietrich
~~JEFinlet~~
~~WDGreenwell~~
~~GSKeeley~~
BWMarguglio
DBMiller
JARutgers
DATaccart

13. QA RECOMMENDATION FOR PART QA:

a) Rework conconforming condition. (LEDavis)
b) Reinspect conduit 1ADA026 in accordance with specification listed above. (Esmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS AFFIXED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS AFFIXED:

15. IS PROCESS QA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC:	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY: Eric R. Oswald	23. WRITTEN REPLY REQUIRED BY: 6/3/81 TO ESTABLISH QA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: DRK eating 5-21-81

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

See attached Transmittal Form No 23335, dated June 12, 1981.

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: See attached Transmittal No 23335
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.: Eric R. Oswald

34. METHOD OF PART QA VERIFICATION:

Reinspected conduit 1ADA026 which now meets specifications above.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: See attached Transmittal No 23335	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: Eric R. Oswald 6/16/81	37. NCR CLOSED BY/DATE: (PART & PROCESS QA COMPLETE) Eric R. Oswald 6/16/81

BECHTEL POWER CORP.

TRANSMITTAL FORM

PLEASE RECEIPT AND RETURN BLUE COPY IMMEDIATELY

DATE 6/12/81

* ACTION

ACTION FOR VENDORS

1. ☐ APPROVED. MFG. MAY PROCEED
2. ☐ APPROVED SUBMIT FINAL DWG. MFG. MAY PROCEED
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT
5. ☐ REVIEW NOT REQUIRED MFG MAY PROCEED.

ACTION FOR OTHERS

6. ☐ FOR APPROVAL
7. ☐ CONSTRUCTION
8. ☐ PRELIMINARY USE
9. ☐ REFERENCE
10. ~~XX~~ Compete response.

SUBJECT	CODE
☐ BECHTEL DRAWINGS	S
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

QTY	E & PREFIX / BECHTEL FOREIGN PR. NO. ☐ / BECHTEL DRAWING NO. ☐	REV NO.	TITLE	VENDOR NO.	* ACTION	CODE
			MPQA NCR M-01-9-1-060 QA AI S-818 QC AI 1169			

CONSUMERS POWER COMPANY
RECEIVED
JUN 15 1981
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

PRINT ROUTE
DMT
DRK
MPL
SHT
ERD
FILE 16-24

THIS COPY FOR

COMMENTS: _____

TO

D. M. Turnbull, MPQAD
Consumers Power Co.

FROM

E. Smith, Quality Control
Bechtel Power Corp.

☐ VENDOR PRINT
☐ OTHER

BY _____

ORIGINAL

BPS FORM 16751

QC AI 1169

MPQA NCR M-01-9 1-060
QA AI S-818

13.b) Conduit 1ADA026 has been reinspected and is now in accordance with E42-A Rev. 50 Sht. 10B para. 17

41.a) The responsible CQCE has been retrained (Ref. QCT-400) in the use of Quality Control Instructions, Drawings and Specifications.

41.c) Seventeen (17) completed raceway (selected at random representing all areas) were checked for installation of paint on exposed male threads and found to be in accordance with requirements of E42-A Rev. 50. These conduits were taken from all Class 1E related buildings. (See attached listing).

T/N 23335

D.G.B.

1)	1BDA014	El. 634'0"	BAY #1	(OK)
2)	1ADA014	El. 634'0"	BAY #2	(OK)
3)	2BN043	El. 634'0"	BAY #4	(OK)
4)	2ADA020	El. 634'0"	BAY #3	(OK)
5)	2BC131	El. 568'0"	Aux. Rm. 26	(OK)
6)	1BKA039	El. 568'0"	Aux. Rm. 25	(OK)
7)	2AC135	El. 599'0"	Aux. Rm. 211	(OK)
8)	2AC134	El. 599'0"	Aux. Rm. 211	(OK)
9)	2AJD029	El. 634'0"	Aux. Rm. 419	(OK)
10)	1BE081	El. 648'	Aux. Rm. 614	(OK)
11)	1AG038	El. 593'	C.B. #1	(OK)
12)	1AG096	El. 593'	C.B. #1	(OK)
13)	2AG075	El. 634'	C.B. #2	(OK)
14)	2BG047	El. 634'	C.B. #2	(OK)
15)	2BSA013	El. 634'	S.W.	(OK)
16)	2AP032	El. 634'	S.W.	(OK)
17)	2AP018	El. 634'	S.W.	(OK)

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QAP: 6 Priority: 05 Start Up: 2EAC Trend: C-3 AI: S828 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-068
Midland 1 and 2	2HBC-109-S-619-1-10	Service Water System	2. DATE: 6/4/81 CLOSED 6/30/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: 6/9/81
NA	Bechtel Constr/QC	Containment No 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Specification 7220-M-342(Q) states: "Parts or subassemblies that will have inaccessible surfaces after assembly shall be in their final cleanliness condition as far as possible before assembly or installation."

Contrary to this, PQC/IR P-1.10, 619-1-3, Log No 13708, Rev 1, Act 2.4(E), cleanliness at F.W. 54, 55, 65 and 66 reference hanger was not signed off as being inspected, but welds are complete, thus, leaving the cleanliness of area indeterminate.

5. DISTRIBUTION

ACTION COPY:

ESmith

INFO COPY:

WRBird MPQAD Routing
JWCook MADietrich
TCCooke(2) MJSchaeffer
~~JFFirlit~~ FHSchulmeister
~~WDGreenwell~~
~~GSKeeley~~
BWMarguglio
DBMiller
JARutgers
DATaggart
~~GKP~~/CAC /KFH

13. QA RECOMMENDATION FOR PART CA:

Provide assurance that F.W. 54, 55, 65 and 66 meets Bechtel program cleanliness requirements. (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1); Containment No 2; QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, WHO MADE REPORT TO NRC: NA

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: [signature]

23. WRITTEN REPLY REQUIRED BY: July 3, 1981 TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaffer 6/9/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Transmittal #23354 dated 6/25/81.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
NA	NA	NA	Transmittal #23354
30. PAB/CONST. SIG. AUTH. IMP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
Transmittal #23354	NA	NA	[signature]

34. METHOD OF PART CA VERIFICATION:

Transmittal #23354 dated 6/25/81 review.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/APP:	37. NCR CLOSED/AT DATE: (PART & PROCESS CA COMPLETE)
Transmittal #23354	[signature] 6-30-81	[signature] 6-30-81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PRO... S. ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-1-1-068

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown--to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Inspectors sometimes record hanger attachment welds and at times they do not. This NCR clarifies this situation.

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown--to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See Blocks 25 & 43.

43. METHOD OF PROCESS CA VERIFICATION:

Transmittal #23354 Review

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

6-30-81

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend: C 2 SUS: 2 EAC Priority: 05 AI: S835

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-069
Midland	8" 2HBC-110-H26	Pipe Support	2. DATE: 6/8/81 CLOSED 6/30/81
9. SERIAL NUMBER:	10. ORG. CONCERNING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Construction and Quality Control	Containment 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Spec. 7220-M-326- 5.1.1 states: "To the greatest extent possible, pipe supports shall be installed in strict compliance with the component pipe support design sketches/drawings."
Contrary to this: Sketch 2-619-2-28 shows to field cut grating to suit spring canister. However, grating and canister have no clearance in some areas.

9. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird ~~GKWendling~~
JWCook MPQAD Route
TCCooke(2) ~~SKT~~/CAC/KFH
MADietrich FHSchulmeister
~~JFFirlet~~ MJSchaeffer
~~LDGreenwell~~
~~CSKeeley~~
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1. Rework grating to give adequate clearance for spring canister. (LEDavis)
2. Reinspect and document. (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1 Cont. #2 QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaeffer 6/9/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Transmittal #23356 dated 6/26/81.
Cut grating to provide adequate clearance.

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMG SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
N/A	N/A	N/A	Transmittal #23356
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR NCR - PLT. SUPT. SIG. AUTH. DISP.:	33. QA MGR. SIG. TO ACCEPT DISP.:
Transmittal #23356	N/A	N/A	

34. METHOD OF PART CA VERIFICATION:

Transmittal #23356 and visual inspection.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)
Transmittal #23356	6-30-81	6/30/81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-069

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown: to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

No actual dimension for clearance shown on sketch and no definition of inspection criteria in Specification M-326. As a result of this nonconformance report, QAR F-068 was initiated.

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown: to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See Blocks 25 & 43.

43. METHOD OF PROCESS CA VERIFICATION:

Cut grating for proper clearance and documented on QC FIR.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY:

6-30-81

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend: C SUS: 2EAC Priority: 05 AI:S836

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-070
Midland	8" 2HBC-90-H1	Pipe Support	2. DATE: 6/9/81 CLOSED 6/30/81
9. SERIAL NUMBER:	10. ORG. CONCERNING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Construction and Quality Control	Containment 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

PQCIR P-2.10, Paragraph 3.2 states: "Prefabricated Vendor supplied functional components. Prefabricated components such as spring canisters and shock suppressors are to be identified with the applicable pipe support identification number."

Contrary to this, identification of hanger is illegible.

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird ~~CKWandling~~
JWCook MPQAD Routing
TCCooke(2) ~~SKT~~/CAC/KFH
MADietrich FHSchulmeister
~~JFFirlet~~ MJSchaeffer
~~CSKeeley~~
~~WDGreenwell~~
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART QA:

1. Apply appropriate hanger identification number as per procedure and document. (ESmith) (LEDavis)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1 Cont. 2 QA

15. IS PROCESS QA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATOR BY:	23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH QA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M. J. Schaeffer 6/9/81

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Transmittal #23355 dated 6/26/81.
Scribed Hanger No. onto spring canister.

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: Transmittal #23355
30. FAB/CONST. SIG. AUTH. IMP. DISP.: Transmittal #23355	31. SIG. OF TEST GROUP ACKNOWL. CONDITION: N/A	32. FOR MAJOR MOD - PLT. [illegible] SIG. AUTH. DISP.: N/A	33. QA APPR. SIG. TO CLOSE NCR/DISP.:

34. METHOD OF PART QA VERIFICATION:

Transmittal #23355 and visual examination.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: Transmittal #23355	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: 6-30-81	37. NCR CLOSED BY/DATE: (PART C/A/PROCESS QA COMPLETE) 6-30-81

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-070

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Original I.D. were off due to material handling during installation.

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See Blocks 25 & 43.

43. METHOD OF PROCESS CA VERIFICATION:

Scribed hanger identification onto spring canister and documented on QC FIR.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY; DATE:

6-30-81

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6A27-0 Trend: C3 SUS: 2BGD Priority: 05 AI: S837 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-071
Midland	2CCB-24-H14	Pipe Restraint	2. DATE: 6/9/81
9. SERIAL NUMBER: N/A	10. ORG. CONCETTING NC: Bechtel Construction and Quality Control	11. AREA/LOC. OF NC: Containment 2	3. DATE OF REV: N/A
			4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Specification 7220-M326, Section 4.2.4 states in part, "No welding across the flange or cover plate of an existing building framing structural beam shall be done without prior approval of project engineering. . . . ."
Contrary to this, welds do exist on flange of existing beam at item # 1 (typical), 4 places.
PQCIR P2.10, Para 3.2 states, "Prefabricated Vendor supplied functional components. Prefabricated components such as spring canisters and shock suppressors are to be identified with the applicable pipe support identification number."
Contrary to this, no identification exists.

5. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith

INFO COPY:
WRBird ~~GKWandling~~
JWCook MPQAD Routing
TCCooke(2) ~~SKF/~~CAC
MADietrich FHSchulmeiste
~~JFFirlet~~ MJSchaeffer
~~WDGreenwell~~
~~GSKeeley~~
BWMarguglio
DBMiller
JARutgers
DATaggart

13. QA RECOMMENDATION FOR PART CA:

1. Rework hanger to conform with procedure, reinspect and document. (ESmith) (LEDavis)
2. Apply appropriate hanger identification as per procedure and document.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X] (LEDavis) (ESmith)

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 1 Cont. 2 QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A
22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaeffer 6/9/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

Transmittal No 23336 dated June 17, 1981.

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMD SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: Transmittal No 23336
30. FAB/CONST. SIG. AUTH. DISP.: Transmittal No 23336	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO APPROVE DISP.

34. METHOD OF PART CA VERIFICATION:

Transmittal No 23336 dated June 17, 1981.

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: Transmittal No 23336	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: PHASE & PROCESS CA COMPLETE

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-1-1-071

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

See Transmittal No 23336.

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See blocks #25 and #43.

43. METHOD OF PROCESS CA VERIFICATION:

Transmittal No 23336.

44. SIGN BY ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA VERIFICATION BY QA: DATE

10-29-81

CPCo

Revised NCR's

6/81

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

Trend B-3 Priority 1 SUS Indeterminate AI S-100I PAGE 1 OF 2

6. PROJECT NAME: Midland 1 & 2	7. NONCONFORMING PART NO: PQCI E-2.0; 1BJF02; 1BTE06	8. NONCONFORMING PART NAME: Quality Control Instruction Cable Trays	1. NCR SERIAL NO: M-01-S-8-102
			2. DATE: 12-1-78
4. SERIAL NUMBER: NA	10. ORG. CONNECTED TO: Bechtel Construction, Bechtel QC	11. AREA/LOC. OF NC: Elevation 614'-0" Auxiliary Building	3. DATE OF REV: 6/11/81
			4. FILE NO: 16.3.4, 16.3.6

12. AS IT NONCONFORMING CONDITION EXISTS AS IDENTIFIED CONDITION WITH REFS:

Paragraph 6, sheet 2 of E-42 (Q) Rev. 7 states in part, "When welding is necessary the finished weld and uncovered metal shall be painted with zinc rich paint as protection against corrosion".

Contrary to the above requirement, cable tray sections 1BJF02 and 1BTE06 were damaged by welding and were not painted. The time between welding and painting is in the order of months. This time delay enables the corrosion to start which the paint is intended to prevent, therefore, violating the requirements. Both of these sections have been accepted by Bechtel QC.

5. DISTRIBUTION

ACTION COPY:
~~LnDreisbach~~
LHCurtis
LEDavis
ESmith

INFO COPY:

WDGreenwell	
~~WLBarclay~~	DBMiller
WRBird	~~WMoring~~
TCCooke	JFNewgen
~~HJGorley~~	~~RJGimanek~~
~~RHermeston~~	DATaggart
~~SHillowell~~	JWCook
GSKeeley	MADietrich
BWMarguglio	JARutgers
~~PAMartinez~~	JLWood
~~JMHendin~~	MPQAD Route

13. CA RECOMMENDATION FOR PART 12:

Recommend timely action be taken to have the cable trays cleaned and painted. Further recommend that paragraph 10 of sheet 2 E-42 be implemented effective immediately.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [ ] NO [X] TAGGED, LOCATION & TYPE OF HOLD TAGS APPLIED: NA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT 4-LIST ITEM: YES [X] NO [ ]		17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]	
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]		19. IF YES, DATE & TIME OF REPORT TO NRC: NA	
20. IF YES, AND VALE REPORT TO NRC: NA		21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA	
22. RECOMMENDED BY: Eugene L Jones 6/11/81	23. WRITTEN REPLY REQUIRED BY: 12-15-78 6/25/81 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: Paul K Sysen 6/11/81 12-1-78	

25. PART CA DISPOSITION, VERIFICATION & COMPLETION DATE:

SEE BECHTEL LETTER FILE 2610 DATED 15 JAN 79.

26. DESIGN/PROJECT RES. ACTS. REQ'D.: NA	27. PRO RES. ACTS. REQ'D.: NA	28. PROCUREMENT RES. DOC. REQ'D.: NA	29. RES. IF REQ. DOC. FOR CA: NA
30. FAB/CONST. RES. ACTS. DOC. REQ'D.: SEE LETTER FILE 2610	31. RES. IF TEST PRIOR ACCEPT. CONDITION: NA	32. FOR VALVE NCR - FLD. SUPT. RES. ACTS. REQ'D.: NA	33. QA ACTS. REQ. TO DOCUMENT RES?: SEE LETTER FILE 2610

34. METHOD OF PART CA VERIFICATION:

VISUAL CHECK OF CABLE TRAY SECTIONS 1BJF02 AND 1BTB06.

35. RES. IF REQ. TEST FOR PART CA DISPOSITION COMPLETION: SEE LETTER FILE 2610	36. RES. VERIFIED PART CA & HOLD TAG REMOVAL DATE: Eugene L Jones 19 JAN 79	37. NCR CLOSED BY DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

M-01-3-8-102

NCR SERIAL NUMBER: _____

13. ASSESSMENT OF ROOT CAUSE(S):

Welding to the cable trays always destroys the galvanized plating on the tray. Due to excessive time after welding before repairs are made, the unpainted surfaces deteriorate to an unacceptable level.

14. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

15. PROCESS CA INITIATED FROM:

DESIGN [ ] FAILED ACTION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

16. CA RECOMMENDATION FOR PROCESS CA:

It is recommended that Bechtel Construction be required to comply with paragraphs 6 and 10 of sheet 2 Rev. 7 E-42 (Q) without excessive delay and before final inspection by Bechtel QC. It is further recommended that activity 3.2 of PQCI E-2.0 be amended to include "cable tray damage" and inspection criteria for E-42 sheet 2 (4) be changed to E-42 Sheet 2 (4) and (6).

Revise Drawing E-42(Q) to provide for the coating repair to be accomplished prior to reporting the conduits, cable trays and supports ready for QC inspection.

17. PROCESS CA TO BE TAKEN BY ORG(S) LISTED IN BLOCK 16 & DATE OF COMPLETION:

18. METHOD OF PROCESS CA VERIFICATION:

19a. NAME OF ORG. RESPONSIBLE FOR PROCESS CA VERIFYING COMPLETION:

19b. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Trend: I-3 Priority: 1 SUS: 2PNA AI: S819

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-061
Midland 1 & 2	2AB2322B	Minimum Bend Radius	2. DATE: 5/21/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF INSP: 6/8/81
N/A	Bechtel QC	Auxiliary Building el. 614 inside MCC 2B23	4. FILE NO: [redacted] & 16.3.6

12. AS IS NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

During the recent NRC inspection held May 18-22, 1981, the Inspector, concurrent with MPQAD, identified the Z phase of Cable 2AB2322B being in violation of the minimum bend radius criteria at the Motor Control Center end (2B23).
Bechtel Quality Control had inspected this cable termination 5/12/81 and indicated that Activity 3.11 in PQCI E-5.0 was found to be satisfactory.

5. DISTRIBUTION

ACTION COPY:
LEDavis
ESmith
REMcCue

INFO COPY:
WRBird GKWandling
JWCook MPQAD Route
TCCooke(2) SKT/CAC
MADietrich
JFFirlet
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart

11. QA RECOMMENDATION FOR PART QA:

1) Construction to rework feeder cable to meet minimum bend radius requirements.
2) Quality Control need to reopen IR and do a reinspection of subject cable for conformance to minimum bend radius.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1) Auxiliary Building el. 614'

15. IS PROCESS QA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC:
20. IF YES, WHO MADE REPORT TO NRC:	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED:

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: 6/4/81 TO ESTABLISH QA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: 5/21/81
M. J. Schrader		M. J. Schrader for HP Leonard

25. PART QA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
	N/A	N/A	
30. PAB/CONST. SIG. AUTH. DISP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
	N/A	N/A	

34. METHOD OF PART QA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS QA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PRO. 3. ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-061

38. QA ASSESSMENT OF ROOT CAUSE(S):

1) Construction was not done in accordance with minimum bend radius requirements.
2) Quality Control inspection was not done in accordance with PQCI E-5.0 Activity 3.11.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

1) Cognizant construction personnel to be instructed as to minimum bend radius requirements and document training. (LEDavis)
2) Cognizant Quality Control personnel to be re-instructed as to the requirements of PQCI E-5.0 and document training. (ESmith)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company
8A27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

Priority: 05 Start Up: 2EAC Trend: C-3 AI: S828 PAGE 1 OF 2

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-1-1-068
Midland 1 and 2	2HBC-109-S-619-1-10	Service Water System	2. DATE: 6/4/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: 6/9/81
NA	Bechtel Constr/QC	Containment No 2	4. FILE NO: 16.3.4 & 16.3.6

12. AS INV NONCONFORMING CONDITION /VERSUS AS REQUIRED CONDITION WITH REFS:

Specification 7220-M-342(Q) states: "Parts or subassemblies that will have inaccessible surfaces after assembly shall be in their final cleanliness condition as far as possible before assembly or installation."

Contrary to this, PQC/IR P-1.10, 619-1-3, Log No 13708, Rev 1, Act 2.4(E), cleanliness at F.W. 54, 55, 65 and 66 reference hanger was not signed off as being inspected, but welds are complete, thus, leaving the cleanliness of area indeterminate.

5. DISTRIBUTION

ACTION COPY:
ESmith

INFO COPY:
WRBird MPQAD Routing
JWCook
TCCooke(2)
JFFirlit
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart
SKT/CAC

13. QA RECOMMENDATION FOR PART CA:

Provide assurance that F.W. 54, 55, 65 and 66 meets Bechtel program cleanliness requirements. (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1); Containment No 2; QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]

17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]

18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]

19. IF YES, DATE & TIME OF REPORT TO NRC: NA

20. IF YES, WHO MADE REPORT TO NRC: NA

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY: [signature]

23. WRITTEN REPLY REQUIRED BY: July 3, 1981 TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE: M. J. Schaffer 6/7/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
NA	NA	NA	
30. FAB/CONST. SIG. AUTH. DSP. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-1-1-068

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown--to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [X]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown--to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

QA27-0 Priority 1 Trend B-2 SUS Indeterminate AI S870

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-074
Midland 1 & 2	1C23 2C23	Control Panels	2. DATE: 6/15/81
9. SERIAL NUMBER:	10. ORG. CONCERNING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: 6/18/81
N/A	Bechtel Construction	659' Elevation	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Bechtel Drawing 7220-E-47, Section 3.6 outlines the internal separation requirements between Class IE and Non-class IE circuits in Control Panels.

Contrary to the above requirements, Non-class IE Cable 2NQ184F has been routed into Control Panel 2C23 through slot 2NJ118 and is tyrapped less than 1" from a flexible conduit containing class IE wiring.

In addition, it was observed in 1C23 that several cables (#81, 17, 7, 9, 4 and 6) routed from the enclosed wireway in the top of the Panel to TB's 23-N2 and 23-N4 in the bottom (Continued page 3)

5. DISTRIBUTION

ACTION COPY:

LEDavis

INFO COPY:

WRBird
CAChien
JWCook
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood
MPQAD Routing

13. QA RECOMMENDATION FOR PART CA:

Adjust the routing of cables in 1C23 and 2C23 such that the separation requirements between Class IE and Non-class IE cables is maintained.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [X] NOT REQUIRED [ ]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: 2 1C23 & 2C23

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY:	24. SUPERVISOR'S SIGNATURE/DATE:
[signature] 6/18/81	6/29/81 TO ESTABLISH CA COMPLETION DATE	[signature] 6/18/81 6/15/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMO SIG. AUTH. DISP.:	28. PROCUREMENT SIG. AUTH. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
	N/A	N/A	
30. FAB/CONST. SIG. AUTH. DISP.:	31. SIG. OF TEST GROUP ACKNOW. CONDITION:	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:	33. QA AUTH. SIG. TO IMPLEMENT DISP.:
	N/A	N/A	

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M01-9-1-074

38. QA ASSESSMENT OF ROOT CAUSE(S):

Termination crews are not routing Non-class IE cabling in accordance with the requirements of Drawing E-47.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [ ] FABRICATION [ ] CONSTRUCTION [X] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Train/retrain all termination crews in the separation requirements of E-47 especially where Control Panels are concerned. Notify MPQAD when such training has been completed.
(LEDavis)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

12. CONTINUED

"AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

do not maintain the required 1" clearance with flexible conduit containing Class IE wiring. This same condition exists in 2C23.

Similar instances of this type of deficiency were noted by NRC during their inspection April 27 through May 1, 1981. As a result QAR F-050 was written.

Consumers Power Company

QA27-0

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AI: S857

Priority: 04 Trend: K-2 Start Up: 1PFA, 2PEA, 1PFB & 2PEB PAGE 1 OF 5

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-01-9-1-075
Midland 1 and 2	1C231, 1C232 2C231, 2C232	Engineering Diesel Control Panel	2. DATE: 6/12/81
9. SERIAL NUMBER:	10. ORG. COMMITTING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: 6/19/81
NA	BPCo Proj Engineering BPCo Procurement	634' 6"	4. FILE NO: 16.3.1 & 16.3.2

12. "AS IS" NONCONFORMING CONDITION VERSUS AS REQUIRED CONDITION WITH REFS:

Bechtel Specification 7220-M-18(Q) dictates the design requirements and applicable codes and standards for material and construction of Emergency Diesel Generator Control Panels.

Contrary to the above specification, numerous deficiencies in these panels were observed during a recent overinspection of vendor workmanship by MPQAD. Attachment #1 lists the deficiencies found with references.

5. DISTRIBUTION

ACTION COPY:

LHCurtis
*RMCollins

INFO COPY:

WRBird
CAChien
JWCook
MADietrich
BWMarguglio
DBMiller
JARutgers
DATaggart
JLWood
MPQAD Routing

13. QA RECOMMENDATION FOR P/ T CA:

1. Provide direction to Bechtel Construction for rework of the panels, so they meet the requirements of Specification 7220-M-18(Q)
*2. Evaluate and determine reportability per 10CFR50, Part 21.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [X] NOT REQUIRED [ ]

14. HOLD TAGS APPLIED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: Four (4) tags, Elevation 634' 6", DG Building, Bays 1, 2, 3 & 4

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [ ] *	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: *	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

22. NCR ORIGINATED BY:	23. WRITTEN REPLY REQUIRED BY: July 1, 1981 TO FACILITATE CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Slaughter 6/12/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.:	27. PMC SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.:	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DISP.: NA	31. SIG. OF TEST GROUP ACKNOW. CONDITION: NA	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

Consumers Power Company

NONCONFORMANCE REPORT
PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-91-9-1-075

39. QA ASSESSMENT OF ROOT CAUSE(S):

Equipment was not properly surveyed at the vendor by the Bechtel SQR and/or all the specifications and standards that applied to this equipment were not properly reviewed/ imposed by the SQR or Bechtel Engineering.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN [X] FABRICATION [ ] CONSTRUCTION [ ] PROCUREMENT [ ] INSPECTION [ ]

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Provide written assurance, with justification, that the Emergency Diesel Generator Control Panels are built to all applicable specifications and will perform in service as required by the original design. (Project Engineering)

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Specification 7220-M-18(Q), Revision 6, Paragraph 5.2.9.c:

All control circuit wiring shall be color coded as follows:

IE Channel 1A or 2A = red
IE Channel 1B or 2B = green
Non-IE wiring = black

Color-coded wiring may be gray with color-coded stripe.

Contrary to the above, there is blue and white jacketed cable used in the panels--not color coded according to the above.

IEEE Standard 384-1977

Paragraph 5.65--Non-Class IE Wiring--Non-Class IE wiring not separated from Class IE or associated wiring by the minimum separation distance (determined in 5.6.2) or by a barrier shall become associated circuits and shall be subject to the requirements of 4.5.

Paragraph 5.6.2 states in part: "Where the control switchboard materials are flame retardant and analysis is not performed, the minimum separation distance shall be six inches (15.24 cm). In the event that the above separation distances are not maintained, barriers shall be installed between redundant Class IE equipment and wiring.

Contrary to the above, Class IE and non-IE wiring is not separated by the required minimum distances (with or without barriers) inside the cabinets. There are some terminal blocks (TS-1, TS-2 and TS-3) that have both color striped cable (Class IE) and no stripe cable (Class non-IE) terminated to the same points. (NOTE: Nuts used on States blocks appear to be steel, not cadnium-plated brass as supplied by States Company.)

Specification 7220-G-5, Revision 1

Paragraph 5.9

Design, material selection and workmanship shall be such as to result in a neat appearance outside and inside, with no welds, rivets or bolt heads apparent from the front faces of the boards and with all exterior surfaces true and smooth. Rivets shall not be used to attach any equipment to the control boards.

Contrary to the above, wire supports are riveted to the cabinet.

Paragraph 6.12

Unshielded wire shall be single conductor, soft drawn copper, ASTM Class B stranded. Wire size shall be No 14 AWG minimum, except annunciator wiring, which shall be No 18 AWG minimum. Insulation shall be IPCEA S-28-357 600 volt type TA, TBS or SIS, rated for 90C conductor temperature, and shall pass the IPCEA S-61-402 flame resisting test.

Contrary to the above, wiring used on undervoltage relays is No 18 AWG, and the following cables are not easily apparent if they meet the above IPCEA requirements:

A. Vulkene Supreme SIS

B. E-52305H-SIS

C. White jacket cable (appears to be teflon)

D. Delco-Link SIS E-18321

E. ITT surprenant EXANE

F. American Wire and Cable Company Machine Tool wire 105°C 600V oil resistant to 40°C CSATEW

G. Blue jacket cable (used as jumpers on contractors)

Paragraph 6.14

All exposed wiring within the boards shall be formed neatly with minimum radius bends, with wires grouped in packs using non-metallic wiring cleat or bands and with groups substantially supported along the board. Wires shall not be spliced or tapped between terminal points. Plastic wiring duct of a type approved by the Buyer may be used.

Contrary to the above, several cables are not tied down and are run outside existing wireways.

Paragraph 6.2 - Terminal Blocks

6.21

Terminal blocks shall be States Company type NT rated 600 volts and shall be of the screw type to accommodate the lugs described in paragraph 6.23 herein. A marking strip shall be provided for each block, permanently marked with Buyer's scheme number in accordance with requirement drawing 7220-E-50. Other appropriate terminal blocks may be acceptable for electronic circuit applications if the Seller deems them advantageous.

Contrary to the above, marking strips are not provided for all terminals.

Paragraph 6.22

Spare terminals equal in number to ten percent (10%) of the active terminals shall be provided. Arrangements of spares shall be such that each board or terminal block group will have its approximate proportion of spares. Buyer's wires connected to one wiring point, a sufficient number of terminals jumpered together, shall be provided to allow connection of only one wire per terminal on the outgoing side of the terminal blocks. Any common connections required shall be provided for by the Seller on the side of the blocks nearest the board face. Not more than two wires shall be connected to each point on the board face side. Terminal blocks shall be grouped by services and segregated according to circuit voltage and field destination. Terminal blocks shall be mounted on the boards not less than ten inches from the bottom of the board.

Contrary to the above, there are terminations with more than two wires (or lugs) connected to a common point (as many as six on some).

Paragraph 6.23

All wire terminations except coaxial, triaxial, thermocouple and resistance termperature detector cables (which will be wired direct to instruments), shall be made with solderless ring-tongue compression-type connectors which firmly grip the conductors. Burndy, "Hylug" type "YAV" for No 9 and smaller and Burndy "YA-L" for larger wires are preferred. When installed, the indentation shall face out and a small gap shall separate the wire insulation from the lug barrel so it is evident by visual inspection that the wire, and not the insulation, is properly clamped in the lug.

Contrary to the above, many terminal lugs are insulated and are not of the correct type or size (some have been modified to fit).

CPCo

Open AFR's

6/81

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Priority: 5 Trend: N2 AT: S-693 Start Up System: 2GMA

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCE:

Specification C-305, Rev 13, Section 4.17 requires that "when expansion anchors are located near each other or near a grouted anchor, the minimum c/c spacing shall be the sum of the edge distances of both anchors as defined in Appendix C and Spec C-306, Appendix B."

Contrary to the above, one of the one-inch grouted anchors for the ground resister, elev 652, is 5 1/2" and 7 1/4" from top two 1/2" expansion anchors for Zack hanger 112 system 2VV85A.

Nine (9) hangers reviewed--only discrepancy identified.

AFR SER NO: M-01-08-1-01

PROJ/DEPT AUDITED: Zack

DATE OF ORIGINATION: 03/11/81

FILE NUMBER: 18.4.7

DISTRIBUTION:

WRBird
JWCook
TCCooke
MADietrich
GSKeeley
BWMarguglio
JMilandin
DBMiller
JARutgers
ESmith
DATaggart
SKT/CAC
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

1. Obtain Project Engineering disposition.

2. Determine if Bays 1, 2 and 4 of the DG building have similar deficiencies.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment date is April 3, 1981.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Subcontract/Zack

PERSON MAKING C/A COMMITMENT: Reinaldo Luis

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e)?: YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC:

IF "YES", TIME OF REPORT TO NRC:

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT:

AFR ORIGINATOR'S SIGNATURE: George D Karsaiko

SUPERVISOR'S SIGNATURE: DK Katerey

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Trend: K/3 SUS: NA Priority: 7 AI: S 841

"AS IS" CONDITION (CRITERIA AS REQUIRED) / "AS VERIFIED" CONDITION WITH REFERENCES:

FIC-1.100, Revision 3, Appendix A, Daily FER, Section 18, states that the Geotechnical Soils Engineer shall "review and approve each test report, and shall review and initial all acceptable test report sheets from US Testing and document on FERs the test reports reviewed."

Contrary to the above, the on-site Geotechnical Soils Engineer did not review the "information only" gradation test reports performed in conjunction with in-place density tests as of January 1, 1981. US Testing did not transmit these informational gradation reports to the on-site Geotechnical Soils Engineer for his review.

AFR SER NO: M-01-16-1-01

FROM/DEPT ADDRESS: BPCo/US Testing

DATE OF ORIGINATION: June 9, 198[illegible]

FILE NUMBER: 18.4.3.4

DISTRIBUTION:

RCAsh	ESmith
WRBird	KKleinhardt
JWCook	SEBandla
TCCooke	PCorcoran
MADietrich	SKT/CAC
LEDavis	RCHollar
LHCurtis	MPQAD Route
RBFallgren	
BWMarguglio	
DATaggart	
WDGreenwell	
GSKeeley	
DBMiller	
JARutgers	

RECOMMENDED CORRECTIVE ACTION:

1. Project Engineering to determine and instruct the on-site Geotechnical Soils Engineer accordingly as to the scope of review responsibilities, including informational tests.
2. Subsequent to Project Engineering's determination of the need for review, instruct US Testing Laboratory Supervisor accordingly as to the need to route informational tests for review by the on-site Geotechnical Soils Engineer. (Contd on reverse side)

CORRECTIVE ACTION COMMITMENT:

Project Engineering to determine need for review of informational tests by on-site Geotechnical Soils Engineer.

DATE OF C/A COMPLETION: 2 weeks from date of issue

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Project Engineering

PERSON MAKING C/A COMMITMENT: Pat Corcoran

METHOD OF VERIFICATION:

IS AN REPORTABLE PER 50.55(e)? YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", WHO MADE REPORT: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE: R. E. [illegible]

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

AUDIT FINDING REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

CONTINUATION SHEET:

"AS IS" CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES (CONTINUED):

RECOMMENDED CORRECTIVE ACTION (CONTINUED):

3. If the need for review of information tests is determined, on-site Geotechnical Soils Engineer to review all informational test reports not previously reviewed, in addition to future information tests, and document results on FER.

CORRECTIVE ACTION (CONTINUED):

AUDITOR/EVALUATOR'S SIGNATURE:	SUPERVISOR'S SIGNATURE:
[signature]	R. E. Sevo

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

UFI 73*03*03

Trend F3 AI S864 SUS Indeterminate Priority 5

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

QA Plan Procedure 4.6, Paragraph 5.6 states "Calibrations shall be performed using reference standards traceable to the National Bureau of Standards or shall be the self-ratio type of calibration."

Contrary to the above, a review of NDE calibration and certification equipment documentation indicates the reports/data sheets do not provide a block entry or line space for recording the serial numbers of calibration standards used for calibration of ultrasonic equipment. To maintain traceability, reports must provide a complete history of examinations (equipment, materials, standards, etc) that are traceable to known standards, directly or indirectly.

This is one item of of twelve reviewed for similar information.

AFR SER NO: M-01-21-1-01

PROJ/DEPT AUDITED: Bechtel/ GEO Const. Testing

DATE OF ORIGINATION: 6-11-81

FILE NUMBER: 18.4.7

DISTRIBUTION:
WRBird
JWCook
TCCooke
MADietrich
WDGreenwell
PJHerbert
GS' ley
BWh..guglio
DBMiller
JARutgers
ESmith
DATaggart
MPQAD Routing
SKT/CAC

RECOMMENDED CORRECTIVE ACTION:

1) Revise existing calibration report form to incorporate calibration block (standard) serial number as that used in calibrating machine/ equipment.

2) Provide justification for deviation from traceability requirement.

(cont on other side)

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of audit report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Subcontracts

PERSON MAKING C/A COMMITMENT: RCAsh

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e): YES [ ] NO [X]

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

IF "YES", WHO MADE REPORT: N/A

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE: DR Keating 6-17-81

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

AUDIT FINDING REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

CONTINUATION SHEET:

"AS IS" CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES (CONTINUED):

RECOMMENDED CORRECTIVE ACTION (CONTINUED):

3) Provide means to ascertain stepwedge standard used previously is traceable to the National Bureau of Standards.

CORRECTIVE ACTION (CONTINUED):

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE:

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

UFI 73*03*03

Trend Fl AI S865 SUS Indeterminate Priority 5

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

GEO Construction - Quality Assurance Program Paragraph 16.3 Closed Loop Corrective Action states: "The closed loop Correction Action system shall consist of:

a) A report of deficiency.
b) A determination of the cause for the deficiency.
c) Notification to responsible personnel.
d) Receipt of acknowledgement and course of action to be taken by responsible organization.
*e) Analysis of corrective action adequacy.
*f) Follow up to assure effectiveness of corrective action."

Contrary to the above: GEO QC Audit/Inspection Report No 2306-9 indicates a management commitment was made to establish a procedure under the corrective action block. GEO could not show evidence that such a procedure had been issued, therefore corrective action has not been implemented, resulting in an open loop deficiency and failure to follow up as necessary to assure the effectiveness of committed corrective action. NOTE: Asterisks indicate items of concern for this finding. This is one item out of seven reviewed.

AFR SER NO: M-01-21-1-02

PROJ/DEPT AUDITED: Bechtel/ GEO Const. Testing

DATE OF ORIGINATION: June 11, 1981

FILE NUMBER: 18.4.7

DISTRIBUTION:
WRBird
JWCook
TCCooke
MADietrich
WDGreenwell
PJHerbert
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
DATaggart
MPQAD Routing
SKT/CAC

RECOMMENDED CORRECTIVE ACTION:

1) Issue procedure as committed to in report number 2306-9.

2) Justify non-compliance to established QA Program.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of audit report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Subcontracts

PERSON MAKING C/A COMMITMENT: RCAsh

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e)? YES [ ] NO [X]

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", WHO MADE REPORT: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE: DK Keating 6-17-81

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Trend F4 AI S866 SUS Indeterminate

UFI 73*03*03
Priority 5

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

GEO Construction - Quality Assurance Plan 2.3, Paragraph 6.7.4 states in part: "A visual acuity examination shall be administered to the candidate prior to the initial certification and thereafter, on an annual basis or at more frequent intervals if required."

Contrary to the above: A review of exams for David Postma indicated the current exam was validated 11/3/80. The previous exam expired 9/20/80. For the period from 9/21/80 to 11/2/80, this individual did not have a valid eye exam and was performing NDE processes.

This is one item out of eleven reviewed.

AFR SER NO: M-01-21-1-03

PROJ/DEPT AUDITED: ~~Bechtel~~ GEO Const. Testing

DATE OF ORIGINATION: 6-11-81

FILE NUMBER: 18.4.7

DISTRIBUTION:
WRBird
JWCook
TCCooke
MADietrich
WDGreenwell
PJHerbert
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
DATaggart
MPQAD Routing
SKT/CAC

RECOMMENDED CORRECTIVE ACTION:

1) Review all reports (NDE) from 9/21/80 thru 11/2/80 and retest all items inspected by D Postma as applicable.
2) Review all other inspectors for similar conditions and establish a program to eliminate expiration of individual's vision test.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of audit report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Subcontracts

PERSON MAKING C/A COMMITMENT: RCAsh

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e): YES [ ] NO [X]

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

IF "YES", WHO MADE REPORT: N/A

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE: DK Keating 6-17-81

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

UFI 73*03*03

Trend F3 AI S867 SUS ~~Indeterminate~~ ~~Priority 5~~

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

GEO Construction - QA Plan Test and Inspection Procedure 3.23.A.1, Revision 2, Paragraph 5.1 states: "Penetrant materials shall be selected from Table 1. Intermixing penetrant materials from different manufacturers or family groups is not permitted."

NOTE: Table 1 shows only (1) manufacturer and only (1) penetrant family.

Contrary to the above, a review of material certifications indicated that several batchs of penetrant materials other than those listed in Table (1) of penetrant procedure 3.23.A.1 are being used presently and have been used in the past.

AFR SER NO: M-01-21-1-04

PRG/DEPT AUDITED: Bechtel/ GEO Const. Testing

DATE OF ORIGINATION: 6-11-81

FILE NUMBER: 18.4.7

DISTRIBUTION:
WRBird
JWCook
TCCooke
MADietrich
WDGreenwell
PJHerbert
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
DATaggart
MPQAD Routing
SKT/CAC

RECOMMENDED CORRECTIVE ACTION:

1) Provide justification for deviation from procedure requirements.

2) Review NDE reports past and present and determine (provide verification) that materials used were not detrimental to any items on which they were used.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of audit report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Subcontracts

PERSON MAKING C/A COMMITMENT: RCAsh

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e): YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", WHO MADE REPORT: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE: LK Keaten 6-17-81

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Priority: 4 Trend: I 3 AI: S-879 SUS: 2ABB

AS IS" CONDITION VERSUS "AS REQUIRED" /"AS WELDED" CONDITION WITH REFERENCES:

Inspection Record for Cable Installation (PCQI 7220/E-4.0 Rev 6) for cable 2BST013B indicates that this cable was removed from reel E26-00G1675. According to a review of records, this reel of B-27 type cable does not exist.

AFR SEQ NO: M-01-27-1-1

PROJ/DEPT AUDITED: Bechtel QC/Construction

DATE OF ORIGINATION: 6/18/81 CLOSED 6/26/8

FILE NUMBER: 18.4.3.4 & 18.4.3.6

DISTRIBUTION:
WRBird
CAChien
JWCook
MADietrich
DCHendrix
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
DATaggart
JLWood
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

1) Investigate problem to determine if cable was from an unapproved reel or if problem was due to record error.
2) Conduct training of QC personnel to insure that requirement to verify the use of cables from only approved reels is understood.

CORRECTIVE ACTION COMMITMENT:

1) Error was found to be a number left off the Inspection Record. Record has been corrected and now shows correct reel number.

2) Training of QC personnel in the area of verification of cable reels is to be completed.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Bechtel QC

PERSON MAKING C/A COMMITMENT: John Russell

METHOD OF VERIFICATION:

1) Reel number (E26-00G16758) was verified to be the reel that the cable was removed from and was verified to be approved by review of Field Engineering Data Package.
2) Training was completed as noted in Bechtel memo QCT-504.

IS AF REPORTABLE PER 50.55(e)?: YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", WHO MADE REPORT: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

AFR INITIATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE:

C/A VERIFICATION SIGNATURE: Eric R. Oswald

VERIFICATION DATE: 6/26/81

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Priority: 4 SUS: 2GNC Trend: R-1 AI: S-882

"AS IS" CONDITION (FAILED AS REQUIRED)/"AS NEEDED" CONDITION WITH REFERENCE:

FPE-7.000, Rev 8, Paragraph 6.6, States in part: "The outer jacket of a cable must enter the equipment." Contrary to the above, cables numbered 2BB2408A and 2BB2408B have had approximately 12 feet of the outer jacket stripped back from one end to facilitate the reduction of conduit size from a pull-box. The cables enter the equipment without an outer jacket.

AFR SER NO: M-01-27-1-2

PROJ/DEPT AUDITED: Bechtel QC/Construction

DATE OF ORIGINATION: 6/18/81

FILE NUMBER: 18.4.3.4 & 18.4.3.6

DISTRIBUTION:
WRBird
CAChien
JWCook
MADietrich
DCHendrix
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
RATaggart
DLWood
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

Provide MPQAD with:
(1) A procedure for stripping back of the jacket on (Q) cables outside of equipment.
(2) Assurance that stripping back of the outer jacket in containment will not have a detrimental effect on the exposed cable during the life of the plant.

CORRECTIVE ACTION COMMITMENT:

Construction to evaluate and provide corrective action commitment.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Construction

PERSON MAKING C/A COMMITMENT: EJCollins

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e)? YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

IF "YES", WHO MADE REPORT: N/A

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE: W. J. Schrapper

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Priority: 4 Trend: B-1 AI: S-883 SUS: Indeterminate

AS IS' CONDITION VERSUS 'AS REQUIRED' / AS NEEDED' CONDITION WITH REFERENCES:

Cables that are being prepared or awaiting installation in containment are not being protected from adjacent work activities or environment. This makes the cable exposed in those areas questionable as to integrity.
There is no known procedure for the protection or segregation of cable that has to be exposed to work environment during installation.

AFR SER NO: M-01-27-1-3

ENGINEER ASSIGNED: Bechtel QC/Construction

DATE OF GRADATION: 6/18/81

FILE NUMBER: 18.4.3.4 & 18.4.3.6

DISTRIBUTION:
WRBird
CAChien
JWCook
MADietrich
DCHendrix
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
DATaggart
JLWood
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

(1) Direct cable pulling crews on the importance of protecting cables.
(2) Revise FPE 4.000 to contain a paragraph on methods to be used to protect cables from construction activities.

CORRECTIVE ACTION COMMITMENT:

Construction to evaluate and provide corrective action commitment.

DATE OF C/A COMPLETION:

DATE OF C/A VERIFICATION:

ORG. RESP FOR C/A: Construction

PERSON MAKING C/A COMMITMENT: EJCollins

METHOD OF VERIFICATION:

IS AR REPORTABLE PER 50.55(e)? YES ☐ NO ☒

IF 'YES', DATE OF REPORT TO NRC: N/A

IF 'YES', TIME OF REPORT TO NRC: N/A

IF 'YES', NRC OFFICIAL TO WHOM REPORTED: N/A

IF 'YES', WHO MADE REPORT: N/A

AFR INITIATOR'S SIGNATURE: Donald C. Hendrix

SUPERVISOR'S SIGNATURE: M. J. Schaefer

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:

CPCo

Closed AFR's
6/81

Priority: 5 Trend: Start Up System: Indetermi AI: S-720

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

AS IS" CONDITION VERSUS "AS REQUIRED"/"AS NEEDED" CONDITION WITH REFERENCES:

Bechtel FPG 8.000, Rev 5, Sec 3.4.b, states in part, "Quality Documentation shall be itemized on the FMR Package (eg. Certificate of Compliance, Exhibit 2)..." Exhibit 2 states in part, "Vendor shall indicate the prescribed technical requirements to which the purchase order has been ordered, ie, ASTM, ASME, etc." Project Quality Control Instruction R-100, Rev 10, Act No 2.3a, states in part, "Review supplier's Quality Verification Documents for availability, legibility, traceability and compliance with Procurement Document Requirements."

Contrary to the above, PO 7220-F-46194(Q), AEO numbers 13938, 13940, 13954, 13984, 19135, 14157, 14158, 14366 and 14596 did not have Quality Verification Documentation indicating the material conforms to the requirements of ASTM Spec numbers and date (cement certification). Eighteen (18) concrete material AEOs reviewed, of this number nine (9) were specifically for cement receiving. Of the nine receiving records reviewed all nine were identified deficient.

AFR SER NO: M-01-10-1-01

PROJ/DEPT ACTIVITY: Bechtel QC/Const

DATE OF CRIGINATION: CLOSED 04/16/81 6/9/81

FILE NUMBER: 18.4.3.6 & 18.4.3.4

DISTRIBUTION:

WRBird LEDavis
JWCook
TCCooke
MADietrich
GSKeeley
BWMarguglio
JMilandin
DBMiller
JARutgers
ESmith
DATaggart
SKT/CAC
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

1. Correct the material receiving inspection records referenced above to provide the corrected ASTM Spec numbers and date.
2. Perform a review of sufficient scope and assure that all cement receiving documentation packages include acceptable certificates.
3. Quality Control to reinstruct personnel to address the above concern and take other actions as necessary to prevent re-occurrence.

CORRECTIVE ACTION COMMITMENT:

Bechtel NCR 3367 has been issued to identify subject cement deliveries and related cement certifications with this deficiency.

DATE OF C/A COMPLETION: May 15, 1981

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Bechtel QC

PERSON MAKING C/A COMMITMENT: D Delaney

METHOD OF VERIFICATION:

Relative to PO 7220-F-46194(Q), fifteen (15) AEO numbers were reviewed between May 2, 1980 and May 28, 1981, for quality verification documentation indicating that the material conforms to the requirements of ASTM specification numbers and date (cement certifications) and were found to be satisfactory. See attached Verification of Corrective Action. Above (15) AEO Numbers did include the nine certifications which were identified deficient befor

IS AN REPORTABLE PER 50.55(e)?: YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", TIME OF REPORT TO NRC: N/A

IF "YES", WHO MADE REPORT: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

AFR ORIGINATOR'S SIGNATURE: [signature] 4/9/1981

SUPERVISOR'S SIGNATURE: [signature]

C/A VERIFICATION SIGNATURE: [signature]

VERIFICATION DATE: June 3, 1981

AI: S720

Project Quality Assurance
Midland Units 1 & 2 - 7220

Verification of Corrective Action

Method:

X 1. Verify action of response as implemented.
X 2. Review of documentation or attachments to resolve finding.
___ 3. Requirement removed or finding withdrawn.
___ 4. Other: _____

Items Checked:

1. PO 7220-F-46194(Q)--Fifteen (15) AEO numbers (12909, 12917, 12918, 12919, 13938, 13195, 13364, 13940, 13954, 13984, 19135, 14157, 14158, 14366 and 14596) were reviewed (issued between May 2, 1980 and May 28, 1981) for cement certification indicating correct ASTM specification numbers and date and were found satisfactory. Above (15) AEO Numbers did include the nine certifications which were identified deficient before.

2. QC conducted a one-hour training session on May 5, 1981, for the review of vendor material certifications as required by the applicable Bechtel POs.

Closeout Documentation (list or attach)

[X] Verified [ ] Not Verified (explain)

1. QCI IOM No 233 dated May 7, 1981
2. Aetna Cement Corporation dated April 14, 1981.

QAE _____ DATE 6/13/81

Bechtel Power Corporation

Interoffice Memorandum

OCT- 233

To Q.C. File

File No.

Subject Midland Project, Units 1 & 2
Vendor Documentation Review

Date May 7, 1981

From Dean A. Delaney

Of Quality Control

At Midland, Mich. Ext. 405
Job No. 7220

Copies to

On May 5, 1981 a one hour training session was conducted by Dean A. Delaney.

The topic of the training session was the review of vendor material certification's as required by the applicable Bechtel purchase order.

Attendees: R. Bennett
B. DeArmond
D. Delaney

DADelaney

Dean A. Delaney
Receiving, Storage/Maintenance
Group Supervisor

DAD/dkr

Aetna Cement Corporation

P.O. Box 80
Essexville, MI 48732
(517) 894-4581

April 14, 1981

Mr. Dean Johnston
Allied Concrete Products
P.O. Box 2141
Midland, MI 48640

Dear Mr. Johnston:

We were requested by Bill DeArmond of Bechtel Power Corporation to clarify our mill certification statement "This will certify that the foregoing cement is Portland Cement complying with the current specifications of the ASTM and other specifications as noted.".

The reference to other specifications is for those customers who request AASHTO or Federal specifications.

ASTM C-150-78a was first approved March 31, 1978 and published May 1978. The current ASTM publication is C-150-80 approved February 12, 1980 and published in April 1980.

The two cement grinds from which cement was shipped to Allied Concrete Products for use on the Midland Nuclear Power Plant were manufactured to meet ASTM specification C150-78a. The two grinds we are discussing are Silo No. 12 manufactured October 16-18, 1979 and Silo No. 8 manufactured April 28 - May 6, 1980. Silo No. 12 was shipped from 3/21/80 to 10/21/80. Silo No. 8 was shipped from 10/1/80 and is still in use.

Future mill tests on Silo No. 8 will be noting ASTM C-150-78a.

Sincerely,

AETNA CEMENT CORPORATION

Elden P. West

Elden P. West
Plant Chemist

EW:sb

cc: K. Neering
E. VanSumeren
Bill DeArmond
Bechtel Power Corporation
P.O. Box 2167
Midland, MI 48640

Trend: D-3 Prior: 04 AI: S 767 Sta[illegible] Up System: Indeterminate

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

AS IS" CONDITION VERSUS "AS REVISED" /"AS WELDED" CONDITION WITH REFERENCES:

1) BPCo FIW-1.120, Rev 2, Para 6.1.4 states "Prior to issuing covered electrodes in portable rod warmers, the rod room attendant shall check that each rod warmer is functioning, there is a calibration sticker affixed to the portable rod warmer, and that the date for the next temperature check has not expired."
2) FIW-1.120 Rev 2, Para 6.2.3 states, "Maintenance checks shall be performed semi-annually to ensure that portable rod warmers maintain a temperature of at least 125°F. during operation."

Contrary to the above, portable rod warmer numbers 49, 53, 59, 56, 54, 192, and 277 had expiration dations of 4/10/81. Further, rod warmer numbers 64, 117, 268 and 270 had expiration dates of 3/29/81.

These eleven (11) warmers were from a sample of approximately forty (40) warmers.

AFR SER NO: M-01-13-1-01

PROJECT AUDITED: Bechtel Construction

DATE OF ORIGINATION: 4/15/81 CLOSED 6/25/81

FILE NUMBER: 18.4.3.4

DISTRIBUTION:
WRBird
JWCook
TCCooke
MADietrich
GSKeeley
BWMarguglio
~~WDGreenwell~~
DBMiller
JARutgers
ESmith
DATaggart
MPQAD Routing
SKT/CAC
TRCharette

RECOMMENDED CORRECTIVE ACTION:

1) Perform maintenance/functional checks on discrepant rod warmers and affix calibration stickers as required.
2) Review requirements of FIW-1.120 for compliance to Procedure WFMC-1 and Specification G-27.
3) Determine if generic problem exists and take corrective action.
4) Reinsruct rod room attendants in their prescribed duties and document same.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of Audit Report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Field Welding Engineer

PERSON MAKING C/A COMMITMENT: J G Savoie

METHOD OF VERIFICATION:

1) Reviewed BPCo complete response, Transmittal #22829 (attached).
2) Conducted overinspection. See CPCo Report No. 2 PIP N. 01-W-1A, Rev 1 (attached).

IS AI REPORTABLE PER 50.55(e)?: YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: NA

IF "YES", TIME OF REPORT TO NRC: NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

IF "YES", WHO MADE REPORT: NA

AUDITOR'S SIGNATURE: [signature]

SUPERVISOR'S SIGNATURE: D K Keating

C/A VERIFICATION SIGNATURE: Tony R. Charette

VERIFICATION DATE: June 24, 1981

JOB 7220 MIDLAND PROJECT

BECHTEL POWER CORP.

TRANSMITTAL FORM

№ 22829

PLEASE RECEIPT AND RETURN BLUE COPY IMMEDIATELY

DATE June 19, 1981

* ACTION

ACTION FOR VENDORS	ACTION FOR OTHERS
1. ☐ APPROVED. MFG. MAY PROCEED	6. ☐ FOR APPROVAL
2. ☐ APPROVED. SUBMIT FINAL DWG. MFG. MAY PROCEED	7. ☐ CONSTRUCTION
3. ☐ APPROVED EXCEPT AS NOTED. MAKE CHANGES AND SUBMIT FINAL DWG. MFG MAY PROCEED AS APPROVED	8. ☐ PRELIMINARY USE
4. ☐ NOT APPROVED. CORRECT AND RESUBMIT	9. ☐ REFERENCE
5. ☐ REVIEW NOT REQUIRED. MFG. MAY PROCEED.	10. ☒ complete response

SUBJECT	CODE
☐ BECHTEL DRAWINGS	B
☐ VENDOR DRAWINGS	V
☐ MATERIAL REQUISITION	MR
☐ SPECIFICATIONS	S
☐ BID REQUEST	BR
☐ QUOTATIONS	Q
☐ PURCHASE ORDER	PO
☐ CONFERENCE NOTES	CN
☐ BID SUMMARY	BS
☐ SUBCONTRACTS	SC
☐ _____	X
☐ _____	Y

ATTENTION VENDORS: ALL FINAL DRAWINGS SUBMITTED TO BECHTEL MUST BE CERTIFIED TRANSPARENCIES.

QTY	F. P. PREFIX / BECHTEL FOREIGN PR. NO. ☐ / BECHTEL DRAWING NO. ☐	REV. NO.	TITLE	VENDOR NO.	ACTION	CODE
			AFR M-01-13-1-01 A.I. 5-767			

CONSUMERS POWER COMPANY
RECEIVED
JUN 24 1981
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

THIS COPY FOR →

ACTION PRINT	TRC	
INFO PRINTS		
MPQA ROUTING	DMT	TRK
PRINT TO FILE		
ORIG TO FILE	16.0	

COMMENTS: _____

TO
QA Superintendent MPQAD
Midland Jobsite

FROM
L. E. Davis
Midland Jobsite

☐ VENDOR PRINT
☐ OTHER

BY L E Davis

IBS FORM 16751

ORIGINAL

AFR M-01-13-1-01 A.I. S-767

1. Portable rod warmers have been surveyed, and those requiring a maintenance check or nearing such check has been performed.

2. A review and a comparison between F.I.W. 1.120 and WFMC-1 has been performed and are consistent in requirements.

3. & 4. No generic problem exists, however, directions of controlling the required semi-annual maintenance check has been developed, to preclude such an occurance and the applicable personnel notified.

Bechtel Power Corporation

Interoffice Memorandum

To Bill Bidwell

File No

Subject Semi-annual maintenance of portable rod warmers

Date June 16, 1981

From M.K. Boone

Of Welding Engineering

At Midland, MI. Ext. 216

Copies to

As described below, please find a schedule for the required maintenance check of portable rod warmers. Please see that the below is accomplished on or before the dates as shown:

Portable Rod Warmer No.	Date Checked	Date Due	Date Due
1 - 50	6-15-81	12-15-81	6-15-82
51 - 100	7-15-81	1-15-82	7-15-82
101 - 150	8-15-81	2-15-82	8-15-82
151 - 200	9-15-81	3-15-82	9-15-82
201 - 250	10-15-81	4-15-82	10-15-82
251 - 300	11-15-81	5-15-82	11-15-82
301 and over	12-15-81	6-15-82	12-15-83

This memo is to be posted in the rod room and to be used as reference when surveying rod warmers to assure compliance to the subject matter.

M.K. Boone
Lead Field Welding Engineer

MKB/pkc

Record No, 3

Project Inspection Plan No. 01-W-1A Rev. 1

Project Midland 1 & 2

Scope Bechtel Welding Materials Issuance and Storage Facility

Title

WELDING/INPROCESS VERIFICATION

cteristic No.	Reference Criteria Dwg/Spec No.	Rev.	Zone/Paragraph	Concur W/PS'I Decision	Reject PS'I Decision	Nonconformances or Deficiencies	Inspector Identification & Date
2.1c	FIW-1.120	2	Paragraph 6.1.4 Paragraph 6.2.3	X	NA	NONE	6/24/81 CFCo 340 QA File

arks Overinspection performed as follow-up to AFR M-01-13-1-01 for verification of corrective action implementation by Bechtel Welding Engineering.

achments

1-25-81

Priority: 4 Trend: 2 Start-Up System: OPPC S-770

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS VERIFIED" CONDITION WITH REFERENCES:

E42A(Q), Rev 49, Sheet 11-C, Para 29, states in part: "The following tolerances apply to all locating dimensions for.... equipment shown on electrical drawings." "Equipment ± 2 inches."

Contrary to the above, 0Y33 was installed 1' 3" west of location indicated on Drawing E532.
(See QCIR E-6.0-146, closed 3/23/81.)

(This deficiency was noted on one (1) of eight (8) pieces of equipment that were inspected during the audit.)

AFR SER NO: M-01-14-1-03

PROJ/DEPT AUDITED: Bechtel Const/QC

DATE OF CLASSIFICATION: CLOSED 4/24/81 6-10-81

FILE NUMBER: 18.4.3.4 & 18.4.3.6

DISTRIBUTION:
WRBird
JWCook
TCCooke
LEDavis
MADietrich
GSKeeley
BWMarguglio
JMilandin
DBMiller
JARutgers
ESmith
DATaggart
SKT/CAC
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

1. Construction install 0Y33 as indicated on Drawing E532. (LEDavis)

2. QC change PQCI E-6.0, Activity 3.2, Inspection Activity Code from I(V) to I(M) because this is a measured inspection criteria. (ESmith)

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment to be provided 14 days after audit report is issued.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Bechtel Const/QC

PERSON MAKING C/A COMMITMENT:

METHOD OF VERIFICATION:

PQCI E-6.0, Activity 3.2 was revised to add (M) requirement and drawing is to be revised per FCN E-4124.

IS AN REPORTABLE PER 50.55(e)? YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: NA

IF "YES", TIME OF REPORT TO NRC: NA

IF "YES", WHO MADE REPORT: NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: NA

AUDIT VERIFICATION'S SIGNATURE: Larry D Seamans

SUPERVISOR'S SIGNATURE: DK Keating

C/A VERIFICATION SIGNATURE: Larry D Seamans

VERIFICATION DATE: June 10, 1981

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

AI S-408

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS VERIFIED" CONDITION WITH REFERENCES:

Dwg 7220-C-2010(Q) Rev 3 states in part, "The meters shall be calibrated and controlled in accordance with Bechtel QA Program and with the following "requirements", and FPG 6.000 Rev 2 states in section 5.4.1, "At a minimum, the calibration interval shall be the interval specified in Block 19 of the Measuring and Testing Equipment List."

Contrary to the above, Measuring and Testing Equipment Lists were not found for the Sparling flowmeter, Serial #G00131, G00132, and G00554 in the Midland Project Temporary Dewatering System.

AFR SER NO: M-01-18-0-02

PROG/DEPT AUDITED: Bechtel QC & USTesting

DATE OF ORIGINATION: 8/28/80 CLOSED 6/9/81

FILE NUMBER: 18.4.3.4

DISTRIBUTION:

WRBird	~~JMilandin~~
JWCook	DBMiller
TCCooke	JARutgers
L ~~C~~Curtis	ESmith
~~L Davis~~	DATaggart
~~L E~~Davis	JLWood
~~L ABreisbach~~	WDGreenwell
~~GPKasparek~~	MPQAD Rout
~~DRKeating~~	SKT/CAC
GSKeeley	MADietrich
~~HPLeonard~~	
~~JWhillywhite~~	
BWMarguglio	
~~REMcCue~~	

RECOMMENDED CORRECTIVE ACTION:

1. Project Engineering/Geotech to determine impact.
2. Incorporate flowmeters into the Bechtel QA Program.
3. Determine root cause for the failure to incorporate the flowmeters into the Bechtel QA Program.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be determined by 11/14/80.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A:
1 Project Engineering
2 Construction

PERSON MAKING C/A COMMITMENT:
CRussell
LEDavis

METHOD OF VERIFICATION:

Reviewed Project Engineering's response dated April 20, 1981, via transmittal #13451 and Field Engineering's response dated May 26, 1981, via transmittal #22812. (responses attached)

Reviewed calibration records for flowmeter and verified flow meters had been incorporated into the Bechtel Calibration Program. No further action required.

IS AF REPORTABLE PER 50.55(e)? YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC:

IF "YES", TIME OF REPORT TO NRC:

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT:

AFR ORIGINATOR'S SIGNATURE: Robert E Davis

SUPERVISOR'S SIGNATURE: DR Keating

C/A VERIFICATION SIGNATURE: RC Dilg

VERIFICATION DATE: 6/9/81

AFR M-01-18-0-02
AI S-408

025960

Project Engineering response Transmittal
138451, April 20, 1981.

AFR M01-18-0-02

Recommended Corrective Action 1:

It was determined that there was no detrimental impact on the results obtained from the monitoring program. This determination was based on the fact that all meters used to monitor the flow were considered to be within the recalibration interval established in the attached response to QAR F-004. The 3-inch meter was considered to be within the calibration time based on actual time in-service throughout the flow monitoring period. This calibration frequency had been incorporated into DCN 3 for Drawing 7220-C-2010 Rev 3.

Recommended Corrective Action 2:

Engineering issued DCN 3 to Drawing 7220-C-2010, Rev 3, to redefine how many meters in the dewatering system are currently subject to the requirements of the quality assurance program. Based upon this definition, construction will have to act to include the meter(s) in the quality assurance program.

Recommended Corrective Action 3:

Construction is responsible for addressing this item.

R.C. Holler for
L.H. Curtis

3/24/81

Field Engineering response
Transmittal 22812, May 26,
1981.

Response to RFFR, 5/1/81

AFR M-01-18-0-02 A.I. S-408

1. The flowmeter, serial number G00133, was incorporated into the Bechtel Calibration Program on 4-29-81 (BPC-2978). Verification is available at the onsite Calibration Lab. The remaining flowmeters will be incorporated into the Calibration Program after they have been recalibrated per the requirements of the Purchase Order 7220-F-48917.

As these flowmeters are incorporated into the Calibration Program, MPQAD will be notified.

2. The flowmeters were purchased in accordance with the Bechtel Q.A. requirements and in accordance with drawing C-2010 Rev. 2. The flowmeters were not incorporated into the Calibration Program since Field Engineering was directed by the Geo-Tech Engineer as to when these flowmeters were to be recalibrated. (P.O.'s F-39449Q, F-41329, F-41514, and F-46743Q). By reviewing the Log of Area Dewatering Flowmeter Readings, kept by U.S. Testing, it can be determined when each flowmeter was replaced in the system.

A definite calibration frequency was not determined until DCN #3 of drawing C-2010 Rev. 3 was issued on 3/5/81. The available calibrated flowmeter (G00133) was then incorporated into the Calibration Program.

The remaining flowmeters, SN116068 and G00554 will be incorporated into the Calibration Program after they have been recalibrated (P.O. 7220-F-48917).

REQUEST FOR FURTHER RESPONSE — ITEM NO S-208

TO	DEPT	COMPANY
P Goguen	Field Engineering	Bechtel

ACTION ITEM	DATE	FILE
Audit Report M-01-18-0, AFR M-01-18-0-02	8/23/80	18.4.3.4

RESPONSE DATE	TO-DAY'S DATE	EVALUATOR	PHONE NO
4/20/81	5/1/81	RC Hirzel	Ext 594

EVALUATION OF EARLIER RESPONSE

We have reviewed Bechtel's response to AFR M-01-18-0-02 and recuire additional action by Field Engineering as follows:

1. Incorporate flow meters into the Bechtel QA Program.
2. Determine root cause for the failure to incorporate the flow meters into the Bechtel QA Program.

ADDITIONAL DATA/ACTION REQUIRED

1. Supply evidence of the incorporation of the flow meters into the Bechtel QA Program.
2. Determine the root cause for failure to incorporate these flow meters.

Please transmit the above information to this department when completed.

DISTRIBUTION
ADDRESSEE
DB MILLER
WR BIRD
DM TURNBULL
ORIGINATOR
SUBJECT FILE
TICKLER
RESEVO

[x] DISCUSSED WITH J Kelleher ON (DATE) 4/30/81

[X] NEXT REPLY AGREED TO BY (DATE) 05/25/81

[ ] PLEASE REPLY BY (DATE) _____ GIVING DATE BY WHICH NEXT REPLY CAN BE EXPECTED

SIGNATURE RC Hirzel DATE 5/1/81 PHONE Ext 594
FOR MPQAD SITE SUPERINTENDANT.

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Priority: 03 Trend: C-3 Start Up: Indeterminate AI: NA

AS IT' CONDITION (CAUSE 'AS NEEDED' /'AS NEED' CONDITION WITH REFERENCE):

PQCI P1.00, Rev 2, Act No. 1.2 states "Review piping checklist to verify all piping line components, field welds and mechanical joints have been documented as being properly completed and pressure tested."

Contrary to this requirement, QCIR P1.00-M412B-1 and QCIR P1.00-M413B-1 were both signed off as N/A in Act No. 1.5 for PQCI T-100 Testing QCE verification. The testing for both P1.00's was performed on T-1.00 HE-CT-26, three weeks after final sign-off on both QCIR P1.00's.

A total of 2 piping installations were examined for this characteristic.

AFR NO: M-01-20-1

PROJECT AND NO: Midland 1 & 2

DATE OF OBSERVATION: May 7, 1981

SPEC REFERENCE: 18.4.3.4 & 18.4.3

DISTRIBUTION:

ACTION:
LEDavis
ESSmith

STANDARD:

WRBird
JWCook
TCCooke
MADietrich
GSKeeley
WDGreenwell
BWMarguglio
DBMiller
JARutgers
DATaggart
MPQAD Routi
SRT/CAC

RECOMMENDED CORRECTIVE ACTION:

1) Take action to correct the QCIR discrepancies. (ESmith)
2) Review P1.00's for similar problems and document. (ESmith)
3) Conduct and document training for applicable QC personnel on Bechtel program requirements for P1.00's. (ESmith)

CORRECTIVE ACTION DESCRIPTION:

1) Completed 5/5/81, at the time it was discovered.
2) All P1.00's to be reviewed by 5-21-81.
3) Training to be conducted for all applicable QC people by 5-21-81.

DATE OF C/A COMPLETION: 5-21-81

DATE OF C/A EFFECTIVENESS: 5-21-81

ORG. ASSIGNED FOR C/A: (1)(2)(3) Const. QA

PERSON ASSIGNED C/A RESPONSIBILITY: C R Fugate

METHOD OF VERIFICATION:

1) P1.00's corrected on discovery by CRFugate by cross reference to PLQI T-100, HE-CT-6.
2) and 3) Review of all P1.00's and training for all applicable QC people done on 5-19-81 and documented response QCT-266, dated 5-21-81.

IS AN INFRACTION FOR SUSPENSION? YES ☐ NO ☐

IF "YES", DATE IS ISSUANCE TO NRC:

IF "YES", TYPE OF NOTICE TO NRC:

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO WAS NOTIFIED:

A/R OR DESIGNEE'S SIGNATURE: W.A. Doing, Jr.

SUPERVISOR'S SIGNATURE: [signature] 6-2-81

C/A VERIFICATION SIGNATURE: W.A. Doing, Jr.

VERIFICATION DATE: 5-21-81

Consumers Power Company

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Priority: 4 Trend: I 3 AI: S-879 SUS: 2ABB

AS IT' CONDITION VERSUS 'AS REQUIRED' /'AS WELDED' CONDITION WITH REFERENCE:

Inspection Record for Cable Installation (PCQI 7220/F-4.0 Rev 6) for cable 2BST013B indicates that this cable was removed from reel E26-00G1675. According to a review of records, this reel of B-27 type cable does not exist.

AFI REQ NO: M-01-27-1-1

PROJECT AUDITED: Bechtel QC/Constructio

DATE OF IDENTIFICATION: 6/18/81 CLOSED 6/26/

ITEM CHECKED: 18.4.3.4 & 18.4.3.6

DISTRIBUTION:
WRBird
CAChien
JWCook
MADietrich
DCHendrix
GSKeeley
BWMarguglio
DBMiller
JARutgers
ESmith
DATaggart
JLWood
MPQAD Routing

RECOMMENDED CORRECTIVE ACTION:

1) Investigate problem to determine if cable was from an unapproved reel or if problem was due to record error.
2) Conduct training of QC personnel to insure that requirement to verify the use of cables from only approved reels is understood.

CORRECTIVE ACTION COMMITMENT:

1) Error was found to be a number left off the Inspection Record. Record has been corrected and now shows correct reel number.

2) Training of QC personnel in the area of verification of cable reels is to be completed.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A: Bechtel QC

PERSON MAKING C/A (SIGNATURE): John Russell

METHOD OF VERIFICATION:

1) Reel number (E26-00G16758) was verified to be the reel that the cable was removed from and was verified to be approved by review of Field Engineering Data Package.
2) Training was completed as noted in Bechtel memo QCT-504.

IS AN REPORTABLE PER 10CFR50.55(e)? YES ☐ NO ☒

IF "YES", DATE OF REPORT TO NRC: N/A

IF "YES", ITEM OF REPORT TO NRC: N/A

IF "YES", WHO MADE REPORT: N/A

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A

AFI ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE:

C/A VERIFICATION SIGNATURE: Eric R Olmsted

VERIFIED DATE: 6/26/81

CPCo

Open CAR's

6/81

M I D L A N D P R O J E C T T E C H N I C A L D E P T.

M A S T E R P U N C H L I S T

6/10/81

CAR Serial Number Change

To DISTRIBUTION:

G. Cully - Bech. Const.
G. W. Rowe - CPCo Const.
D. T. Torrie - CPC. Tech Dept.

Sue Bandla - MPQA
ECO

An error was made when the serial number of the attached CAR was assigned. The error is hereby being corrected as follows:

CAR 2-PHA-E-003

Has been changed to:

CAR 2-PHG-E-002

Please change any records you may have on this CAR accordingly and ensure that all future correspondence regarding this CAR references the corrected serial number.

FROM: GKWandling, CPCo Technical Dept., Punchlist Maintenance
Midland Plant, EXT. 529

2 - PHG - E - 002

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System PHG - Discip E - Serial 005

~~PHA~~ PHG Swk 5/26/81
Swk 6/3/81

(2) Description

Present bus to breaker cables of breaker 2B2301 present a fire hazard when subjected to loads the breaker is capable of carrying.

(✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 08/01/81

Increase size of cables of 2B2301

(✓) Contd on Attachment

(4) Related Documents and References

E 18(Q) SH 1 Rev 9

NCR Report M-01-6-1-043 Breakers 0B4522 and 0B4622

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B P C
Subsequent Action: C P T

(7) Category: 0 2
Cause: 2 2
Retest Reqd [X] Yes [ ] No
Q-Listed [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable Swk 5/26/81
[ ] Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

	Signature	Date	Time
Orig:	David L Whaley VW	5-12-81	0830
FE/TE:	Swk	5/26/81	1228
PS/PTS:	Bill Wheeler	5/26/81	1500

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

(11) Retest Complete — Date

TE: _____

Completion Review Signature — Date

FE/TE: _____

MPQA: _____

PS/PTS: _____

(✓) Contd on Attachment

TO: G. Pflatz/R. Hienkle

Electrical

FROM: W. P. Reuther
Turnover

SUBJECT: CAR 2-PRG-E-003

DATE: 6 / 5 / 81

MESSAGE

Attached please find the above CAR for your action.

Please return to me when Block #10 is completed and signed off.

SIGNED: W. P. Reuther for R. E. Reuther

REPLY

SIGNED

DATE / /

REDIFORM. 45 472

SEND PARTS 1 AND 3 WITH CARBON INTACT - PART 3 WILL BE RETURNED WITH REPLY.

POLY PAK (50 SETS) #472

DETACH AND FILE FOR FOLLOW-UP

MIDLAND PROJECT TECHNICAL DEPT.

MASTER PUNCHLIST

6/10/81

CAR Serial Number Change

To DISTRIBUTION:

G. Cully - Beca. Const.
G.W. Rowe - CPCo Const.
D. T. Torrie - CPC. Tech Dept

Sue Bandla - MPQA
ECO

An error was made when the serial number of the attached CAR was assigned. The error is hereby being corrected as follows:

CAR 2-PHA-E-003

Has been changed to:

CAR 2-PHG-E-002

Please change any records you may have on this CAR accordingly and ensure that all future correspondence regarding this CAR references the corrected serial number.

FROM: GKWandling, CPCo Technical Dept., Punchlist Maintenance
Midland Plant, EXT. 529

2-PHG-E-0025

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System ~~PHA~~ PHG - Discip E - Serial 0025

~~PHA~~ PHG Qual Rev 5/24/81
Qual Rev 6/3/81

(2) Description

Present bus to breaker cables of breaker 2B2301 present a fire hazard when subjected to loads the breaker is capable of carrying.

(✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 08/01/81

Increase size of cables of 2B2301

(✓) Contd on Attachment

(4) Related Documents and References

E 18(Q) SH 1 Rev 9
NCR Report M-01-6-1-043 Breakers 0B4522 and 0B4662

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B P C
Subsequent Action: C P T

(7) Category: 0 2
Cause: 2 2
Retest Read: [X] Yes [ ] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable Lee Rowe 5/24/81
[ ] Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

		Date	Time
Orig:	David G. McAvoy VV	5-12-81	0830
FE/TE:	Lee Rowe	5/24/81	1228
PS/PTS:	Bill Wheeler	5/26/81	1500

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete — Date

TE: _____

Completion Review Signature — Date

FE/TE: _____

MPQA: _____

PS/PTS: _____

(✓) Contd on Attachment

TO: G. Pfletz/R. Hienkle

Electrical

FROM: W. P. Reuther
Turnover

SUBJECT CAR 2-PRC-E-003

DATE 6 / 5 / 81

MESSAGE

Attached please find the above CAR for your action.

Please return to me when Block #10 is completed and signed off.

SIGNED W. P. Reuther

REPLY

SIGNED DATE / /

REDIFORM 4S 472

SEND PARTS 1 AND 3 WITH CARBON INTACT - PART 3 WILL BE RETURNED WITH REPLY.

DETACH AND FILE FOR FOLLOW-UP

2 - PHG - E - 0025 2

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System ~~PHA~~ PHG - Discip E - Serial ~~0025~~ 2

~~PHA~~ PHG Dwk 5/26/81 4
Dwk 6/3/81

(2) Description

Present bus to breaker cables of breaker 2B2301 present a fire hazard when subjected to loads the breaker is capable of carrying.

☐ (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 08/21/81

Increase size of cables of 2B2301

☐ (✓) Contd on Attachment

(4) Related Documents and References

E 18(Q) SH 1 Rev 9

NCR Report M-01-6-1-043 Breakers 0B4522 and 0B4627

(5) ☒ Deficiency
☐ Design Chg
☐ Retest Only
☐ _____

(6) Initial Action: B P C
Subsequent Action: C P T

(7) Category: 0 2
Cause: 2 2
Retest Read: ☒ Yes ☐ No
Q-Listed: ☒ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
☒ Not Reportable Dwkowe 5/26/81
☐ Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

	Signature	Date	Time
Orig:	David L Kelley VW	5-12-81	0830
FE/TE:	Dwkowe	5/26/81	1228
PS/PTS:	Bill Wheeler	5/26/81	1500

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

(11) Retest Complete — Date

TE: _____

Completion Review Signature — Date

FE/TE: _____

MPQA: _____

PS/PTS: _____

☐ (✓) Contd on Attachment

TO G. Pflatz/R. Hienkle

Electrical

FROM W. P. Reuther
Turnover

SUBJECT CAR 2-PHG-1-003

DATE 6 / 5 / 81

MESSAGE

Attached please find the above CAR for your action.

Please return to me when Block #10 is completed and signed off.

SIGNED W. P. Reuther

REPLY

SIGNED DATE / /

REDIFORM 45 472

SEND PARTS 1 AND 3 WITH CARBON INTACT -
PART 3 WILL BE RETURNED WITH REPLY.

POLY PAK (50 SETS) #472

DETACH AND FILE FOR FOLLOW-UP

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit: 2 - S/U System: P.H.H - Discip: E - Serial: 0.03

(2) Description

Present bus To breaker cables of breaker 2B2401 present a fire hazard when subjected to loads The breaker is capable of carrying.

(✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date: 07/01/82

Increase the size of Cables

(✓) Contd on Attachment

(4) Related Documents and References

E18(Q) SH 3 Rev 9

NCR Report M-01-6-1-043 Breaker: 084522 and 084622

(5) ~~X~~ Deficiency (Date 6/19/81)

☒ Design Chg

☐ Retest Only

☐ _____

(6) Initial Action: B,P,D

Subsequent Action: C,P,T

(7) Category: C,2

Cause: 7,2

Retest Read: ☑ Yes ☐ No

Q-Listed: ☑ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21

☒ Not Reportable — Name: [illegible] Time/Date: 6-12-81

☑ ~~Reportable; MPQA Notified~~ — Name: [illegible] Time/Date: [illegible]

(9) Signature

	Signature	Date	Time
Orig:	Laurel LeValley	5-12-81	0830
FE/TE:	[illegible]	6/11/81	1310
PS/PTS:	[illegible]	6/19/81	1320

(10) Corrective Action or Response:

Action Organization Representative

Date

(✓) Contd on Attachment

(11) Retest Complete — Date

TE:

Completion Review Signature — Date

FE/TE:

MPQA:

PS/PTS:

CORRECTIVE ACTION REPORT

Page 1 of 2

(1) Unit 2 - S/U System N.H.W - Discip E - Serial 0.0.1

(2) Description

CABLE 2NB11-07 D IS TERMINATED IN THE WRONG LOCATION ON BLOCK OTB9. Present term. points do not connect with internal wiring for Alarm. = Physical change MADE THIS CAR IS TO REVISE PRINT. THE SDCN Program will handle This in Re Actual

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 12/01/81

REVISE PRINT TO REFLECT PROPER LOCATION OF ALARM CABLE 2NB11107D AS term. ON OTB9 terminals 11 & 12 to meet internal Alarm Wiring.

(✓) (✓) Contd on Attachment

(4) Related Documents and References 7220-EG-79(3)-5

(5) [ ] Deficiency
[X] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: BPD
Subsequent Action:

(7) Category: 05
Cause: 01
Retest Read: [ ] Yes [X] No
Q-Listed: [ ] Yes [X] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable — Don Jarvis
[ ] Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

	Name	Date	Time
Orig:	B P DeJarnette VOV	6/19/81	0900
TE:	Don Jarvis 1/2	6/22/81	0917
PS/PTS:		6/22/81	1000

(10) Corrective Action or Response:

Action Organization Representative

Date

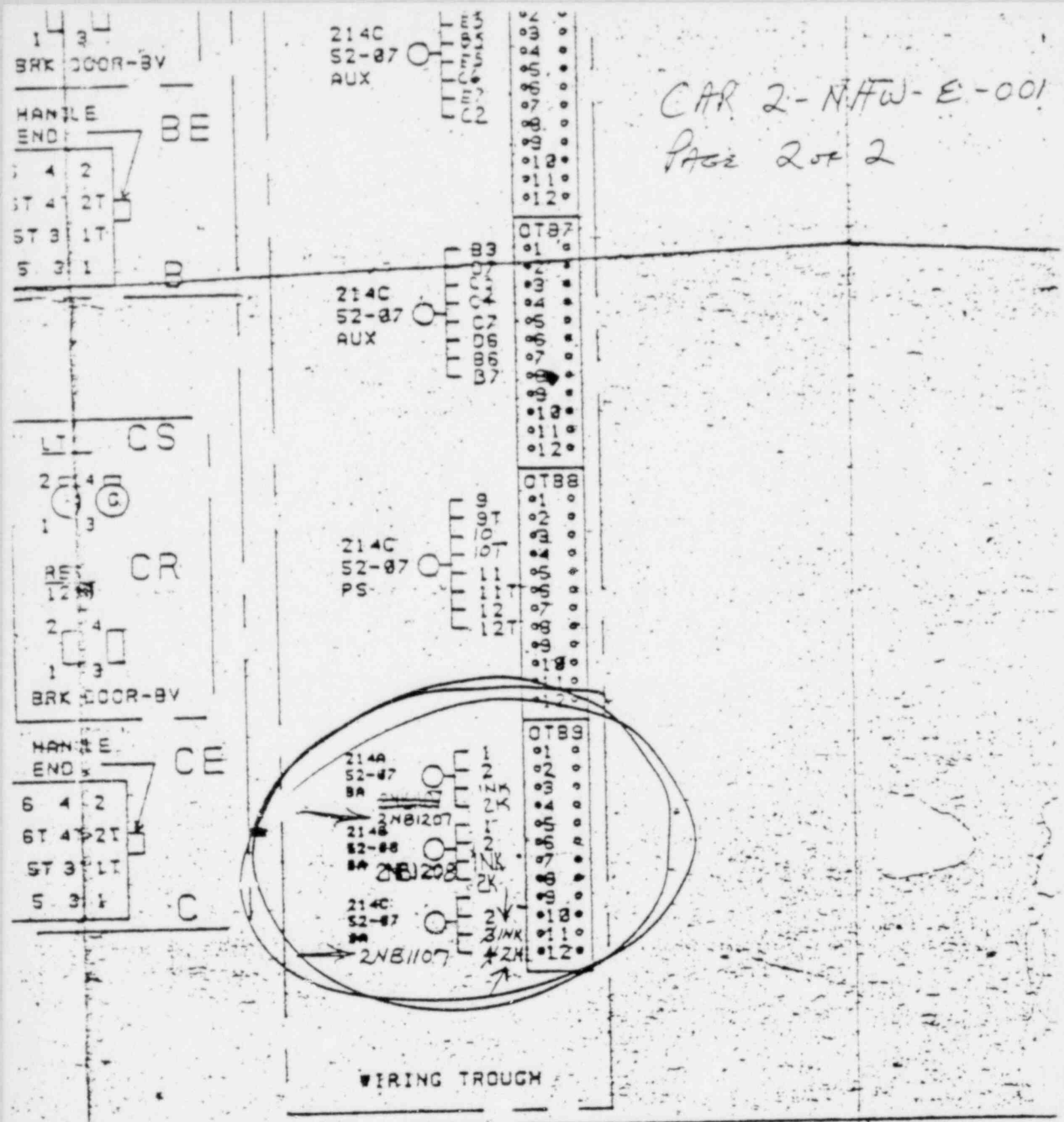
(11) Retest Complete
TE: NA

Completion Review Signature — Date

~~QE~~/TE:
MPQA: NA
PS/PTS:

( ) (✓) Contd on Attachment

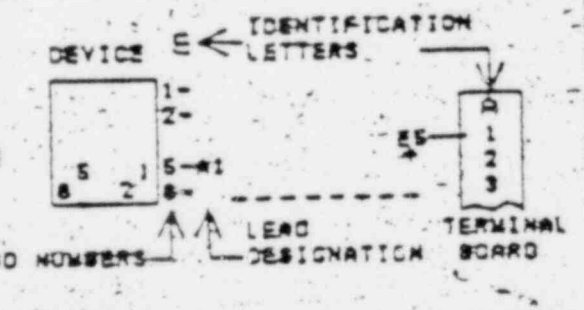
CAR 2-NHW-E-001
PAGE 2 OF 2



METHOD OF CONNECTIONS

CONNECTIONS ARE INDICATED BY DESIGNATIONS DERIVED FROM IDENTIFICATION LETTERS OF THE DEVICE AND THEIR STUD OR TERMINAL NUMBER

FOR COMPLETE INSTRUCTIONS SEE GEI-25374



1 THIS DRAWING S LOCATION OF AP

2 NUMBERED SQUAR AND DO NOT NEC

3 INTERNAL CONNE ELEMENTARY DIA

4 DEVICE FUNCTIO

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System B.C.A - Discip M - Serial 0.2.6

(2) Description (Originator)

2PP-1140 appears on two isometric drawings M-611 sh 6 and M-611 sh 7.

(M611 sh 6 → E6)
(M611 sh 7 → H8)

☐ (✓) Contd on Attachment

(3) Recommended Corrective Action

Delete 2PP-1140 from M611 sh 7.

M611 sh 6 is consistant with M 411.7

Due Date 11/8/81

☐ (✓) Contd on Attachment

(4) Related Documents and References

M611 sh 6 rev 17 M411 rev 12

M611 sh 7 rev 9

(5) ☒ Deficiency
☐ Design Chg
☐ Retest Only
☐ _____

(6) Initial Action: B.P.D
Subsequent Action:

(7) Category: 02
Cause: 0.1
Retest Reqd ☐ Yes ☒ No
Q-Listed ☒ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
☒ Not Reportable D. Goodman
☐ Reportable; MPQA Notified _____

(9) Signature	Name	Date	Time
Orig:	Bruce Kubyshin	4/29/81	14 45
FE/TE:	D. Goodman	6-10-81	1350
PS/PTS:	Richard Winter	10/29/81	07:15

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

☐ (✓) Contd on Attachment

(11) Retest Complete	Date
TE: _____	
Completion Review Signature	Date
FE/TE: _____	
MPQA: _____	
PS/PTS: _____	

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit: 2 - S/U System: EAC - Discip: E - Serial: 0.C.4

(2) Description

Current Limiters (Type HFCP-5Amp) ON load side of breaker 2B2427 are NOT installed.

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date: 08/01/81

Install HFCP-5Amp current limiters

( ) (✓) Contd on Attachment

(4) Related Documents and References

E13(Q) SH 4. Rev. 9
E198(Q) SH 1 Rev 3

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B P C
Subsequent Action:

(7) Category: A 2
Cause: 4 0
Retest Read: [ ] Yes [X] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable Em Evans 0830 6/18/81
[ ] Reportable; MPQA Notified _____ / _____
Name / Time/Date

(9) Signature

		Date	Time
Orig:	David L'Valley	5-13-81	0830
FE/TE:	Em Evans	6/18/81	0830
PS/PTS:	Kirk Fuller	6/22/81	0700

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

(11) Retest Complete — Date

TE: _____

Completion Review Signature — Date

FE/TE: _____

MPQA: _____

PS/PTS: _____

( ) (✓) Contd on Attachment

CORRECTIVE ACTION REPORT

Page 1 of ____

(1) Unit 2 - S/U System GJA - Discip E - Serial 0106

(2) Description

Molded Case Breaker 2B2402 cat # EF3H050 is wrong size - should be cat # EF3L050.

☐ (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 04011 mm 04018 82

Replace with correct breaker.

☐ (✓) Contd on Attachment

(4) Related Documents and References

E-1B(Q) SH 3 Rev 9

(5) ☐ Deficiency
☐ Design Chg
☐ Retest Only
☐ _____

(6) Initial Action: B.P.C
Subsequent Action:

(7) Category: 0.5
Cause: 0.2
Retest Reqd ☐ Yes ☑ No
Q-Listed ☑ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
☑ Not Reportable M T Beaghoff 6/8/81
☐ Reportable; MPQA Notified _____
Name / Time/Date

(9) Signature

		Date	Time
Orig:	David LeValley	5-21-81	1300
FE/~~TE~~:	M T Beaghoff	6/8/81	1058
~~PS~~/PTS:	Paul Butler	6/27/81	0900

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

(11) Retest Complete — Date
TE: _____

Completion Review Signature — Date
FE/TE: _____
MPQA: _____
PS/PTS: _____

☐ (✓) Contd on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System G.N.C - Discip E - Serial 0.0.4

(2) Description

Moulded case breaker 2B2311 Cat # HE3B100 should be a FJ3B100.

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 0.6.0.1.5.2

Replace with correct breaker

( ) (✓) Contd on Attachment

(4) Related Documents and References

E-18(Q) SH 1 Rev 9

(5) [X] Deficiency
[ ] Design Chg.
[ ] Retest Only
[ ] _____

(6) Initial Action: B.P.C
Subsequent Action:

(7) Category: 0.2
Cause: 4.0
Retest Read: [ ] Yes [X] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable SM Evans 0830 6/18/81
[ ] Reportable; MPQA Notified _____ (Name) _____ (Time/Date)

(9) Signature		Date	Time
Orig:	David L Valley	5/15/81	1530
FE/TE:	SM Evans	6/18/81	0830
PS/PTS:	[illegible]	6/22/81	0700

(10) Corrective Action or Response:

Action Organization Representative

Date

( ) (✓) Contd on Attachment

(11) Retest Complete	Date
TE:	
Completion Review Signature	Date
FE/TE:	
MPQA:	
PS/PTS:	

CORRECTIVE ACTION REPORT

Page 1 of ____

(1) Unit: Z - S/U System: G.N.C - Discip: E - Serial: 0.0.3

(2) Description

Moulded Case Breaker 2B2308 Cat # HE3B100

Should be a FJ3B100

☐ (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date: 06/01/82

Replace with correct breaker

☐ (✓) Contd on Attachment

(4) Related Documents and References

E.18(Q) SH 1 Rev 9

(5) ☒ Deficiency
☐ Design Chg
☐ Retest Only
☐ _____

(6) Initial Action: B P C
Subsequent Action:

(7) Category: 0 2
Cause: 4.0
Retest Read: ☐ Yes ☒ No
Q-Listed: ☒ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
☒ Not Reportable — E M Evans 0830 6/18/81
☐ Reportable; MPQA Notified _____

(9) Signature	Name	Date	Time
Orig:	David Blakley	5/14/81	1530
FE/~~TE~~:	E M Evans	6/18/81	0830
PS/PTS:	Don Wheeler	6/22/81	0700

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

☐ (✓) Contd on Attachment

(11) Retest Complete	Date
TE: _____	
Completion Review Signature	Date
FE/TE: _____	
MPQA: _____	
PS/PTS: _____	

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System G.N.C - Discip E - Serial 0.0.2

(2) Description

Moulded case breaker 2B2408 Cat.# HE3B100 is wrong size - should be Cat# FJ3B100.

(✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date 05.18.2

Replace with correct breaker

(✓) Contd on Attachment

(4) Related Documents and References

E 18(Q) SH 3 Rev 9

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B.P.C
Subsequent Action:

(7) Category: A.2
Cause: 4.0
Retest Read: [ ] Yes [X] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable S.M. Evans 0830 6/18/81
[ ] Reportable; MPQA Notified _____

(9) Signature	Name / Time/Date	Date	Time
Orig:	David Whitley VW	5-21-81	1330
FE/~~TE~~:	S.M. Evans	6/18/81	0830
PS/PTS:	D.M. Whitley	6/22/81	0700

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete — Date

TE:

Completion Review Signature — Date

FE/TE:

MPQA:

PS/PTS:

(✓) Contd on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit: Z - S/U System: G.N.C - Discip: E - Serial: 0.0.1

(2) Description

Moulded case Breaker 2B2411 Cat# HE3B100 is wrong size - should be FJ3B100.

(✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date: 06/21/82

Replace with correct breaker

(✓) Contd on Attachment

(4) Related Documents and References

E 18(Q) SH 3 Rev 9

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B P C
Subsequent Action:

(7) Category: 0.2
Cause: 4.0
Retest Reqd: [ ] Yes [X] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable Ell Evans 0830 6/18/81
[ ] Reportable; MPQA Notified _____
Name / Time/Date

(9) Signature		Date	Time
Orig:	David Lobdell	5-21-81	1330
FE/TE:	Ell Evans	6/18/81	0830
PS/PTS:	R Mushinske	6/22/81	0700

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete — Date

TE: _____

Completion Review Signature — Date

FE/TE: _____

MPQA: _____

PS/PTS: _____

(✓) Contd on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit – S/U System 1.0.1 Discip – Serial 0.6.3

(2) Description

AN isolated INSTRUMENT ground connection IS required for The Solid state instrument systems AND Computer Systems INSTALLED AT The MIDLAND PLANT. DATA INACCURACIES WILL RESULT WITHOUT THIS connection, as well as POSSIBLE EQUIPMENT DAMAGE. THIS Ground system MUST be seperate from The plant power Ground System.

(✓) Contd on Attachment

(3) Recommended Corrective Action

ATTACH INSULATED Ground conductor from each effected system To The plant ground grid (EARTH ground)

Due Date: 08 01 81

(✓) Contd on Attachment

(4) Related Documents and References (SYSTEMS)

RJA, RLA, RLB, RLC, RLD, RLE, RLF, RLG, RLH, RLK, RLJ, RLL, RLM, RLQ, RLR, SAA, SAB, SBA, SCA, SCB, SDA, SDE, SEA, SGA, SPA, SQA, HBB, HCC HED, HEF.

(5) ☐ Deficiency
☒ Design Chg
☐ Retest Only
☐ _____

(6) Initial Action: B P D
Subsequent Action: B P C

(7) Category: 0.6
Cause: 0.3
Retest Reqd: ☐ Yes ☒ No
Q-Listed: ☒ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
☒ Not Reportable T.E. Moore
☐ Reportable; MPQA Notified _____
Name Time/Date

(9) Signature		Date	Time
Orig:	T.E. Moore	6-25-81	1445
FE/TE:	T.E. Moore RMB	6-26-81	0740
PS/PTS:		6/26/81	0800

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete	Date
TE:	
Completion Review Signature	Date
FE/TE:	
MPQA:	
PS/PTS:	

(✓) Contd on Attachment

CORRECTIVE ACTION REPORT

Page 1 of

(1) Unit 2 - S/U System B.C.A - Discip M - Serial 0.2.5

(2) Description

Isometric shows order of 2PP-1125A and 1"-2FCB-44 reversed from P&ID.

(P&ID M411 C-4)
(Iso M611 sh 4 G-6)

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action

Correct isometric drawing

Due Date 1.1.0.1.8.1

( ) (✓) Contd on Attachment

(4) Related Documents and References

M411 Rev 12

M611 sh 4 Rev 13

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B.P.D
Subsequent Action:

(7) Category: 0.2
Cause: 0.1
Retest Read: [ ] Yes [X] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[✓] Not Reportable
[ ] Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

		Date	Time
Orig:	Dina Kubala	4/24/81	1500
FE/TE:		5-15-81	1350
PS/PTS:		6-17-81	0700

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete — Date

TE:

Completion Review Signature — Date

FE/TE:

MPQA:

PS/PTS:

( ) (✓) Contd on Attachment

HPL

CORRECTIVE ACTION REPORT

(1) Unit S/U System Discip Serial: 0 - [illegible] - [illegible]

(2) Description of Deficiency

DURING PERFORMANCE TESTING OF [illegible] THE VIBRATION READING ON THE MOTOR OUTBOARD END WAS HIGHER THAN EXPECTED BASED ON UNCOUPLED MOTOR DATA IN ADDITION SEVERE DRIP (GLAND LEAK) WITH NOTED AFTER COMPLETION OF TEST

BLOCK 7 UNDEFINED -

(✓) Con't on Attachment

(3) Recommended Corrective Action and Retest

(1) UNCOUPLE MOTOR CHECKING MOTOR PUMP VIBRATION READING
(2) REMOVE PACKING GLAND AND VERIFY PROPER SHAFT CLEARANCE & PACKING GLAND - IF NORMAL WORK TO REMOVE PACKING GLAND PER [illegible] OF PROCEDURE
(3) RUN MOTOR UNCOUPLED AND OBTAIN VIBRATION READINGS
(4) RE COUPLE PUMP MOTOR - [illegible]

(✓) Con't on Attachment

(4) Related Documents and References

a) PROCEDURE M2 OSP SW5 04
b) GOULDS PUMPS INSTRUCTION MANUAL 3220 - A 15 - 6 - 3

☐ Deficiency (5)	(6) Initial: C P T	(7) Cause: 4 0	NRC Reportability 10CFR50.55e (8)
☐ Design Chg	ACTION Subseqnt:	Category: 2 6	☑ Not Reportable
☑ Troubleshoot		☐ Retest Req	☐ Reportable; QA Notified: Name Time/Date
☐ Maintenance		☑ Q-Listed	
☐ Retest Only			

(9) Signature

	Date	Time
Orig:	[illegible]	1345
FE/TE:	[illegible]	1145
PS/PTS:	[illegible]	1410

(10) Corrective Action or Response:

CONSUMERS POWER COMPANY
RECEIVED
APR 29 19[illegible]
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

HPL
your copy

Action Organization Representative

Date

(11) Retest Complete

TE: Date

Completion Review Signature

QA: Date

FE/TE:

PS/PTS:

(✓) Con't on Attachment

(3) RECOMMENDED CORRECTIVE ACTION CONT

AS REQUIRED BY PARAGRAPH 4.2.2 AND 4.2.3 OF REF PROCEDURE

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System K E H - Discip E - Serial 0 0 7

(2) Description

Contact LRL-7 on Line (69) of Reference Drawing (A) should be shown as normally closed (i.e., closed with Relay LRL de-energized). It is shown as normally closed on Reference Drawing (B) and must be normally closed for the "grapple-loaded core slow zone" light to illuminate over the core.

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action

Contact LRL-7 should be changed to normally closed on Reference Drawing (A).

Due Date 0 9 2 1 8 1

( ) (✓) Contd on Attachment

(4) Related Documents and References

a. Main Multiple Function Mast - Electrical Schematic 7220-M1.29-22-2 (Stearns-Roger 22577-101, Revision 0)

b. Main Bridge & Trolley Ckt. - Electrical Schematic 7220-M1.29-23-2 (Stearns-Roger 22577-102, Revision 0)

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: B P D
Subsequent Action:

(7) Category 0 2
Cause 0 1
Retest Read [ ] Yes [X] No
Q-Listed [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable K P Kleas 6/9/81 - 1400
[ ] Reportable; MPQA Notified _____
Name Time/Date

(9) Signature

		Date	Time
Orig:	E Eckhoff KM	6/9/81	1320
FE/TE:	E W Evans	6/15/81	0810
PS/PTS:	R M Wheeler	6/16/81	0730

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

(11) Retest Complete	Date
TE: _____	
Completion Review Signature	Date
FE/TE: _____	
MPQA: _____	
PS/PTS: _____	

( ) (✓) Contd on Attachment

L KWANG 2

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 1 - S/U System K E H - Discip E - Serial 0 0 6

(2) Description

~~67~~ 69 E7E

Contact RRL-7 on Line ~~(67)~~ of Reference Drawing (A) should be shown as normally closed (i.e., closed with relay RRL de-energized). It is shown as normally closed on Reference Drawing (B) and must be normally closed for the "grapple-loaded core slow zone" light to illuminate over the core.

☐ (✓) Contd on Attachment

(3) Recommended Corrective Action

Contact RRL-7 should be changed to normally closed on Reference Drawing (A).

Due Date 10/2/81

☐ (✓) Contd on Attachment

(4) Related Documents and References

a. Main Multiple Function Mast - Electrical Schematic 7220-M1.29-27-2 (Stearns-Roger 22576-101, Revision 0)

b. Main Bridge & Trolley Ckt. - Electrical Schematic 7220-M1.29-25-2 (Stearns-Roger 22576-102, Revision 0)

(5) [X] Deficiency
☐ Design Chg
☐ Retest Only
☐ _____

(6) Initial Action: B P D
Subsequent Action:

(7) Category: 0 2
Cause: 0 1
Retest Read: ☐ Yes ☒ No
Q-Listed: [X] Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
~~[X]~~ Not Reportable D. Williams 6/5/81 - 1400
☐ Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

	Signature	Date	Time
Orig:	E F Eckhoff KWA	6/9/81	1100
FE/~~TE~~:	S M Evans	6/15/81	0750
PS/PTS:	R M Wheeler	6/16/81	1070

(10) Corrective Action or Response:

Action Organization Representative

_____ Date _____

(11) Retest Complete — Date

TE: _____

Completion Review Signature — Date

FE/TE: _____

MPQA: _____

PS/PTS: _____

☐ (✓) Contd on Attachment

CORRECTIVE ACTION REPORT

(1) Unit S/U System Discip Serial: 0 - EAA - M - 030

(2) Description of Deficiency

Service Water pump OP-75A stuffing box bearing shows excessive wear through approximately 180° off MTB its circumference and ~~about~~ upper MTB 2/3 of its length. The pump was run approximately 30 hours during preliminary pump testing.

☐ (✓) Con't on Attachment

(3) Recommended Corrective Action and Retest

Due 8/1/81

Return the stuffing box bearing and head shaft sleeve to the manufacturer for evaluation and rework or ~~repair~~ replacement MTB as necesary. This shipment should coincide with the return of the pump impeller, which is in progress

☐ (✓) Con't on Attachment

(4) Related Documents and References

Gould Drawing number D2088

☐ Deficiency (5)
☐ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) Initial: B.P.C

ACTION Subseqnt:

(7) Cause: 4.0

Category: 0.2

☐ Retest Req MTB
☐ Q-Listed

NRC Reportability 10CFR50.55e

☐ Not Reportable
☐ Reportable; QA Notified

(8) M F Berghuis 6/8/81

Name Date

(9)

Signature	Date	Time
Orig: M F Berghuis	6/8/81	1410
FE/~~TE~~: M F Berghuis	6/8/81	1410
PS/PTS: R W Mueller	6/10/81	1416

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete

TE: Date

Completion Review Signature

QA: Date

TE:

PS/PTS:

☐ (✓) Con't on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 2

(1) Unit: D - S/U System: D.C.A - Discip: M - Serial: 1.0.6

(2) Description

During Armer's inspection of Sluice Gates a lower hook stirrup on Gate OM-91B was found cocked. When the stirrup was removed for straightening the bolts were found damaged. Since this was an outside gate sealed against the pond, ~~both~~ bolts were moved from an inner gate and used on the OM-91B gate.

☐ (✓) Contd on Attachment

(3) Recommended Corrective Action

Due Date: 08.01.81

Order two new bolts and replace bolts in the lower stirrup on gate OM-96B or D that was used on the OM-91B gate.

☐ (✓) Contd on Attachment

(4) Related Documents and References

(5) ☒ Deficiency ☐ Design Chg ☐ Retest Only ☐ _____

(6) Initial Action: B.P.C. Subsequent Action:

(7) Category: 6.3 Cause: 2.0 Retest Reqd: ☐ Yes ☒ No Q-Listed: ☒ Yes ☐ No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
☒ Not Reportable R.J. McClelland 6/3/81
☐ Reportable; MPQA Notified _____ (Name / Time/Date)

(9) Signature		Date	Time
Orig:	R.J. McClelland	6/3/81	0946
FE/TE:	R.J. McClelland	6/3/81	0946
PS/PTS:		6/4/81	1500

(10) Corrective Action or Response:

Action Organization Representative

Date

☐ (✓) Contd on Attachment

(11) Retest Complete	Date
TE:	
Completion Review Signature	Date
FE/TE:	
MPQA:	
PS/PTS.	

CORRECTIVE ACTION REPORT

(1) 1-NGE-E-001

(2) Description of Deficiency

Cable 1AA0505M in panel MCC 1B23, terminal barrier broken out between TB-2 and TB-3.

☐ (✓) Con't on Attachment

(3) Recommended Corrective Action and Retest

Repair/Replace

☐ (✓) Con't on Attachment

(4) Related Documents and References

E-76, Sh 8&9, Rev. 3

E-17, Sh 2, Rev. 5

(5) ☒ Deficiency
☐ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) ACTION
Initial: B,P,C
Subseqnt: C,P,T
C,P,Q

(7) Cause: 2.2
Category: 05
☐ Retest Req
☒ Q-Listed

NRC Reportability 10CFR50.55e
☒ Not Reportable — K.T. Donnell 10/4/79 (8)
☐ Reportable; QA Notified _____ Name _____ Date

(9)

Signature	Date	Time
Orig: K.T. Donnell	10/4/79	10:23
FE/TE: K.T. Donnell	10/4/79	10:33
PS/PTS: [illegible]	10/4/79	1210

(10) Corrective Action or Response:

Completed 5-21-81 per CWR 1-NGE-E-0320

Per Ronald Hienkle

Action Organization Representative

Date 5-22-81

(11) Retest Complete

TE: N/A	Date
Completion Review Signature	Date
QA: [redacted]	6-1-81
TE: [illegible]	5-27-81
PS/PTS: [illegible]	6/3/81

☐ (✓) Con't on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System BCA - Discip M - Serial 019

(2) Description

Decay Heat Removal System (Unit 2). Midland P&ID M-411 Rev 10 Zone A-4 shows one valve (411-124) installed in a vent line on DHR Hot Leg Suction Line. Actual system has two vent valves in vent line.

(✓) Contd on Attachment

(3) Recommended Corrective Action and Retest

CORRECT P&ID M-411

Due Date 1 0 0 1 8 2

(✓) Contd on Attachment

(4) Related Documents and References 3A 10/22/80

Midland P&ID M-411 Rev 10 Zone A-4
D-MLD-80-93

(5) [X] Deficiency
[ ] Design Chg
[ ] Troubleshoot
[ ] Maintenance
[ ] Retest Only

(6) ACTION
Initial: B P D
Subsequent: C P C / C P Q

(7) Category 0 2
Cause 0 3
Retest Reqd [ ] Yes [X] No
Q-Listed [X] Yes [ ] No

(8) NRC Reportability 10 CFR50.55(e)
[X] Not Reportable — D.A. Kayata 12:41 11-11-80
[ ] Reportable; QA Notified — Name — Time/Date

(9) Signatures

		Date	Time
Orig:	Ellen Swift for Henkel	10/20/80	0820
FE/TE:	Duane A. Kayata	11-41-80	12:41
PS/PTS:	R M Wheeler	12-1-80	9 [illegible]

(10) Corrective Action or Response:

No corrective action required . Design requires only one (1) valve in these lines. In addition FSK-DVI-M611 sh 2 rev. 2 shows one (1) valve.

This line has not yet been installed, so contrary to statement above, the actual field condition will have only one (1) valve.
No drawing changes required.

JEC Action Organization Representative
J.A. Clements Date 2-12-81

(11) Retest Complete

		Date
TE:	[illegible]	
Completion Review Signature		
QA:	[redacted]	6.1.81
FE/TE:	[illegible]	5-15-81
PS/PTS:	R M Wheeler	6-1-81

(✓) Contd on Attachment

5

N/A

CORRECTIVE ACTION REPORT

(1) Unit S/U System Discip Serial: 1 - NGE - E - 003

(2) Description of Deficiency

CONTACT K620, NCE-CC IN THE BKR CLOSING CIRCUIT IS REFERENCED TO E374 SH 17. E374 SH 17 REFERENCES THE CONTACT TO 1B17.

☐ (√) Con't on Attachment

(3) Recommended Corrective Action and Retest

DETERMINE WHICH PRINT IS CORRECT AND CORRECT OTHER PRINT

☐ (√) Con't on Attachment

(4) Related Documents and References

E-76 SH 8 REV 3, E374 SH 17 REV 2

☒ Deficiency (5)
☐ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) Initial: BPD
Subseqnt: CPT

(7) Cause: 01
Category: 05
☒ Retest Req
☒ Q-Listed

NRC Reportability 10CFR50.55e
☒ Not Reportable — K.T. Donnell 10/10/79 (8)
☐ Reportable; QA Notified

(9)

	Name	Date	Time
Orig:	R. Clemens	10/9/79	1000
FE/TE:	K.T. Donnell	10-10-79	0815
PS/PTS:	[illegible]	10/10/79	0530

(10) Corrective Action or Response:

E-76 SH 8 REV 3 IS INCORRECT AND WILL BE REVISED TO SHOW CORRECT CONTACT IN THE BRKR CLOSING CKT.

D. Corbett 10/16/79
Action Organization Representative

Closed by issue of CAR'S 1-NGE-E-020 and 2-NGE-E-021.

Incorporated on E-76(Q) REV. 7

3/4/81 MB

3/5/81

S R Basavihi Date 10-17-79

(11) Retest Complete

	Date
TE: NA	
Completion Review Signature	
QA: [redacted]	6-4-81
FE/TE: [redacted]	6-1-81
PS/PTS: [redacted]	6/1/81

☐ (√) Con't on Attachment

~~DAFT~~

CORRECTIVE ACTION REPORT

(1) Unit S/U System Discip Serial: 2 - NGE - E - 004

(2) Description of Deficiency

CONTACT K620, NC2+C2 IN THE BAKR CLOSING CIRCUIT IS REFERENCED TO E37H SH28. E37H SH 28 REFERENCES THE CONTACT TO 1B18

(✓) Con't on Attachment

(3) Recommended Corrective Action and Retest

DETERMINE WHICH PRINT IS CORRECT AND CORRECT THE OTHER PRINT

(✓) Con't on Attachment

(4) Related Documents and References

E 76 SH 8, REV 3, E37H SH 28 REV 2 (SH 9)

(5) ☒ Deficiency
☐ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) ACTION — Initial: BPD; Subseqnt: CPT

(7) Cause: 01; Category: 05
☒ Retest Req
☒ Q-Listed

NRC Reportability 10CFR50.55e
☒ Not Reportable — K.T. Donnell 10/16/79 (8)
☐ Reportable; QA Notified

(9)

Signature	Name	Date	Time
Orig: R. C. Chapman	VW	10/16/79	10.45
FE/TE: K.T. Donnell		10.10.79	0815
PS/PTS: [illegible]		10/16/79	0531

(10) Corrective Action or Response:

E-76 SH 8 REV 3 IS INCORRECT AND WILL BE REVISED TO SHOW CORRECT CONTACT IN THE BRKR CLOSING CKT. P. Colvett 10/16/79
Closed by issue of CAR's 1-NGE-E-020 and 2-NGE-E-021

Incorporated on E-76(Q) REV. 7

3/4/81 MB

GBR 3/5/81

Action Organization Representative: AR Basinski Date 10-17-79

(11) Retest Complete

TE: NA	Date
Complete Signature	Date
QA: [redacted]	6-1-81
TE/TE: [illegible]	6-1-81
PS/PTS: [illegible]	6/1/81

(✓) Con't on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit: 0 - S/U System: K.E.G - Discip: E - Serial: 0.0.5

(2) Description

Based on the current design of the "Grapple Down in ..." circuits (lines 46 thru 49, ref 1) when lowering the inner mast in the transfer basket area, LS-6 (Grapple Down in Rack) will actuate the "Grapple Down in Rack" circuit at a higher elevation (ref (2)) than LS-7 (Grapple Down ... Basket). There does not appear to be any interlocks to block the LS-6 circuit when in the basket area. This results in actuating the "Grapple Down..." circuits approximately 7 inches prior to the assembly setting down in the basket. Both the "Grapple Down in Rack" and "Grapple Down in Basket" circuits and lights will be lit when the assembly is full down in the basket.

( ) (√) Contd on Attachment

(3) Recommended Corrective Action It appears the original design was based on a basket elevation higher than the rack elevation, rather than the opposite positions indicated in ref (2) with the rack elevation higher than the basket elevation. It is recommended the XRL-7 contact (line 48) be removed from the "Grapple Down in Basket" circuit and a normally open XRL contact be included in the (Fuel/Rod) "Grapple Down in Rack" circuit.

Due Date: 01/01/82

( ) (√) Contd on Attachment

(4) Related Documents and References

(1) Supplier Document 7220-M1.29-2C-3 (SR Dwg = 22576-111, Rev B)

(2) Supplier Document 7220-M1.29-21-1 (Field Erection Procedure - Dwg = L-22576-11, Rev D)

(5) [X] Deficiency
[ ] Design Chg
[ ] Retest Only
[ ] _____

(6) Initial Action: P F E
Subsequent Action:

(7) Category: Q.2
Cause: 0.1
Retest Read: [ ] Yes [X] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)/10 CFR 21
[X] Not Reportable — E M Evans 6/9/81-1400
[ ] Reportable; MPQA Notified _____ Name Time/Date

(9) Signature

	Name	Date	Time
Orig:	Evan C Odonnell	6/9/81	1200
FE:	E M Evans	6/15/81	0820
PS/PTS:	R M Uhrich	6/16/81	0700

(10) Corrective Action or Response:

Action Organization Representative

Date

(11) Retest Complete — Date
TE:

Completion Review Signature — Date
FE/TE:
MPQA:
PS/PTS:

( ) (√) Contd on Attachment

CPCo

Closed CAR's

6/81

CORRECTIVE ACTION REPORT

(1) [illegible] 19-[illegible]-[illegible] - [illegible]

(2) Description of Deficiency Primary Motor System

There is a vent valve and a drain valve installed in the body of valve 449-1-147 (OV-FSM043). They are not shown on P&ID M-449 sh 1A Rev 1. Valve OV-FSM043 is at H-4 on M-449 sh 1A Rev 1.

(Con't on Attachment)

(3) Recommended Corrective Action and Retest

REVISE DIFFERENCE BETWEEN "P&ID" AND "AS-BUILT" CONDITION

N.C. 11/1/81

(✓) Con't on Attachment

(4) Related Documents and References

M-449 sh 1A Rev 1
SWEC 80-52

[ ] Deficiency (5)	(6) Initial	(7) Cause	NRC Reportability 10 CFR 50.55e	(8)
[ ] Design Chg			[ ] Not Reportable	
[ ] Troubleshoot	Subsequent	Category	[ ] Reportable (NCR No. [illegible])	
[ ] Maintenance			Name	
[ ] Retest Only	[ ] Retest Req	[X] Q-Listed		

(9) Signature (To be Maint. 7/24/81)	Date	Time
Orig: [illegible] for Turner	8/18/81	1430
TE: [illegible]	7/28/81	
PE/PTS: [illegible]	8/11/81	

(10) Corrective Action or Response:

1/2" DRAIN AND VENT VALVES WILL BE SHOWN ON THE LEVEL TRANSMITTER SIDE of VALVE 449-1-147 AS WELL AS THE FOLLOWING VALVES

449-1-122	449-2-119
449-1-150	449-2-120
449-2-117	
449-2-118	

R. Nicolaus 7/27/81
Action Organization Representative
[illegible] for
Date 5/27/81
R.H. Curtis

PSID's 7220-M-449 SH1A AND 7220-M-449 SH2 WILL BE REVISED TO INCORPORATE CHANGES Transcribed onto M-449-1A Rev. 4 M-449-2 Rev. 7 5/4/81

(✓) Con't on Attachment

(11) Retest Complete	Date
TE: NA	
Completion Review Signature	Date
PE/TE: [illegible]	
PE/PTS: [illegible]	

CORRECTIVE ACTION REPORT Page 1 of 3

(1) Unit S/U System Disclp
[ ]-[7][0][1]-[ ]

(2) Description of Deficiency

There is no permanently installed Temperature Instrumentation on any of the chilled water system chillers. Temperature Instrumentation is required for the safe operation of the water chillers.

Other Systems Affected: 0,1,2-GEA; 0603; 0,1,2-GBC; 1,2 GTC

[ ] [✓] (✓)Con't on Attachment

(3) Recommended Corrective Action and Retest

See Attached

Date 12/1/80 [✓] (✓)Con't on Attachment

(4) Related Documents and References

[ ] Deficiency (5)
[ ] Design Chg
[ ] Troubleshoot
[ ] Maintenance
[ ] Retest Only

(6) Initial: B P D
(7) Cause: 0.3

ACTION
Subsequent: C P G
Category: 0.6

[ ] Retest Req
[X] Q-Listed

NRC Reportability 10CFR50.55e (8)
[X] Not Reportable
[ ] Reportable; QA Notified
Name

(9) Signature

		Date	Time
Orig:	R. Moore	12/8/80	1400
~~QE~~/TE:	R. Moore	12/8/80	1400
PS/PTS:	[illegible]	12/9/80	0745

(10) Corrective Action or Response:

PROTECT ENGINEERING REJECTS THE ABOVE CHANGE REQUEST ON THE BASIS THAT IT DOES NOT MEET THE THREE POINT CRITERIA AS STATED IN CPCo SERIAL 7553.

F. Kearn 8/28/80
Action Organization Representative
P. Corn Date 8/28/80

R.E. NOTE: PER R. NICOLAUS OF PROTECT ENGINEERING, 8/28/80

(11) Retest Complete Date
TE: N/A
Completion Review Signature Date
QA: [redacted] 6/16/81
~~QE~~/TE: R. Moore for 6/16/81
PS/PTS: [illegible]

[ ] (✓) Con't on Attachment

PTS [illegible] 6/16/81

① Redesignate the following Thermometer Wells (TW) as Temperature Indicators (TI) on a) P&ID, b) ISOMETRIC DWG'S, c) AND ON Instrument INDEX:

Well #	P&ID	sh	Rev	Zone	ISO	sh	Rev	zone
0TW-5747 A	M-457	1B	1	(F-6)	M-657	50	3	(F-7)
0TW-5747 B		1B	1	(C-6)		50	3	(F-3)
0TW-5745		1B	1	(H-3)		49	6	(E-6)
1TW-5712 A		2A	1	(E-5)		2	3	(D-5)
1TW-5713 A		2A	3	(C-5)		1	5	(E-5)
1TW-5712 B		2A	3	(A-5)		37	5	(B-5)
1TW-5713 B		2A	3	(A-5)		36	4	(G-4)
2TW-5712 A		3B	3	(E-5)		3	5	(G-5)
2TW-5713 A		3B	3	(C-5)		3	5	(D-5)
2TW-5712 B		3B	3	(J-5)		41	5	(G-7)
2TW-5713 B		3B	3	(B-5)		40	4	(D-2)
1TW-5736 A		4A	1	(H-5)		14	2	(D-7)
1TW-5736 B		4A	1	(E-5)		14	2	(E-6)
1TW-5736 C		4A	1	(C-5)		14	2	(F-4)
2TW-5735 A		5A	2	(C-3)		22	2	(C-5)
2TW-5736 A		5A	2	(C-3)		12	2	(C-7)
2TW-5735 B		5A	2	(C-7)		22	2	(E-6)
2TW-5736 B		5A	2	(C-6)		12	2	(E-6)
2TW-5736 C		5A	2	(G-6)		12	2	(F-5)
0TW-5792		6	5	(D-6)		19	3	(E-7)
0TW-5793		6	5	(D-5)		19	3	(B-2)

② a) Add the following TI to the listed P&ID, Redesignate the TW to be a TI on b) ISO and c) Instrument Index

Well #	P&ID	sh	Rev	Zone	ISO	sh	Rev	zone
2TW-5735C	M457	5A	2	(G-7)	M657	22	2	(G-3)

③ Add the following TI's to a) P&ID, b) ISO
a) Instrument index to allow reading chilled water inlet temperature to the respective chillers.

TI #	P&ID	sh	Rev Zone	ISO	sh	Rev Zone
ITE-5735A	M-152	4A	1 (H-6)	M-647	31	4 (G-3)
ITE-5735B	↓	4A	1 (E-6)	↓	31	4 (G-5)
ITE-5735C		4A	1 (C-6)		31	4 (E-5)

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System KEH - Discip E - Serial 004

(2) Description

1. Limit switches LS-32 thru LS-35 (lines 28, 32, 37 & 42) on the referenced drawing are numbered incorrectly, the limit switch list on the right side of the referenced drawing shows them as LS-31 thru LS-34.
2. Contact on line 21 (connecting wires 45 and 49) is not labeled.
3. Contact on line 23 (connecting wires 45 and 48) is not labeled.

(✓) Contd on Attachment

(3) Recommended Corrective Action and Retest

Due Date: 09 30 81

1. Renumber the switches in accordance with the limit switch list, i.e. LS-31 thru LS-34.
2. Label the contact as SZ1-2.
3. Label the contact as OR-3.

(✓) Contd on Attachment

(4) Related Documents and References

Main Multiple Function Mast - Electrical Schematic 7220-M1.29-22-2 (S-R 22577-101 rev 0)

(5) [X] Deficiency
[ ] Design Chg
[ ] Troubleshoot
[ ] Maintenance
[ ] Retest Only

(6) Initial: ~~C P E~~ 12/23/80 B P D
Subsequent: C P C / C P Q

(7) Category: 02
Cause: 01
Retest Read: [ ] Yes [ ] No
Q-Listed: [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)
[X] Not Reportable — Name: D.V. Kaigler Time/Date: 7:39/12-19-80
[ ] Reportable; QA Notified — Name: _____ Time/Date: _____

(9) Signature

		Date	Time
Orig:	E F Eckhardt	12/19/80	0730
FE/~~SE~~:	Duane A. Kaigler	12-19-80	0739
PS/~~RE~~:	R M Wheeler	12-19-80	1300

(10) Corrective Action or Response:

STEARNS-ROGER HAS REVISED DRAWING 22577-101 (B), (V.P. = 7220-M1.29-22-3) FOR THE LIMIT SWITCH LEGEND TO AGREE WITH THE ACTUAL SWITCHES SHOWN ON THE SCHEMATIC, LABELED THE CONTACT BETWEEN POINTS 45 AND 48 AS OR-3 AND THE CONTACT BETWEEN POINTS 45 AND 49 AS SZ1-2, PER B&W LETTER SERIAL BECHTEL-3509 DATED FEB. 9, 1981.

CHK 6-8-81
RRC 5-26-81
CHK 6/8/81

Action Organization Representative: O.S. Anderson for L.H. Curtis Date 6/10/81

Verified EME 6/22/81

(11) Retest Complete — Date: —
TE: N/A
Completion Review Signature — Date:
QA: [redacted] 6/24/81
FE/~~SE~~: E M Evans 6/22/81
PS/PTS: R M Wheeler 6/24/81

(✓) Contd on Attachment

(F)

EWA 1.0

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 1 - S/U System KEH - Discip E - Serial 0,05

(2) Description

Limit switches LS-32 thru LS-35 (lines 28, 32, 37 & 42) on the referenced drawing are numbered incorrectly, the limit switch list on the right side of the referenced drawing shows them as LS-31 thru LS-34.

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action and Retest

Due Date 01/01/82

Renumber the switches in accordance with the limit switch list, i.e. LS-31 thru LS-34.

( ) (✓) Contd on Attachment

(4) Related Documents and References

Main Multiple Function Mast - Electrical Schematic 7220-M1.29-27-2 (SR 22575-101 rev 0)

(5) [X] Deficiency [ ] Design Chg [ ] Troubleshoot [ ] Maintenance [ ] Retest Only

(6) Initial CPE BPD 12/29/80

Subsequent ACTION CPC CPQ

(7) Category 02 Cause 01

Retest Reqd [ ] Yes [ ] No

Q-Listed [X] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e):

[X] Not Reportable DA Kajale 7:48/12-19-80

[ ] Reportable; QA Notified _____ Name Time/Date

(9) Signature

		Date	Time
Orig:	Gaugam Gehlot	12/17/80	0730
FE/[redacted]:	Dhane G. Kajale	12-19-80	0740
PS/[redacted]:	E M Michael	12-19-80	1300

(10) Corrective Action or Response:

STEARNS-ROGER HAS REVISED THE LIMIT SWITCH LEGEND TO AGREE WITH THE ACTUAL SWITCHES SHOWN ON THE SCHEMATIC 7220-M 1.29-27-3, STEARNS-ROGER DRAWING 22576-101 (A), PER B&W LETTER SERIAL BECHTEL-3509 DATED FEBRUARY 9, 1981.

5-26-81 6-8-81

6/9/81

Verified EME 6/22/81

Action Organization Representative [signature] Date 6/10/81

(11) Retest Complete Date

TE: N/A —

Completion Review Signature Date

QA: [redacted] 6/24/81

FE/TE: EM Evans 6/22/81

PS/PTS: [signature] 6/24/81

( ) (✓) Contd on Attachment

(F)

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit: O - S/U System: K E G - Discip: E - Serial: 0 0 4

(2) Description

The location of LS-26 (XRL) shown in the referenced drawing would allow the Auxiliary Building Fuel Handling Bridge (ABFHB) to violate the LS-16 and 24 limits in the tilt pits. Under certain conditions, the present location would also allow the ABFH B mast to strike the angled portions of the cask pit wall.

(✓) Contd on Attachment

(3) Recommended Corrective Action and Retest

Due Date: 04/16/82

The LS-26 (XRL) actuation point should be moved to the south such that LS-26 will close as LS-29 (FWL) opens.

(✓) Contd on Attachment

(4) Related Documents and References

Fuel Storage Bridge & Trolley CKT. - Electrical Schematic 7220-M-1.29-24-2 (S-R 22576-112 rev 0)

(5) ☒ Deficiency
☐ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) Initial: C P E
Subsequent: C P C / C P Q

(7) Category: 0 2
Cause: 0 1
Retest Reqd: ☐ Yes ☒ No
Q-Listed: ☒ Yes ☐ No

(8) NRC Reportability 10 CFR50.55(e)
☒ Not Reportable — DA Kajala 7:38/12-19-80
☐ Reportable; QA Notified — Name — Time/Date

(9) Signature

		Date	Time
Orig:	E F Eckhardt KWA	12/16/80	1230
FE/~~RE~~:	Wayne A. Kajala	12-19-80	0738
PS/~~RE~~:	R M Wheeler	12-19-80	1300

(10) Corrective Action or Response:

V.P. 7220-M-1.29-24-3 (STEARNS-ROGER DWG. 22576-112) DOES NOT REQUIRE REVISION AS THE DRAWING DOES NOT REFLECT THE ACTUAL LOCATION OF THE LIMIT SWITCH ACTUATION POINT PER DISCUSSION BETWEEN WAYNE HUNT (BECHTEL), ED COOPER (BECHTEL) & DICK KLEIN (B&W) ON 6-8-81.

PER DISCUSSION BETWEEN ED COOPER (BECHTEL) AND BRIAN O'DONNELL (CPCo) ON 6-10-81 IT WAS AGREED THAT THE REFERENCED DWG REVISION IS NOT REQUIRED AND THAT THE LIMIT SWITCH ACTUATION POINT WILL BE SET IN THE FIELD SUCH THAT THE MAST WILL NOT HIT THE ANGLED WALL.

Action Organization Representative: Ed Cooper Date 6-27-81

No dwg verification reqd LS setting will be done after T/O in pre-op test per Brian O'Donnell 6/30/81

E PTP

E.R. Cooper 6-15-81

(✓) Contd on Attachment

(11) Retest Complete — Date

TE: N/A

Completion Review Signature — Date

QA: [redacted] 6-30-81

FE/~~RE~~: [illegible] 6/30/81

PS/PTS: R M Wheeler 7/6/81

Corrected 6/12

CORRECTIVE ACTION REPORT

① Unit S/U System Discip Serial
O - E A A - M - 0 5 0

② Description of Deficiency

Service Water pump OP-75A stuffing box bearing shows excessive wear through approximately 180° off its circumference and upper about 2/3 of its length. The pump was run approximately 30 hours during preliminary pump testing. MTB

[ ] (✓) Con't on Attachment

③ Recommended Corrective Action and Retest Due 8/1/81

~~Return the stuffing box bearing and head shaft sleeve to the manufacturer for evaluation and rework or repair~~ replacement as necesary. ~~This shipment should coincide with the return of the pump impeller, which is in progress~~ MTB

[✓] (✓) Con't on Attachment

④ Related Documents and References

see attached sheet MTB

Gould Drawing number D2088

[✓] Deficiency ⑤ [ ] Design Chg [ ] Troubleshoot [ ] Maintenance [ ] Retest Only

⑥ Initial B.P.C Subsequent

⑦ Cause 4.0 Category 0.2

ACTION [ ] Reportable [✓] Q-Listed

NRC Reportability 10CFR50.55e
[✓] Not Reportable
[ ] Reportable; QA Notified

⑨ Signature Name Date

Orig: MF Bright 8/7/81
F:
PS:

⑩ Corrective Action Response:

⑪ Retest Complete Date
TE:

Completion Review Signature Date
QA:
TE:
PS/PTS:

[ ] (✓) Con't on Attachment

Continuation of Block 3

1. Return the stuffing box bearing and head shaft sleeve to the vendor. Ship bearing and sleeve wi pump impeller which is also being returned to vendor.
2. Instruct vendor to evaluate wear on bearing to determine: a) is wear excessive and b) probable cause of wear.
3. If wear on bearing is determined to be excessive, vendor should a) determine if bearing can be repaired or if it must be replaced.
   b) notify Matt Berghoff of CPCo PMO-Construction (517)-631-0951 of necesity of repair or replacement and probable cause of wear.
   c) repair or replace bearing as required.

Orig: MF Berghoff 6/9/81
FE: MF Berghoff 6/9/81
PS: RM Wheeler 6/9/81

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 1 - S/U System HAA - Discip M - Serial 002

(2) Description P&ID M-409B shows valve # 409200 (OCKRPP410) which has been changed to valve # 4211581 (ICKRPP551) on P&ID M-421 SH 2

Valve # 409200 (OCKRPP410) has the location F-6

Valve # 4211581 (ICKRPP581) has the location G-2

Both valves are in line 1HC13-79

( ) (√) Contd on Attachment

(3) Recommended Corrective Action and Retest Delete valve # 409200 (OCKRPP410)

Due Date 06/01/81

( ) (√) Contd on Attachment

(4) Related Documents and References

M-409B Rev 3

M-421 SH 1 Rev 3

(5) [√] Deficiency [ ] Design Chg [ ] Troubleshoot [ ] Maintenance [ ] Retest Only

(6) Initial BPD

Subsequent ACTION CPC / CP

(7) Category 03

Cause 06

Retest Read [ ] Yes [√] No

Q-Listed [√] Yes [X] No

(8) NRC Reportability 10 CFR50.55(e)

[ ] Not Reportable G.L. Bowers 10:18 1-6-81

[ ] Reportable; QA Notified _____

Name Time/Date

(9) Signature		Date	Time
Orig:	John Bowers	11/1/81	10:18
FE/~~TE~~:	J. Sullivan	2-2-81	10:10
PS/~~PTS~~:	P. Mulhall	2-5-81	930

(10) Corrective Action or Response:

RE-M 956 was approved deleting valve 200. This will be shown on Rev. 4 of 409B

J. Clements 3-11-81

Revision 4 issued 4-20-81

BN

Joe

Action Organization Representative Date

(11) Retest Complete

TE: N/A Date —

Completion Review Signature Date

QA: [redacted] 6-3-81

FE/~~TE~~: J. Sullivan 6-3-81

PS/PTS: [redacted] 6/5/81

( ) (√) Contd on Attachment

CORRECTIVE ACTION REPORT

Page 1 of 1

(1) Unit 2 - S/U System H A A - Discip M - Serial 0 0 1

(2) Description P&ID M-409B shows valve # 409199 (0CKRPP409) which has been changed to valve # 4221578 (2CKRPP578) on P&ID M-422 SH 1

Valve # 409199 (0CKRPP409) has the location G-3
Valve # 4221578 (2CKRPP578) has the location G-2
Both valves are in line 2HCB-79

( ) (✓) Contd on Attachment

(3) Recommended Corrective Action and Retest Delete valve # 409199 (0CKRPP409)

Due Date 0 8 1 0 1 8 1

( ) (✓) Contd on Attachment

(4) Related Documents and References
M-409B Rev 3
M-422 SH 1 Rev 3

(5) [✓] Deficiency
[ ] Design Chg
[ ] Troubleshoot
[ ] Maintenance
[ ] Retest Only

(6) Initial B P D
Subsequent C P C / C P Q

(7) Category 0 3
Cause 0 6
Retest Reqd [ ] Yes [✓] No
Q-List [✓] Yes [ ] No

(8) NRC Reportability 10 CFR 50.55(e)
[ ] Not Reportable J.A. Bowers 10:25 1-6-81
[ ] Reportable; QA Notified _____
Name Time/Date

(9) Signature

	Date	Time
Orig: J.A. Bowers	1/6/81	10:25
FE/~~TE~~: T.E. Gadson	2-4-81	10:10
PS/~~PTS~~: C.W. Crawley	2-4-81	1130

(10) Corrective Action or Response:

RE-M 956 was approved deleting valve 199. This will be shown on Rev.4 of 409B

J.A. Clements 3-11-81

Revision 4 issued 4-20-81

Action Organization Representative
Date

(11) Retest Complete
TE: N/A Date —
Completion Review Signature
QA: [redacted] Date 6.5.81
FE/~~TE~~: T.E. Gadson 6-3-81
PS/PTS: C.W. Crawley 6/5/81

cancelled

( ) (✓) Contd on Attachment

CORRECTIVE ACTION REPORT Page 1 of 1

(1) Unit S/U System Discip Serial: 1 - FEA - M - 005

(2) Description of Deficiency

Drawing FSK-M-1501D-3 R-1 Rev. C [illegible] M-1503 does not agree with P&ID M-452A Rev. 1 [illegible] Silencer (exhaust). M-452A shows the 16-11 exhaust silencer as [illegible] M-101D and the FSK and notes the drawing should be M-101A.

☐ (✓) Con't on Attachment

(3) Recommended Corrective Action and Retest

Create drawing between F.S. [illegible] and P&ID and change drawings accordingly.

☐ (✓) Con't on Attachment

(4) Related Documents and References

FSK-M-1501D-3 R-1 Rev C Exhaust Silencer Detail
P&ID-M-452A Rev 1 Exhaust Intake & Exhaust Piping Schematic
Emerson to Fisk Ltr. [illegible] Transmittal Unit 1 & 2

(5) ☒ Deficiency
☐ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) Initial: B.P.D
Subseqnt: C.P.Q

(7) Cause: D.1
Category: 5.C
☐ Retest Req
☒ Q-Listed

NRC Reportability 10CFR50.55e
☒ Not Reportable [illegible] 9/26/80
☐ Reportable; QA Notified

(8) Name / Time/Date

(9) Signature

	Signature	Date	Time
Orig:	[illegible]	9/26/80	1320
FE/~~DE~~:	Wayne C Bigler	9/25/80	0830
PS/~~RPS~~:	[illegible]	9/25/80	0935

(10) Corrective Action or Response:

P&ID-M-452A, Rev. 2 Shows silencer as # 1M-101A. This corrects the above stated discrepancy.

R.E. Note:
Per S. Emerson of project engineering, 9/25/80.

F. Kramm 9/25/80
Action Organization Representative
F. Kramm Date 9/25/80

(11) Retest Complete

	Signature	Date
TE:	N/A	
QA:	[redacted]	5/29/81
FE/~~DE~~:	W C Bigler	11-6-80
PS/~~RPS~~:	[illegible]	10-2-80

☐ (✓) Con't on Attachment

CORRECTIVE ACTION REPORT

Drawing (1) 2-ALA-I-004

(2) Description of Deficiency Change to incorporate the unwritten software on Loop diagrams J-337-3E (Rev.0) & J-337-3A(Rev.0). These Loop diagrams apply to OTSG 2E-51A and 2E-51B, not just 2E-51A. Loop Diagram J-337-7 does not show the output to turbine driven auxiliary feedwater pump 2A-05.

☐ (√) Con't on Attachment

(3) Recommended Corrective Action and Retest Revise to show all outputs and change adapter tables to show which field transmitters are associated with which OTSG.

☐ (√) Con't on Attachment

(4) Related Documents and References PID M-407 Sh 3 (Rev.6)
Logic Diagram J-132, Sh.3 (Rev.5).

☐ Deficiency (5)
☒ Design Chg
☐ Troubleshoot
☐ Maintenance
☐ Retest Only

(6) ACTION — Initial: C.P.M; Subseqnt: C.P.C; C.P.Q; C.P.C

(7) Cause: 0.3
Category: 0.5
☐ Retest Req
☒ Q-Listed

NRC Reportability 10CFR50.55e
☒ Not Reportable Paul K Willis 7.12.79
☐ Reportable; QA Notified _____ (Name) _____ (Date)

(8)

(9) Signature

	Signature	Date	Time
Orig:	[illegible]	7.12.79	1300
FE/TE:	EM Evans	7/12/79	1430
PS/PTS:	Paul K Willis	5 JUL 79	900

(10) Corrective Action or Response:
P.E. NOTE: A NOTE WILL BE ADDED TO J-337(Q) SH.7 (REV.3) INDICATING THAT THE OUTPUTS WILL GO TO 2MA-3972B AND 2MA-3981.
THE FIELD TRANSMITTER IDENTIFYING NUMBER INDICATES WHICH STEAM GENERATOR IT IS ASSOCIATED WITH. FOR EXAMPLE 2LT-3975A/C INDICATES THAT THIS PARTICULAR INSTRUMENT IS ASSOCIATED WITH STEAM GENERATOR 'A' BY REFERING TO THE FIRST LETTER AFTER THE INSTRUMENT NUMBER. CONSEQUENTLY ADAPTER TABLES WILL REMAIN AS PRESENTLY SHOWN.

ANN ARBOR CONTACT ASHOK PATYAL ON 7/12/79

See Attached Sheet For Corrective Action

John W. Mayer 7/12/79
Action Organization Representative
S R Bauman Date 7-12-79

☐ (√) Con't on Attachment

(11) Retest Complete — Date
TE: NA

Completion Review Signature	Date
QA: [redacted]	5/29/
TE: FE: ME Bergdoll	5/18/
PS/PTS: [illegible]	6/11/

(10) Corrective Action or Response:

1) Due to extensive design changes, Loops J-337 Sh 7, 25, & 26 will be superseded by new Loops J-337 Sh 36 thru 41.

2) The adapter tables of the above new loops will reference the steam generator to which the transmitters are associated.

CORRECTIVE ACTION WAS COMPLETED TO J-337 Sh. 36 thru 41, ISSUED REV. 0, 1/7/91

12/2/90

3/18/91

CPCo

Open QAR's

CC WRBird DCochran
CAChien/KFH MJSchaeffer
MADietrich
BWMarguglio
MPQAD Routing

QUALITY ACTION REQUEST

DO NOT TREND 1PPA
Priority: 1 Start-up: 2PPA AI: S-893 UFI: 73-10-03-2 File: 16,17

From: (1)		
Danny Cochran	Site: MPQAD	Job 7220

To: (2)	Control Document ref.: (3)	QAR Ident. No.: (4)
LH Curtis	7220-E-051	F070

Action Requested: (5)

Wiring of transformers 1X53 and 2X53 are not supported inside the transformer cubicle. Connection of vendor wiring to field wiring is by means of a splice, thus putting the weight of the cable directly on the transformer. Request Project Engineering evaluate the present equipment condition concerning adequate cable support.

Signature: (6)	Date: (7)	Reply Requested by: (8)
Danny Cochran	7/2/81	8/3/81

Reply: (9)

Signature: (10)	Date: (11)

Action Verified: (12)	Date: (13)

8/2/74

CC NRBird
CAChien/KFH
MADietrich
BWMarguglio
MPQAD Routing
FHSchulmeister
MJSchaeffer

QUALITY ACTION REQUEST

FILE: 16.17

Priority: 05 Trend: C-3 AI: S887 Start Up: Indeterminate

From: (1) FH Schulmeister		
To: (2) LE Davis	Control Document ref.: (3) MPQAD Procedure M-2	QAR Ident. No.: (4) F-069

Action Requested: (5)

Midland Project Quality Assurance Trend Analysis for reporting period May 9, 1981 through May 30, 1981, indicates the quantities of deficiencies have increased by more than double, from 22 to 50. (See attached matrix.)

Signature: (6)	Date: (7) July 2, 1981	Reply Requested by: (8) July 17, 1981

Reply: (9)

Signature: (10)	Date: (11)
Action Verified: (12)	Date: (13)

8/2/74

QAR: F-069
FILE: 16.17
DATE: 7/2/81

DEFICIENCY	REPORTING PERIOD 4/5 - 5/2	5/9 - 5/30
Incomplete Installations (hangers)	2	11
Welding	1	8
Identification	2	5
Anchor Belt Installations	4	3
Deviated from Drawing	1	1
Damage to Equipment Material	2	7
Hold Points Violated	8	11
Storage	2	2
Traceability and Documentation	0	2
TOTALS	22	50

As the matrix indicates, we have continuing and increasing problems. Hold points are still being violated, and at a rising rate, Construction personnel turning over hangers for Quality Control inspection that are incomplete, have risen over five times the previous month; damage to material and equipment has risen by over three times the amount last month; and identification of "Q"-list materials is also rising.

The following action is requested for all areas that show an increase in deficiencies:

1. Bechtel Construction to provide an explanation for increases.

2. Bechtel Construction to provide information on what corrective action will be implemented to reduce the quantity of deficiencies.

FHS/dea

CC WRBird MPQAD Routing
CAChien
LHCurtis
MADietrich
BWMarguglio
MJSchaeffer
FHSchulmeister

QUALITY ACTION REQUEST

UFI: 73*10*03*02

Priority: O-5 A/T S886 File: 16.17

From: F H Schulmeister MPQAD Midland 7220 (1)		
To: L H Curtis (2)	Control Document ref.: 7220-M-326 (3)	QAR Ident. No.: F-068 (4)

Action Requested: (5)

Hanger drawing 2-619-2-28 (attached) indicates field should "cut grating to suit" with no dimensions or tolerances provided (documented on MPQAD NCR M-01-1-1-069). Review of the installation reveals that the grating and spring canister are in contact with each other, placing the continued satisfactory operation of the hanger in question. It should be noted that QC inspected and accepted the hanger in the above described condition. When questioned, QC stated the condition was acceptable because the drawing did not contain any dimensions or tolerances which prevented them from inspecting the item. A further review of the applicable specifications (M-326, 366) indicates that there is a lack of specificity relative to clearances in and around hanger. The following actions are requested:(Cont'd)

Signature: F H Schulmeister (6)	Date: 6.29.81 (7)	Reply Requested by: 7.13.81 (8)

Reply: (9)

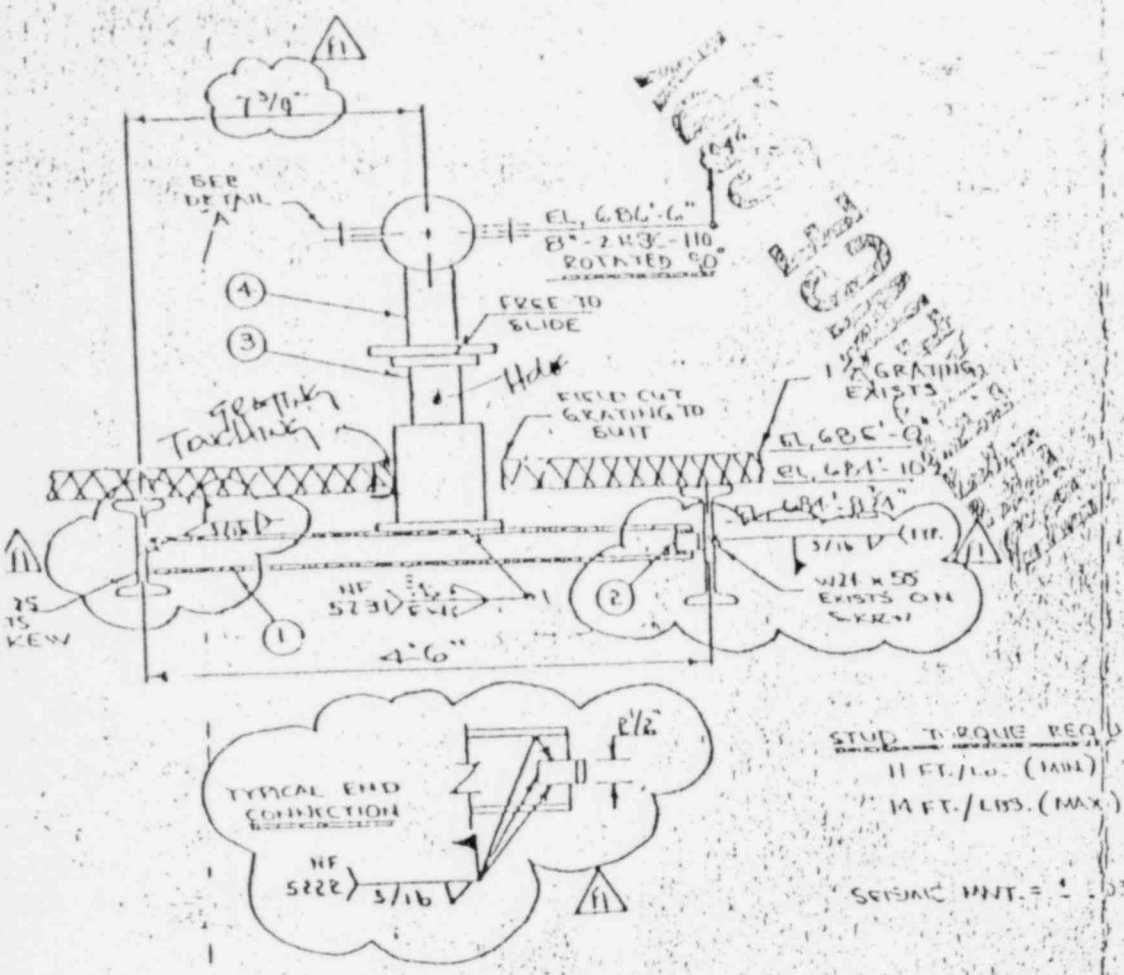
Signature: (10)		Date: (11)
Action Verified: (12)		Date: (13)

8/2/74

ACTION REQUESTED: (Continued)

1 Provide dimensions or tolerances on applicable drawings vs. general statements, such as, "cut to suit". Addition of dimensions will allow QC to perform their intended function, and

2. Provide additional specificity in the applicable specifications relative to clearances around hangers.



ITEM NO.	MATERIALS & OPERATIONS	QUAN	SHIP
	PIPE SUPPORT CONSISTING OF:	ONE	
1	4" W-Beam @ 13# / Ft., 4'-5" long	1	
	SK-519 (REF. 36)		
2	A 3/8" x 1" x 0'-3 1/2" LONG	2	
	WELD ALL (REF. 20)		
3	A "C", PIG #2, w/Travel Stops, Hot Load=1066# Cold Load= 1066# w/Load Flange, w/Load Column Extended 1 15/16"	1	
4	@ 5/8" O.D. Pipe, Clamp Assembly, SK# 2-619-1- 2B ; Sheet 2 of 2, Detail "A" TH=32F	1	
	Hanger Assembly Sketch & Engineering Bundle & Tag	1	
	Tack @ 6"-2HBC-110-H26	1	
	Appl'y Carbo-Zinc #11 to above mat'l except (a) do which shall be treated with a rust preventative		
	Approved By: [signature] Date: 2/5/16	CRITICAL	QUAN SHIP

FOR MATERIALS AND OPERATIONS SEE SKETCH NO.

RECEIVED
FEB 25 2016
ENGINEERING CORP

ITT GRINNELL
PIPE HANGER DIVISION

REF. DRAWING NUMBERS
PIPE: NA-7B(0)Q ELECT:
STEEL: C-651(0)S H.V.A.C.:

CONDITIONS	Fx	Fy	F
DESIGN			
NORMAL @ 175°F		-1029	
EMERGENCY			
FAULTED			

REV.	DATE	ENG. BY	CHK. ENG.	DWN BY	CHK BY	DESCRIPTION
0	1-4-16	GSS	ES	NNF	RO	
1	2/11/16	GS	DT	RO	GJ	Comm'l Change
2	2/10/16	GGS	GK	GGS	GK	
3						
4						

CUSTOMER CONSUMER
ORDER OR CONT. NO.
JOB NAME MIDLAND
MAPS NO. 8-2 HBC
SKETCH NO. 2-619-
SHEET 1 OF 2

THIRD PARTY INSPECTION
CODE CLASS: ASME III-3

ISO. H-619 SHT 3(0) Q
POINT 540
MAT'L. SA-106 GR.B
IN. 2" AREA 4

t tolerences in accordance
h GCP #2A001 U.N.O.
. Procedure is FH-101N-3
i products designed in
cordance with EPL File No.1
r.3

JC

Consumers Power Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION - QUALITY ASSURANCE DEPARTMENT

6A27-0 Trend: C 2 SUS: 2 EAC Priority: 05 AI: S835

6. PROJECT NAME:	7. NONCONFORMING PART NO:	8. NONCONFORMING PART NAME:	1. NCR SERIAL NO: M-07-1-1-069
Midland	8" 2HBC-110-H26	Pipe Support	2. DATE: June 8 1981
9. SERIAL NUMBER:	10. ORG. CONCERNING NC:	11. AREA/LOC. OF NC:	3. DATE OF REV: N/A
N/A	Bechtel Construction and Quality Control	Containment 2	4. FILE NO: 16.3.4 & 16.3.6

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

Spec. 7220-M-326- 5.1.1 states: "To the greatest extent possible, pipe supports shall be installed in strict compliance with the component pipe support design sketches/drawings."
Contrary to this: Sketch 2-619-2-28 shows to field cut grating to suit spring canister. However, grating and canister have no clearance in some areas.

5. DISTRIBUTION

ACTION COPY:

LEDavis
ESmith

INFO COPY:

WRBird
JWCook
TCCooke(2)
MADietrich
JFFirlet
WDGreenwell
GSKeeley
BWMarguglio
DBMiller
JARutgers
DATaggart
GKWandling
MPQAD Route
SKI/CAC

13. QA RECOMMENDATION FOR PART CA:

1. Rework grating to give adequate clearance for spring canister. (LEDavis)
2. Reinspect and document. (ESmith)

DESIGN/PROJECT ENG. DISPOSITION REQUIRED [ ] NOT REQUIRED [X]

14. HOLD TAGS AFFIXED: YES [X] NO [ ] NUMBER, LOCATION & TYPE OF HOLD TAGS AFFIXED: 1 Cont. #2 QA

15. IS PROCESS CA REQUIRED: YES [X] NO [ ] IF NO, ENTER JUSTIFICATION BELOW:

16. DOES NC AFFECT Q-LIST ITEM: YES [X] NO [ ]	17. IS NC REPORTABLE PER 50.55(e): YES [ ] NO [X]
18. IS NC REPORTABLE PER PART 21: YES [ ] NO [X]	19. IF YES, DATE & TIME OF REPORT TO NRC: N/A
20. IF YES, WHO MADE REPORT TO NRC: N/A	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: N/A
22. NCR ORIGINATOR/DT:	23. WRITTEN REPLY REQUIRED BY: 7/3/81 TO ESTABLISH CA COMPLETION DATE
	24. SUPERVISOR'S SIGNATURE/DATE: M.J. Schaefer 6/9/81

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. COMC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A:
30. FAB/CONST. SIG. AUTH. DEP. DISP.:	31. SIG. OF TEST GROUP ADMIN. CONDITION:	32. FOR MAJOR NCR - FLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO DOCUMENT DISP.:

34. METHOD OF PART CA VERIFICATION:

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)

CC WRBird BWMarguglio
CAChien MPQAD Routing
MADietrich

QUALITY ACTION REQUEST

UFI: 73*10*03*02

Priority: 4 Trend: B-1 Start-Up: Indeterminate AI: S-874 FILE: 16.17

From: (1)		
MPQAD DC Hendrix	Site QA	Job 7220

To: (2)	Control Document ref.: (3)	QAR Ident. No.: (4)
LE Davis	J-218(Q) and J-400(Q)	F-065

Action Requested: (5)

Class IE(Q) Instrumentation installed in containments I & II have been removed per an Engineering Design Hold on Specifications J-218(Q) and J-400(Q).

It is indeterminate what location, area of storage and type of maintenance level, these instruments will fall under during the rework presently being undertaken.

Inform MPQAD what actions are being taken on the above concerns.

Signature: (6)	Date: (7)	Reply Requested by: (8)
[signature]	6/25/81	7/8/81

Reply: (9)

Signature: (10)	Date: (11)

Action Verified: (12)	Date: (13)

CC WRBird
CAChien
MADietrich
BWMarguglio
MPQAD Routing

QUALITY ACTION REQUEST

UFI 73*10*03*02
AI S 868

Priority: 04 Trend: Do Not Trend SUS: 1 & 2 BBA File 16.17

From: (1) JRDecker/REBlackinton — Site O.A. — Job 7220		
To: (2) LEDavis	Control Document ref.: (3) 7220/C-304-1.1.1	QAR Ident. No.: (4) F 064

Action Requested: (5)

In regards to the welding being performed on the RPV Upper Lateral Supports Modification, what specifically is the year and revision of AWS-D.1.1 being referenced in Procedure 7220-C-304-1.1.1? --- Additionally, is AWS B.3.0 being used as a basis for welding procedure qualification?

Signature: (6)	Date: (7) 6/15/81	Reply Requested by: (8) 6/26/81

Reply: (9)

Per Specification C-304, Paragraph 3.1, AWS D.1.1 (1972-75), for structural welding code, an FCR has been generated to provide necessary information in Form 84 Civil for modification of RPV upper lateral supports. This FCR will specify the specification used, welding procedure and NDE.

NOTE: In light of AWS B-3.0 being a non-mandatory aid of informational parameters, an oral response was accepted (answer: "not necessarily") in lieu of written response.

Signature: (10) See Transmittal Form No 22834 attached	Date: (11) 7/7/81	
Action Verified: (12)	Date: (13) 7/7/81	

8/2/74

CC WRBird
CAChien
MADietrich
BWMarguglio
MAVerderosa
MPQAD Routing

QUALITY ACTION REQUEST

UFI: 73*10*03*02

Priority 03 Trend M-3 Start Up 2PEA/2PEB AI S863 FILE: 16.17

(1) From: M A Verderosa		
(2) To: R M Collins	(3) Control Document ref.:	(4) QAR Ident. No.: F-063 Rev 1

(5) Action Requested: Two of the four Emergency Diesel Generators supplied by Transamerica DeLaval Corp. have exibited apparently incomplete welds in the rectangular/cylindrical transition region of the lube oil connector pipes (Part No. 02-465-21-BC). The units involved are 2G-11 and 2G-12.

At the present time insufficient documentation prevents MPQAD from making an absolute determination of the manufacturing and quality verification discrepancies, if any, which resulted in these apparently incomplete items being delivered from DeLaval, and further released for piping installation. (For example, a detailed drawing of the specific part, which would provide necessary weld procedure identification, was not submitted as part of the overall documentation.)(Cont'd page .2)

(6) Signature: MA Verderosa	(7) Date: 6/22/81	(8) Reply Requested by: 7/27/81

(9) Reply:

(10) Signature:	(11) Date:
(12) Action Verified:	(13) Date:

8/2/74

"ACTION REQUESTED" CONTINUED:

To date, an NCR (3425) has been issued to resolve the immediate problem of proceeding with Diesel Generator assembly and a Safety Concern and Reportability Evaluation (SCRE #23) regarding this condition has been submitted to Bechtel Project Engineering for further evaluation.

Bechtel is requested to investigate this matter to:

1. Determine the nature/extent of the discrepancies apparently observed with the hardware onsite.
2. If found discrepant, determine the DeLaval Quality System deficiencies which resulted in the units being shipped in this condition. As a minimum, this determination should consider (evaluate the adequacy of) the DeLaval Quality Program requirements for:
   - weld fitup inspection
   - final weld inspection
   - final (component/assembly) inspection
   - Quality Verification Documentation Review (prior to release for shipment).
   - surface preparation inspection prior to coating/painting (interior/exterior).
   - welder qualification

   including acceptance criteria and documentation.
3. Determine the Bechtel Quality System deficiencies, if any, which resulted in this condition going undetected (Note that QSR 148Q indicated that the specific parts in question were found to be acceptable for shipment to the site) to the point of piping installation.

Bechtel should identify corrective actions for any deficiencies identified during the investigation.

In addition to the Bechtel investigation of the cause(s) of the above specific condition (and the determination/implementation of corrective actions), Bechtel should evaluate the condition's effect on the confidence in the integrity of all other DeLaval welded joints and, in fact, all other facets of the DeLaval Diesel Generator fabrication program.

CC ~~WRBird~~ DBMiller
RDDavis MJSchaeffer
MADietrich / MPQAD Routing
BWMarguglio SKT/CAC

QUALITY ACTION REQUEST

FILE: 16.17

Priority: 05 Trend: M-3 Start Up: Indeterminate AI: S858 UFI: 73*10*03*02

(1) From: MJ Schaeffer/RD Davis — Site Q.A. — Job 7220		
(2) To: RM Collins	(3) Control Document ref.: Technical Specification 7220-C-50A	(4) QAR Ident. No.: F-062

(5) Action Requested:

Vendor-supplied radiographic film package for Technical Specification 7220-C-50A (containment liner plate) has indeterminate exposure location information.

Please provide complete correlation of existing radiography films to existing weld locations.

(6) Signature: RD Davis	(7) Date: 6/11/81	(8) Reply Requested by: 6/30/81

(9) Reply:

(10) Signature:		(11) Date:
(12) Action Verified:		(13) Date:

8/2/74

CC WRBird
MADietrich
BWMarguglio
MJSchaeffer
MPQAD Routing
SKT/CAC

QUALITY ACTION REQUEST

Trend: K-2
Priority: 1
SUS: 1PEA, 2PEA, 1PEB, 2PE
AI: S857
File: 16.17
UFI: 73*10*03*02

From: (1)		
D.C. Hendrix	Site Q.A.	Job 7220
To: (2)	Control Document ref.: (3)	QAR Ident. No.: (4)
L. H. Curtis	7220-M-18	F-061

Action Requested: (5)

Bechtel Specification 7220-M-18 dictates the design requirements and applicable codes and standards for material and construction of Emergency Diesel Generator Control panels.

Contrary to the above Specification, numerous deficiencies in these panels were observed during a recent overinspection of Vendor Workmanship by MPQAD. Attachment #1 lists the deficiencies found, some of which were accepted as satisfactory by the SQR by virtue of SDDR's.

Due to the extreme number and types of deficiencies and deviations found, (as per attch. #1) and the large number of SDDR's issued to accept them, Project Engineering is requested to (continued on page 2)

Signature: (6)	Date: (7)	Reply Requested by: (8)
Donald C. Hendrix	6-10-81	6-24-81

Reply: (9)

Signature: (10)	Date: (11)
Action Verified: (12)	Date: (13)

8/2/74

ACTION REQUESTED (Cont'd)

evaluate and:

(a) Provide written assurance, with justification, that the Emergency Diesel Generator Control Panels are built to all applicable specifications and will perform in service as required by the original design.

(b) Provide direction to Bechtel construction for repair of the panels so they meet the requirements of specification 7220-M-18 (with attachments)

ATTACHMENT #1

1. Panel not constructed to NEMA 12 standards.

2. Internal wiring completed with questionable wire types.

   A. Vulcreen Supreeme
   B. E-52305H-SIS
   C. White jacket cable (appears to be teflon)
   D. Vulkene SIS
   E. ITT surprenant EXANE
   F. American Wire and Cable Co. Machine Tool wire 105°C 600V oil resistant to 40°C CSATEW
   G. Blue jacket cable (used as jumpers on contactors)

3. Wire supports are rivited to cabinet.

4. Separation of class IE and non IE wiring inside cabinet.

5. More than 2 lugs per terminal on many connections (as many as 6 on some)

6. Many loose connections.

7. Many buss connections do not have washers and do not have full thread engagement.

8. Hinges on cabinet doors are not concealed type.

9. Terminal blocks not color coded.

10. Color coded wire on one side of a terminal block and non color code on the other.

11. Nuts on terminal strips appear to be steel not cadium-plated brass and many are missing.

12. Undersized wire on undervoltage relays (#18)

13. Many terminal lugs are insulated and are not of the correct type or size (some are modified to fit)

14. Leads are lifted without identification.

15. Wire markers appear to be PVC.

16. No separate instrument ground buss provided.

17. Current transformer circuit wiring not separated.

CC WRBird DBMiller
RDDavis MJSchaeffer
MADietrich BKT/CAC
BWMarguglio MPQAD Routing

QUALITY ACTION REQUEST

FILE: 16.17
UFI: 73*10*03*02

Priority: 05 Trend: To be determined Start Up: Indeterminate AI: S859

From: (1) MJ Schaeffer/RD Davis Site Q.A. Job 7220		
To: (2) LH Curtis	Control Document ref.: (3) Technical Spec 7220-C-50A Midland FSAR	QAR Ident. No.: (4) F-060

Action Requested: (5)

Please provide clarification of Midland FSAR: Volume 7, Section 3.8.1.6.4 (3.8.1.6.4.3) does not address shop inspection of liner plate seam welds. What ASME code section applies? (Technical Specification 7220-C-50A, Section 9.2.9.1, specifies ASME VIII.)

FSAR Table 3.2-1 specifies liner plate design criteria as ACI-318, AISC and AWS D-1.1. FSAR Section 3.9.1.6.4 specifies welding and examination in accordance with ASME Section III. Is design criteria in conflict with welding and examination criteria?

Signature: (6) RD Davis	Date: (7) 6/11/81	Reply Requested by: (8) 6/24/81

Reply: (9)

Signature: (10)		Date: (11)
Action Verified: (12)		Date: (13)

8/2/74

CC SEBandla BWMarguglio
WRBird MJSchaeffer
RMCollins AESchlaifer
LHCurtis PGoguen
MADietrich SKThurow
NKirker

QUALITY ACTION REQUEST

File: 16.17

Priority: 03 Trend: None SUS: Indeterminate AI: S321 UFI: 73*10*03*02

(1) From: MJSchaeffer/JCShah

(2) To: LEDavis/ESmith *

(3) Control Document ref.: 152 FQA-80 (AI: S321)

(4) QAR Ident. No.: F-059 Revision 1*

(5) Action Requested:

As per IOM from LH Curtis to MA Dietrich (CHron. No. 025917) dated April 1, 1981, the subject bolts on hanger No. 631-1-18, with anomalies on the head, were identified as defective by Project Engineering. To complete this action item, the following concerns need to be addressed:

1. Replace the subject bolts with anomalies on the head (hanger No. 631-1-18).
2. Identify any other Q-list components having similar defective bolts and provide assurance that all such bolts have been replaced.
3. Determine action necessary to prevent installation of subject defective bolts in the future.

(6) Signature: M.J. Schaeffer *

(7) Date: 6/9/81 *

(8) Reply Requested by: July 10, 1981

(9) Reply:

(10) Signature:

(11) Date:

(12) Action Verified:

(13) Date:

8/2/74

CPCo

Closed QAR's

CC: WRBird
~~HGeesley~~
~~LADreisbach~~
BWMarguglio
CAChien
MADietrich
MPQAD Routing
AI: S-382

QUALITY ACTION REQUEST

QFI: 73*10*03*02

Page 1 of 3 16.17
File ~~16.10.3.2~~ Hic

(1) From: DANott, MPQA

(2) To: [redacted]S/RCAsh | (3) Control Document ref.: Spec 7220-E-6 | (4) QAR Ident. No.: F-006

(5) Action Requested:

1. Paragraph 6.7.1 of the above specification states in part, "All control wiring shall be type TA or SIS, Class B stranded, single conductor, No 14 AWG minimum. The paragraph does not distinguish between interpanel control wiring and circuit breaker control wiring; the latter contains #16 AWG wiring and smaller.

2. Paragraph 6.7.5 of the specification states in part, "All wiring terminations shall be made with solderless ring tongue compression-type connectors." Contrary to this, there are Female Quick Disconnects used on some Circuit Breaker wiring.

(Contd on Page 3)

(6) Signature: D.A. Nott | (7) Date: 9/24/80 | (8) Reply Requested by: 10/8/80

(9) Reply:

Transmittal 012492 from L H Curtis to H P Leonard dated 11/21/80 (Attachment 1).

Bechtel IOM 032264 from L H Curtis to MA Dietrich dated 6/5/81 (Attachment 2).

(10) Signature: See above responses. | (11) Date: See above responses.

(12) Action Verified: D. Nott | (13) Date: 6/15/81

8/2/74

Action Requested: (Contd from page 1)

3. Paragraph 6.7.5 of the specification states in part, "...a small gap shall separate the wire insulation from the lug barrel so it is evident by visual inspection that the wire and not the insulation is properly clamped in the lug." Contrary to this some connectors had plastic sleeves over the barrels, making a visual inspection of lugs impossible.

The following action is recommended:

A) Item #1 -- Revise paragraph 6.7.1 to read similar to Spec 7220-F-11 paragraph 6.7.1, which states, "All wiring within components or subassemblies may be manufacturers standard size. Wiring from components and subassemblies to terminal blocks for external wiring shall be No 14 AWG minimum.

B) Item #2 -- Revise paragraph 6.7.5 to sanction the use of these quick disconnects.

C) Item #3 -- This is similar to conditions reported by QAR SD-332 Action Item #H-150. Corrective action should be similar to that taken for QAR SD-332.

cc: [illegible] LH Curtis
JLCorley VJ Manta
~~LJKorrisxxxx~~ LJ [illegible]
BWMarguglio
MA Dietrich
DA Nott

AI: S-382

AI - 373

QUALITY ACTION REQUEST

~~ATTACHMENT 1~~
CLOSE QAR: F-006

File ~~16.10.3.E~~ [illegible]

012492

~~To:~~ H.P. Leonard

~~From~~ (1)	(2) Control Document ref.:	(3) QAR Ident. No.:	(4)
LHCurtis	Spec 7220-E-6	F-006	

(5)

Action Requested:

1. Paragraph 6.7.1 of the above specification states in part, "All control wiring shall be type TA or SIS, Class B stranded, single conductor, No 14 AWG minimum. The paragraph does not distinguish between interpanel control wiring and circuit breaker control wiring; the latter contains #16 AWG wiring and smaller.

2. Paragraph 6.7.5 of the specification states in part, "All wiring terminations shall be made with solderless ring tongue compression-type connectors." Contrary to this, there are Female Quick Disconnects used on some Circuit Breaker wiring.

(Contd on Page 3)

Signature: (6)	Date: (7)	Reply Requested by:
[signature]	9/24/80	10/8/80

Reply: 1. Specification requirement applies to control wiring. The application of the #16 wiring is for instrumentation & therefore is not subject to this requirement & is acceptable.

2. Vendor has uses female quick disconnects for their subcomponent wiring. Specification will be revised to accomodate this. 12/5/80 forecast completion.

3. The deviation identified in item #3 is acceptable for the following reasons: a.) Vendor has used this item for their sub-component wiring inside the device. b.) Standard lengths complete with end connecting lugs are manufactured by the vendor as their device component. c.) Functional testing of these components checks out the continuity of the circuits as well as the wiring. d.) Proper amount of extension is visible which will provide sufficient visual evidence that the conductor has penetrated far enough for connection to the lug. Specification should not be revised for this deviation.

NOTE: Reference of QAR SD-332 is not applicable for this purchase order.

Written Response Required: no
Com Use: Closes com # 012492

Signature: (10)	Date:
V.J. Manta for L.H. CURTIS	11/21/80
Action Verified: (12)	Date:

8/2/74

012492

Action Requested: (Contd from page 1)

3. Paragraph 6.7.5 of the specification states in part, "...a small gap shall separate the wire insulation from the lug barrel so it is evident by visual inspection that the wire and not the insulation is properly clamped in the lug." Contrary to this some connectors had plastic sleeves over the barrels, making a visual inspection of lugs impossible.

The following action is recommended:

A) Item #1 -- Revise paragraph 6.7.1 to read similar to Spec 7220-E-11 paragraph 6.7.1, which states, "All wiring within components or subassemblies may be manufacturers standard size. Wiring from components and subassemblies to terminal blocks for external wiring shall be No 14 AWG minimum.

B) Item #2 -- Revise paragraph 6.7.5 to sanction the use of these quick disconnects.

C) Item #3 -- This is similar to conditions reported by QAR SD-332 Action Item #H-150. Corrective action should be similar to that taken for QAR SD-332.

ATTACHMENT 2
QAR: F-006

Bechtel Associates Professional Corporation

Inter-office Memorandum

032264

To M.A. Dietrich

Date June 5, 1981

Subject Midland Plant Units 1 and 2
~~Bechtel Job 7220~~
QAR-F-006

From L.H. Curtis

Of Engineering

Copies to Copy Distribution

At Ann Arbor

Reference Engineering Response to QAR-F-006 (Com 016589)

This is to inform you that engineering has revised Specification 7220-E-6 to incorporate engineering action items indicated in the referenced response.

The specification is currently at Revision 9 dated February 25, 1981.

R.C. Hollar for

L.H. Curtis

KMB/ccb(QE)
6/2/8

Copy Distribution:

K. Bandy
K.M. Baum
L.H. Curtis
R.C. Hollar
E.M. Hughes
B.P. Kononetz

Written Response Requested: No

Com Use: N/A

Log No. 254 File No.
Response Rec'd Date
QA Action Item No.

Route	Init.	Act	Comment
PQAE			
Resp. Eor.			
Elect (1)			
Elect (2)			
Civil/Meh			
Pipe/Weld			
Inst.			
Trn Ovr			
Trend			
Spcl.			

REPORT OF NONCONFORMITY LOG

DATE 7-1-81

NCR OPENED	NCR & SYSTEM	FCP #	DESCRIPTION OF NONCONFORMITY/STATUS	CURRENT RESPONSIBILITY	COMMENTS
3-23-78	00002 BBA-2	3	Unit #2 Incore Instrumentation Support Legs IC-2 HA, HB, & HC - Incomplete Welds.	Field Action	3-27-78 Bechtel to supply clamps.
5-3-78	405 BBD	280	Unit #2 S.G. 2E-51B Name Plate	Field Action	Install before turnover. Name plate being stored in vault.
9-12-78	425 BBD	11	Unit #1 S.G. 1E-51A and S.G. 1E-51B Manways have upset metal.	Field Action	9-15-78 prior to closing manway, rework upset metal & P.T.
11-15-78	455 BBD	280	Unit #2 S.G. 2E-51A missing Name Plate	CPCo Action	Install before turnover.
11-15-78	456 BBD	233	Unit #1 S.G. 1E-51A missing Name Plate	CPCo Action	Install before turnover.
11-15-78	457 BBD	233	Unit #1 S.G. 1E-51B de-faced Name Plate	Field Action	Install before turnover. Name Plate being stored in vault.
12-29-78	467 BBC	48	Unit #2 R.C. Pump Motor 2P-51C missing equipment tag.	CPCo Action	Install before turnover. Name Plate being stored in vault.
4-12-79	507 BCA	38	Unit #1 Decay Heat valve 410-045. Bent indicator stem; 410-046 replace packing gland nut.	Field Action	Install nut and straighten stem before turnover. BPC to supply material per RFI #353.
4-12-79	508 BCA	46	Unit #2 2CCA-18. Missing nuts on packing gland stem on part no. 411-048.	Field Action	Install nuts before turnover. BPC to supply material per RFI #353
6-19-79	1613 BBC	70,95 96,97	Unit #2 RC Pump Internal parts Documentation (Bechtel NCR #1680)	NPGD/BJ Action	7-13-79 Vendor to supply documentation.
9-21-79	1661 BBA-1	280, 223	Unit #1 Reactor Vessel. Missing Name Plate	Unit #1-CPCo Action, Unit #2-Field Action	Install before turnover (Unit #2)
9-26-79	1663 KEI	65	Unit #2 Fuel Transfer Tube. Rails are out of tolerance.	Field Action	11-16-79 Clear when FCP 187 is upgraded.

REPORT OF NONCONFORMITY LOG

NCR OPENED	NCR & SYSTEM	FCP #	DESCRIPTION OF NONCONFORMITY/STATUS	CURRENT RESPONSIBILITY	COMMENTS
10-10-79	1669 BBC	233	Unit #1 RCPM 1P51D missing Name Plate	CPCo Action	Install before turnover. Name Plate being stored in vault.
10-11-79	1671 BBB	25	Unit #1 1CCA-015-601-02-07; discrepancy between spool piece and drawing.	Field Action	1-28-80. Bechtel to supply materia Spool placed on hold (RFI #313 & 1
12-6-79	1695 BBB	40	Unit #2 PZR relief valve (2PSV-0231) discharge gasket sealing face scored.	Field Action	12-14-79, sent to BPC for storage 9-11-80 for layup.
3-25-80	1725 BBD	9RT100	Unit #1 & 2 2E51A & B, 1E51A & B, upper feedwater riser weld's geometric unacceptability.	CPCo Approval	7-15-80
4-25-80	1728 BBD	11	Unit #2 2E51B 1" nozzle has been cut and is now oval shaped.	Field Action	4-29-80. CPCo Action
5-30-80	1733 BBC	112	Unit #2 2P51A two studs cannot be threaded into the motor mount because of misalignment between the motor flange and the motor mount holes.	Field Action	7-17-80
6-11-80	1734 BBB	280, 233	Unit #1 Pressurizer Name Plate missing	Field Action	Install before turnover.
6-13-80	1736 BBA-1	136	Unit #2 Closure Head Key Blocks, dowel pins and hex cap screws, no vendor documentation available.	NPGD Action	6-17-80
6-19-80	1738 BBA-1	140	Unit #1 Closure Head Key Blocks, dowel pins and hex cap screws, no vendor documentation available.	NPGD Action	6-23-80

REPORT OF NONCONFORMITY LOG

NCR OPENED	NCR & SYSTEM	FCP #	DESCRIPTION OF NONCONFORMITY/STATUS	CURRENT RESPONSIBILITY	COMMENTS
9-29-80	1754 BBC	N/A	Unit #2 As-built locations of the R.C. Pumps are out of tolerance.	BPC Action	9-29-80
12-5-80	1761 BBA-1	192	Unit #1 Vent Valve Sleeve machined oversized.	NPGD Action	1-15-80
12-10-80	1762 BCA	264	Unit #1, Valve #410-094, Cap Screw was damaged due to galling during disassembly.	BPC Action	12-10-80
12-11-80	1763 BBA-2	131A	Unit #2, Pipe Restraint, Receipt inspect material per 9-QPP-108 was bypassed.	QC Action	12-16-80
12-23-80	1764 KEF	124	Unit #1, Indexing Fixture, the alignment key at "Z" Axis is off location by 3/16" and is bound against bolts on side travel is needed.	Field Action	2-24-81
1-15-81	1765 BBA-2	291	Unit #1, Plug placed in 1P51C return line slipped down line to elbow allowing dimineralized water to enter return line, pump casing & suction line.	Field Action	1-20-81
1-28-81	1772 BBA-1	61	Unit #1, Thermal Shield Restraint Blocks, two bolts are seized up and will not move in either direction.	NPGD Action	1-28-81

REPORT OF NONCONFORMITY LOG

NCR OPENED	NCR & SYSTEM	FCP #	DESCRIPTION OF NONCONFORMITY/STATUS	CURRENT RESPONSIBILITY	COMMENTS
2-10-81	1776 BBA-1	97	Unit #1 Surveillance Specimen Holder Tube True position problem.	Field Action	2-10-81
2-17-81	1779 BBA-1	298	Unit #1 Reactor Vessel - Seal Ledge Damage	NPGD Action	2-17-81
3-9-81	1782 BHA & BCA	12-13	Units #1 & 2 Decay Heat & Core Flood - FCP's do not provide weld closure point.	Field Action	Revise FCP to include requirement
3-11-81	1785	13B	Unit #2 Hanger Support - rebar damaged while drilling anchor hole.	B&W Engr.	BPC to advise.
3-23-81	1787 BBA-2	64	Unit #2 Service Structure - base metal cracks adjacent to welds #2 & 5 on monorail supports.	B&W Engr.	NPGD to advise.
4-15-81	1790 BBA-1	330	Unit #2, Guide Block Mk. 283 ground .004" in a local area.	NPGD Action	ASAP
4-23-81	1791 BBA-1	-	Unit #2 Reactor Vessel flange has arc strike in a non-critical area.	NPGD Action	ASAP
4-29-81	1792 BBC	-	Unit #2, Snubber (C st. Mk. #2F1-1) piston pulled out 1". FCP requirement is .15"/min.	BPC Action	BPC to advise.
4-29-81	1793 BBC	102	Unit #2 Clevis end of snubber 2B-1 will not fit over R.C. Motor Mount Lug.	NPGD Action	ASAP

REPORT OF NONCONFORMITY LOG

DATE 7-1-81

NCR OPENED	NCR & SYSTEM	FCP #	DESCRIPTION OF NONCONFORMITY/STATUS	CURRENT RESPONSIBILITY	COMMENTS
5-15-81	1795 BBA-1	321	Unit #2, Plenum became bound while lowering in indexing fixture. Keys & guide blocks gouged.	NPGD Action	Grind & remachine as recommended.
5-20-81	1796 BBA-2	177	Unit #2 Small Bore Piping Design Hold #1231 by-passed when FW #1 was insta. .d.	B&W Field	When line is re-designed, determine if weld is AAI based on NDE; or cut out per re-design.
5-28-81	1798 BBC	102B	Unit #2 Retainer Ring material not receipt inspected & documentation is not available.	BPCo Action	ASAP
6-2-81	1799 BBA-1	151	Unit #2 Split Nut Rings material need documentation	NPGD Action	ASAP
6-8-81	2101 BBA-1	151	Unit #2 CRDM Seal Port Cover Bolt bound in hole	NPGD Action	ASAP
6-16-81	2103 BBC	94B	Unit #2 Snubbers 2H1-2 & 2H1-1 stroked because retaining device was removed.	BPCo Action	BPCo to advise.
6-19-81	2104 BCA	237	Unit #2 Decay Heat Removal Line #2CCA-65 misaligned	B&W Field	Line will be cut & re-welded to correct
6-23-81	2105 BBB	25B	Unit#1 Hanger Shim Tolerance not met.	B&W Field	BPCo to advise.

B&W

Open NCR's

6/81

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	Unit #2	6-1-81	Split Nut Rings	MK 120

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Mt. Vernon	☒ RECEIVING ☐ TEST ☐ CONST.	591	#151

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
9-OPP-108	142166E, Rev. 8	N/A

13. DESCRIPTION OF NONCONFORMITY

6-1-81

No documentation available. Print #142166E, Rev. 8, Note #2 calls for a ~~cet~~ certified test report.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
C. J. Bowen / [illegible] 6-2-81 (NAME / DATE)	[illegible] 6-2-81 (NAME / DATE)	☐ YES ☒ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO

[illegible] FIELD PROJECT ENGINEER — 6-1-81 DATE

18. RECOMMENDED DISPOSITION: ☐ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER — DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER — DATE

22. APPROVALS

B&W QC _____ SIGNATURE _____ DATE — OTHER _____ SIGNATURE _____ DATE

OWNER/AGENT _____ SIGNATURE _____ DATE — OTHER _____ SIGNATURE _____ DATE

23. ANI REVIEW

_____ SIGNATURE _____ DATE

24. DISPOSITION COMPLETED

_____ NAME _____ DATE

25. DISPOSITION VERIFICATION ☐ ACCEPTABLE ☐ UNACCEPTABLE

_____ NAME _____ DATE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

O-?

FIELD PROJECT MANAGER — DATE

27. NONCONFORMITY CLOSED

FIELD QUALITY CONTROL SUPV. — DATE

SEQUENTIAL NUMBER NO 1799 1700

BWCC 21888

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

FCP #151
UNIT #2

RECEIVING INSPECTION REPORT

JOB NUMBER CL238 DATE 6-1-81
PART NAME SPLIT NUT RINGS
PART NUMBER mk 120
PART S.N. N/A NUMBER OF PIECES 138 PCS
VENDOR MT-VERNON

2 REFERENCE DOCUMENTS	3 ASSIGNED STORAGE LEVEL	4 STORAGE LOCATION
CODE ASME III DRAWING 42166E Rev 8 PURCHASE ORDER M11 EQUIPMENT SPEC. N/A B&W FIELD SPEC. N/A	LEVEL I LEVEL II LEVEL III N/A LEVEL IV IN ACCORDANCE WITH Q.C. PROCEDURE N/A	Redd Fox Installation

5 INSPECTION CHECKLIST	N/A	ACC.	NOT ACC.	REMARKS
MANUFACTURING DOCUMENTATION			✓	No documentation available
PROTECTIVE COVERS AND SEALS		✓		
COATINGS AND PRESERVATIVES		✓		
CLEANLINESS		✓		
PHYSICAL DAMAGE		✓		
DESICCANT & MOISTURE INDICATORS	✓			
IDENTIFICATION OR MARKING		✓		
DIMENSIONAL INSPECTION	✓			
AEO 14912				
16 120 2013 52-1 THRU 52-69				
BR 68769				

N/A = NOT APPLICABLE

REPORT OF NONFORMITY NUMBER #1799
RELEASE FOR CONSTRUCTION TAG NUMBER N/A
REJECT TAG NUMBER 201
REPORT OF INSPECTION NUMBER N/A

Q.C. INSPECTOR C. F. Bauer
NUMBER

No 826

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

Log CAC0-2575 IC → I.C

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	#2	6-8-81	C.R.D.M.	#14 per FCP

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Diamond Power Spec. Corp.	☐ RECEIVING ☐ TEST ☒ CONST.	592	FCP #151 Seq. 390

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY#
7220-M1.4-34-4	N/A	N/A

13. DESCRIPTION OF NONCONFORMITY

During installation of the 3/8" x 1" seal port cover plate bolts on C.R.D.M. ~~4933~~ 950 6/3/81, the top righthand bolt (1 of ~~24~~ 4 6/3/81) was bound 23/32 inches into the threaded hole. Bolt is still bound in hole.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
C. Baum 5-8-81 (NAME / DATE)	S.L. Tarbox 6/8/81 (NAME / DATE)	☐ YES ☒ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — W. N. Linn (FIELD PROJECT ENGINEER) — 6-8-81 (DATE)

18. RECOMMENDED DISPOSITION: ☐ N/A ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

Remove damaged bolt as outlined on page 2.

W. N. Linn (FIELD PROJECT ENGINEER) — 6-8-81 (DATE)

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER — DATE

22. APPROVALS

B&W FQC — SIGNATURE — DATE — OTHER — SIGNATURE — DATE

OWNER/AGENT — SIGNATURE — DATE — OTHER — SIGNATURE — DATE

23. ANI REVIEW — SIGNATURE — DATE

24. DISPOSITION COMPLETED — NAME — DATE

25. DISPOSITION VERIFICATION — NAME — DATE — ☐ ACCEPTABLE ☐ UNACCEPTABLE — REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

FIELD PROJECT MANAGER — DATE

27. NONCONFORMITY CLOSED

FIELD QUALITY CONTROL SUPV. — DATE

2101

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORM #
CL-238	Unit #2		2101

1. A. Using tape, seal off the seal port opening in the C.R.D.M. Flange on Drive S/N 950.

   B. Apply "oil of wintergreen" to the one (1) bolt which is bound, and allow to soak for a minimum of twenty-four (24) hours.

   C. Using torque wrench, attempt to back out the bolt.

   +++ If bolt cannot be removed per step #1, step #2 will be required.

2. A. Using a band saw, or mechanical grinder, cut off the bolt which is bound as close to the C.R.D.M. Flange as possible without cutting into the Flange.

   B. Set up and drill a 3/16" to 1/4" dia. hole into the portion of bolt still remaining in the Flange.

   C. Using an E-Z Out, remove the remaining portion of bolt still existing in the C.R.D.M. Flange.

*3. Insepct the stud hole in the C.R.D.M. Flange for any stud damage. If there is thread damage report data to N.P.G.D.

4. Vendor is to supply new bolt.

5. Withdraw the new 3/8" x 1" long bolt.

*6. Receive and inspect the new 3/8" x 1" long bolt for the seal port cover per 9-QPP-108.

BWCC 318/[illegible]

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	Unit #2	6-17-81	Snubber	2-H1-2 & 2-H1-1

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
I.T.T. Grinnell	☐ RECEIVING ☐ TEST ☒ CONST.	593	FCP #943 (2P51"A")

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	PHD5222-6 & 82	N/A

13. DESCRIPTION OF NONCONFORMITY During installation of snubbe rs 2H1-2 & 2H1-1, the positive piston retaining device was removed with the supporting chain falls being attached to the bracket end at an angle that created an extending pressure on the piston. This resulted in the snubbers being stroked, 2H1-2 stroked ½" and 2H1-1 stroked 15/16", the time span of stroking is not known. No visible damage to equipment. See Sheet 2 for sketch.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
V.E. Booker / [illegible] (NAME) 6/16/81 (DATE)	S.L. Taulbee (NAME) 6/17/81 (DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO

W. H. Lain — FIELD PROJECT ENGINEER — 6-17-81 — DATE

18. RECOMMENDED DISPOSITION: ☒ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

Bechtel to advise.

W. H. Lain — FIELD PROJECT ENGINEER — 6-19-81 — DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER — DATE

22. APPROVALS

B&W FQC _____ (SIGNATURE) _____ (DATE) OTHER _____ (SIGNATURE) _____ (DATE)

OWNER/AGENT _____ (SIGNATURE) _____ (DATE) OTHER _____ (SIGNATURE) _____ (DATE)

23. ANI REVIEW

_____ (SIGNATURE) _____ (DATE)

24. DISPOSITION COMPLETED

_____ (NAME) _____ (DATE)

25. DISPOSITION VERIFICATION ☐ ACCEPTABLE ☐ UNACCEPTABLE

_____ (NAME) _____ (DATE) REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

FIELD PROJECT MANAGER — DATE

27. NONCONFORMITY CLOSED

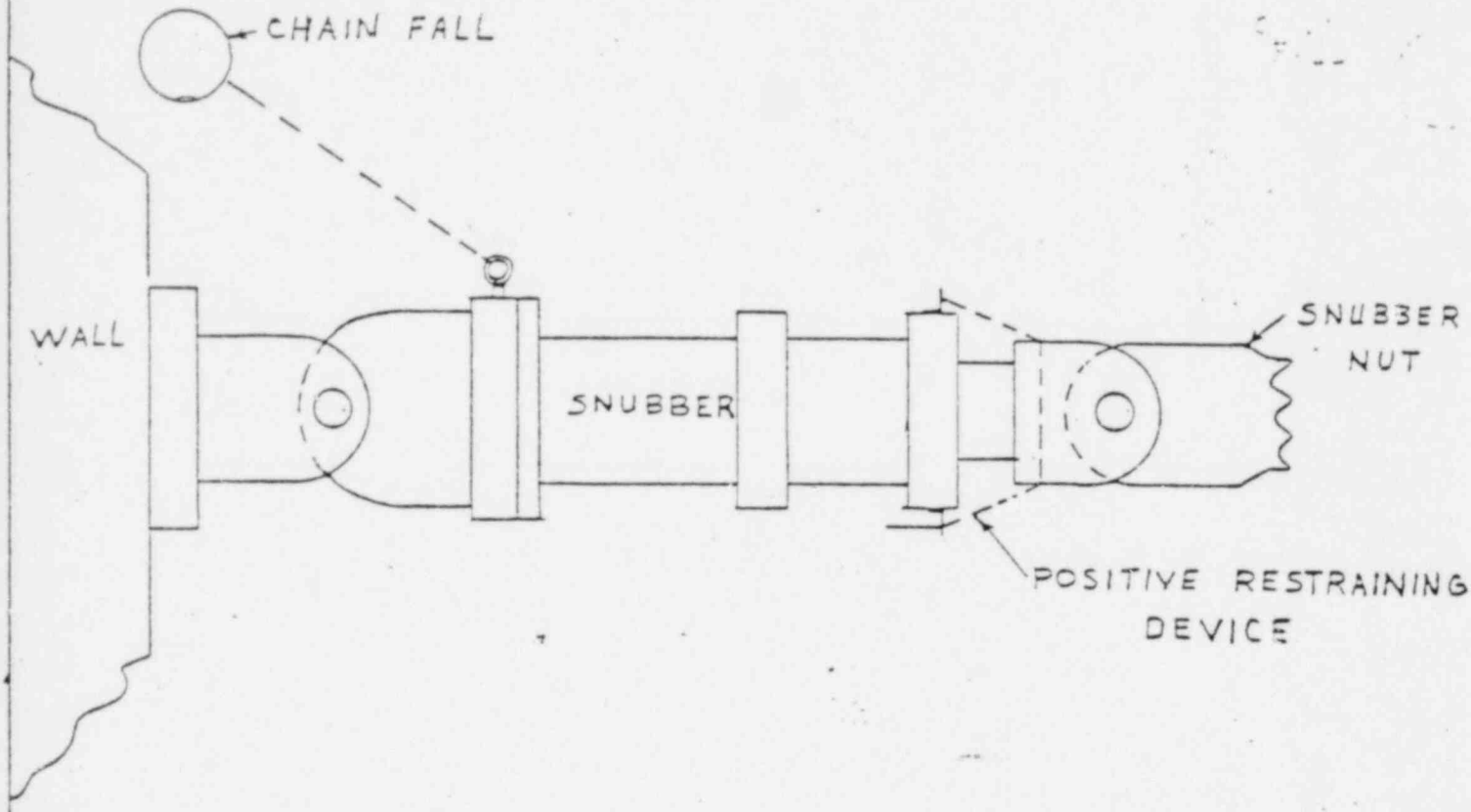
FIELD QUALITY CONTROL SUPV. — DATE

SEQUENTIAL NUMBER № 2103

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	Unit #2	6-17-81	2103



(5) CPCO-2601-6/24 (2) CPCO-2611-6/24

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	#1	6-19-81	Decay Heat Removal	FW 3

6. VENDOR MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Bechtel	☐ RECEIVING ☐ TEST ☒ CONST.	594	237

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
M-204	M-610, Sht. 2	N/A

13. DESCRIPTION OF NONCONFORMITY

An acceptable radiograph of FW 3 was completed on 5/29/81. Without the appropriate field weld papers being ~~complete~~ generated, the cover pass of FW 3 was "washed" with a TIG torch on 6/19/81 to correct a pipe misalignment problem. The acceptable radiograph is now nullified. The pipe remains misaligned.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
[signature] 6-19-81 (NAME / DATE)	S.L. Taulbee 6/19/81 (NAME / DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — [signature] FIELD PROJECT ENGINEER — 6-22-81 DATE

18. RECOMMENDED DISPOSITION: ☒ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

N/A

[signature] FIELD PROJECT ENGINEER — 6-23-81 DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☒ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

Line 2CCA-65, Decay Heat Removal, weld FW 3 will be cut and re-preped & re-welded to the new weld data sheet to correct pipe misalignment.

[signature] FIELD PROJECT ENGINEER — 6-23-81 DATE

22. APPROVALS

B&W FQC S.L. Taulbee 6/23/81 SIGNATURE DATE — OTHER SIGNATURE DATE

OWNER/AGENT [signature] 6/23/81 SIGNATURE DATE — OTHER SIGNATURE DATE

23. ANI REVIEW

SIGNATURE DATE

24. DISPOSITION COMPLETED

NAME DATE

25. DISPOSITION VERIFICATION ☐ ACCEPTABLE ☐ UNACCEPTABLE

NAME DATE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

Notify the appropriate crafts and superintendents that welding is not to be performed without approved written instructions (i.e. Weld Data Sheet).

[signature] FIELD PROJECT MANAGER — 6-23-81 DATE

27. NONCONFORMITY CLOSED

FIELD QUALITY CONTROL SUPV. DATE

2104

SEQUENTIAL NUMBER NO 2104

B&W 31612-1

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 23 ROE 6-26-81

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	#1	6-23-81	Hanger	1CCA-15-H6 & H10

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Bechtel	☐ RECEIVING ☐ TEST ☒ CONST.	595 & 596 RCB 6-26-81	25B

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
M-326	1-601-2-24 & 1-601-2-23	N/A

13. DESCRIPTION OF NONCONFORMITY

During the Q.C. performance of Seq. 050 (C-3 shim gaps and % of gap) on Hanger ~~#6~~ #C AND #10, it was found that the shim tolerances were not met. (See attached sheets for details).

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
R.O. Brown 6-26-81 NAME T. KANE 1/2 6-23-81 DATE	G. H. Harris 6-23-81 NAME DATE	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO H.H. Lim 6-26-81

H.H. Lim FIELD PROJECT ENGINEER 6-23-81 DATE

18. RECOMMENDED DISPOSITION: ☐ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER DATE

22. APPROVALS

B&W FQC _____ SIGNATURE _____ DATE OTHER _____ SIGNATURE _____ DATE

OWNER/AGENT _____ SIGNATURE _____ DATE OTHER _____ SIGNATURE _____ DATE

23. ANI REVIEW

_____ SIGNATURE _____ DATE

24. DISPOSITION COMPLETED

_____ NAME _____ DATE

25. DISPOSITION VERIFICATION ☐ ACCEPTABLE ☐ UNACCEPTABLE

_____ NAME _____ DATE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

C-3

03

FIELD PROJECT MANAGER DATE

27. NONCONFORMITY CLOSED

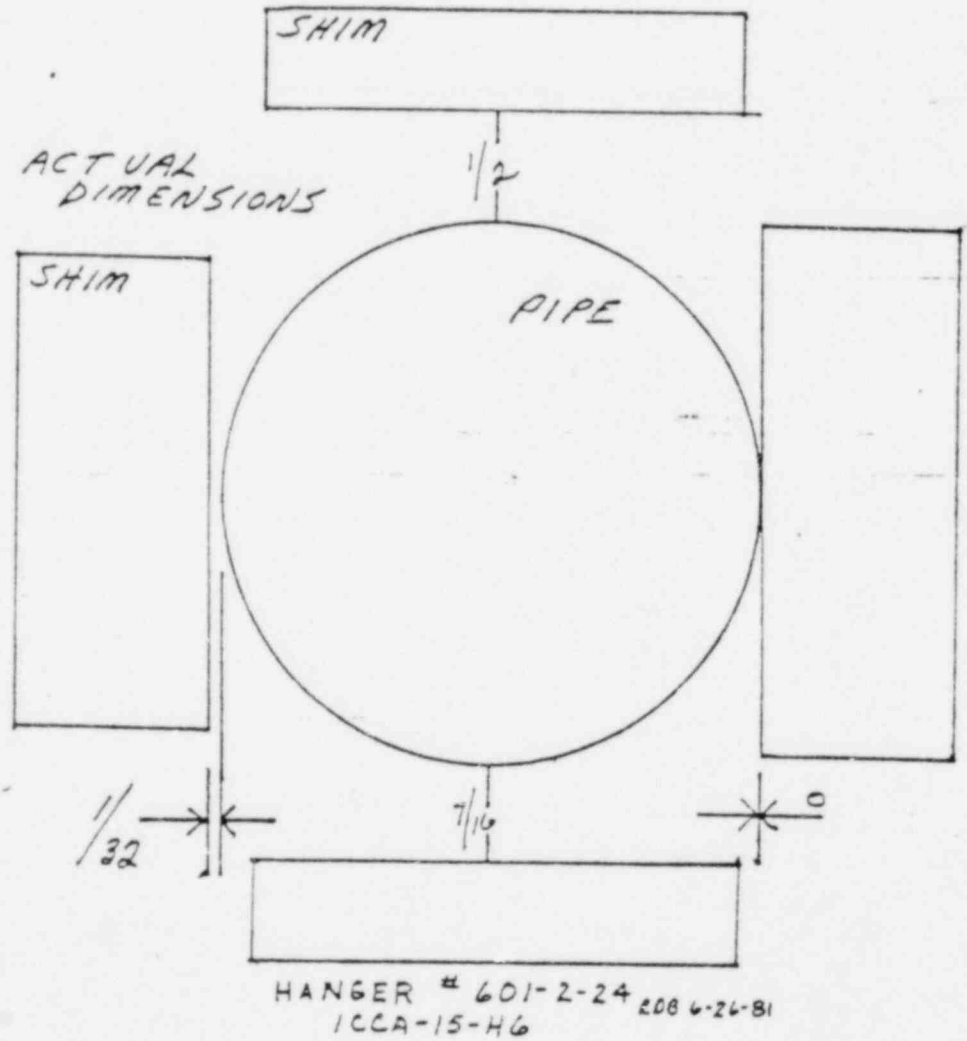
FIELD QUALITY CONTROL SUPV. DATE

SEQUENTIAL NUMBER № 2105

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL238	#1 FCP250	6-23-81	2105

REQUIRED DIMENSIONS ARE TOP + BOTTOM - 1/2" + 1/2"
SIDE + SIDE - 1/32" + 1/32"

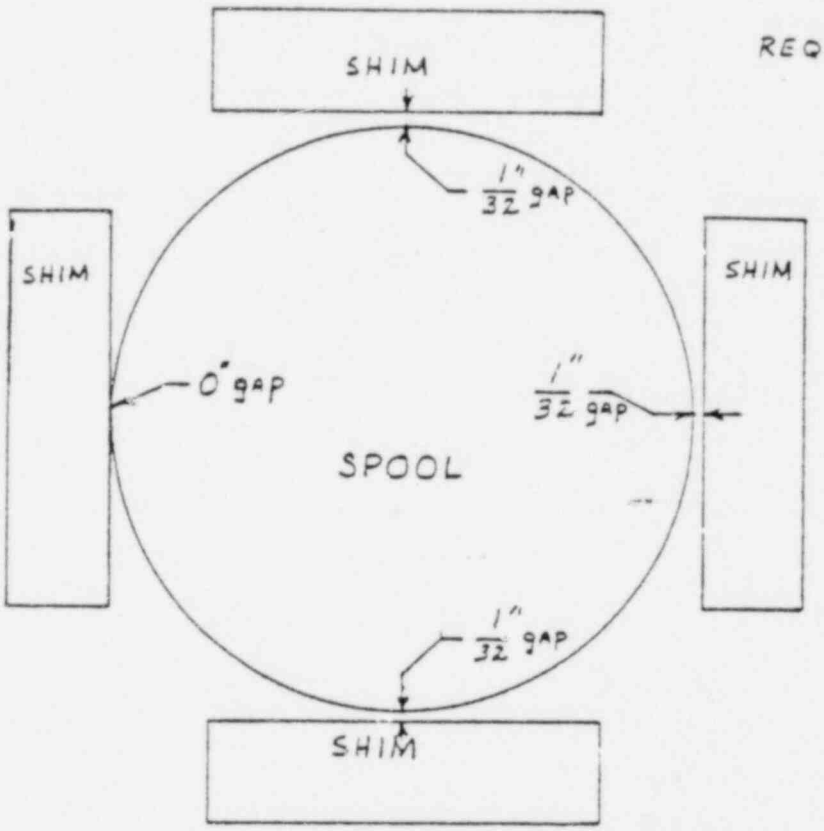


HANGER # 601-2-24 208 6-26-81
ICCA-15-H6

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL 238	UNIT # 1	6-26-81	2105



REQUIRED DEMENSIONS:
1/32" TYP.

HANGER # 601-2-23
ICCA 15-H10

B&W

Closed NCR's

W.H. Lim 3-4-80

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL 238	1	2-27-80	Service Structure	Mk. 766

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
B&W	☐ RECEIVING ☐ TEST ☒ CONST.	418	FCP #102

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	203262E	N/A

13. DESCRIPTION OF NONCONFORMITY

All Dowel Pin Holes were reamed oversized and diameter from top to bottom is inconsistent. See Attached Chart.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
A.C. Ashworth Jr. 2-27-80 (NAME / DATE)	R.W. Thye 2-27-80 (NAME / DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — W.H. Lim (FIELD PROJECT ENGINEER) — 2-27-80 (DATE)

18. RECOMMENDED DISPOSITION: ☐ N/A ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

Rework holes per recommended disposition on Pages 3 ~~and 4~~ W.H. Lim 3-4-80
Vendor to Advise

W.H. Lim — FIELD PROJECT ENGINEER — 3-4-80 — DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☒ REPAIR ☒ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

See SPR 118 and Page 3
Revised Page 3 in accordance with
Rev. 1 of S.P.R. #118.

W.H. Lim — FIELD PROJECT ENGINEER — W.H. Lim 3-4-81, 4-23-80 — DATE

22. APPROVALS

B&W FQC R.W. Thye 3-5-81 / R.W. Thye 4-23-80 — SIGNATURE / DATE — OTHER — SIGNATURE / DATE

OWNER/AGENT R.E. Whitaker 4/25/80 — SIGNATURE / DATE — OTHER — SIGNATURE / DATE

R.E. Whitaker 3/26/81

23. AN REVIEW — SIGNATURE — 4/29/80 DATE — 3-10-81

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
L.D. Brown 6-17-81 (NAME / DATE)	S.L. Taulbee 6/18/81 (NAME / DATE)	☒ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

Advise the Field Superintendants as to the necessity of machining to the tolerances as stated in the Field Construction Procedures.

V.N. Agrawal — FIELD PROJECT MANAGER — 4/23/80 — DATE

27. NONCONFORMITY CLOSED — S.L. Taulbee — FIELD QUALITY CONTROL SUPV. — 6/18/81 — DATE

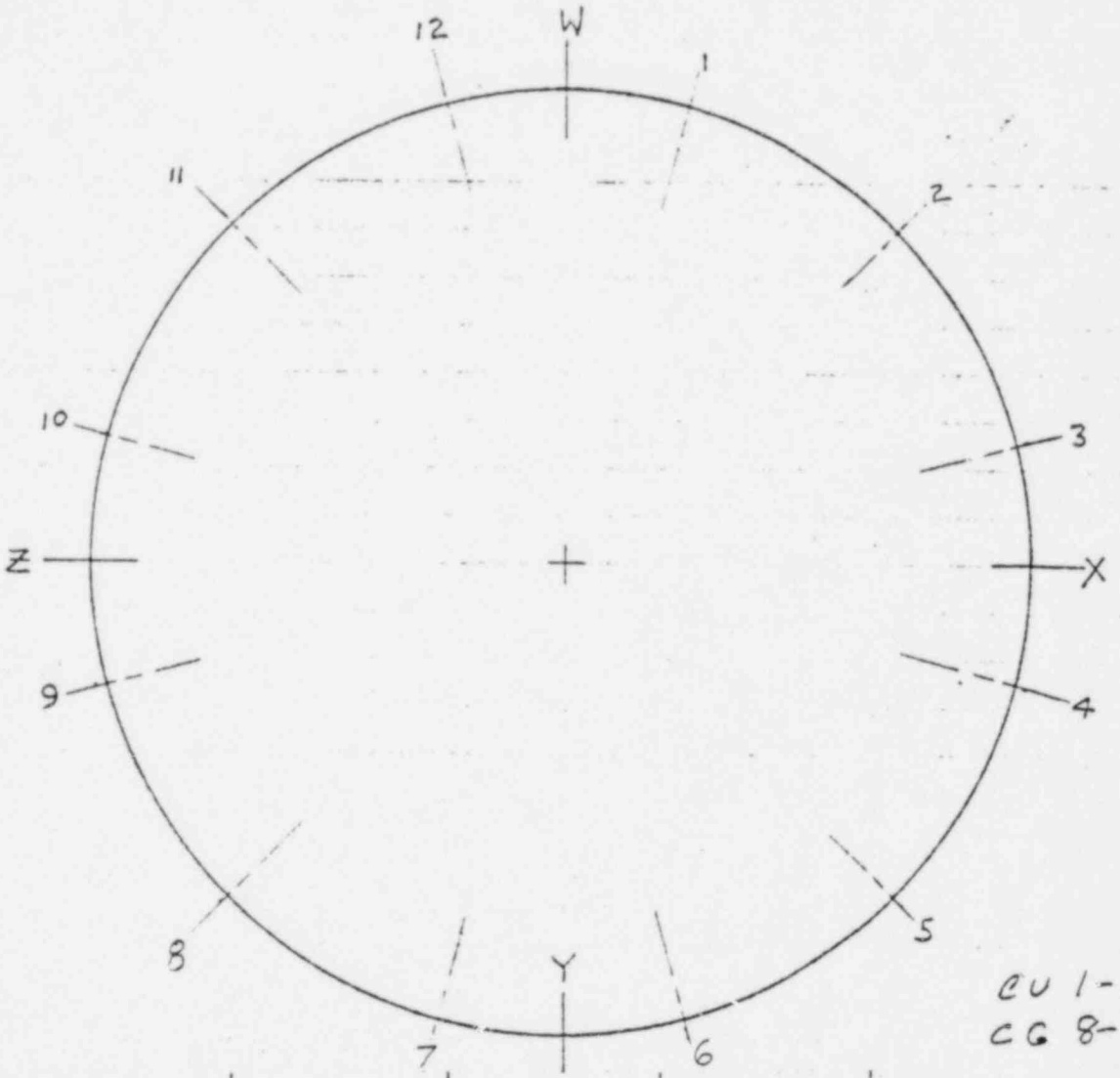
SEQUENTIAL NUMBER № 1717

BWC-51330

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	2-27-80	1717



CU 1-218
CG 8-40

	TOP	BOTTOM	PIN DIA.
1	1.3762"	1.3762"	1.375"
2	1.3772"	1.3776"	1.375"
3	1.3774"	1.3767"	1.375"
4	1.3771"	1.3775"	1.375"
5	1.3764"	1.377"	1.375"
6	1.3769"	1.3769"	1.3747"
7	1.3781"	1.392"	1.375"
8	1.3785"	1.382"	1.375"
9	1.379"-1.392"	1.381"-1.385"	1.375"
10	1.3765"	1.3755"	1.3747"
11	1.3795"	1.377"	1.3745"
12	1.376"	1.376"	1.3747"

A. C. Schmidt

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	2-29-80	1717

REQUIRED DISPOSITION

1. Set up to the following holes, as referenced per Page No. 2, and ream holes so as to have a uniformed sized hole. Remove minimum amount of metal.

   A. Hole No. 7
   B. Hole No. 8
   C. Hole No. 9
   D. Hole No. 11

   } 6-3-80 R. Jain

2. Inspection to take final sizes of aboved reworked holes and report data to engineering.

   A. Hole No. 7
   B. Hole No. 8
   C. Hole No. 9
   D. Hole No. 11

   } SEE ATTACHED SHEET FOR INSPECTION INFORMATION R.D. Brown 6-3-80

3. B&WCC to provide hole sizes to B&W NPGD for re-ordering dowel pins for above (4) holes. TRANSMITTED TO N.P.G.D. 6-3-80 — W.H. Hall 6-30-80

4. Receive and inspect (4) new dowel pins.
   R.I.R. # 1116 3-4-81 R.D. Brown
   Report of Inspection #36525 3-4-81 R.D. Brown CWI-318

5. Install (4) new pins into mating holes. These pins to have interference fit. Tack weld in place per WIN-101-1, as stated per Rev. 1 of S.P.R. No. 118 ADDED LAST SENTENCE R.D. Brown 3-4-81
   5-9-81 R. Jain (S/N 2) Stuck in hole #8 NCR # 1784 issued 3-9-81 R.D. Brown

6. Install original dowel pins into the remaining (8) holes and tack weld into place, per WIN-101-1. NCR # 1784 Closed 6/12/81 RJ
   ~~Installed per FCP# 12 Sec. 065. 5-1-80 C.J. Brown/RDB 6-17-81~~
   Installed per FCP # 12 Sec 065 5-1-80 R. Jain 6-17-81

7. Inspect installation of dowel pins. Clear N.C.R.
   Inspected and acceptable 5-1-80 C.J. Brown/RDB 6-17-81

SITE PROBLEM REPORT

TITLE (MAX. 30 CHARACTERS): Steam Structure Dowel Holes

PRIORITY 1 ☐ 2 ☐ 3 ☐ 4 ☐ NONE ☐

LEAD MANAGER: T. A. Krenzke

CUSTOMER: Consumers Power Co.

SUPPLIER: B&W

QQC. ID	NSS NO.	SPR NO.	REV. NO.
13	13	118	1

PA NO.	CHARGE NO.	PROJ. BUDGET	VENDOR CLAIM NO./ SHIPPING DAMAGE NO.	PART NO./TOS NO.
				44-60-001

DESCRIPTION OF PROBLEM

Holes #7, 8, 9 & 11 Reworked Per SPR 118-0. See RFI.

RFI #455

ORIGINATOR: H.A. Guetling DATE: 6/6/80

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L.D. Cline — NPGD, Lynchburg

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

See RFI #455

RESOLUTION

NPGD agrees with the disposition on RFI #455. B&W Construction Company should procure the dowels as recommended from B&W - Barberton. Please advise NPGD of the as-built configurations when completed.

RECEIVED JUN 23 1980

☐ INFORMATION ONLY

RESOLUTION PREPARED BY: T.A. Krenzke DATE: 6/16/80

POTENTIAL CROSS-CONTRACT APPLICABILITY	POTENTIAL SAFETY CONCERN	RESOLUTION DOCUMENT NO.	REVIEWED BY: Glenn R. Wittig for L.G. Weatherford DATE: 6-18-80
☐ YES ☐ NO	☐ YES ☐ NO		APPROVED BY: T.A. Krenzke DATE: 6-18-80

SPR CLOSEOUT REPORT:

CLOSED OUT BY: DATE:

SHEET ____ OF ____

DWG. DNG. OR SPEC.	SHEET	REV.	TITLE
NCR #1717	1	0	Area 510 Service Structure Dowel Holes RFI #455

PREPARED BY: W. C. Hall

Appr: H. H. Engr. G

RESPONSE REQUESTED BY DATE A.S.A.P.

EXISTING CONDITION:

As stated per N.C.R. #1717, the four oversized holes (7,8,9,11) have been redrilled and reamed. However, rework has not improved the dimensions of the holes, as shown per attachment.

REQUESTED INFORMATION:

BSCC requests that (4) new dowel pins be ordered to the size shown per attachment and that these dowels be fit and allowed to be tack welded.

RESPONSE

Reviewed by: Date Response Prepared by: _____

Civil _____ _____ Bechtel Approval:

Elect. _____ _____

Mech. _____ _____ Project Field Engineer or Designee Date

ATTACHMENT TO R.F.I. #455

NCR # 1717
CG 8-40 R.D. Brown 6-3-80

Hole No. 7:
Top 1.3934" - 1.3965"
Middle 1.400" - 1.3991"
Bottom 1.419" - 1.4173"
Recommended Dowel Pin Size 1.3975"

Hole No. 8:
Top 1.3957" - 1.3944"
Middle 1.3942" - 1.3953"
Bottom 1.4055" - 1.4041"
Recommended Dowel Pin Size 1.3952"

Hole No. 9:
Top 1.3951" - 1.3935"
Middle 1.3933" - 1.4006"
Bottom 1.4027" - 1.412"
Recommended Dowel Pin Size 1.3945"

Hole No. 11:
Top 1.3914" - 1.3916"
Middle 1.3907" - 1.391"
Bottom 1.3902 - 1.3908"
Recommended Dowel Pin Size 1.3912"

BWCC 31858

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

RECEIVING INSPECTION REPORT

FCP# 102 unit #1

1

JOB NUMBER CL 238 DATE 3-4-81

PART NAME Dowel Pin

PART NUMBER MK No. 766

PART S.N. #1, #2, #3, #4 NUMBER OF PIECES 4

VENDOR Belgium Tool

2 REFERENCE DOCUMENTS	3 ASSIGNED STORAGE LEVEL	4 STORAGE LOCATION
CODE N/A DRAWING 19C336 E Rev 1 PURCHASE ORDER PO 144 EQUIPMENT SPEC. N/A B&W FIELD SPEC' N/A	☐ LEVEL I ☐ LEVEL II N/A ☐ LEVEL III ☑ LEVEL IV IN ACCORDANCE WITH Q.C. PROCEDURE N/A	Rec'd for installation

5 INSPECTION CHECKLIST	N/A	ACC.	NOT ACC.	REMARKS
MANUFACTURING DOCUMENTATION	X			
PROTECTIVE COVERS AND SEALS		X		
COATINGS AND PRESERVATIVES	X			
CLEANLINESS		X		
PHYSICAL DAMAGE		X		
DESICCANT & MOISTURE INDICATORS	X			
IDENTIFICATION OR MARKING		X		
DIMENSIONAL INSPECTION		X		
AEC # 14639				

N/A = NOT APPLICABLE

REPORT OF NONFORMITY NUMBER N/A
RELEASE FOR CONSTRUCTION TAG NUMBER N/A
REJECT TAG NUMBER N/A
REPORT OF INSPECTION NUMBER N/A

№ 1116

Q.C. INSPECTOR R. D. Brown
NUMBER

FDS 31591-2

BARCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF INSPECTION

(COMPLETE BLOCKS 1 THRU 6 ALL INSPECTIONS.)
(COMPLETE BLOCKS 7 THRU 19 AS APPLICABLE.)

1. INSPECTED ☒ RECEIVING ☐ STORAGE ☐ IN PROCESS ☐ FINAL ☐ INSTALLATION
2. TYPE TEST Dimensional
3. RESULTS ☒ ACCEPT ☐ REJECT
4. DRAWING NO. 126886E Rev 1
5. MK. NO. OR USE mk # 766
6. CONTRACT NO. CL 238
7. PROCEDURE NO. FCP #102
8. SEQUENCE NO. 050 & NCR #1717 step #4
9. PAGE NO. 3 of 3
11. P. E. REQ'D. ☐ YES ☒ NO
12. P. O. NO. 144 COMP/SYS NO. N/A
13. VENDOR Belgium Tool
14. ~~EQUIP~~/MATL DESCR. Dowel pins
15. APPLICABLE PROCED. 9-QPP-108
16. APPLICABLE SPEC. (A) N/A (B) (C)
17. CARRIER N/A
18. BILL OF LADING NO. N/A DATE
19. DEL. REPORT NO. N/A

10. DESCRIPTION OF INSPECTION:

Dia. of dowel pins S/N 1 - 1.3975"

S/N 2 - 1.3952"

S/N 3 - 1.3944"

S/N 4 - 1.3912"

INSPECTED BY B&W R. D. Brown DATE 3-4-81

CUSTOMER DATE

CARRIER DATE

OTHER DATE

FS - IV - 1
9A - 107

№ 36525

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	8-18-80	Shim	27-71-2012-60-6

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Babcock&Wilcox	☐ RECEIVING ☐ TEST ☒ CONST.	455	97

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	238856E	N/A

13. DESCRIPTION OF NONCONFORMITY

Serveillance specimen holder tube shim was machined undersized. Theshim shou l be 0.964" at Hole 4-1 and 0.959" at Hole 4-2. The actual dimension of theshim is C.831".

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
R. Brown for R. Brown — NAME	RW Phipps — NAME	☒ YES ☐ NO
8-18-80 — DATE	8-18-80 — DATE	

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO

W. H. Lian — FIELD PROJECT ENGINEER — 8-19-80 DATE

18. RECOMMENDED DISPOSITION: ☐ N/A ☐ REWORK ☐ REPAIR ☒ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

Vendor to supply a new shim & documentation. Q.C. to inspect shim in accordance with 9-QPP-108. Shim to be machined, inspected, and installed in accordance with FCP #97.

W. H. Lian — FIELD PROJECT ENGINEER — 9-22-80 DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☒ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

Vendor to supply a new shim & documentation. Q.C. to inspect shim in accordance with 9-QPP-108. Shim to be machined, inspected, and installed in accordance with FCP #97.

W. H. Lian — FIELD PROJECT ENGINEER — 9-3-80 DATE

22. APPROVALS

B&W FQC: R. W. Phipps — SIGNATURE — 9-4-80 DATE — OTHER: ____ SIGNATURE ____ DATE

OWNER/AGENT: R E Whitaker — SIGNATURE — 9/5/80 DATE — OTHER: ____ SIGNATURE ____ DATE

23. ANI REVIEW: C. [illegible] — SIGNATURE — 6-29-81 DATE

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
R. C. Brown — NAME	S.L. Taulbee — NAME	☒ ACCEPTABLE ☐ UNACCEPTABLE
6-29-81 — DATE	6/30/81 — DATE	REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

The machining operation was revised to incorporate a new machine capable of holding closer tolerances.

Walter J. Lee — FIELD PROJECT MANAGER — 9/4/80 DATE

27. NONCONFORMITY CLOSED

S.L. Taulbee — FIELD QUALITY CONTROL SUPV. — 6/30/81 DATE

SEQUENTIAL NUMBER № 1746

SITE PROBLEM REPORT

TITLE (MAX. 30 CHARACTERS): CORE SUPPORT ASSEMBLY		PRIORITY: 1 ☐ 2 ☒ 3 ☐ 4 ☐ NONE ☐	
		LEAD MANAGER: J.W. Mitchum	
CUSTOMER: Virginia Power (VP)	SUPPLIER: B&W (NFD)	DOC. ID: 13	NSS NO.: 12
		SPR NO.: 170	REV. NO.: 0
PA NO.	CHARGE NO.	MAR. BUDGET	VENDOR CLAIM NO./ SHIPPING DAMAGE NO.
			PART NO./TGS NO.: 620-0012-00 01-001

DESCRIPTION OF PROBLEM

SEE NCR'S # 1746 ± 1748

NOTE: ERRORS WERE INCURRED IN FIELD MACHINING.

ORIGINATOR: M.A. GRUETLING for E.D. GREEN DATE: 8/28/80

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L.D. CLINE — NPGD-LYNCHBURG

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

NPGD PROVIDE SUFFICIENT MATERIAL FOR B&W C.C. TO CUSTOM MACHINE IN FIELD.

RESOLUTION:

UNDERSIZED SLOTS AS INDICATED ARE NOT USEABLE FOR SAT INSTALLATION. B&W NPGD / NED will provide replacement material and will be charged to B&W C.C. (1)

☐ INFORMATION ONLY

RESOLUTION PREPARED BY: R.C. Mitchum DATE: 8/29/80

POTENTIAL 10CFR50.55(e) APPLICABILITY	POTENTIAL SAFETY CONCERN	RESOLUTION DOCUMENT NO.
☐ YES ☒ NO	☐ YES ☒ NO	

REVIEWED BY: [illegible] DATE: 9/2/80

APPROVED BY: [illegible] DATE: 9/2/80

SPR CLOSEOUT REPORT:

CLOSED (INITIAL) BY: DATE:

SHEET ____ OF ____

BWCC 31888

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

RECEIVING INSPECTION REPORT

1

JOB NUMBER CL 238 DATE 6-17-81

PART NAME S.S.H.T. Shim material

PART NUMBER SEE BELOW

PART S.N. SEE BELOW NUMBER OF PIECES 5

VENDOR Babcock & Wilcox

2 REFERENCE DOCUMENTS	3 ASSIGNED STORAGE LEVEL	4 STORAGE LOCATION
CODE ASME III DRAWING 238856E REV. 2 PURCHASE ORDER M.I.Z. EQUIPMENT SPEC. N/A B&W FIELD SPEC. N/A	☐ LEVEL I ☐ LEVEL II ☒ LEVEL III N/A ☐ LEVEL IV IN ACCORDANCE WITH Q.C. PROCEDURE N/A	Rec'd for installation

5 INSPECTION CHECKLIST	N/A	ACC.	NOT ACC.	REMARKS
MANUFACTURING DOCUMENTATION		X		
PROTECTIVE COVERS AND SEALS	X			
COATINGS AND PRESERVATIVES	X			
CLEANLINESS		X		
PHYSICAL DAMAGE		X		
DESICCANT & MOISTURE INDICATORS	X			
IDENTIFICATION OR MARKING				
DIMENSIONAL INSPECTION	X			
AEO 15145				
HT# 38109-2A 3 pcs. S/N 27-71-2012-20,21,22 mk# 27-71				
HT# 38109-2A 2 pcs. S/N 27-62-2012-20,21 mk# 27-62				

N/A = NOT APPLICABLE

REPORT OF NONFORMITY NUMBER N/A
RELEASE FOR CONSTRUCTION TAG NUMBER N/A
REJECT TAG NUMBER N/A
REPORT OF INSPECTION NUMBER N/A

Q.C. INSPECTOR R. D. Brown
NUMBER

№ 848

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	8-21-80	Shim	27-71-2012-60-5

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Babcock & Wilcox	☐ RECEIVING ☐ TEST ☒ CONST.	456	97

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	238856E	N/A

13. DESCRIPTION OF NONCONFORMITY: Serveillance specimen holder tube shim was machined undersized. The shim should be 0.946 at hole 3-1 and 0.942 at hole 3-2. The actual dimension of the shim is 0.867".

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
James L. Jones NAME, 8-21-80 DATE	R W Thope NAME, 8-21-80 DATE	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)
☐ YES ☒ NO — H. H. Linn FIELD PROJECT ENGINEER — 8-21-80 DATE

18. RECOMMENDED DISPOSITION: ☐ N/A ☐ REWORK ☐ REPAIR ☒ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS
Vendor to supply a new shim & documentation. Q.C. to inspect shim in accordance with 9-QPP-108. Shim to be machined, inspected, and installed in accordance with FCP #97.
H. H. Linn FIELD PROJECT ENGINEER — 9-22-80 DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☒ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS
Vendor to supply a new shim & documentation. Q.C. to inspect shim in accordance with 9-QPP-108. Shim to be machined, inspected, and installed in accordance with FCP #97.
H. H. Linn FIELD PROJECT ENGINEER — 9-3-80 DATE

22. APPROVALS
B&W FQC: R W Thope SIGNATURE, 9-4-80 DATE — OTHER: ____ SIGNATURE, ____ DATE
OWNER/AGENT: R E Whitaker SIGNATURE, 9/15/80 DATE — OTHER: ____ SIGNATURE, ____ DATE

23. ANI REVIEW: C. [illegible] SIGNATURE, 6-29-81 DATE

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	☑ ACCEPTABLE ☐ UNACCEPTABLE
R. L. Brown NAME, 6-29-81 DATE	S. L. Taulbee NAME, 6/30/81 DATE	REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION
It was found the shim had slipped in it's vice during set-up. The machine operator was instructed to exercise additional care during set-up. Field supervision randomly inspects the set-up.

Walter J. Lee FIELD PROJECT MANAGER — 9/4/80 DATE

27. NONCONFORMITY CLOSED: S. L. Taulbee FIELD QUALITY CONTROL SUPV. — 6/30/81 DATE

SEQUENTIAL NUMBER № 1748

SITE PROBLEM REPORT

TITLE (MAX. 30 CHARACTERS): Core Support Assembly	PRIORITY 1 ☐ 2 ☒ 3 ☐ 4 ☐ NONE ☐
	LEAD MANAGER: J.W. Mathum
CUSTOMER: Consumers Power Co.	SUPPLIER: B&W
	DOC. ID: 13 — NSS NO.: 12 — SPR NO.: 170 — REV. NO.: 0
PA NO.	CHARGE NO. — MAR. BUDGET
VENDOR CLAIM NO./ SHIPPING DAMAGE NO.	PART NO./TGS NO.: 620-0012-00 01-001

DESCRIPTION OF PROBLEM

See NCR's # 1746 ± 1748

Note: Errors Were Incurred In Field Machining.

ORIGINATOR: M.A. Guetling for T.D. Green — DATE: 8/29/83

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L.D. Cline — NPGD-Lynchburg

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

NPGD Provide Sufficient Material For B&W C.C. To Custom Machine In Field.

RESOLUTION

Undersized shims as indicated are not useable for SSPT installation. B&W NPGD / NED will provide replacement material and will be charged to B&W C.C. (1)

☐ INFORMATION ONLY

RESOLUTION PREPARED BY: R.C. Mathum — DATE: 8/29/83

POTENTIAL CROSS-CONTRACT AFFECTED?	POTENTIAL SAFETY CONCERN	RESOLUTION DOCUMENT NO.
☐ YES ☒ NO	☐ YES ☒ NO	

REVIEWED BY: W.R. Hildebrandt — DATE: 9/2/83

APPROVED BY: D.C. Cook — DATE: 9/2/83

SPR CLOSEOUT REPORT:

CLOSED (W) BY — DATE

SHEET ___ OF ___

BWCC 31888

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

RECEIVING INSPECTION REPORT

1

JOB NUMBER CL 238 DATE 6-17-81

PART NAME S.S.H.T. Shim material

PART NUMBER See Below

PART S.N. See Below NUMBER OF PIECES 5

VENDOR Babcock & Wilcox

2 REFERENCE DOCUMENTS	3 ASSIGNED STORAGE LEVEL	4 STORAGE LOCATION
CODE ASME III. DRAWING 238856E Rev. 2 PURCHASE ORDER M.I.2 EQUIPMENT SPEC. N/A B&W FIELD SPEC. N/A	☐ LEVEL I ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV N/A IN ACCORDANCE WITH Q.C. PROCEDURE N/A	Rec'd for installation

5 INSPECTION CHECKLIST	N/A	ACC.	NOT ACC.	REMARKS
MANUFACTURING DOCUMENTATION		X		
PROTECTIVE COVERS AND SEALS	X			
COATINGS AND PRESERVATIVES	X			
CLEANLINESS		X		
PHYSICAL DAMAGE		X		
DESICCANT & MOISTURE INDICATORS	X			
IDENTIFICATION OR MARKING				
DIMENSIONAL INSPECTION	X			
AEO 15145				
HT# 38109-2A 3 pcs. S/N 27-71-2012-20,21,22 MK# 27-71				
HT# 38109-2A 2 pcs. S/N 27-62-2012-20,21 MK# 27-62				

N/A = NOT APPLICABLE

REPORT OF NONFORMITY NUMBER N/A
RELEASE FOR CONSTRUCTION TAG NUMBER N/A
REJECT TAG NUMBER N/A
REPORT OF INSPECTION NUMBER N/A

Q.C. INSPECTOR R. D. Brown
NUMBER

№ 848

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 2 Rev 10-21-80

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	10-29-80	Incore Tank	N/A

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
CB & I	☐ RECEIVING ☐ TEST ☒ CONST.	469	FCP #111

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY#
N/A	M-353(Q), Rev. 4	N/A

13. DESCRIPTION OF NONCONFORMITY

A small fire started in the bottom center of the incore tank caused by sparks from an arc gouging operation being performed on the containment wall. Combustible material such as Handi-wipes (paper cleaning towels) was found in the area of the fire. (See page 2 of 2 for resulting damage).

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
NAME [signature] DATE 10-29-80	NAME R W Thone DATE 10-29-80	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — W. H. Lion, FIELD PROJECT ENGINEER — DATE 10-29-80

18. RECOMMENDED DISPOSITION: ☐ N/A ☐ REWORK ☒ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

See Attachment.

W. H. Lion, FIELD PROJECT ENGINEER — DATE 10-31-80

20. ACTUAL DISPOSITION: ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

See Redi-letter 074115 and Attachment.

W. H. Lion, FIELD PROJECT ENGINEER — DATE 11-21-80

22. APPROVALS

B&W FQC R W Thone SIGNATURE — 11-21-80 DATE — OTHER _____ SIGNATURE _____ DATE _____

OWNER/AGENT R E Whitaker SIGNATURE — 11/25/80 DATE — OTHER _____ SIGNATURE _____ DATE _____

23. ANI REVIEW [signature] SIGNATURE — 11-25-80 DATE

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
W. J. Hall NAME — 6-4-81 DATE	T. F. Norris NAME — 6-4-81 DATE	☒ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION Instruct all manual personnel through the weekly Tool-box Safety Meeting, in proper housekeeping procedures through the B&WCC Procedure for General Housekeeping & Cleanliness During Construction (see attached procedure). In addition to the above procedure, stressing the importance of the removal of all flammable materials from the construction area, when they are not being used. Also, instruction indicating proper amounts of rags, paper towels, and clean suits needed at any time during the normal construction shift, to minimize build ups of excess flammable material.

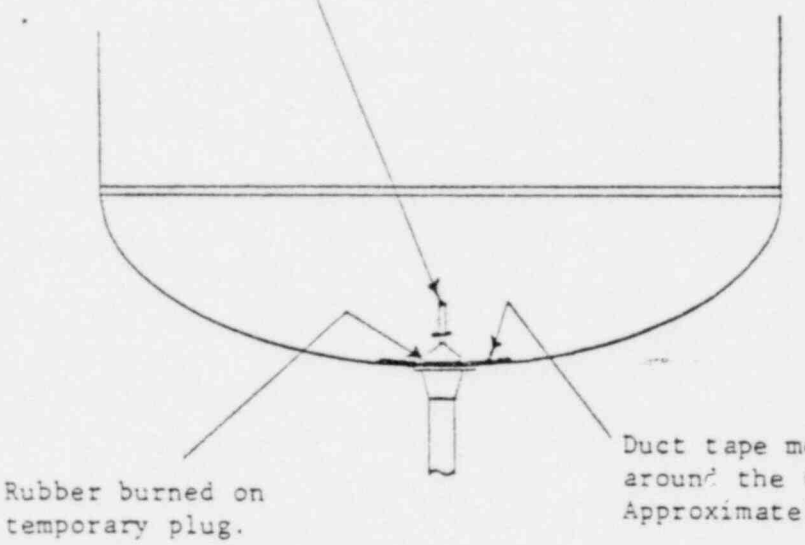
Walter Shon, FIELD PROJECT MANAGER — DATE 11/21/80

27. NONCONFORMITY CLOSED T. F. Norris, FIELD QUALITY CONTROL SUPV. — DATE 6-4-81

SEQUENTIAL NUMBER № 1755

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	10-29-80	1755



REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	10-31-80	1755

Bechtel to advise if disposition is acceptable.

1. Clean tank of all debris and remove rubber plug. 5/28/81 R Lair

   NOTE: Provide temporary cover in place of plug. Use caution so that the line below the plug is not contaminated.

2. Clean heat affected area with spot check cleaner and rinse with demineralized water. 5/28/81 R. Lair

3. Lightly buff (not grind) area if required to facilitate cleaning. 5/28/81 R Lair

4. Inspect tank for possible arc strikes. 05/28/81 K. Carroll - Q.C.

5. If arc strikes are found:

   ~~A. Grind out heat affected zone in depth stages of .010".~~

   ~~B. After each grinding stage, etch in accordance with 9-WG-104.~~

   ~~C. When the heat affected zone has been completely removed, blend grind to 3:1 taper with 1" min. radius.~~

   ~~D. NDE examine in accordance with 9-PT-104.~~

   S/A Lair 11-21-80

   E. Map and record location, size, depth, width, ~~and root radius of cavity~~ OF ARC STRIKE
   Mapped & recorded locations 05/28/81 K. Lair

6. Perform leach tests for floride and chloride contamination of affected areas. Transmit samples for analysis. Arnold Kleinwald 5/29/81

7. Notify engineering of all results. Transmit all data to Bechtel for evaluation. Notify Bechtel to install new plug. DATA SENT TO BECHTEL ON SPECIMEN DATED 6/3/81 wm Hall 6-4-81

redi-letter

07411 5 TRIP

TO W. G. LUM / L. STRUSS

BECHTEL CONSTRUCTION CO.

FROM A. KILISZEK

SUBJECT INCORE TANK

DATE 11/11/80

MESSAGE YOUR PROCEDURE FOR CLEANING THE TANK, AS STATED IN THE DISPOSITION TONER 1255, IS ACCEPTABLE. IF ARC STRIKES ARE FOUND IN THE TANK BECHTEL WILL TAKE APPROPRIATE ACTION.

SIGNED A. Kiliszek Ed

REPLY

RECEIVED

SIGNED W. G. Lum DATE 11/20/80

REDIFORM, 45 472

SEND PARTS 1 AND 3 WITH CARBON INTACT.
PART 3 WILL BE RETURNED WITH REPLY.

Babcock&Wilcox

B&W Construction Company

Copley, Ohio 44321

Telephone: (216) 666-8841

PROCEDURE FOR

GENERAL HOUSEKEEPING & CLEANLINESS DURING CONSTRUCTION

1.0 Purpose

The purpose of this procedure is to define the various methods and requirements necessary to minimize or remove if possible, all fire hazards, and exposures detrimental to personal health and safety.

2.0 Scope

The scope of this procedure covers all areas occupied by B&WCC personnel during all facets of construction.

3.0 The Project Superintendent has overall responsibility for ensuring that adequate and proper housekeeping is performed during construction.

A) Superintendents shall be responsible for ensuring that all personnel are aware of the housekeeping requirements prior to commencement of work.

4.0 Specific Instructions and Requirements of B&W QA designated areas and materials

Specific instructions and requirements for cleanliness during the construction of specific units requiring Quality Control Standards are incorporated into the individual Field Construction Procedures (FCP) as required.

Responsibilities for maintenance of the above standards lies with the B&WCC QC Manager, the Lead Discipline Engineer(s), and Superintendents involved.

5.0 General Housekeeping Requirements

The project site is organized to limit activities to specific areas, i.e., storage of hazardous materials, non-eating areas, etc., such areas may be changed in activity restrictions during the normal progression of the job as field conditions change. General requirements are listed below.

a) Danger areas shall be clearly identified by posting signs and listing the restrictions imposed upon the area.

b) Materials, tools, and construction equipment shall be stored in an orderly manner and regulated to keep access and work areas clear. Small items should be stored in containers whenever practical.

d) Removal of combustible packing materials from items should be performed prior to entering warehouses or permanent structures. If unpacking must be done inside, the packing material should be removed and placed in suitable containers.

e) Waste disposal containers shall be provided in adequate quantities and in convenient locations. They should be so located that a fire in a container would not be a hazard.

f) All hazardous waste materials shall be put in containers. Scrap and protruding objects must be cleared from work areas and passageways. Containers should be emptied or removed as often as necessary.

g) Permanent material or equipment located in work areas shall be protected, if necessary, by coverings in order to provide protection from operations within or conditions associated with the area which would impair the integrity of the material or equipment.

6.0 Surveillance

Daily inspections will be made by the Project Safety Department. The Safety Department will report any deficiencies to the responsible parties for correction.

CH/HP 8101.2F1
ORIGINAL(TC 79-030)

1141 26.01

ANALYSIS REQUEST FORM

NCR # 1755

1. Sample Source (Component, System, Etc) Inconel tank

2. Analysis Requested by B & W Corp. C. 4/c dept.

Dept Q.C 8:00 Phone 416

3. Sample Time/Date 5/29/81 4. Sample Taken by Arnold Kleinsek

5. Analysis Required (Check)

A. Water Quality Type (Circle One) I II III

B. Water Quality

- ✓ Chlorides
- ✓ Fluorides
- _____ Conductivity
- _____ Silicates
- _____ Sulfides
- _____ pH
- _____ Suspended Solids
- _____ Total Solids
- _____ Total Dissolved

C. Flush Water and Filters

(1) Water

- _____ pH
- _____ Conductivity
- _____ Organics

(2) Filters

- _____ Particle Size

D. Lay-up Water

- _____ pH
- _____ Oxygen
- _____ Conductivity
- _____ Hydrazine
- _____ Chlorides
- _____ Fluorides

E. Other Tests (Please List)

BASE and samples #1 thru #4

6. Miscellaneous Information (Unusual Conditions, Time Needed, Etc)

7. Sample Received by Charles R. Gray
Technician's Signature

8. Sample Number 81-307 THRU 81-311

ANALYSIS RESULTS FORM

1. Sample Number 81-303
2. Sample Source Onsite tank BASE Sample
3. Technician Ashton
4. Sample Time/Date 0800 / 5/29/81
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides ~~(ppm)~~ µg/ft³	8133.17	77
Fluorides ~~(ppm)~~ µg/ft³	8136.1	<77
Sulfides (ppm)		
Silicates (ppm)		
Suspended Solids (ppm)		
Dissolved Solids (ppm)		
Total Solids (ppm)		
pH		
Conductivity (µmho/cm)		

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (µmho/cm)		
Particle Size (Inches)		
Sliver Size (Inches)		

D. Other Tests

	Results

6. Notes
Swipe sampling as per CHP 8120.7

7. Reagents used checked for expiration. (Initial) CRG
8. Equipment used checked for calibration or standardized as appropriate. (Initial) CRG
9. ~~Requesting individual~~ informed of results by ~~phone~~, ~~mail~~, verbal. (Circle) Time 14:00
10. Supervisor's Approval DD Ellis 6/4/81

CEP 8101.2F2
REVISION 1

1141 26.01

ANALYSIS RESULTS FORM

1. Sample Number 81-307
2. Sample Source Davies tank sample #1
3. Technician Allen Tom
4. Sample Time/Date 0800/5/29/91
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides (~~ppm~~) $\mu g/ft^2$	0133.17	309
Fluorides (~~ppm~~) $\mu g/ft^2$	0136.1	<77
Sulfides (ppm)		
Silicates (ppm)		
Suspended Solids (ppm)		
Dissolved Solids (ppm)		
Total Solids (ppm)		
pH		
Conductivity (μmho/cm)		

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (μmho/cm)		
Particle Size (Inches)		
Sliver Size (Inches)		

D. Other Tests

	Results

6. Notes
Surge sampling as per CAP 8120.7

7. Reagents used checked for expiration. (Initial) CRG
8. Equipment used checked for calibration or standardized as appropriate. (Initial) CRG
9. Requesting individual informed of results by ~~phone~~, mail, verbal. (Circle) Time 14:00
10. Supervisor's Approval DRicci/BFH

CHP 8101.2F2
REVISION 1

1141 26.01

ANALYSIS RESULTS FORM

1. Sample Number 81-309
2. Sample Source Quarry tank Sample #2
3. Technician B. Newton
4. Sample Time/Date 0800 / 5/24/81
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides ~~(ppm)~~ $\mu g/ft^2$	8133.17	231
Fluorides ~~(ppm)~~ $\mu g/ft^2$	8136	77
Sulfides (ppm)		
Silicates (ppm)		
Suspended Solids (ppm)		
Dissolved Solids (ppm)		
Total Solids (ppm)		
pH		
Conductivity (μmho/cm)		

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (μmho/cm)		
Particle Size (Inches)		
Silver Size (Inches)		

D. Other Tests

Results

6. Notes
Swipe sampling as per CHP 8120.7
7. Reagents used checked for expiration. (Initial) CEG
8. Equipment used checked for calibration or standardized as appropriate. (Initial) CEG
9. ~~Requesting individual~~ informed of results by phone, mail, verbal. (Circle) Time 14:00
10. Supervisor's Approval DDRhi / 6FH

CHP 8101.2F2
REVISION 1

1141 26.01

ANALYSIS RESULTS FORM

1. Sample Number 81-310
2. Sample Source Creek Tank Sample #3
3. Technician Addington
4. Sample Time/Date 0800 / 5/29/81
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides ~~(ppm)~~ μg/ft²	#133.17	309
Fluorides ~~(ppm)~~ μg/ft²	#136.1	277
Sulfides (ppm)		
Silicates (ppm)		
Suspended Solids (ppm)		
Dissolved Solids (ppm)		
Total Solids (ppm)		
pH		
Conductivity (μmho/cm)		

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (μmho/cm)		
Particle Size (Inches)		
Sliver Size (Inches)		

D. Other Tests

Results

6. Notes
Surge sampling as per CHP 8120.7
7. Reagents used checked for expiration. (Initial) CRG
8. Equipment used checked for calibration or standardized as appropriate. (Initial) CRG
9. ~~Requesting~~ Individual informed of results by phone, mail, verbal. (Circle) Time 1400
10. Supervisor's Approval DDRees 1 BFH

ANALYSIS RESULTS FORM

1. Sample Number 81-311
2. Sample Source Owens Lake Sample #4
3. Technician Blanton
4. Sample Time/Date 0800 / 5/29/81
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides ~~(ppm)~~ mg/ft²	8133.17	154
Fluorides ~~(ppm)~~ mg/ft²	8136.1	<77
Sulfides (ppm)		
Silicates (ppm)		
Suspended Solids (ppm)		
Dissolved Solids (ppm)		
Total Solids (ppm)		
pH		
Conductivity (µmho/cm)		

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (µmho/cm)		
Particle Size (Inches)		
Sliver Size (Inches)		

D. Other Tests

Results

6. Notes
Samples as per CHP 8120.7

7. Reagents used checked for expiration. (Initial) CLC

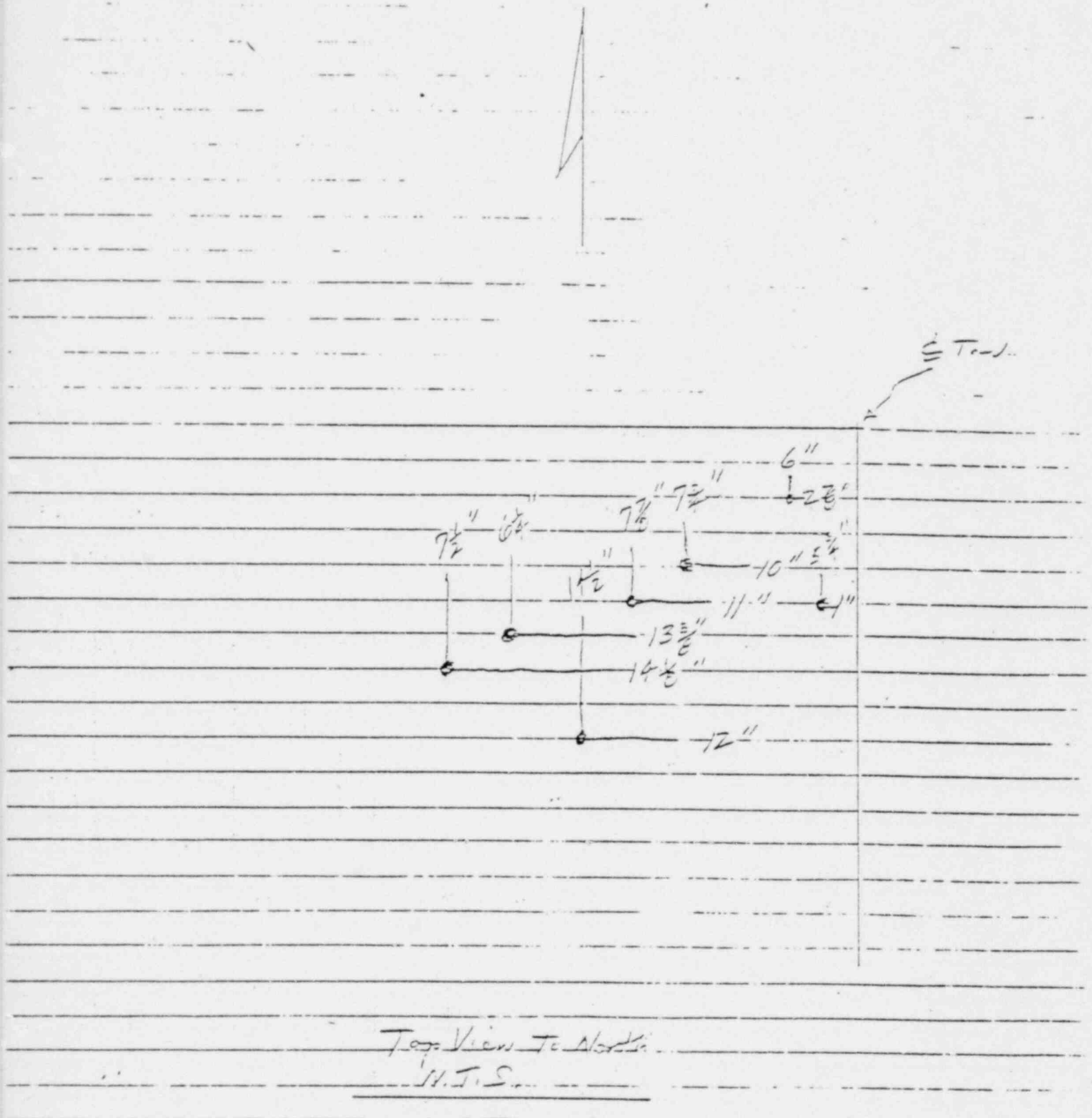
8. Equipment used checked for calibration or standardized as appropriate. (Initial) CLC

9. ~~Requesting individual informed of results by~~ phone, mail, verbal. (Circle) Time 1400

10 Supervisor's Approval DDLee / BAH

Unit 1

FCP 111, NCR = 1755, Seq. 5 ± 55 (1/16/91)



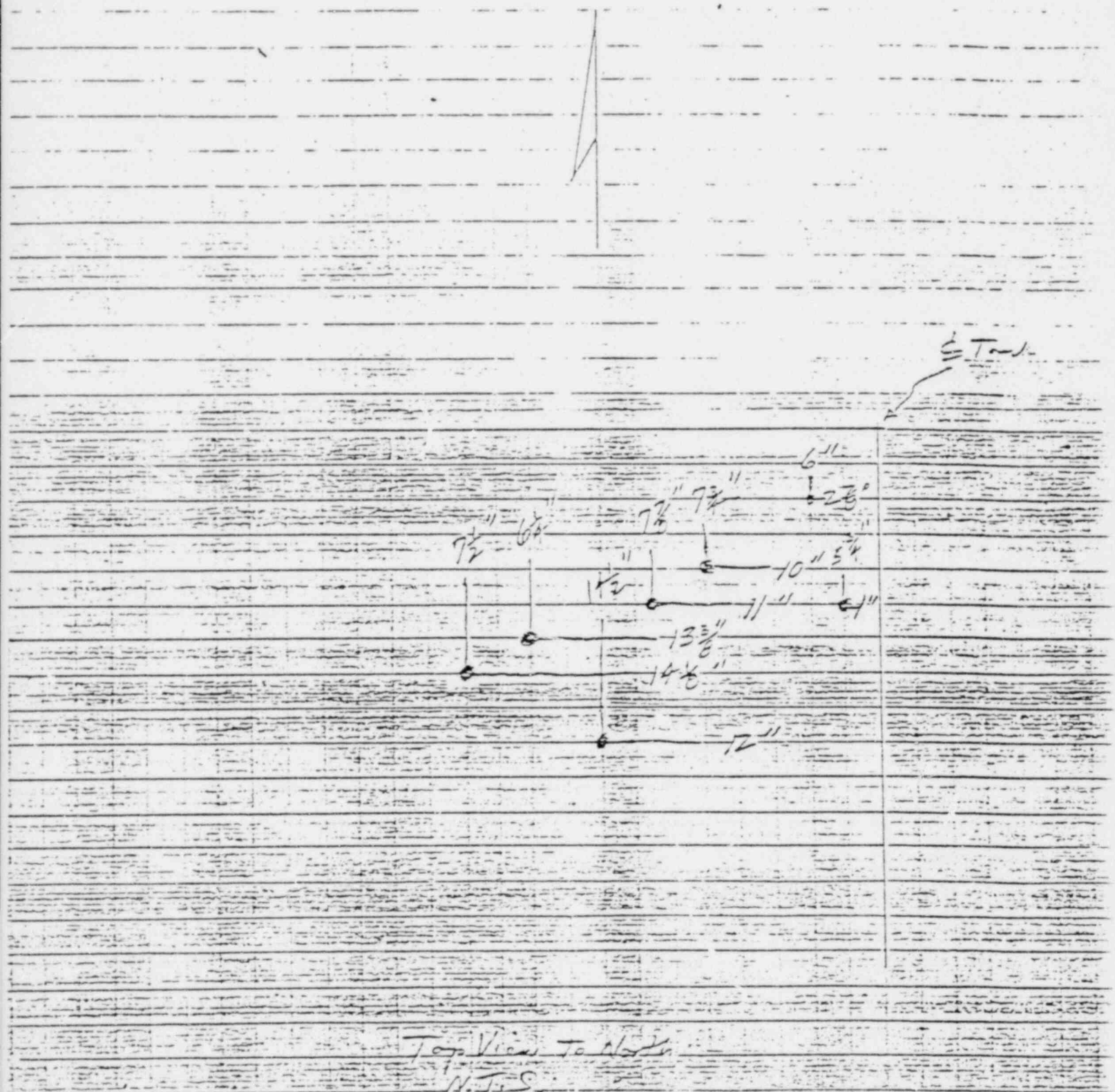
Top View To North

N.T.S.

K. Conrad
05/16/91

Unit 1

FCP. 111, NCR = 1755, Seq. 5 & 5E (Incl. Supplement)



Top View to Node

N.T.S.

K. Grubb

05/28/21

TO Steve Love – Bechtel Sub Contracts

DATE 6/3/81

SUBJECT Disposition of N.C.R. #1755 (Fire In the Incore Tank)

MESSAGE

Attached are copies of Chemical Analysis and a sketch of Arc Strikes for the Unit #1 Incore Tank. This data is being transmitted to Bechtel for their evaluation. By the transmitting of this information B&W N.C.R. #1755 will be cleared and all work/data related to the fire in the Incore Tank by B&W is complete.

Upon this memo Bechtel is notified to install new plug.

SIGNED W J Hall

REPLY

SIGNED DATE / /

45 475 SEND PARTS 1 AND 3 WITH CARBONS INTACT - PART 3 WILL BE RETURNED WITH REPLY.

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	1-20-81	Service Structure Tie Plate	MK 755

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Babcock & Wilcox	☐ RECEIVING ☐ TEST ☒ CONST.	558	FCP #102

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	203269E, Rev. 1	N/A

13. DESCRIPTION OF NONCONFORMITY
An arc burn was created by a short in a welding cable at the edge of a hole in tie plate #12. (See sketch on Page 2 of 2).

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
A. C. Ashworth Jr. 1-20-81 (NAME / DATE)	R W Hope 1-20-81 (NAME / DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)
☐ YES ☒ NO — W. G. Lisa (FIELD PROJECT ENGINEER) — 1-20-81 (DATE)

18. RECOMMENDED DISPOSITION: ☐ N/A ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS
See Attachment

W. G. Lisa (FIELD PROJECT ENGINEER) — 2-2-81 (DATE)

20. ACTUAL DISPOSITION: ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS
Rework per Page No. 3 and transmit final cavity size to ~~F~~ N.P.G.D. for final acceptance as stated in S.P.R. #191.

W. G. Lisa (FIELD PROJECT ENGINEER) — 2-10-81 (DATE)

22. APPROVALS				23. ANI REVIEW
B&W FQC	R W Hope 2-10-81 (SIGNATURE / DATE)	OTHER	(SIGNATURE / DATE)	[illegible] Feb 27, 1981 (SIGNATURE / DATE)
OWNER/AGENT	R E Whitaker 2/25/81 (SIGNATURE / DATE)	OTHER	(SIGNATURE / DATE)	

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION
W. G. Lisa 6-18-81 (NAME / DATE)	(NAME / DATE) ☐ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION
Instruct personnel not to have welding cables lay on or make ~~cot~~ contact with contract material without proper protection between the cables and material.

Walter J. Lisa (FIELD PROJECT MANAGER) — 2-10-81 (DATE)

27. NONCONFORMITY CLOSED
S. L. Taulbee (FIELD QUALITY CONTROL SUPV.) — 6/19/81 (DATE)

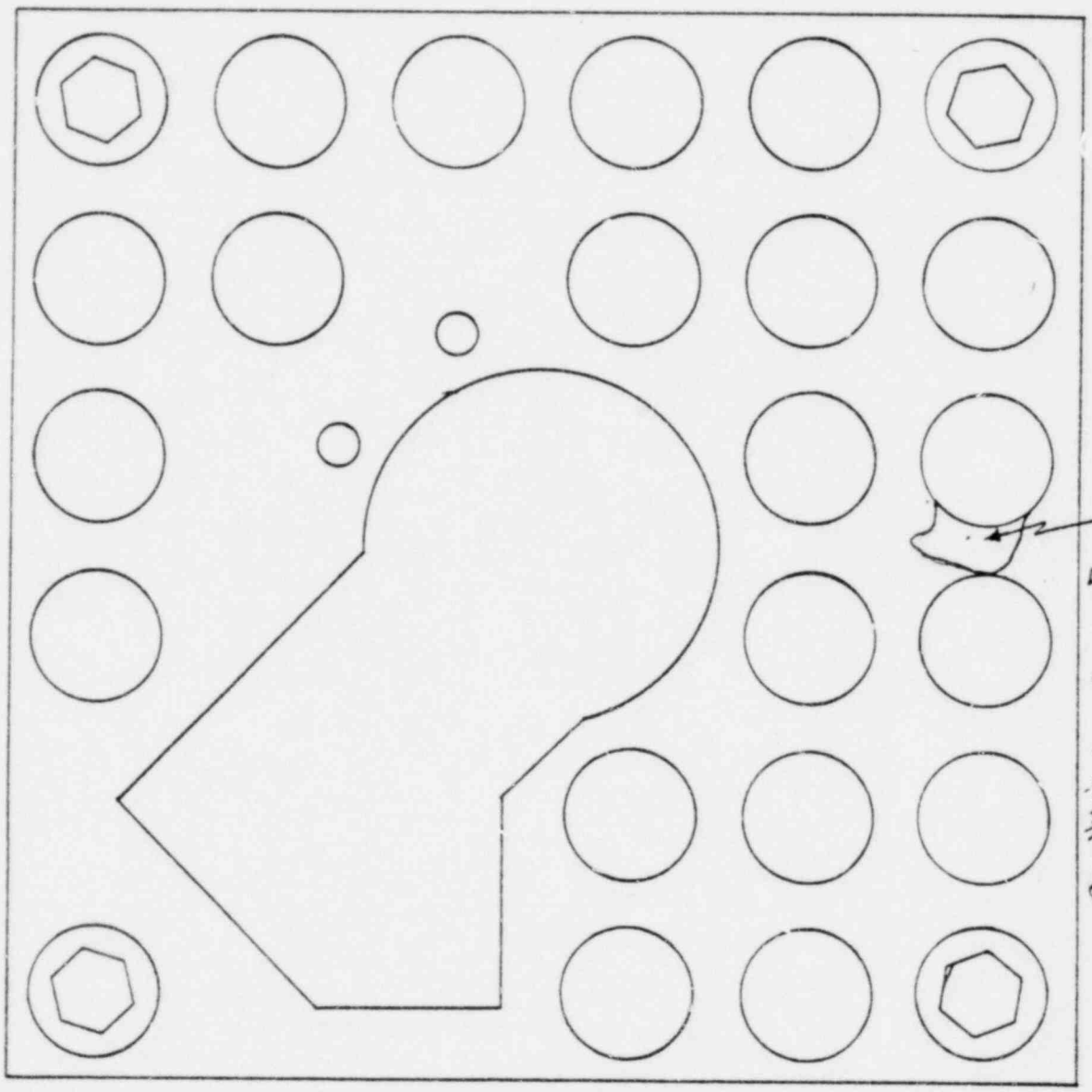
SEQUENTIAL NUMBER № 1769

BWC 1F

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	1-20-81	1769



#12 TIE PLATE

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	2-2-81	1769

ATTACHMENT

1. Grind depression to 3:1 taper with a 1" minimum root radius.
2. NDE examine depression in accordance with 9-PT-103. PT OK 3-6-81 3581 BE
3. If PT indications are found, perform sequences ' and 2 until acceptable.
4. Etch in accordance with 9-WG-104 to assure ~~carbon steel~~ MEAT EFFECTED AREA — W.A. Hall 2-10-81 is removed. 3-9-81 V.S. Bowden
5. Map and record location, size, depth, width and root radius of depression. 3-9-81 C.J. Bowden
6. Transmit information to NPGD for final acceptance.

W.A. Lucas 6-17-81 SEE IVAN GREEN'S LETTER TO STEVE LOVE DATED 6-17-81

BWCC 31809-1

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

MAGNETIC PARTICLE & LIQUID PENETRANT INSPECTION REPORT

MAGNETIC PARTICLE REPORT

JOB NUMBER _____ WELD NUMBER _____ DATE _____

SYSTEM NUMBER _____ M.T. PROCEDURE NUMBER _____

WELD REPAIR NUMBER _____ SEQ. NUMBER _____ F.C.P. NUMBER _____

INSPECTION LEVEL	MATERIAL INSPECTED	SURFACE CONDITION	APPLICABLE CODE
☐ ROOT ☐ FINAL ☐ PARTIAL ☐ REPAIR	☐ WELD ☐ BASE METAL	☐ AS WELDED ☐ GROUND ☐ MACHINED	☐ ASME I ☐ ASME III ☐ ASME VIII ☐ B 31.1 ☐ OTHER _____

CURRENT	EXAMINATION METHOD		EQUIPMENT	MAGNETIC PARTICLE
☐ A.C. ☐ D.C. ☐ D.C. RECTIFIED AMPERES _____	☐ PROD ☐ Y-5 YOKE	☐ WET ☐ DRY	MAKE _____ MODEL _____ SERIAL NUMBER _____	☐ FLOURESCENT ☐ RED ☐ GRAY

☐ ACCEPT ☐ REJECT

COMMENTS:

INSPECTOR _____

CERTIFIED LEVEL _____

LIQUID PENETRANT REPORT

JOB NUMBER CL-238 WELD NUMBER NCR 1769 DATE 3-6-81

SYSTEM NUMBER SERVICE Structure Unit 1 L.P. PROCEDURE NUMBER 9PT103

WELD REPAIR NUMBER N/A SEQ. NUMBER 2 F.C.P. NUMBER 102

INSPECTION LEVEL	MATERIAL INSPECTED	SURFACE CONDITION	APPLICABLE CODE
☐ ROOT ☐ FINAL ☐ PARTIAL ☐ REPAIR ☒ cavity	☐ WELD ☒ BASE METAL TYPE SS	☐ AS WELDED ☒ GROUND ☐ MACHINED	☐ ASME I ☒ ASME III ☐ ASME VIII ☐ B 31.1 ☐ OTHER _____

PRE EXAM. CLEANING	PENTRANT APPLICATION	PRE DEVELOP CLEAN	DEVELOPER APPLICATION	POST EXAM. CLEANING
☒ SPRAY ☒ WIPE BATCH NO. 80H065 DRY TIME 5 min.	☐ SPRAY ☒ BRUSH BATCH NO. 806033 DWELL TIME 10 min.	☐ CLOTH WIPE ☒ TOWEL WIPE ☒ SOLVENT WIPE BATCH NO. 80H065 DRY TIME 5 min.	☐ DUST ☒ SPRAY BATCH NO. 806028 DEV. TIME 7 min.	☒ FLUSH ☒ SOLVENT WIPE BATCH NO. 80H065

☒ ACCEPT ☐ REJECT TEMPERATURE 70° GAGE NUMBER CU-17253

COMMENTS:

Lighting OK

INSPECTOR Brent Eastman

CERTIFIED LEVEL II

N/A = NOT APPLICABLE

SEQUENTIAL NUMBER № 3581

BABCOCK & WILCOX

SITE PROBLEM REPORT (CONSTRUCTION/STARTUP)

FDE-21001-3 (8-80)

TITLE (MAX. 20 CHARACTERS) SHROUD STRUCTURE	PRIORITY 1 ☐ 2 ☒ 3 ☐
	LEAD MANAGER
CUSTOMER Cincinnati Gas & Elec. / SUPPLIER B&W	COD. ID 12 / MIS NO. 12 / SPR NO. 19 / REV. NO. 0
VENDOR CLAIM NO./CAUSING DAMAGE NO.	P.O.# W./TAG NO. 620-0012-44-60-0501

DESCRIPTION OF PROBLEM

See Attached B&W CC

UCR # 1769.

W. J. LEE

FEB 9 1981

PREPARER H. A. GUETLING for L. D. GREE DATE 2/7

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L. D. Cline → NPGD Lynchburg

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

Vendor To Approve Site Recommendatio

RESOLUTION

The action should be to proceed with attachment on page 3 of 3 in report of nonconformity 1769. Keep in mind the relationship of the rework to the edge and thickness of the tie plate and do not overwork. NPGD reserves the right for final acceptance once work is complete.

RESOLUTION PREPARED BY [illegible] DATE 2/6/81

REVIEWED BY [illegible] DATE 2-6-8

MULTIPLE-CONTRACT PROBLEM	POTENTIAL SAFETY CONCERN	RESOLUTION DOCUMENT NO.	APPROVED BY [illegible] DATE 2/6/81
☐ YES ☒ NO	☐ YES ☒ NO		COMPLETED (VERIFIED BY) DATE

SPR CLOSEOUT REPORT:

CLOSED OUT BY DATE

SHEET ____ OF ____

NOTE: THIS IS NOT A SAFETY RELATED DOCUMENT. SAFETY RELATED PROBLEMS SHALL BE

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	1-20-81	Service Structure Tie Plate	MK 755

6. VENDOR MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Babcock & Wilcox	☐ RECEIVING ☐ TEST ☒ CONST.	558	FCP #102

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	203269E, Rev. 1	N/A

13. DESCRIPTION OF NONCONFORMITY

An arc burn was created by a short in a welding cable at the edge of a hole in tie plate #12. (See sketch on Page 2 of 2).

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
A. C. Schmidt Jr. (NAME) 1-20-81 (DATE)	R. W. Lloyd (NAME) 1-20-81 (DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — P. H. Lisa (FIELD PROJECT ENGINEER) — 1-20-81 (DATE)

18. RECOMMENDED DISPOSITION: ☐ N/A ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

See Attachment

P. H. Lisa — FIELD PROJECT ENGINEER — 2-2-81 — DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

FIELD PROJECT ENGINEER — DATE

22. APPROVALS

B&W FQC _____ (SIGNATURE) _____ (DATE) OTHER _____ (SIGNATURE) _____ (DATE)

OWNER/AGENT _____ (SIGNATURE) _____ (DATE) OTHER _____ (SIGNATURE) _____ (DATE)

23. ANI REVIEW

_____ (SIGNATURE) _____ (DATE)

24. DISPOSITION COMPLETED

_____ (NAME) _____ (DATE)

25. DISPOSITION VERIFICATION ☐ ACCEPTABLE ☐ UNACCEPTABLE

_____ (NAME) _____ (DATE) REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

FIELD PROJECT MANAGER — DATE

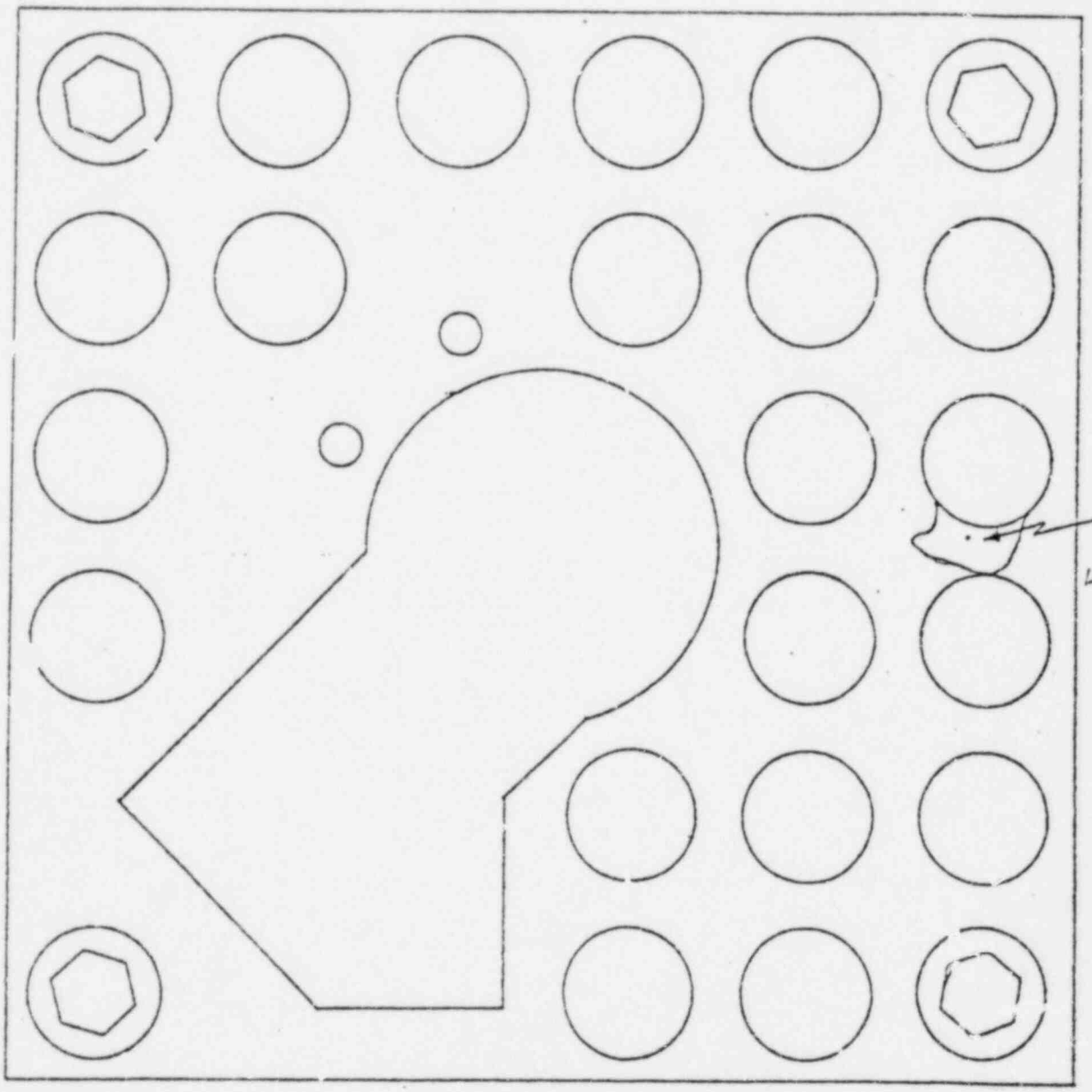
27. NONCONFORMITY CLOSED

FIELD QUALITY CONTROL SUPV. — DATE

SEQUENTIAL NUMBER NTO 4750

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	1-20-81	1769



#12 TIE PLATE

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	2-2-81	1769

ATTACHMENT

1. Grind depression to 3:1 taper with a 1" minimum root radius.
2. NDE examine depression in accordance with 9-PT-103.
3. If PT indications are found, perform sequences 1 and 2 until acceptable.
4. Etch in accordance with 9-WG-104 to assure ~~carbon steel~~ HEAT AFFECTED ZONE is removed.
5. Map and record location, size, depth, width and root radius of depression.
6. Transmit information to NPGD for final acceptance.

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP

To
STEVE LOVE, BECHTEL, SUB-CONTRACTS

From
IVAN GREEN, B&W, SITE OPERATIONS MANAGER

BDS 663-5

Cust.
CONSUMERS POWER COMPANY

File No. or Ref. 12-191-01

Subj.
TIE PLATE ARC BURN - UNIT I

Date
JUNE 17, 1981

This letter to cover one customer and one subject only.

The repair of the arc burn created by the short in the welding cable as described in NCR #1769 has been completed.

The results have been reviewed by B&W Engineering and are acceptable.

I. D. Green

IDG:dcw
CC: D. B. Miller
D. F. Judd
T. J. Walton

W. J. LEE
JUN 19 1981

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	1-20-81	R.C. Pump	1P51B

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Byron Jackson	☐ RECEIVING ☐ TEST ☒ CONST.	557	121

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
None	N/A	None

13. DESCRIPTION OF NONCONFORMITY
ANI hold point by passed, statement in the body of the FCP required contacting the ANI prior to pressurizing the system to 2500 PSIG and holding for 15 minutes, effecting a hydrostatic test of the motor mount to pump casing gasket.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
T.H. Harris Jr. 1-20-81 (NAME / DATE)	R.W. Thope 1-20-81 (NAME / DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)
☐ YES ☒ NO — W. A. Lain (FIELD PROJECT ENGINEER) — 1-20-81 (DATE)

18. RECOMMENDED DISPOSITION: ☒ N A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS
N/A

W. A. Lain (FIELD PROJECT ENGINEER) — 1-20-81 (DATE)

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☒ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS
The process was witnessed by B&WCC QC personnel and deemed to be performed acceptable, and it is not acode requirement for this type of hydrostatic test to be witnessed by the ANI.

W. A. Lain (FIELD PROJECT ENGINEER) — 1-20-81 (DATE)

22. APPROVALS
B&W QC: R.W. Thope 1-20-81 (SIGNATURE / DATE) OTHER: _____ (SIGNATURE / DATE)
OWNER/AGENT: R.E. Stokes 1/21/81 (SIGNATURE / DATE) OTHER: _____ (SIGNATURE / DATE)

23. ANI REVIEW
[signature] (SIGNATURE) — 1-27-81 (DATE)

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
R.W. Thope 1-29-81 (NAME / DATE)	R.W. Thope 1-29-81 (NAME / DATE)	☒ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION
Inform all supervisory personnel to be more acutely aware of the presence of ANI hold points and to stamp all future ANI hold points in the body of the FCP in red ink.

Walter J. Lee (FIELD PROJECT MANAGER) — 1-20-81 (DATE)

27. NONCONFORMITY CLOSED
R.W. Thope (FIELD QUALITY CONTROL SUPV.) — 1-29-81 (DATE)

SEQUENTIAL NUMBER № 1768

Babcock & Wilcox

a McDermott company

B&W Construction Company

3333 Copley Road
Copley, Ohio 44321
(216) 666-8841

January 29, 1981

TO: ALL SUPERINTENDENTS

FROM: W. J. Lee, Project Manager

SUBJECT: Field Construction Procedures,
A.N.I. Hold for Inspection

Per our recent discussion, this is to reconfirm the importance of the Field Construction Procedure (FCP) and Weld Instruction Procedures:

1. At no time, should a "FCP Hold, Inspection Point or A.N.I Hold be by-passed.

2. At no time, should the "tolerance allowed" be exceeded.

3 If for some reason, #1 and #2 cannot be achieved, Engineering must be notified for a resolution.

W. J. Lee

WJL/dbc

cc: V. N. Asgaonkar
R. W. Shope
File

TY.

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	2	3-4-81	R.C. Pump Motor	2P51C

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
General Electric	☐ RECEIVING ☒ TEST ☐ CONST.	572	58

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
9-QPP-104, Rev. 2	N/A	N/A

13. DESCRIPTION OF NONCONFORMITY

During the 30 day maintenance inspection using the RTD Bridge, it was discovered that #3 thermocouple was inoperative. All other conditions was acceptable.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
Rpt for C. Bowen (NAME) 3-4-81 (DATE)	R W Shine (NAME) 3-4-81 (DATE)	☐ YES ☒ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — W. H. Lyon, FIELD PROJECT ENGINEER — 3-4-81 DATE

18. RECOMMENDED DISPOSITION: ☒ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19 TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

Vendor to advise.

W. H. Lyon, FIELD PROJECT ENGINEER — 3-30-81 DATE

20. ACTUAL DISPOSITION: ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

Disconnect thermocouple #3 and connect thermocouple #9 to be used as the replacement per attached letter for I.D. Green, dated 6-2-81.

W. H. Lyon, FIELD PROJECT ENGINEER — 6-4-81 DATE

22. APPROVALS				23. AND REVIEW
B&W FQC	G. D. Davis 6-5-81 (SIGNATURE / DATE)	OTHER	(SIGNATURE / DATE)	R. Dolan 6-15-81 (SIGNATURE / DATE)
OWNER/AGENT	R E A Peterson 6/10/81 (SIGNATURE / DATE)	OTHER	(SIGNATURE / DATE)	

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
G. D. Davis (NAME) 6-18-81 (DATE)	S. L. Taulbee (NAME) 6/16/81 (DATE)	☑ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

FIELD PROJECT MANAGER — DATE

27. NONCONFORMITY CLOSED

S. L. Taulbee, FIELD QUALITY CONTROL SUPV. — 6/16/81 DATE

SEQUENTIAL NUMBER № 1783

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	2	6-4-81	1783

1. Disconnect thermocouple #3 as shown per G.E. Drawing No. 116D8890, and connect thermocouple #9 to terminal board to replace thermocouple #3. See G.E. Drawing No. 116D8890 for T.C. location.

6-16-81 R. Tait

*2. For thermocouple #9, record air temperature and three (one for each phase wiring) motor winding temperature for compliance. Air temperature shall be 40°F or above, and each motor winding temperature shall exceed the air temperature by 10°F

6-16-81 V. Booker / 6-18-81

NOTE: This testing is part of the monthly inspection requirements as outlined in the G.E. Instruction Manual. It will be done initially on Thermocouple #9 to verify that it is operable and then checked once every month as outlined in F.C.P. #58. ADDED NOTE W.W. Lim 6-9-81

T.W. Davis / 6/9/81

BDS 1698-1

LONGHAND MEMORANDUM — THE BABCOCK & WILCOX COMPANY

TO: Steve Love, Bechtel Sub-Contracts

FROM: Ivan Green, B&W SOM

CUST.: CPCo

FILE NO. OR REF.: 12E42

SUBJ.: RCPM Failed RTD

DATE: 6.2.81

NCR # 1783 states that " the #3 thermocouple is inoperative". Per Ray Brown, BUSCC, the inoperative thermocouple is the #3 stator RTD. The stator RTDs are embedded temperature detectors in the stator slots between two stator coil sides. There are two RTDs located in each phase and wired to the terminal boards as shown in GE drawing 116D9890. There also exists 3 spare RTDs that are not wired to the terminal boards.

I would suggest considering the #3 RTD as "failed" and use the spare #9 RTD (same phase) as a replacement by wiring it to the terminal board.

Ivan Green

cc: D B Miller
Don Judd
Carl Drummond

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	1	3-9-81	Service Structure	MK 766

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Babcock & Wilcox	☐ RECEIVING ☐ TEST ☒ CONST.	574	FCP #102

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	203262E	1717

13. DESCRIPTION OF NONCONFORMITY

See attached sheet.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
Rwt FOR R. Brown — NAME; 3-9-81 — DATE	R W Thagard — NAME; 3-9-81 — DATE	☐ YES ☒ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — W. H. Linn — FIELD PROJECT ENGINEER — 3-9-81 — DATE

18. RECOMMENDED DISPOSITION: ☐ N A ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

Remove Pin #8, re-machine Pins #7, 8 and 9 and refit and tack weld in place per page 3.

W. H. Linn — FIELD PROJECT ENGINEER — 3-19-81 — DATE

20. ACTUAL DISPOSITION: ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

Rework the (4) dowel pins as outlined per page #3 with the exception that if pin #8 is damaged during it's removal, N.P.G.D. will be notified and a replacement pin will be ordered per S.P.R. 118 Rev. 2.

W. H. Linn — FIELD PROJECT ENGINEER — 4-9-81 — DATE

22. APPROVALS				23. ANI REVIEW	
B&W FQC	R W Thagard 4-9-81	OTHER		T Dunn	4/13/81
	SIGNATURE DATE		SIGNATURE DATE	SIGNATURE	DATE
OWNER/AGENT	R E Whitaker 4/9/81	OTHER			
	SIGNATURE DATE		SIGNATURE DATE		

24. DISPOSITION COMPLETED		25. DISPOSITION VERIFICATION		☑ ACCEPTABLE ☐ UNACCEPTABLE
R. D. Brown	6-11-81	S. L. Taulbee	6/12/81	REPORT OF NONCONFORMITY #
NAME	DATE	NAME	DATE	

25. CORRECTIVE ACTION

FIELD PROJECT MANAGER — DATE

27. NONCONFORMITY CLOSED — S. L. Taulbee — FIELD QUALITY CONTROL SUPV. — 6/12/81 — DATE

SEQUENTIAL NUMBER № 1784

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	3-9-81	1784

1. Pin (S/N 2) is stuck in hole #8 at one inch depth and will not go in any further. Pin was shrunk in liquid nitrogen before installation.

2. The second set of readings were taken because of Item #1. The first set of readings for NCR #1717 were taken with intra-mic. #CG8-40 from which the dowel pins were made. Upon checking the holes the second time with telescoping gages and O.D. mic. CU1-319. It was found that the holes were out of round, therefore the absolute min. dia. was not found with the intra-mic.

   The min. dimensions taken the second time with telescoping gages are:

   Hole #7 - min. 1.3914 Existing Pin Dia. 1.3975

   Hole #9 - min. 1.3917 Existing Pin Dia. 1.3945

   Hole #11 - min. 1.3902 Existing Pin Dia. 1.3912

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	Unit #1	3-16-81	1784

1. Tack weld a carbon steel flat bar (approximately 1/2" thk. X 2" wide x 12" lg.) to the top of dowel pin #8, per WIN 101-1, by centering bar onto the top of the dowel pin and depositing approximately 1/8" fillet along both long edges. 4-16-81 K. Jan

2. A. Place (1) Porta Power on each side of the dowel pin underneath the flat bar.
   B. Simultaneously apply pressure to the "Porta Powers" to remove dowel pin #8.
   A. 4-16-81 K. Jan B. 4-16-81 K. Jan

3. A. Buff dowel pin hole #8 to remove burrs, raised metal as required.
   B. Cut to remove flat bar from the top of dowel pin #8 and blend grind areas on top of dowel where flat bar was removed.
   A. 4-16-81 K. Jan B. 4-16-81 K. Jan

*4. Using the telescoping gages and O.D. MIC CU1-319 measure the I.D. of dowel pin hole #8 and record the smallest dimension taken. ~~1.3921"~~ ROB 4-23-81
1.3918" SMALLEST DIA. 4-23-81 C&B

5. Turn the O.D. of the dowel pins as follows:

   A. Dowell pin #7 - 1.3922 ± .0002"

   B. Dowel pin #8 - smallest reading taken in step #4, plus .0008" with a tolerance of ± .0002"

   C. Dowel pin #9 - 1.3925" ± .0002"

   D. Dowel pin #11 - no machining required.

MACHINED BY OUTSIDE VENDOR
WH Hall 6-11-81

6. Place dowel pins into liquid nitrogen for five (5) minutes. Remove and place into their proper hole in the Service Structure and Head. Tack weld in place per WIN-101-1. 6-10-81 K. Jan INSTALL PINS 7, 8, 9, 11.

*7. Inspect installation of dowel pins for holes #7, #8, #9 and #11.
OK A. Kleinrath 6-11-81

BABCOCK & WILCOX

PDS-21091-9 (8-80

SITE PROBLEM REPORT (CONSTRUCTION/STARTUP)

TITLE (MAX. 30 CHARACTERS): Service Structure Dowel Holes	PRIORITY 1 ☐ 2 ☐ 3 ☐
	LEAD MANAGER
CUSTOMER: CPCo / SUPPLIER: B&W	DOC. ID: 13 / NSS NO.: 13 / SPR NO.: 118 / REV. NO.: 2
VENDOR CLAIM NO./SHIPPING DAMAGE NO.	PART NO./TGS NO.: 44-60-001

DESCRIPTION OF PROBLEM

New dowels were ordered per Rev 1 of this SPR. The dowels were ordered based on inaccurate hole dimensions. See the attached NCR # 1784.

PREPARER: Ivan Green — DATE: 3-25-81

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L D Cline

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

Recommend disposition as in the attached NCR.

RESOLUTION

The recommended disposition in the attached report of Nonconformity #1784, Page 3 of 3 is satisfactory. However, if the pin stuck in hole #8 is damaged during removal, B&W-NPGD is to be notified and a replacement pin will be procured.

RESOLUTION PREPARED BY: T A Brandsberg — DATE: 4/2/81

REVIEWED BY: Dac W A Williamson — DATE: 4/3/81

APPROVED BY: C S Stuver — DATE: 4/3/81

COMPLETED (VERIFIED BY) — DATE

MULTIPLE-CONTRACT PROBLEM	POTENTIAL SAFETY CONCERN	RESOLUTION DOCUMENT NO.
☐ YES ☒ NO	☐ YES ☒ NO	

SPR CLOSEOUT REPORT:

CLOSED OUT BY — DATE

SHEET ____ OF ____

NOTE: THIS IS NOT A SAFETY RELATED DOCUMENT. SAFETY RELATED PROBLEMS SHALL BE REPORTED ON FORM BWNP-20000

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	2	4-7-81	R.C. Pump	2P51A

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Byron Jackson	☐ RECEIVING ☐ TEST ☒ CONST.	579	FCP #305

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	1F-7623, Rev. K	N/A

13. DESCRIPTION OF NONCONFORMITY

During boring of #10 hole in the pump motor base, the motor mount was also bored into by a sufficient amount (approx. 1/16") to remove all but a trace of the chamfer of the threaded hole.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
A.C. Schmidt Jr. 4-7-81 (NAME / DATE)	[illegible] 4-7-81 (NAME / DATE)	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — W. H. Lisin (FIELD PROJECT ENGINEER) — 4-7-81 (DATE)

18. RECOMMENDED DISPOSITION: ☐ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☒ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

Recommend "Accept as is" Of the discprepant condition.

W. H. Lisin (FIELD PROJECT ENGINEER) — 4-7-81 (DATE)

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☒ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

"Accept as is" per letter from B&W S.O.M. dated 5/21/81 (attached) referencing S.P.R. No. 12-197.

D. G. Dunst (FIELD PROJECT ENGINEER) — 5-27-81 (DATE)

22. APPROVALS
B&W QC [illegible] 5-27-81 (SIGNATURE / DATE) OTHER _____ (SIGNATURE / DATE)
OWNER/AGENT R.E. Whitaker 6/5/81 (SIGNATURE / DATE) OTHER _____ (SIGNATURE / DATE)

23. ANI REVIEW
[illegible] (SIGNATURE) — June 15, 1981 (DATE)

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
W. H. Lisin 6-15-81 (NAME / DATE)	S.L. Taulbee 6/15/81 (NAME / DATE)	☒ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

The F.C.P. has been revised to incorporate the use of a positive stop and that the dimension the positive stop is set to, be verified by either the superintendent or field engineer.

Walter J. [illegible] (FIELD PROJECT MANAGER) — 4-9-81 (DATE)

27. NONCONFORMITY CLOSED S.L. Taulbee (FIELD QUALITY CONTROL SUPV.) — 6/15/81 (DATE)

SEQUENTIAL NUMBER № 1789

DOE 1698-1

LONGHAND MEMORANDUM — THE BABCOCK & WILCOX COMPANY

TO: Steve Love, Bechtel Subcontracts

FROM: Ivan Green, B&W SOM

CUST.: CPCo

FILE NO. OR REF.: SPR 12-197

SUBJ.: RCPM Stand Hole Chamfer Cut - Unit 2

DATE: 5-21-81

NOR #1789 addressed the inadvertent overboring of #10 hole in the 2P51A motor base and resulted in removing the lead-in chamfer of the threaded hole in the motor stand.

Since the studs are installed and started by hand, B&W recommends to accept "as is". Additional care should be taken to not bore into the chamfer on the remaining holes.

If you have any questions, please advise.

Ivan Green

cc: D B Miller

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	Unit #2	5-8-81	Thermal Shield Restraint	Block #18 S/N-360-2013-60-13

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Babcock & Wilcox	☐ RECEIVING ☐ TEST ☒ CONST.	Block #584	FCP #60

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	~~111222D~~ 110 5-8-81 111222D, Rev. 2	N/A

13. DESCRIPTION OF NONCONFORMITY

The print calls for a clearance of .005" to .008" between restraint block MK #360 and thermal shield and no measurable gap between restraint block MK #376 and thermal shield. Restraint Block #18 has clearance of .004". See attached sheet.

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
R.O. Brown 5-8-81 (NAME / DATE)	T.G. Davis 5-8-81 (NAME / DATE)	☐ YES ☒ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO

W. H. Linn — FIELD/PROJECT ENGINEER — 5-9-81 DATE

18. RECOMMENDED DISPOSITION: ☒ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS

Vendor to advise.

W. H. Linn — FIELD PROJECT ENGINEER — 5-9-81 DATE

20. ACTUAL DISPOSITION: ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☒ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

Accept as is.

See longhand memorandum from Ivan Green to Steve Love dated 5-11-81 for justification.

W. H. Linn — FIELD PROJECT ENGINEER — 5-12-81 DATE

22. APPROVALS

B&W FQC T.G. Davis 5-13-81 (SIGNATURE / DATE) OTHER _____ (SIGNATURE / DATE)

OWNER/AGENT R.E. Whitaker 6/1/81 (SIGNATURE / DATE) OTHER _____ (SIGNATURE / DATE)

23. ANI REVIEW

[illegible] — SIGNATURE — 6-2-81 DATE

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
W. H. Linn 6-2-81 (NAME / DATE)	T.G. Davis 6-2-81 (NAME / DATE)	☐ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

_____ FIELD PROJECT MANAGER — _____ DATE

27. NONCONFORMITY CLOSED

T.G. Davis — FIELD QUALITY CONTROL SUPV. — 6-2-81 DATE

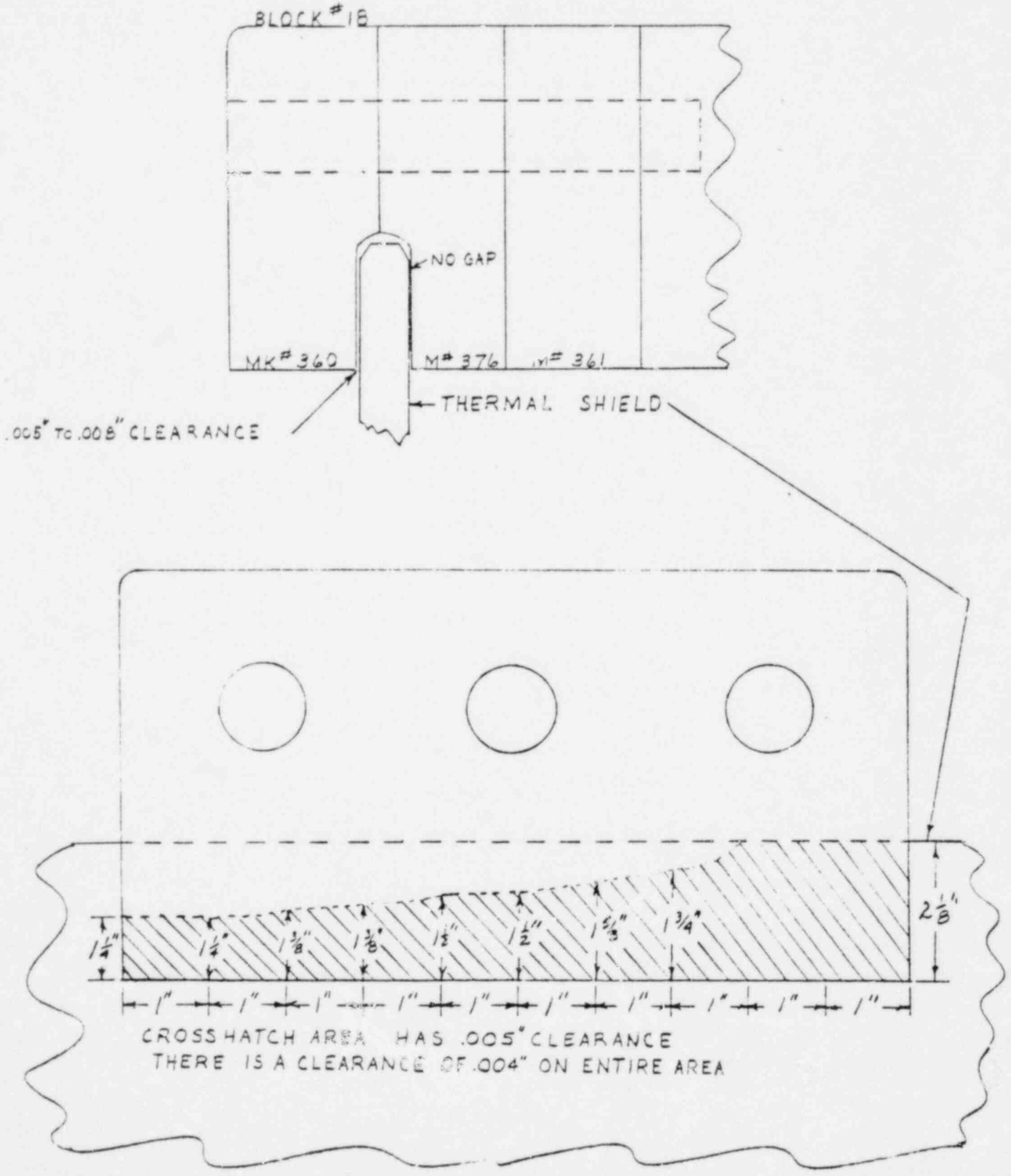
SEQUENTIAL NUMBER № 1794

CWCO 31839

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL 238	UNIT # 2	5-8-2:	# 1794



ADJ 1698-1

LONGHAND MEMORANDUM — THE BABCOCK & WILCOX COMPANY

TO: Steve Sova, Bechtel Subcontracts

FROM: Tom Isreau, B&W SOM

CUST.: CPCo

FILE NO. OR REF.: SPR-~~13-155-1~~ 13-203

SUBJ.: Thermal Shield Restraint Block Gap-Unit 2

DATE: 5-11-81

B&W Engineering has reviewed thermal shield restraint block problem as described in NCR #1794.

The gap is to allow the thermal shield to slide in the pocket to allow for thermal growth during power operation. A 0.004 inch gap is sufficient to accomodate the required conditions.

B&W Engineering recommendation is to accept "as is".

If you have any questions, please advise.

P.G

BACC 31812-1

BABCOCK & WILCOX
B&W CONSTRUCTION COMPANY

PAGE 1 OF 1

REPORT OF NONCONFORMITY

1. JOB NUMBER	2. UNIT NUMBER	3. DATE	4. ITEM NAME	5. ITEM NUMBER
CL-238	Unit #2	5-21-81	Snubber Bracket Shim Plate	N/A

6. VENDOR/MANUFACTURER	7. DISCOVERED DURING	8. REJECT TAG NUMBER	9. PROCEDURE NUMBER
Bechtel	☐ RECEIVING ☐ TEST ☒ CONST.	586,587,588,589	FCP #94A & #103A

10. SPECIFICATION NUMBER	11. DRAWING NUMBER	12. PRIOR REPORT OF NONCONFORMITY #
N/A	N/A	N/A

13. DESCRIPTION OF NONCONFORMITY

A 16 gauge shim plate w as placed behind snubber brackets C-2, E-4 on 2P51C and E-2 of 2P51A Pump. This shim plate does not have a heat number of type of mateiial that is traceable to the plate it was removed from. The plate it was cut from has no identifiable markings. ~~Rec eive~~ and inspection was not performed.
RECEIPT J. F. Doyle 5-22-81

14. REPORTED BY	15. VERIFIED BY	16. CORRECTIVE ACTION REQUIRED
R.D. Brown / D. Brown 5-21-81 NAME / DATE	T. H. Davis Jr. 5-21-81 NAME / DATE	☒ YES ☐ NO

17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e)

☐ YES ☒ NO — D. G. Durst, FIELD PROJECT ENGINEER — 5/21/81 DATE

18. RECOMMENDED DISPOSITION: ☒ N/A ☐ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS

N/A

W. H. Linn, FIELD PROJECT ENGINEER — 6-4-81 DATE

20. ACTUAL DISPOSITION: ☒ REWORK ☐ REPAIR ☐ REPLACE ☐ RETURN ☐ ACCEPT AS IS

21. DISPOSITION INSTRUCTIONS

Remove non-traceable shim plate and replace with traceable shim plate.
Remove non-traceable plate from traceable storage area.

W. H. Linn, FIELD PROJECT ENGINEER — 6-4-81 DATE

22. APPROVALS				23. ANI REVIEW
B&W FQC	T. H. Davis Jr. 6-4-81 SIGNATURE / DATE	OTHER	SIGNATURE / DATE	SIGNATURE June 15, 1981 DATE
OWNER/AGENT	R.E. Whitaker 6/8/81 SIGNATURE / DATE	OTHER	SIGNATURE / DATE	

24. DISPOSITION COMPLETED	25. DISPOSITION VERIFICATION	
H.W. Lamm 6-15-81 NAME / DATE	T. H. Davis Jr. 6-15-81 NAME / DATE	☒ ACCEPTABLE ☐ UNACCEPTABLE REPORT OF NONCONFORMITY #

25. CORRECTIVE ACTION

Advise craft personnel to avoid using non-traceable shim plate for shim behind snubber brackets.

Walter J. Lee, FIELD PROJECT MANAGER — 6-4-81 DATE

27. NONCONFORMITY CLOSED — S. L. Taulbee, FIELD QUALITY CONTROL SUPV. — 6/15/81 DATE

SEQUENTIAL NUMBER № 1797

B&W ISI

Open NCR's

THE BABCOCK & WILCOX COMPANY
NUCLEAR POWER GENERATION DIVISION
NONCONFORMANCE REPORT (ISI)

Customer: CONSUMERS POWER CO. Nonconformance Report No: 81-10
Contract No: 599-0641-03-01 Inspection Report No.: N/A
Component: MAIN FEEDWATER B UNIT #1 Location: MIDLAND, MI
Description of nonconforming condition:

ON ATTACHED CALIBRATION SHEET NO. 060551 THE FOUR HOUR CALIBRATION CONFIRMATION REQUIRED BY PROCEDURE ISI-126 REV. 1 SECTION 6.4 (B) WAS VIOLATED BY 5 MINUTES

Originator L. A. (REDNER) Date 8 JUNE 81

ISI Corrective Action

ISI Manager _____ Date _____
Other affected Components:

Nonconformance Disposition: Accept ☐ Reject ☐
Comments:

QC Surveillance Manager _____ Date _____
Implementation Confirmed by _____ Date _____

Distribution:

ISI Manager Group Leader QAE File

BWNP 3017-

Babcock & Wilcox
Nuclear Power Generation Division

CALIBRATION SHEET FORM 1 SHEET NO: 060551 DATE: 29 APRIL 81 TIME: 0740 HR

CUSTOMER: CONSUMERS POWER CO.	CONTRACT NO.: 192-064-006	COMPONENT MAIN FEEDWATER B	PROCEDURE ISI 126 Rev-1
EXAMINER: K. Nat	SD#: N1932	LEVEL: II	COUPLANT: Sonotrace 40
EXAMINER: William Zinnie A. Richards	ID#: 24540	LEVEL: II	COUPLANT ID#: 62025

INSTRUMENT

ID#: 12059
LINEARITY CHECK [X] YES [ ] NO
REJECT: OFF %
MAT'L. CAL.: 942
DELAY: 632
PULSE ENERGY: 1
COARSE GAIN IN DB: 0
FINE GAIN IN DB: 24dB
FINE GAIN: 5 %
SCREEN RANGE: 2.5"
SCREEN DEPTH: 2.5 IN.
[ ] TAR [X] NORMAL — OPERATION
FREQUENCY: MHZ
[ ] NORMAL [ ] RF — DISPLAY
REP. RATE:
ZERO CONTROL: 0
RESOLUTION:
A
B — DGC
C
A
B — GATE
C
[ ] NORMAL [ ] FIRST ECHO — ECHO START

CALIBRATION BLOCK

ID# 41227
LENGTH 1.20 IN.
OD 18.0 IN.
THICKNESS .934 IN.
* TEMP 57 °F

CRYSTAL

ID# 32237
TYPE 4-5
FREQ. 2.25 MHZ
SIZE .50 IN.
ACTUAL .45 °

CALIBRATION BLOCK SIMULATOR

SERIAL NO. N/A SCREEN-RANGE IN.
SIGNAL AMP SCREEN DEPTH IN.
COURSE GAIN-DB FINE GAIN DB
* TEMP °F

SYSTEM CALIBRATION

ANGLE 45 CAL. DIR. AXIAL [X] CIRC. [ ]

REFLECTOR	AMPLITUDE % OF FULL SCREEN	SCREEN READING IN INCHES
2/0 NODE	80 %	.46 IN.
3/0 NODE	55 %	.70 IN.
5/0 NODE	35 %	1.16 IN.
6/0 NODE	40 %	1.40 IN.
NA/0 NODE	NA %	NA IN.
/0 NODE	%	IN.
TOP NOTCH	%	IN.
OPPOSITE NOTCH	%	IN.
BKR CB*	%	IN.
BKR P*	%	IN.

SEARCH UNIT CABLE

TYPE Microdot LENGTH 6'
* THERMOMETER 15067
* (REQUIRED SUMMER '73 FOR VESSELS REQUIRED WINTER '75 FOR PIPING)

FIGURE NO(S). EXAMINED

C5.21.1157
C5.21.1155
C5.21.1159
C5.21.1153
NA

NA

NA

CALIBRATION CONFIRMATION

TIME	1145 HRS	HRS	HRS	HRS	HRS	HRS
BLOCK SIM.	NA % NA IN	% IN	% IN.	% IN.	% IN.	% IN.	% IN
BACK REFL.	% IN	% IN	% IN.	% IN.	% IN.	% IN.	% IN
2/0 NODE	80 % .46 IN	IN	% IN.	% IN.	% IN.	% IN.	% IN
3/0 NODE	55 % .70 IN	IN	% IN.	% IN.	% IN.	% IN.	% IN
6/0 NODE	40 % 1.40 IN	% IN	% IN.	% IN.	% IN.	% IN.	% IN
TOP NOTCH	NA % NA IN	% IN	% IN.	% IN.	% IN.	% IN.	% IN
OPPOSITE NOTCH	% IN	% IN	% IN.	% IN.	% IN.	% IN.	% IN
INITIALS	WJZ						

* BKR B (BACK REFLECTION FROM CAL. BLOCK) * BKR P (BACK REFLECTION FROM PART)

BECHTEL

Open NCR's

6/81

LOG OF NONCONFORMANCE REPORTS

PROJECT NAME: Midland JOB NO: 07220 PAGE: 202

2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3467	5-22-81	Contrary to PQCI C-1.50 & Spec. C-305, (6) expansion anchors for hgr. 2-604-3-10 were installed w/o QC inspection & exceed 4" embed.			
3468	5-26-81	Dwg. M604-17, PW-1,00-604-17-92, there is no acceptable criteria for installation of elbowlets at FW 92, contrary to PSP G-1.1 Rev.3.			
3469	5-26-81	Contrary to Spec. M-204, 1" valves 1XV0324B (024) & 1XV0324A (026) don't have an "N" Stamp data tag for Dwg. FSK-M-1HCC-7?-1.	Doc. Rework		
3470	5-26-81	Contrary to FPG-5,000, seal water return cooler #1E-59A has approximately 23 arc strikes. See NCR for the locations.	Rework		
3471	5-27-81	Contrary to Spec. M-204, Para 6.4, FW #1 Conn. #12 on Dwg. FSK-DVI-M-610-6 R.1 was fabbed w/o QC verification or doc. of cleanliness.	Use As Is	6-22-81	L. Glatz
3472	5-28-81	Contrary to Spec. C-305 & V.P. E-49-1-5, E-19-3-9, & E-11-1-5, battery chargers and inverters not anchored properly.			
3473	5-28-81	Contrary to Spec. M-204, an area of small pipe line FSK-M-1HCC-33-1 has been damaged.			
3474	5-29-81	R-1.00-15081, 240 each - 1" CBA-GB valves purchased from Grand Gulf has documentation problems.	It.1&2 Dpc.Rwk. It.3 N/A		
3475	5-29-81	Three Type 14 supports for conduit 2CG033 are welded across a beam flange other than specified in E-42.			
3476	6-1-81	Contrary to Spec. C-233, NCR written to track the work for pipe restraints listed on page 2 that are remaining to be completed.			
3477	6-1-81	Contrary to Spec C-321, there exists 2-7" core drilled holes with a clear distance of 1".	N/A		
3478	6-1-81	Contrary to Spec. C-306, (4) horizontal bars were cut within a 10' radial distance.			
3479	6-2-81	Contrary to Spec. C-306, grade B7 studs received on P.O. F-47542 R-1,00-14909 does not have all the documentation.	Doc. Rework		
3480	6-2-81	Contrary to PSP G-6.1, on Dwg. M-604 sh.8 FW88 fit up was bypassed and joint welded without AI concurrence.			
3481	6-2-81	Contrary to what Dwg. 1-610-7-21 sub 4/F1 shows, shop weld #1's actual condition is 3/16" or less all around.	Rework		
3482	6-2-81	QC has no citeria for acceptance of warpage for hgr. 2-604-15-27, therefore leaving quality of beam indeterminate.			
3483	6-3-81	Contrary to Spec. C-231, there exists 2-3" core drilled holes with clear distance of 3", & 2-6" holes with no clear distance.			
3484	6-3-81	Contrary to Spec. ASME SA 194, 6 of the 72 ASME SA 194 grade 8M type 316 nuts don't have markings.	Reject	6-18-81	M. Sherwood
3485	6-3-81	M-127B, R-1.00-15159, QA manual not yet approved.			

LOG OF NONCONFORMANCE REPORTS

PROJECT NAME 1 Midland JOB NO. 1 07220 PAGE 8 203

2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3486	6-3-81	Contrary to Letter #BCCC-5385, FW-8,9,&10 on Dwg. FSK-MPC-2-2016 are not accessible for reinspection.			
3487	6-3-81	Contrary to Letter #BCCC-5385, FW-1,2,&3 on Dwg. FSK-MPC-1-1019 are not accessible for reinspection.			
3488	6-3-81	C-2.10-22, Non-Q shiming material was used contrary to Dwg. C-350 Detail A and FCN #C804.			
3489	6-4-81	Contrary to Spec. M-204, Q.C. has no documented cleanliness for FW 15,16,&27C3 on Dwg. M611 sh.4, prior to welding.			
3490	6-4-81	Contrary to E-42B sh.332 R.2, P1001 double strut was used on two type 12 supports rather than P1001A3 triple strut.	Rework		
3491	6-4-81	Contrary to PSP G-6.1, valve 10" ECB-GT-LX (410-042) on Dwg. M610 sh.4 was installed without Act. 2.8.			
3492	6-5-81	M-611 Sh 4 Contrary to M-204 QC has no documented cleanliness for FW 5C1 & 6 on spool 2FCB-24-611-4-4			
3493	6-5-81	Contrary to PSI Act. 2.8, valves 2½"-HCC-6B(404-1-005) & 2½"-2SV-0418(404-1-004) are installed w/o Act 2.8 signed by QC prior to closure.			
3494	6-8-81	Contrary to PQCI P-1.30, valve 1MO-1024A (410-103) on Dwg. M-610 sh4 was installed without an IR being issued.			
3495	6-8-81	Contrary to Spec. M-204 & BQAM Sec.5250, QC doesn't have doc. that supports the validity of the vibro-etched heat # on pipe.			
3496	6-8-81	Contrary to ASME code Sec. III NCA 3800, the CofC accompanying the fittings received on R-1.00-14859 (P.O. F-3139) doesn't have all info.	Doc. Rework	6-16-81	M. Sherwood
3497	6-8-81	Contrary to Spec. M-326, hgr. sketch 1-603-7-12 Sub.4 specifies the use of grouted anchors, actual installation consists of expansion.			
3498	6-8-81	Contrary to ASME Sect. III, valve 2½"-2SV0421A(404-1-81) installed without the nameplate with the Nuclear Code stamp.			
3499	6-10-81	C-1.60-321, contrary to Spec. C-306, during review of April's cut rebar asbuilt dwgs., 3 N/S bars were cut within 10'.			
3500	6-10-81	Contrary to Spec. M-204 & PSP G6.1, FW 43 on M-617 sh.6 was welded without QC documentation of cleanliness inspection.			
3501	6-10-81	Contrary to Spec. M-204 Para. 4.1, the leak chase material welded to the flued head at Pene. 1Z-51 has no material I.D..			
3502	6-10-81	Contrary to Spec. M-204 Para. 4.1, the leak chase material welded to the flued head at Penetration 2Z-51 has no material I.D..			
3503	6-10-81	Hydrotest BN-CT-2 & 6 were performed without the water chemistry analysis to verify Grade II testing, contrary to FPB-1.000 & T-1.00.	Rework	6-24-81	C. Fugate
3504	6-10-81	Contrary to PSP 6.1, Act. 2.3 fly up on PQCI PW-1.00 Rev.1 was bypassed during construction.			

LOG OF NONCONFORMANCE REPORTS

PROJECT NAME: Midland JOB NO.: 07220

2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3505	6-10-81	SC-1.05-238, contrary to ASTM C-31-69, specimens cast on 6-9-81 were measured at 82°F.			
3506	6-11-81	Contrary to Spec, A-41, A-41-5-1 carboline product data sheets for phenoline 305 has no recommendations as to specific process of mixing.	Use As Is	6-24-81	R. Bennett
3507	6-11-81	There is no evidence of Q.C. verification for cables listed on page 2 of NCR passing thru vias listed, rendering cables indetermin.			
3508	6-12-81	Contrary to Spec. C-306, one stirrup bar was cut in a beam in south face wall without P.E of R.E. approval.			
3509	6-12-81	Contrary to Spec. G-33, a CMTR can not be supplied by the vendor for R-1.00-15004 on P.O. F-50286, leaving material indeterminate.	Reject		
3510	6-16-81	Contrary to Spec. E-55, the tray fittings listed on NCR page 2 received on R-1.00-15243 P.O. F-50240 are ripped.			
3511	6-15-81	Contrary to Spec. M-204, FW #26c1 on FSK-M-1HBC-498-6-1 was installed w/o QC verification & doc. of cleanliness, also mat. missing heat #.			
3512	6-15-81	Contrary to Spec. M-204, pipe & coupling between FW #10 & FW 11, FSK-M-1HBC-498-3, were installed w/o QC verifi. of clean & heat #'s			
3513	6-15-81	Contrary to EPE 4.000 para. 6.5&6.7, the minimum bend radius of cable 2AMU003A was exceeded by 1.5".			
3514	6-16-81	Contrary to Spec. M-204, FW#7 on FSK-M-1HBC-497-2 & FW's #2&3 on FSK-M-1HBC-3-1 have no documentation of QC cleanliness verification.			
3515	6-16-81	Contrary to PSP G-3.2 R.6, there is inconsistent identification of FW #43, 50, & 38 from Dwg. FSK-M-2HBC-128-1.			
3516	6-16-81	Contrary to Spec. G-33, the #6 rebar received on R-1.00's-14964, 14965, & 14966 didn't meet the minimum strength requirement.	Reject		
3517	6-17-81	Contrary to PSP G-6.1 R.5 Para. 3.3, FW #1 Dwg. FSK-MPY-80 sh.2 was welded out without an IR or documentation.			
3518	6-17-81	Contrary to PSP G-6.1 R.5 Para. 3.3, FW #3, 7, 11, & 19 Dwg. FSK-M-1HBC-3-3 were welded out without an IR or documentation.	N/A	6-24-81	L. Glatz
3519	6-17-81	Contrary to PSP G-6.1 R.5 Para. 3.3, Fw 38R1 & 4R1 dwg. FSK-M-1HBC-4-2 & FW #8R1, FSK-M-1HBC-498-1 welded out w/o IR or documentation.			
3520	6-18-81	Contrary to Spec. M-201 Rev.8, pipe spool 2ECB-2-S611-1-2 has buckles for about 2' up the bend of the pipe.			
3521	6-18-81	Contrary to Spec. C-231, 3 N/S bars were cut in violation of the spec. on the slab at 674'-6".			
3522	6-18-81	Contrary to Spec. M-204 Rev. 14, there is no material traceability on FW's listed on NCR page 2 to Dwg. FSK-M-1HBC-4-8.			
3523	6-18-81	Contrary to Spec. M-204 & PSP G-6.1, FW 14 on FSK-M-1HBC-4-8 Rev.2 has no documented cleanliness by Q.C..			

LOG OF NONCONFORMANCE REPORTS

PROJECT NAME [1] Midland JOB NO [1] 07220 PAGE [8] 205

[2] NRC NO	[3] DATE	[4] NONCONFORMANCE DESCRIPTION / REMARKS	[5] DISPO.	[6] DATE NCR CLOSED	[7] CLOSED BY
3524	6-18-81	Contrary to Spec. C-306, #11 vertical bar 6'2" W/7.2 was cut in north face of a pilaster.			
3525	6-18-81	Contrary to Spec. C-306, 3 vertical bars were cut within a 10' radial distance.			
3526	6-19-81	Oil from a crane located above JB 2BJ573 has been dripping onto cables 2BB2411 A&B, 2BB2408 A&B, and 2BB2424 E&M.			
3527	6-19-81	Contrary to Dwg. E-22-49-1, the black conductors of cable 1AG1001AG & 1AG1001AM are bent into a loop which is 3¼".			
3528	6-19-81	During Ann Arbor SQD review of Southern Boiler QVD, there were problems found with the documentation.			
3529	6-22-81	Contrary to Spec. C-306, one #11 vertical bar of a #11 vertical bundle was cut without Resident or Project Engineer's approval.			
3530	6-23-81	The documentation received for welded Unistrut doesn't contain the verification reports required in Spec. E-52 Rev.2, Para. 6.3.8.			
3531	6-23-81	Contrary to Spec. M-204, FW #3 was installed without QC verification or documentation of cleanliness.			
3532	6-23-81	Contrary to Spec. M-204, stanchion welded to pipe on hgr. 614-10-55 with full penetration weld, causing flattening of the pipe.			
3533	6-24-81	F-50786, Contrary to Spec. G-33, the material test report for the material received on AEO-15005 isn't legible and traceable.			
3534	6-26-81	Sway struts & pring cans were received without the weld exams on several P.O.'s (see NCR) contrary to ASME Sec. III Sub/Sec NF '74 Ed.			
3535	6-26-81	Contrary to QCI Act. 2.8, valve 2½ 2CCC-GT-L(404-1-033) was installed without QC signing Act. 2.8 prior to closure.			
3536	6-29-81	Soil Field Density Test results do not meet the requirements of Spec. C-210 Rev.3.			
3537	6-29-81	Contrary to G-6.1 Para. 3.3, QC doesn't have completed PQCI's P-1.00 & P-2.00's on lines listed on NCR, leaving them indeterminate.			

Person contacted
L. E. Davis

NONCONFORMANCE REPORT

S/C - NONTESTABLE

1. PROJECT NAME: MIDLAND	JOB NO.: 7220					19. NO. 3476	20. PAGE 1 OF 2
2. UNIT(S): 1 & 2	3. DRAWING/PART NO.: SEE CONTINUATION SHEET	REV	4. ITEM DESCRIPTION: PIPE RESTRAINTS			5. ITEM LOCATION: VARIOUS	
6. ~~P.O. OR~~ SPEC NO.: C-733 (9)	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: CONST	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. SEE CONTINUATION SHEET NO. C 233 REV 9 1		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD		

16. NONCONFORMING CONDITION:

REQUIREMENT: SPEC C 233(9) REV 9 1 STATES:
WHEN SPECIFIED ON ENGINEERING DESIGN DRAWINGS, WELDED JOINTS (NORMALLY: TEE JOINTS) AND PLATES SHALL BE SUBJECTED TO THE FOLLOWING NDE EXAMINATION. (U.T.)

CONDITION:
CONTRARY TO THE ABOVE CONST WELDS [S] MEET REQUIREMENTS OF SPEC C 233 (9) REV 9 1 SECT. 8.4 6/4/81

17. REPORTED BY: Gerald Von Doorne DATE: 5/30/81

18. VALIDATED BY: L E Davis DATE: 6-1-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

PIPE RESTRAINT NO	DWG NO	REV	PCAR NO	P LIST NO	
CONT'D				1.10.2	
PR-631-1-18	C-404-TYP61	5	C-304-1533	1.10.2	
PR-631-1-3	C-404-TYP61A	5	C-304-1513		
CONT'D					
PR-639-13-17	C-484 TYPE 17	6	C-304-1380 REV 1	1.10.2	
PR-639-13-5	C-484 TYPE 15	6	C-304-1371	1.10.2	
PR-639-13-33	C-484 TYPE 17	6	C-304-1382	1.10.2	
PR-639-13-6	C-484 TYPE 10H	6	C-304-1378	1.10.2	
PR-639-13-8	C-484 TYPE 16	6	C-304-1379	1.10.2	
PR-632-1-3H	C-404-TYP61	5	C-304-1474	1.10.2	
PR-632-1-12B	C-404-TYP63	5	C-304-1414	1.10.2	
PR-632-1-22H	C-404-TYP62	5	C-304-1316	1.10.2	
HVAC BUILDING RESTRAINTS					
PR-660-1-845	C-834 DETAIL 3	3	C-304-1581	1.10.2	
PR-660-1-13	C-834 DETAIL 3	3	C-304-1679	1.10.2	
PR-660-1-647	C-834 DETAIL 8	3	C-304-1550	1.10.2	
PR-ON @ KC LINE	C-838	5	C-304-1428 REV 1	1.10.2	

HOLD FOR ENG. DISPOSITION, 14 HOLD TAGS APPLIED, THIS NCR IS WRITTEN TO TRACK WORK REMAINING TO BE COMPLETED TO ALLOW THE CLOSURE OF MANY OLD IR'S.

A-Job

CONTACT: STEVE PAYNE

NONCONFORMANCE REPORT

S/U NONTESTABLE

1. PROJECT NAME: MIDLAND — JOB NO.: 7220 — 19. NO. 3477 — 20. PAGE 1 OF 1

2. UNIT(S): COMMON — 3. DRAWING/PART NO.: N/A — REV: N/A — 4. ITEM DESCRIPTION: CORE DRILLING — 5. ITEM LOCATION: SERVICE WATER RM 301 SOUTH WALL EL. 652'4"

6. ~~P.O. OR~~ SPEC NO.: C-231 — 7. SERIAL NO.: N/A — 8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A — 9. SOURCE: CONSTRUCTION — 10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER — IR NO. C1.60-322 NO. C 231 (E) — 12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO — 13. SKETCH ATTACHED ( ) YES (X) NO — 14. Discovered During ( )Rec'g (X)Const ( )Test — 15. Equip. Installed By ( )Ch... N/A ...g ( )FLD

16. NONCONFORMING CONDITION:

SPECIFICATION C-231 REV 20 SECTION 9.2.2 SUB SECTION A.2 STATES "THE MINIMUM CLEAR DISTANCE BETWEEN TWO CORE-DRILLED HOLES SHALL BE 2 TIMES THE DIAMETER OF THE LARGER HOLE." CONTRARY TO THE ABOVE THERE EXIST 2-7" CORE DRILLED HOLES WITH A CLEAR DISTANCE OF ONE INCH. ITEM IS LOCATED ON ~~SOUTH WALL~~ 5/27/81 SOUTHWALL RM 301 2'2" E/WEST WALL @ EL. 652'9" TO 654'. HOLD FOR ENG. DISPOSITION, QLIST #105, 1 HOLD TAG APPLIED

17. REPORTED BY: James G Selch — DATE: 5/27/81

18. VALIDATED BY: R. Smith — DATE: 6-1-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

NONCONFORMANCE REPORT

S/U - NON TESTABLE

1. PROJECT NAME: MIDLAND	JOB NO. 7220			19. NO. 3478 XXXXX	20. PAGE 1 OF 3
2. UNIT(S): COMMON	3. DRAWING/PLAT NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CUT REBAR	5. ITEM LOCATION: AUX B.D. EL 584 @ REACTOR & RB 24 7-4 LINE	
6. P.O. OR SPEC NO.: C-306 (c) rev 7	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: CONSTRUCTION PIPEFITTERS	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO. N/A NCR 3016 (c) rev 7	12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO	13. SKETCH ATTACHED: (X) YES ( ) NO	14. Discovered During: ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By: ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION: APPENDIX D, SECTION 2.2, STATES IN PART, "... TWO BARS MAY BE CUT EACH WAY, EACH FACE, PROVIDED THE MINIMUM RADIAL DISTANCE TO THE ~~NEAST~~ NEXT CUT BAR ON THE SAME FACE, IN THE SAME DIRECTION, IS AT LEAST TEN FEET." CONTRARY TO THIS, (4) FOUR HORIZONTAL BAR WERE CUT WITHIN A TEN FOOT RADIAL DISTANCE @ EL 584 NEAR COLUMNS 7.4 & E.1 HOLD TAG APPLIED; Q-LIST 1.203

17. REPORTED BY: William C Kuhn — DATE: 5-29-81

18. VALIDATED BY: R. E. Jones — DATE: 6-1-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

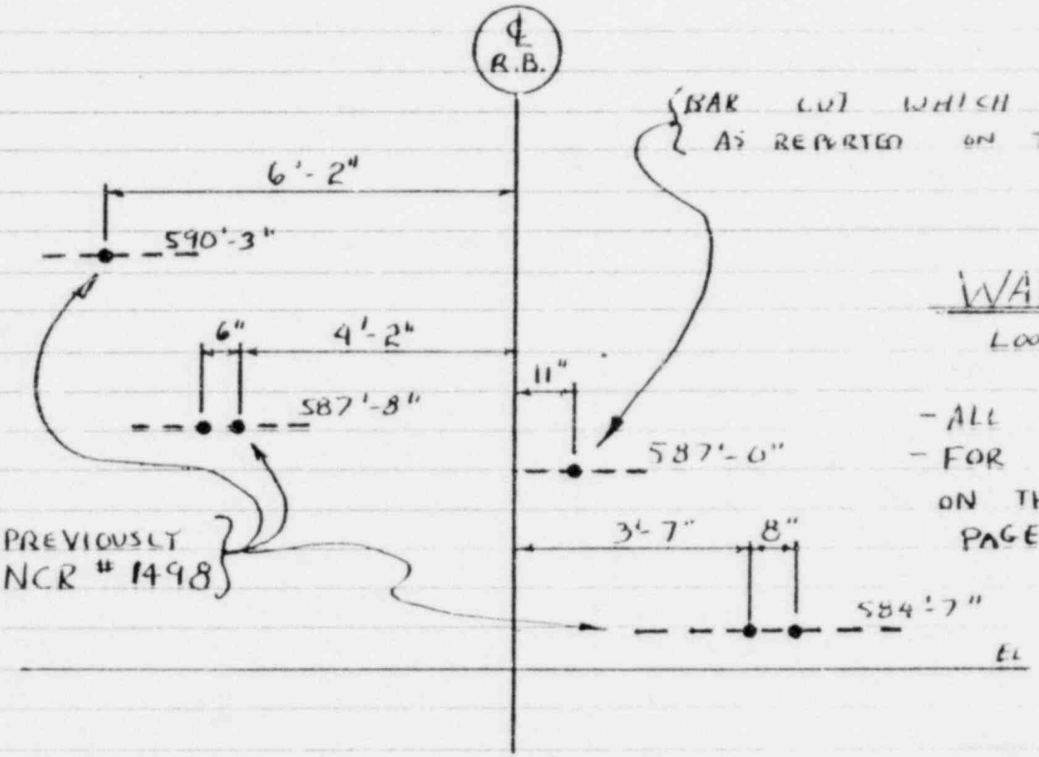
26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

BECHTEL

NONCONFORMANCE REPORT (CONT'D) PAGE 2 OF 3 NCR NO 1478 XXXXX



WALL @ 7.4 LINE

LOOKING WEST

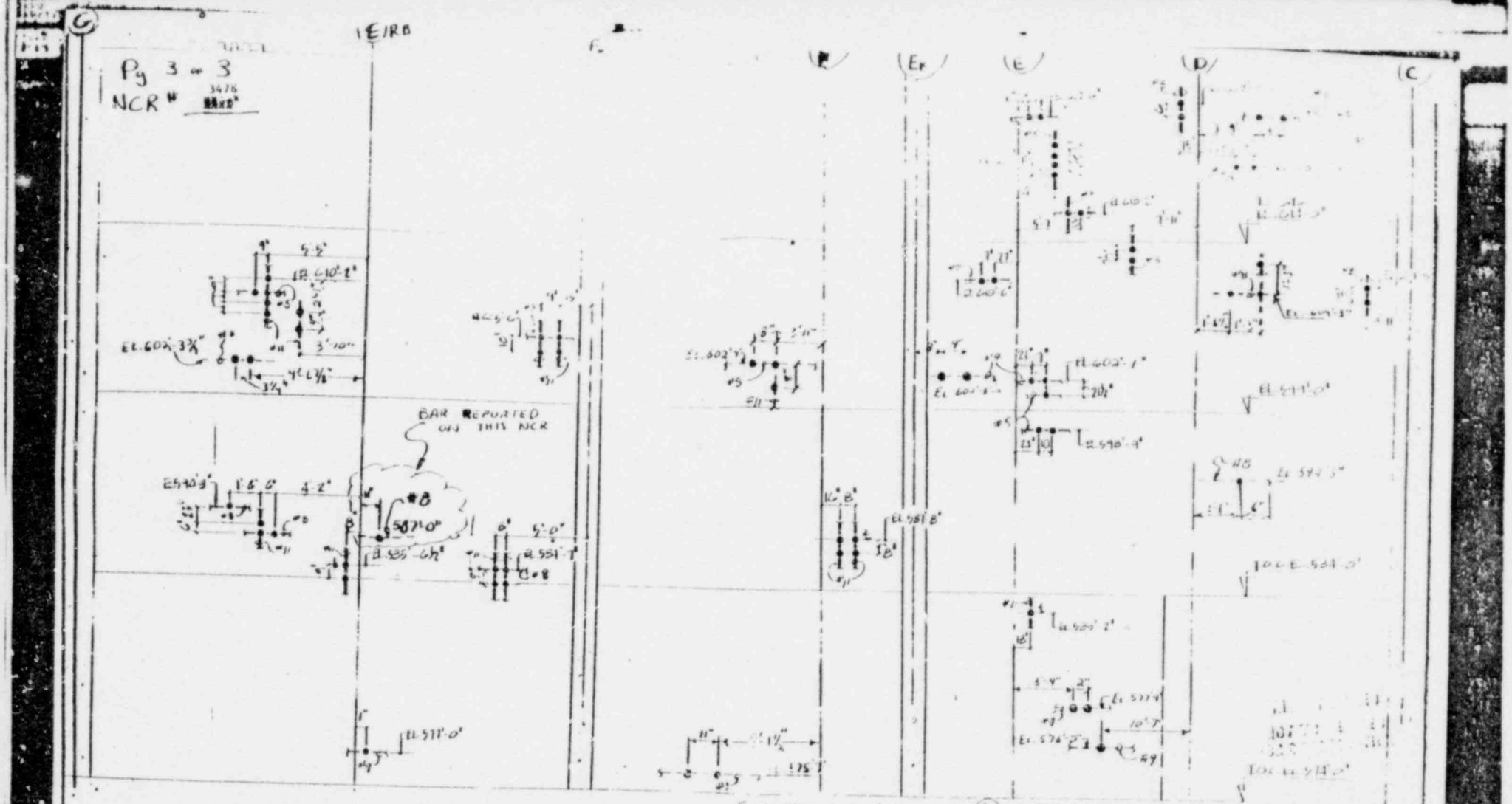
3/8" = 1'-0"

- ALL BAR - #8 NEAR FACE
- FOR ALL OTHER BAR ON THIS WALL, SEE PAGE 3.

10098 2

QC-G-3 3

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – POAE
Goldenrod Copy – QC



NOTE: FAR FACE CUT REBAR ARE SHOWN ON OTHER SHEETS.

LEGEND

• — CUT REBAR

----→ DIRECTION OF BAR

ALL BAR HEAD FACE U.N.O.

A	4/11/88	ADDED CUT REBAR	ES	BLDG. AUX.	ROOM — 22, 23 & 24
		NCR # 3478			
Δ	9/19/88	ADDED CUT REBAR	ES	ELEV. 574'-0"	PIPEWAY

10	3/16/88	ADDED CUT BAR	WKK	SEP	VE	SCALE NTS	BECHTEL POWER CORP. MIDLAND, MICHIGAN
12	4/6/88	ADDED CUT REBAR	DS	SEP			
11	4/22/88	ADDED CUT REBAR	SEP	DS		TITLE RECORD OF CUT REBAR	
						JOB 7220	DSK / A 116 (1)	REV 13

A-Lab

Engineer Contacted: J. Slifer

NONCONFORMANCE REPORT

S/U Code: Indeterminate

1. PROJECT NAME: Midland			JOB NO.: 7220			19. NO. 3479	20. PAGE 1 OF 1
2. UNIT(S): Indeter.	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: ASME SA 193, Grade B7 Studs			5. ITEM LOCATION: Warehouse 1	
6. P.O. OR SPEC NO.: F-47542	7. SERIAL NO.: N/A	8. REPLACEMENT PART: P/N N/A REV N/A SER NO. N/A		9. SOURCE: Supplier	10. CONTRACTOR/SUPPLIER: Texas Bolt		
11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO R-1.00-14909 NO C-306, R. 7		12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO	13. SKETCH ATTACHED: ( ) YES (X) NO	14. Discovered During: (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By: ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION:

Specification C-306, Revision 7, requires documentation which includes, in part, a G-321-D and Certified Material Test Report. Contrary to this, the above listed studs do not have this documentation, leaving their quality indeterminate.

"Q" list number indeterminate

2 HOLD tags applied

Hold for Engineering disposition

17. REPORTED BY: M. Slocumb — DATE: 5/28/81

18. VALIDATED BY: DNO for F. Russell — DATE: 6/2/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

NONCONFORMANCE REPORT

AU 286C

1. PROJECT NAME	JOB NO.	19. NO.	20. PAGE
MIDLAND	7220	3480	1 OF 1

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2	M604 SH 8	10/F1	6" S/S CAP TO 6"S/S TEE, FW 88	AUX BLDG /Rm 213

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
NA	NA	P/N NA REV NA SER NO. NA	~~CONST~~ QC	NA

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	To Equip Furnished By
( ) DWG ( ) SPEC (✓) OTHER IR NO P-W-100-M604-8-F3 NO AADD/PSP 5	(✓) YES ( ) NO	( ) YES (✓) NO	( )Rec'g (✓)Const ( )Test	( )Client (✓)Eng (✓)N.D

16. NONCONFORMING CONDITION:

REQUIREMENT: PSP G-6.1 PARA 7.0 STATES IN PART THAT THE ASME CODE AUTHORIZED INSPECTOR MAY IDENTIFY REQUIRED WITNESS AND HOLD POINTS FOR CODE ITEMS.

CONDITION: ON DWG M 604 SH 8 FW 88 BUTT WELD (FPG) WAS ASSIGNED AN A.I. HOLD POINT ON FIT-UP. FIT-UP WAS BYPASSED AND JOINT WAS WELDED without AI OBTAINING A I CONCURRENCE.

5/30/81

5/30/81

17. REPORTED BY — DATE

R. J. DeBoer 5/30/81

18. VALIDATED BY — DATE

NA E Ennis 6-2-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINFER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Discussed w/ R. Hendricks

NONCONFORMANCE REPORT

5/4 IBCA

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO 3481	20. PAGE 1 OF 3
2. UNIT(S): ONE	3. DRAWING/PART NO.: 1-610-7-21	REV: 3	4. ITEM DESCRIPTION: SHOP WELD	5. ITEM LOCATION: AUX BLDG	Pw 21
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV NA SER NO NA	9. SOURCE: ~~CBASE~~ Kaiser	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. P2.10-610-7-2 NO.	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X) F D

16. NONCONFORMING CONDITION:

M-326 REV. 6, Section 4.2.1 states NO undersize welds are permitted.

Drawing 1-610-7-21 REV. 3 Sub 4/F1 shows shop weld #1 to be 1/4" all around. Contrary to this, actual condition is 3/16" or less all around. See attached sketch.

"Q" LIST # 4.1.2

1 HOLD TAG APPLIED.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
K. Gustafson	6-1-81	[illegible] E. Swiatt	6-2-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

ITEM NO.	MATERIALS & OPERATIONS	QUAN	SHIP		PAT	L	CSC	PRI	SEC	AIS
	ORISMTC CHEV STRUT ASSEMBLY CONSISTING OF:	ALL								
2	STC 211 #1 Chev Strut Extension 10 3/4" O.D. pipe, Carbon Steel, Tot Wt=1780# L=2'-0" W=2'-6½" R.S. 4-2-80 LH 1743	1				X				
1	6" Wide Flange B 15.5# / Ft. (S1-3) Wt=19# 1'-2 1/2" long, Wt=19#, Shop Center of To Item #2	1				X				
2	Carbon Steel (SA-515GR65 or SA-36) Pl - 1" Section 1-1, Wt=190#	1				X				
	Seismic Assembly Sketch & Engineering Bundle A Tie Mark = L-1FCB-19-H6	1 1								
	All Bolts & Studs in accordance w/ AH 1747 CSS									
	Hangers to be painted in accordance with Bechtel Standard Specification Sheet									

CONTROLLED BY FIELD ENGINEERING

RECEIVED
MAY 29 1981
QUALITY CONTROL
BECHTEL JOB 7220

WORK PRINT

NCN 4 1481

Approved By: P.S. Date: 11-12-75	CRITICAL	QUAN	SHIP		PAT	L	CSC	PRI	SEC	AIS	

FOR MATERIALS AND OPERATIONS SEE SKETCH NO. _____ SHEET ___ OF ___

ITT GRINNELL
PIPE HANGER DIVISION

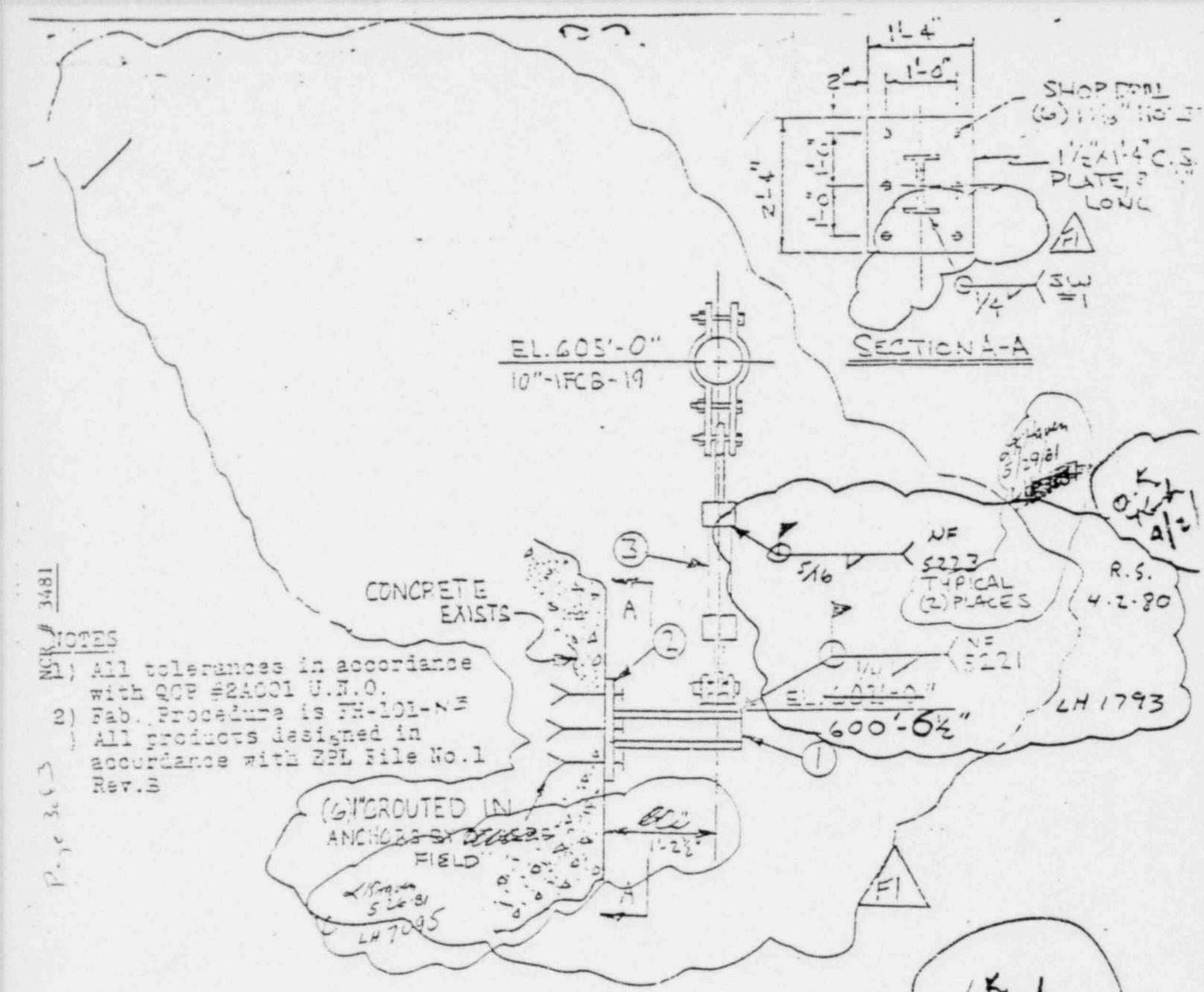
REF. DRAWING NUMBERS

TYPE: M-12Z-(C)-C ELBOW: ___
STEEL: C-ECOS-(C)-E H.V.A.C.: ___

CONDITIONS	Fx	Fy	Fz	Mx	My	Mz
DESIGN	—	—	—	—	—	—
NORMAL UPSET	—	±4772 -6758	—	—	—	—
EMERGENCY	—	±5416 -6752	—	—	—	—
FAULTED	—	—	—	—	—	—

REV.	DATE	DSN BY	ENG CHK	PROJ MGR	QCS QA	DESCRIPTION
1	5-1-81	PS	GP	—	—	REVISED NODE
2	5-11-81	PS	GP	—	—	REVISED NODE
3	7-1-81	PS	T.M.	L.S.	—	PER DRAWING

CUSTOMER CONSUMERS POWER CO.
JOB NO. 7220
JOB NAME MIDLAND 1 & 2 BOP MECH.
I.D. NO. 10"-1FCB-19-H6
SKETCH NO. 1-610-7-21
SHEET 1 OF 1 REV. 3



NCR # 3481

NOTES
1) All tolerances in accordance with QCP #2AC01 U.M.O.
2) Fab. Procedure is FH-101-N3 All products designed in accordance with EPL File No.1 Rev.3

PIPE ISO.	H-610-SH.7-(6)-0
DATA POINT	448
PIPE MAT'L.	SA-312 GR304
INSUL.	2" AREA 3

#1	1-01-1-11	1-SF150 UNIT-2
Shop Weld No.	Weld Procedure	Mech. Procedure

THIRD PARTY INSPECTION ☐
CODE CLASS: ASME III-2

Discussed w/R. Hendricks

NONCONFORMANCE REPORT

S/4 2B6A

1. PROJECT NAME 7220 Midland		JOB NO. 7220				19. NO. 3482	20. PAGE 1 OF 1
2. UNIT(S) 2	3. DRAWING/PART NO. 2-604-15-27 Subs 1	REV 2	4. ITEM DESCRIPTION Hanger 2-604-15-27			5. ITEM LOCATION Aux Bldg	
6. P.O. OR SPEC NO. NA	7. SERIAL NO. NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA		9. SOURCE Const	10. CONTRACTOR/SUPPLIER NA		
11. INSPECTION CRITERIA (X) DWG ( ) SPEC ( ) OTHER	IR NO. P2B-2-604-15-27 NO.	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION: Hanger 2-604-15-27 Item 1 Beam is warped in two places where Item 4 is welded to it. Quality Control has no criteria for acceptance of warpage these face leaving the quality of the beam indeterminate. Up graded from D.R. PM 1807

Q list No is 4.045

17. REPORTED BY William Arnett DATE 6-28-81

18. VALIDATED BY J Holtzapple, Applied E&C DATE 6-2-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Contact: Steve Payne

NONCONFORMANCE REPORT

S/U NONTESTABLE

1. PROJECT NAME: MIDLAND	JOB NO.: 7220				19. NO. 3483	20. PAGE 1 OF 2
2. UNIT(S): Common	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: Concrete Drilling - Clear Distance		5. ITEM LOCATION: Aux. Bldg.	
6. ~~P.O. OR~~ SPEC NO.: C-231	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Construction	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. C1.60-322 NO. C-11 20	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip. Furnished By ( ) Client ( ) Ag ( ) FLD	

16. NONCONFORMING CONDITION:

Item #1: Specification C-231 Rev 20 Section 9.2.2 Sub Section A.2 states "The Minimum Clear Distance Between Two-Core Drilled Holes Shall Be 2 Times the Diameter of the Larger Hole." Contrary to the Above, There Exist 2-3" Core Drilled Holes with a Clear Distance of 3" at 5.6 Line Wall, 9'6" South/A Line & El. 649'4". Item #2 C-231 Rev 20 Section 9.2.2 Sub-Section B.2 states "The Minimum Clear Distance (Cont.)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James C Seech	5/29/81	A. E. Russell	6/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BLOCK #16 CONT.

BETWEEN TWO CORE-DRILLED HOLES SHALL BE 2 TIMES THE DIAMETER OF THE LARGER HOLE." CONTRARY TO THE ABOVE, THERE EXIST 2-6" CORE DRILLED HOLES WITH NO CLEAR DISTANCE (5" CENTER TO CENTER). ITEM IS LOCATED IN 634'6 SLAB ROOM 415 10"±W/7.4 LINE & 8'5"S/B LINE WALL.

HOLD FOR ENGINEERING DISPOSITION, Q LIST #1105, 2 HOLD TAGS APPLIED.

A-fab

ENGINEER CONTACTED:
RON HENDRICKS

NONCONFORMANCE REPORT

S/U CODE: INDETERMINATE

1. PROJECT NAME: MIDLAND	JOB NO.: 7220					19. NO. 3484	20. PAGE 1 OF 1
2. UNIT(S): INDETER.	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: ASME SA 194 GRADE 8M TYPE 316 NUTS			5. ITEM LOCATION: WAREHOUSE 1	
6. P.O. OR SPEC NO.: F-47443	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: SUPPLIER	10. CONTRACTOR/SUPPLIER: TEXAS BOLT		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO R-1.00-150.52 NO ASME SA 194	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION:

SPECIFICATION ASME SA 194, PARAGRAPH 11.1 STATES "ALL NUTS SHALL BEAR THE MANUFACTURER'S MARK", AND 11.2 STATES IN PART "NUTS SHALL BE LEGIBLY MARKED TO INDICATE THE GRADE AND PROCESS OF THE MANUFACTURER". CONTRARY TO THIS, 6 OF THE 72 ABOVE MENTIONED NUTS DO NOT HAVE THE PRESCRIBED MARKINGS, LEAVING THEIR QUALITY INDETERMINATE. — "Q" LIST # INDETERMINATE — 4 HOLD TAGS APPLIED — — HOLD FOR ENGINEERING DISPOSITION —

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
W. J. Stevens	6/2/81	R. F. Russell	6/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

MECH - C. ANDERSON

NONCONFORMANCE REPORT

S/O CODE: INDETERMINATE

1. PROJECT NAME: MIDLAND	JOB NO. 7220				19. NO. 3485	20. PAGE 1 OF 2
2. UNIT(S): 1 & 2	3. DRAWING/PART NO.: N/A	REV	4. [illegible] N: 2" - [illegible] - CBB-GB ITEM 42.0		5. ITEM LOCATION: WAREHOUSE #1	
6. P.O. ~~CHANGE NO~~: M-127B - REV 11	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N REV SER NO. N/A		9. SOURCE: SUPPLIER	10. CONTRACTOR/SUPPLIER: HENRY VOGT MACH. CO.	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER: IR NO. R-100-15159 NO 7220-M-127B Rev 7	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD		

16. NONCONFORMING CONDITION:

P.R. Manual currently under review but not yet approved - (see SDDR-2092) Q number is indeterminate. Hold pending Engineering disposition. 25 HOLD tags applied to the non-conforming items.

17. REPORTED BY: [signature] DATE: 6/3/81

18. VALIDATED BY: M.D. E. Smith DATE: 6-3-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Supplier Deviation Disposition Request

NOTE:
1. COMPLETE INSTRUCTIONS ON BACK OF THIS SHEET
2. Items 1-18 below to be completed by supplier
3. * Items: Bechtel entries only
4. Attach additional information whenever necessary
5. Bechtel must be notified within 5 days after detection of deviation
6. A copy of the completed SDDR form shall be included by the supplier in the quality verification data package for each item to which this SDDR applies

SUPPLIER COMPLETED

FOR SUPPLIER USE		PROJECT Midland	FOR BECHTEL USE	
Supplier SDDR No.	Date Submitted	JOB NO. 7220	Bechtel SDDR No.	Date Received
2	5/15/81		2092	5-19-81

1. Supplier Name: Henry Vogt Mach.Co. Address: P. O. Box 1918 City & State: Louisville,KY Zip: 40201

2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Deviation Detected	6. All Previous SDDR (No.'s & Date's)
214875-NUC	E-48317	1" SW Globe Valve	5/15/81 (Date) Doc. (Method)	None
7. Bechtel P.O. & Rev. No.	**8. Bechtel Part No.**	**9. Bechtel Part Name**	**10. Bechtel SQR Notified**	**11. Bechtel Engrg Notified**
7220-M-127B R11	Item 42.0 1"-EBB-GB	1" Manual Globe Valve	5/15/81 (Date) Phone (Method)	5/15/81 (Date) Phone (Method)

12. Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary and identify quantity and serial No.'s as applicable)
QA Manual currently under review but not yet approved.

13. Suppliers Proposed Disposition: ☒ Use-As-Is ☐ Repair ☐ Modify Bechtel Requirement

14. Cost Impact: None 15. Schedule Impact: None

16. Proposed Disposition and Technical (plus Cost/Schedule if applicable) Justification: Attach extra sheets, sketches, etc. as necessary
Manual approved by ASME and reflects no major program changes since Edition 2 which has previously been approved by Bechtel

17. Associated Supplier Document Change(s)
None

18. Suppliers Authorized Representative
Name: S. B. Radcliff Signature: [signature] Title: Manager, Nuclear Products Group Date: 5/15/81

*19. Bechtel Engrg. Action
☒ Accepted ☐ Rejected
Engrg. Follow-up: ☐ Spec/Rec. Change ☐ Supplier ☐ Licensing Doc. Change ☐ Price Adjustment ☐ Other
NOT REQ'D

*20. Bechtel Disposition Statement Including Justification (Attach extra sheets, sketches, etc. as necessary)

BECHTEL

This SDDR approved for 25 valves item 42.0 only. Each individual valve shall be tagged identifying this SDDR and stating, "These valves were manufactured under a QA manual which was not approved for use on the Midland Project as of April 22, 1981." The vendor QA manual will be reviewed by Bechtel for compliance with Project requirements. H. Vogt is responsible for satisfactory compliance of these valves. A copy of this SDDR shall be included with the documentation for each valve.

Construction Action Required ☐ YES ☐ NO

*21. Bechtel Acceptance/Signature	Date		Date
QC [signature]	5/22/81	22. Supplier	
PE [signature]	5/22/81	*23. Bechtel Supplier Quality Representative	
CE [signature]	5-22-81		
QA [signature]	05-22-81		

NCR 3485

Page 2 of 2

SFP-20248, REV 2/80

ED 27 REV. 2

DISCUSSED WITH RON HENDRICKS

NONCONFORMANCE REPORT

S/O 2KAC

1. PROJECT NAME	JOB NO.	19. NO. 3486	20. PAGE 1 OF 1
MIDLAND	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2	FSK-MPC-2-2016	2	PENETRATION 27-51	R/B #2

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	CONSTRUCTION	N/A

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG ( ) SPEC (X) OTHER IR NO. SEE BLOCK 16 NO. SEE BLOCK 16	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) F.E.D

16. NONCONFORMING CONDITION:

REQUIREMENT: LETTER #BLC-5385 STATES IN PART "ALL WELDS IDENTIFIED AS BEING MADE PER DRAWING 5, M14, SHALL BE INSPECTED FOR THE REQUIRED FILLET WELD SIZE."

CONDITION: FW-8, FW-9, AND FW-10 ON DRAWING FSK-MPC-2-2016 ARE NOT ACCESSIBLE FOR INSPECTION. (IR'S PH20-FSK-MPC-2-2016-1, PH30-FSK-MPC-2-2016-1, PH30-FSK-MPC-2-2016-19, WR-5-FSK-MPC-2-2016, FHQC-784, ACK-3720)

REV #1 4.482

WELDS TACKED

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James Cashwell	6-2-81	J. E. Russell	6/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER	DATE
PROJECT ENGINEER	DATE
PROJ CONSTR QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE

DISCUSSED WITH R. HENDRICKS

NONCONFORMANCE REPORT

S/U IKAC

1. PROJECT NAME: HIDALGO	JOB NO.: 7230					19. NO. 3487	20. PAGE 1 OF 1
2. UNIT(S): 1	3. DRAWING/PART NO.: FSK-MRC-1-1019	REV: 1	4. ITEM DESCRIPTION: RENATCATION 1Z-51			5. ITEM LOCATION: REACTOR BUILDING 1	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: CONST.	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. SEE BLOCK 16 NO. SEE BLOCK 16	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION:

REQUIREMENT: LETTER # BCC-5385 STATES IN PART: "ALL WELDS IDENTIFIED AS BEING MADE BEFORE DECEMBER 5, 1979, ARE REINSPECTED FOR THE REQUIRED FILLET WELD SIZE."

CONDITION: FW1, FW2, AND FW3 ON FSK-MRC-1-1019 ARE NOT ACCESSIBLE FOR REINSPECTION. (IR's WK-5-FSK-MRC-1-1019, W-100B-FSK-MRC-1-1019-1, PL30-FSK-MRC-1-1019-1, PL30-FSK-MRC-1-1019-1, 11.00-9.81)

Q-LIST 4.482

HOLD TAG APPLIED

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James A Brownell	6-1-81	J. F. Russell	6/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Contact L Morris

NONCONFORMANCE REPORT

NON TESTABLE

1. PROJECT NAME	JOB NO.	19. NO. 3488	20. PAGE 1 OF 2
Midland	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
Cont #2	C350	10	Polar Crane Girder	0°-360° EL 736-8 1/16" ±

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	Ebasco	

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equ[illegible]rnished By
( ) DWG (X) SPEC ( ) OTHER IR NO. C-2,10-22 NO C304	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION: Dwg C350 Detail "A" requires shiming for the bottom flang of the Crane Girder. FCN #C304 requires all shim material to be "Q". Contary to the above Non Q shiming material was used. Ref. attached Telephone call between Ster-Grant & Anil Desai dated 12/6/76. Q list #1.10.14 NO Hold Tag applied.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Edwin Dutton	5/29/81	K. F. Russell	6/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Telephone ✓

ROUTE PETE'S

BY STEVE GRANT OF CLARK

TO ANIL DESAI OF TORNE

DATE 10/6/76 TIME VARGO/HANC

SUBJECT POLAR CRANE RUNWAY GIRDER SHIMS JOB NO 7220

I QUESTIONED ANIL REGARDING DWG C-350 AS FOLLOWS:

1) ARE SHIMS UNDER THE POLAR CRANE RUNWAY GIRDERS Q OR NON-Q?

2) BEING AS A-36 MATERIAL IS NOT MANUFACTURED IN THICKNESSES LESS THAN 1/4", WOULD AISI-M1020 MATERIAL BE ACCEPTABLE FOR THE SPLIT SHIMS? I INFORMED ANIL THAT I SPOKE WITH MO EARLIER [illegible] MATERIAL WITH SIMILAR YIELD STRENGTH TO A36, [illegible] TOLD ANIL THAT M1020 HAD YIELD STRENGTH OF 35 KSI MIN, & THAT A COMPLIANT OF COMPLIANCE WAS THE DOCUMENTATION AVAILABLE.

ANIL RETURNED MY CALL & I INFORMED HIM THAT THE POLAR CRANE MATERIAL WAS Q; THOUGH THE ACTUAL POLAR CRANE WAS NON-Q, & THAT THE REQUIREMENT FOR MAKING THE SHIMS Q OR NON-Q WOULD DEPEND ON WHETHER OR NOT THE POLAR CRANE WOULD CREATE A SAFETY HAZARD IF THE SHIMS FAILED. I INFORMED ANIL THAT IF THE SHIMS FAILED (I.E. SOMEHOW CRUSHED OR CRUMBLED) THE SAFETY OF THE POLAR CRANE WOULD NOT BE AFFECTED. ANIL AGREED, AS DID MO EARLIER, THAT THE SHIMS DID NOT AFFECT THE SAFETY OF THE POLAR CRANE & COULD BE NON-Q. I DISCUSSED THIS WITH TERRY VALENZANO RIGHT AFTER MY TELECON WITH ANIL & HE ALSO AGREED THAT THE SHIMS WERE NOT A SAFETY HAZARD & SHOULD BE NON-Q.

I TOLD ANIL THAT I WOULD ORDER THE SHIMS AS NON-Q, THOSE SHIMS THICKER THAN 1/4" WOULD BE A36 MATERIAL WITH MILL TEST REPORTS & THE SHIMS THINNER THAN 1/4" WOULD BE M-1020 MATERIAL WITH CERTIFICATES OF COMPLIANCE. ANIL AGREED THAT THIS WAS ACCEPTABLE.

I TOLD ANIL THAT I'D SEND HIM A COPY OF OUR TELECON TO DOCUMENT OUR AGREEMENT.

STEVE GRANT

Page 1 of 2

NCR 3488

Discussed with Bud Ziino

NONCONFORMANCE REPORT

S/U 2 BCA

1. PROJECT NAME: Zimmer	JOB NO: 7220							19. NO. 3489	20. PAGE 1 OF 1
2. UNIT(S): 2	3. DRAWING/PART NO.: M611 sh 4	REV: 13/F3	4. ITEM DESCRIPTION: See block 16					5. ITEM LOCATION: El. 575' Aux. Bld. El 577' VC Ext 6.9 E Line	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA			9. SOURCE: Constr.		10. CONTRACTOR/SUPPLIER: NA		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER NO. M-204	IR NO. 3110-611-4-5	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO			13. SKETCH ATTACHED ( ) YES (X) NO		14. Discovered During ( )Rec'g (X)Const ( )Test		15. Equip Furnished By ( )Client (X)Eng ( )FLD

16. NONCONFORMING CONDITION: Requirement: M204 Para. 6.4 States in Part, "Prior to installation all piping shall be visually inspected for cleanliness". Condition: Contrary to the above quality control has no documented cleanliness for F.W. 15, 16 and 27C3 on Dwg. M611 sh 4, Rev. 13/F3 prior to welding.

Q list 4.1.1.4

3 Hold Tags applied

17. REPORTED BY: Rex Runyan DATE: 6-2-81

18. VALIDATED BY: C. A. W. DATE: 6-4/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BECHTEL

REVISED TO MATCH DRAWING 7220 E42B SH 3 NONCONFORMANCE REPORT 3/4 - NON-RESIDENT UNIT

1. PROJECT NAME: ALIBUAD		JOB NO.: 7220			19. NO. 3490	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: E 056 SH2	REV: 1	4. ITEM DESCRIPTION: CONDUIT Supports		5. ITEM LOCATION: CONT'd 638', 8'-12' W. of 3	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV SER NO.	9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: NA		
11. INSPECTION CRITERIA: [X] DWG [ ] SPEC [ ] OTHER — IR NO. ALC023A NO. E42B Rev 2	12. ASME AUTHORIZED INSPECTION REQ'D: [ ] YES [X] NO	13. SKETCH ATTACHED: [ ] YES [X] NO	14. Discovered During: [ ] Rec'g [X] Const [ ] Test	15. Equ ished By: ng [X] FLD		

16. NONCONFORMING CONDITION:

REQUIREMENT: DRAWING 7220 E42B REV 2 SH 332 ALLOWS P1001A3 TRIPLE STRUT AS A FLAG OUT FROM TYPE 12 TUBE STEEL CONDUIT SUPPORTS, UNLESS NOTED OTHERWISE.

CONDITION CONTRARY TO THE ABOVE, TWO TYPE 12 CONDUIT SUPPORTS WERE INSTALLED WITH P1001 DOUBLE STRUT AS FLAGS OUT FROM

E

17. REPORTED BY: J. Miller DATE: 6-3-81

18. VALIDATED BY: [illegible] DATE: 6-4-81

21. ROUTING: [X] TO FIELD ENGINEERING [ ] TO OTHERS (SPECIFY)

22. [ ] Field Engineering Disposition [ ] Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

(BLOCK 16 CONTINUED)
TUBE STEEL, CONTAINMENT #1, ELEV 635'±, 8' AND 12' WEST OF COLUMN #3 AND SUPPORTING 1ALC023.

ADDITIONALLY: 1ALC023 HAD BEEN INSPECTED AND ACCEPTED. ALL CONDUIT SUPPORTS WERE ALSO CORRECT AND ACCEPTED. THE TWO NONCONFORMING SUPPORTS WERE INSTALLED WITHOUT NOTIFICATION OF CONDUIT REWORK. AND TWO ORIGINAL SUPPORTS WERE REMOVED.

Q# 3.006

TWO QC HOLD TAGS APPLIED.

HOLD FOR ENGINEERING DISPOSITION.

Discussed with D. Hendricks

NONCONFORMANCE REPORT

3/4 IBCA

1. PROJECT NAME: MIDLAND	JOB NO. 7220				19. NO. 3491	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: M-610 SH 4	REV: 15/F2	4. ITEM DESCRIPTION: Valve 4HD-042		5. ITEM LOCATION: Aux Bldg.	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: RC	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. NO. PSP G6.1		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD	

16. NONCONFORMING CONDITION: Requirement: Quality Control Notices Manual PSP G6.1 Para. 3.3 states "Project Quality Control inspection activities and tasks that must be performed by construction quality control to verify that work performed by Bechtel Construction during field receiving, fabrication, installation, ...

Cont'd Page #2

17. REPORTED BY: [signature] DATE: 5/3/81

18. VALIDATED BY: [signature] DATE: 6/4/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

NONCONFORMANCE REPORT (CONT'D) PAGE 2 OF 2 NCR NO 3491

Cont'd from Page #1
Block #16

... erection testing and subcontractor surveillance conform to the inspection reference criteria.

Condition: Contrary to the above, Valve 10" ECB-GT-LX (410-042) on Isometric Dwg M-610 S#4 Rev 15/F2 was installed without activity 2.8 (Internals free of damage) of the valve Inspection record being verified by Q.C.

This valve (410-042) is noted on a D.R. #T/M 1811; this N.C.R. was requested by Field Engineering.

Valve is located on C/L 585'6", 4'3" S/D, 10'10" E/15.6 line 1FCB-42 Dwg 610 S#4 Rev 15/F2.

Q List 4-106

1 Hold Tag Applied

Discussed with Bud Thind

NONCONFORMANCE REPORT

S/u 2 BCA

1. PROJECT NAME: Midland	JOB NO.: 7220					19. NO. 3492	20. PAGE 1 OF 1
2. UNIT(S): 2	3. DRAWING/PART NO.: M-611 sh 4	REV: 3 / F3	4. ITEM DESCRIPTION: FW 5 C1			5. ITEM LOCATION: EL 585' 2' N of E aux. Bld. 18' W of 7.4	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA		9. SOURCE: Indeterminate	10. CONTRACTOR/SUPPLIER: NA		
11. INSPECTION CRITERIA ( ) DWG ⋈ SPEC ( ) OTHER	IR NO. 3412-611-N-2 NO 22224	12. ASME AUTHORIZED INSPECTION REQ'D ⋈ YES ( ) NO	13. SKETCH ATTACHED ( ) YES ⋈ NO	14. Discovered During ( )Rec'g ⋈Const ( )Test	15. Equip Furnished By ( )Client ⋈Eng ( )FLD		

16. NONCONFORMING CONDITION:

Requirement: M-204 Para. 6.4 States in Part, "Prior to installation all piping shall be visually inspected for cleanliness" Condition: Contrary to the above quality verbal has no documented cleanliness for FW 5 C1, ~~one~~ spool 2 EECB-34-611-4-4 SFW6 OD 6-5-81 prior to welding.

Q List Y, 11 Y

1 Weld Tag Applied.

17. REPORTED BY: Rex Runyon DATE: 6-4-81

18. VALIDATED BY: C. W. L. Smith DATE: 6-5-81

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Discussed with: Bud Thind

NONCONFORMANCE REPORT

S/U # 2RGA

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO. 3493	20. PAGE 1 OF 1
2. UNIT(S): Two	3. DRAWING/PART NO.: M-605 Sh. 2	REV: 6/11	4. ITEM DESCRIPTION: 2½"-HCC-6B(404-1-005) Valves: 2½"-2SV-0418(404-1-004)		5. ITEM LOCATION: Aux. Bldg.
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: QC	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO P-430-605-2-1 NO QCI, ACT. 2.8	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD	

16. NONCONFORMING CONDITION: Requirement: Quality Control Instruction, Act. 2.8 states, Inspect the valve or in-line component "internals" prior to the final installation closure to confirm it is free from damage. Contrary to the above: Valves, 2½"-HCC-6B(404-1-005) and 2½"-2SV-0418(404-1-004) are installed and did not have activity 2.8 signed by Quality Control prior to the final closure.

Q List No. is 4.047 2 Hold Tags Applied

17. REPORTED BY: Lou Glatz DATE: 6-5-81

18. VALIDATED BY: [signature] DATE: 6-5-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Discussed with R. Hendricks

5/4 152A

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO	19. NO. 3494	20. PAGE 1 OF 1
Midland	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
1	M-610 SH 4	15/12	Valve 410-103	Aux Bldg.

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	CONST.	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	PQCI-IR P13 NO 13 SP G 6.1	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION

Requirement: Act. 2-8 of the P-1-30 PQCI-IR states "Inspect the valve or in-line component "internals" prior to final closure." Condition: Contrary to the above, Valve 1MO-1024A (410-103) on Dwg M610-SH4 Rev 15/12 was installed in the system without a PQCI-IR being Issued. Valve is located @ 5'2", 4'2" S/E & 4'3" E/5.6 line 10" IFCB-19 - Quest 4-106

1 Hold tag Applied

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
[signature]	6/4/81	[signature] E. Garfield	6/8/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Discussed With
Bob Franklin

S/U 2BCA

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland	JOB NO.: 7220					19. NO. 3495	20. PAGE 1 OF 2
2. UNIT(S): 2	3. DRAWING/PART NO.: FSK-M-2FCR-41-1	REV: 3	4. ITEM DESCRIPTION: 3/4" Pipe between F.W. 23C1 and 1902			5. ITEM LOCATION: El. 573 aux. B.D. attached to Room # 28 of the 2BCA	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N: NA REV: NA SER NO.: NA		9. SOURCE: Constr.	10. CONTRACTOR/SUPPLIER: NA		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. 2110-FSK-M NO 2FCB-41-1-1	12. AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD		

16. NONCONFORMING CONDITION:

Requirement : Spec, M-204-41,1,3 States "Pipe shall be marked with a heat number or heat code and the identification will be recorded in the record isometric or other record Document. Material identification marking shall be transfered (before Cutting) to all pieces where a part is cut to make more than one component.

Cont. on page 2

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Rex Runyon	6-3-81	[illegible] E. Dirk	6-8-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
	•		

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 19NCR NO 3495

Block 16 Cont.

BQAM Section 5C50 Para. 6 States in part "Whenever material is divided, the applicable quality control instruction requires that a quality control engineer verify that the required identification marks are correctly transferred".
Condition: Contrary to the above, Q.C. does not have documentation that supports the validity of the vibro-etched heat number on this pipe. (approx. 2 feet in length).

Q List No 4,114

1 Hold Tag Applied

Rex Runyon QC 6-3-81

Engineer
Inspector, J. Smarrelly

NONCONFORMANCE REPORT

Sw side underreamed

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO. 3496	20. PAGE 1 OF 1
2. UNIT(S): Intake	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: Stainless Steel Johnson Joint Fittings	5. ITEM LOCATION: Elevation 1	
6. P.O. OR SPEC NO.: F5-39X2437	7. SERIAL NO.: 1 thru 4	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Supplier	10. CONTRACTOR/SUPPLIER: W E Lehmann	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER	IR NO(S): 8-100-1435B NCR NO(S): 2A 3903	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: ASME Code, Section III, NM-3300, and per NCR-3903.6, Paragraph 4.2 reference this Subject System Certificate number and expiration date. Contrary to this, the certificate of compliance accompanying the above mentioned fittings does not contain the information.

Weld not applied. Design undetermined. Wait for Engineering Disposition

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
W F Shrewsbury	6/5/81	R M L Smith	6-8-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Discussed w/W. Simpson

NONCONFORMANCE REPORT

S/U # 1B6C

1. PROJECT NAME: Midland	JOB NO.: 7220					19. NO. 3497	20. PAGE 1 OF 1
2. UNIT(S): ONE	3. DRAWING/PART NO.: 1-603-7-12	REV: 3	4. ITEM DESCRIPTION: Hange 1-603-7-12			5. ITEM LOCATION: Aux Bldg RM 212	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA		9. SOURCE: Const.	10. CONTRACTOR/SUPPLIER: NA		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER — IR NO. 2-603-7-13A, SPEC NO. M-326	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During * ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD			

16. NONCONFORMING CONDITION:

Specification 7220 M-326 Rev. 6, Section 5.1.1 states in part "... pipe supports shall be installed in strict compliance with the component pipe support design sketches/drawings."

Hanger Sketch 1-603-7-12 Rev 3 Sob 4 specifies the use of grouted anchors. Contrary to this actual installation consists of expansion anchors.

QA List # 4,035

1 Hold Tag Applied.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
K. Gustafson	6/5/81	W. E. Smith	6/8/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Contacted: Bud Thind NONCONFORMANCE REPO[illegible] S/4 # 28GA

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO. 3498	20. PAGE 1 OF 1
2. UNIT(S): Two	3. DRAWING/PART NO.: M-604 Sh. 16	REV. 8/81	4. ITEM DESCRIPTION: 2½" 2XV0421A Valve (404-1-81)		5. ITEM LOCATION: Aux. Bldg.
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Q.C. Constr.	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO P-430-604-k-1 NO. ASME Code Sect III Div 1		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD

16. NONCONFORMING CONDITION: ASME Boiler and Pressure Vessel Code, Section III, Artical NA-8311 States in part: "A seperate nameplate (shall) be attached to the Component (valve) by suitable means. The nameplate shall be attached by a means that will not affect the integrity of the Component." Contrary to this, Valve #404-1-81 was installed in the piping System without the nameplate with the Nuclear Code Symbol Stamp Q List No. is 4.04/0 One Hold Tag Applied

17. REPORTED BY: Louis F. Glatz DATE: 6-8-81

18. VALIDATED BY: QA/QC E. Amick DATE: 6-8-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Contact: Steve Payne

NONCONFORMANCE REPORT

Su Nonreportable

1. PROJECT NAME: Midland			JOB NO.: 7220					19. NO. 3499	20. PAGE 1 OF 2
2. UNIT(S): Common	3. DRAWING/PART NO.: N/A		REV: N/A	4. ITEM DESCRIPTION: Excessive Cut Rebar				5. ITEM LOCATION: Aux Bldg RM 419 EL 634'6"	
6. ~~P.O. OR~~ SPEC NO.: C 306	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N: N/A	REV: N/A	SER NO.: N/A	9. SOURCE: Construction	10. CONTRACTOR/SUPPLIER: N/A			
11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER	IR NO. C160-321 NO. C 306	12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO	13. SKETCH ATTACHED: (X) YES ( ) NO	14. Discovered During: ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By: ( ) Client ( ) Bechtel ( ) F.E.D				

16. NONCONFORMING CONDITION:

Spec. C-306 Appendix D Section 22 states in part "Two bars may be cut each way, each face, provided the minimum radial distance to the next cut bar on the same face, in the same direction, is at least 10 feet." Contrary to this, during a review of Aiken's Cut Rebar Asbuilt Drawings, 3 North-South bars located between 29 & 5'11" E/29, at Elines El. 634'6" were cut within ten feet (radial feet) Hold For Eng. Disposition, Q List # 1203 / Hold Tag Applied

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James C Seiler	6/4/81	R. Brooks	6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

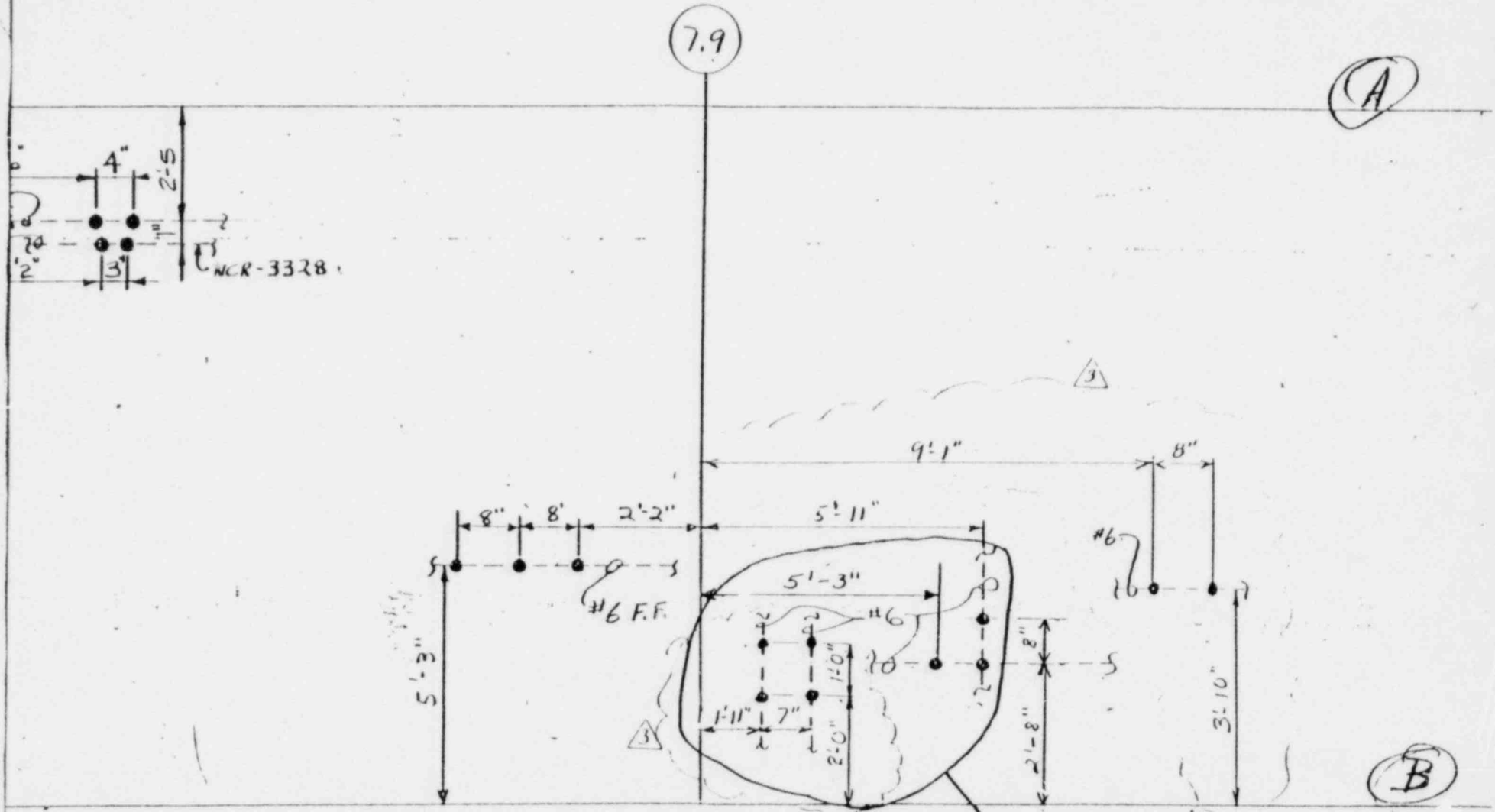
rework	reject	repair	use as is

PROJECT FIELD ENGINEER	DATE
PROJECT ENGINEER	DATE
PROJ CONSTR QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE



Room 419 SLAB @ EL. 634'-6" 3 NORTH/SOUTH CUT

CA-R1-5 Pt 55A

NONCONFORMANCE REPORT

5/4 2EGA

1. PROJECT NAME	JOB NO.	19. NO.	20. PAGE
Midland	07220	3500	1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2	M617SH6	10/12	EW43 LACKS Cleanliness Inspection	Aux Bldg East Wing Lo all, El 615

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	REV	SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	N/A	N/A	N/A	Construction	N/A

11. INSPECTION CRITERIA	IR NO	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	NO M204 rev 14	( ) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: Requirement: Spec. M204 rev 14, para. 6.4 states, "Prior to installation all piping shall be visually checked for cleanliness."

Also, PSPG6.1, rev 5 para. 3.3.3.a.6, "Inspect (I)... [is a] mandatory inspection point beyond which work shall not proceed past the point where the designated activity is no longer inspectable..."

(continued on page 2)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Raleigh Pinal	6/9/81	C. E. Norris	6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER	DATE
PROJECT ENGINEER	DATE
PROJ CONSTR QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE

Block #13

Condition: FW43 on M617S#6 was welded without Quality Control Documentation of cleanliness inspection. This is an inspect point on PQCI P1.00.

Qlist 4.174

One (1) Hold Tag.

DISCUSSED WITH L. HENDRICKS

A-Job

S/U IKAC

NONCONFORMANCE REPORT

1. PROJECT NAM: MIDLAND	JOB NO. 7220			19. NO. 3501	20. PAGE 1 OF 2
2. UNIT(S) 1	3. DRAWING/PART NO. F-X-MRC-1-1019	REV 1	4. ITEM DESCRIPTION ATTACHMENT WELDING TO ASME COMPONENTS	5. ITEM LOCATION R/B #1	
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE CONST.	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC (X) OTHER	IR NO. See Block 16 NO. See Block 16	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Tec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: REQUIREMENT: SEC M-204 REV 14 PARA 4.1 STATES IN PART, "MATERIALS ... SHALL MEET ALL REQUIREMENTS OF THE NUCLEAR POWER PLANT COMPONENTS CODE ..." ASME BOILER AND PRESSURE VESSEL CODE SEC III PARA NB-2400 REQUIRES MATERIAL WELDED TO ASME COMPONENTS TO COME FROM AN ASME APPROVED SUPPLIER. ALSO SEC M-204 PARA 4.1.2 REQUIRES MATERIAL WELDED TO ASME COMPONENTS TO HAVE CERTIFIED MATERIAL TEST REPORTS (Cont. on P. 2)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James A. Brownell	6-2-81	E Smith	6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BLOCK 16 CONTINUED:

CONDITION: THE LEAK CHASE MATERIAL WELDED TO THE FLUED HEAD AT PENETRATION 12-51 HAS NO MATERIAL IDENTIFICATION, THEREFORE IT IS NOT TRACEABLE TO A CERTIFIED MATERIAL TEST REPORT, AND BECAUSE THE QUALITY OF THE MATERIAL IS INDETERMINATE.

G-LIST 4.4.4

1 HOLD TAG APPLIED

DISCUSSED WITH R. HENDRICKS

NONCONFORMANCE REPORT

S/O 2KAC

1. PROJECT NAME: MIDLAND	JOB NO.: 7220				19. NO. 3502	20. PAGE 1 OF 2
2. UNIT(S): 2	3. DRAWING/PART NO.: FSK-MAP-2-2016	REV: 2	4. ITEM DESCRIPTION: ATTACHMENT WELDING TO ASME COMPONENTS		5. ITEM LOCATION: REACTOR BUILDING 2	
6. P.O. OR SPEC NO.: N/A	SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: CONSTR	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC (X) OTHER	IR NO. SEE BLOCK 16 NO. SEE BLOCK 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) F.E.D	

16. NONCONFORMING CONDITION:

REQUIREMENT: SPEC M-204 REV 14 PARA 4.1 STATES IN PART, "MATERIALS... SHALL MEET ALL REQUIREMENTS OF THE NUCLEAR POWER PLANT COMPONENTS CODE..." ASME BOILER AND PRESSURE VESSEL CODE SEC III PARA NB 2600 REQUIRES MATERIAL WELDED TO ASME COMPONENTS TO COME FROM AN ASME APPROVED SUPPLIER. ALSO SPEC M-204 PARA 4.1.2 REQUIRES MATERIAL WELDED TO ASME COMPONENTS TO HAVE CERTIFIED MATERIAL TEST REPORTS. (CONT. ON P. 2)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James A Brownell	6-1-81	E. Davies	6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BLOCK 16 CONTINUED

CONDITION: THE LEAK CHASE MATERIAL WELDED TO THE FLUED HEAD AT PENETRATION 2Z-51 HAS NO MATERIAL IDENTIFICATION; THEREFORE IT IS NOT TRACEABLE TO A CERTIFIED MATERIAL TEST REPORT, AND RENDERING THE QUALITY OF THE MATERIAL INDETERMINATE.

Q-LIST 4.484

1 HOLD TAG APPLIED

Discussed with Dobbie John

S/u # 1 BVA
2 BVA

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland	JOB NO: 7220			19. NO 3503	20. PAGE 1 OF 2
2. UNIT(S): 1 + 2	3. DRAWING/PART NO.: M 649 - 2	REV: Yes	4. ITEM DESCRIPTION: Lines 1 HCC-164 and 2 HCC-164	5. ITEM LOCATION: Utile Pipe Rack Bent 114 Water Tank Farm	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N: NA REV: NA SER NO: NA	9. SOURCE: Field Eng	10. CONTRACTOR/SUPPLIER: NA	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (4) OTHER	IR NO. T-100 Rev 0-3 NO. T-100 Rev 0-6 See Block 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (4) NO	13. SKETCH ATTACHED ( ) YES (4) NO	14. Discovered During ( )Rec'g ( )Const (4) Test	15. Equip Furnished By ( )Client ( )Eng ( )FLD

16. NONCONFORMING CONDITION:

REQUIREMENT: FPB-1.000, PARA 3.6 REQUIRES FIELD ENGINEERING TO HAVE THE QUANTITY AND QUALITY OF WATER AVAILABLE. FPB-6.000, PARA 3.8.5 REQUIRES CPCo. TO PROVIDE WATER CHEMISTRY ANALYSIS SUPPORT FOR ALL DEMIN. WATER USED IN THE TESTING AND CLEANING PROGRAM. PQCI-T-1.00, REV 5, ACTIVITY 1.3.C "D-LISTED # 4.492

2 Hold Tags applied

17. REPORTED BY: R Fugate — DATE: 6-10-81

18. VALIDATED BY: E. Smith — DATE: 6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Block 16 continued (REQUIREMENT): REQUIRES Q.C. TO REVIEW THE DOCUMENTATION TO VERIFY THAT THE TESTING MEDIUM IS OF THE TYPE AND QUALITY SPECIFIED FOR THE TEST.

CONDITION: CONTRARY TO THE ABOVE, HYDRO-TESTS BN-CT-2 AND BN-CT-6 WERE PERFORMED WITHOUT THE WATER CHEMISTRY ANALYSIS TO VERIFY GRADE II WATER AS THE TESTING MEDIUM SPECIFIED BY APPENDIX "D" OF THE TEST PACKAGES FOR BN-CT-2 AND BN-CT-6.

S K Faryate 6-10-81

DISCUSSED WITH: PE Earl Nielsen

NONCONFORMANCE REPORT

SAFCEGA

1. PROJECT NAME: MIDLAND			JOB NO.: 7220			19. NO. 3504	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: M-016-9	REV: 0/A	4. ITEM DESCRIPTION: HBC-131 FL 23			5. ITEM LOCATION: Aux Bldg 37'-6" Sh 12	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO. NO. PSP 6.1		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION:

Requirement: PSP Section 6.1 Para 5 Article 3.3.3.2.5 states: Inspect (I), Test (T), Witness (W), and Review (R) are Mandatory Inspection Points beyond which work shall not proceed past the point where the Designated Activity is no longer INSPECTABLE without the consent of the Responsible CQCE.

CONDITION: CONTRARY TO THE ABOVE, Activity 2.3, Fit up (cont.)

17. REPORTED BY: Robert J Caudell DATE: 6/5/81

18. VALIDATED BY: W. R. Smith DATE: 6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTN QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 (CONT)

ON QCIR PQCI-WS-581 PW 1.00 Rev 1 WAS By-PASSED DURING CONSTRUCTION. ACTIVITY 2.3 FIT UP IS AN INSPECTION ACTIVITY. NOTE: NO PW1.00 QCIR WAS ISSUED PRIOR TO THE WELDING OF FW 23 ON DWG A1616-9.

QC LIST 4.163

1 HOLD TAG APPLIED

CONTACTED: R. KOWALSKI (F.E.) A-fab

S/C: NON TESTABLE

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND	JOB NO. 7220					19 NO. 3505	20 PAGE 1 OF 2
2. UNIT(S): I & II	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: INITIAL CURE OF CONCRETE SPECIMENS			5. ITEM LOCATION: FIELD	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: FIELD ENGINEERING	10. CONTRACTOR/SUPPLIER: BECHTEL		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO. SC 105-238 NO. ASTM C31-69		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g ( )Const (X) Test	15. Equip Furnished By ( )Client ( )Eng (X) F.E.D		

16. NONCONFORMING CONDITION: ASTM C31-69 STATES IN PART THAT THE INITIAL CURE TEMPERATURE OF CONCRETE SPECIMENS SHALL BE MAINTAINED AT A TEMP. OF 60° TO 80°F DURING THE FIRST 24 HOURS AFTER MOLDING. CONTRARY TO THE ABOVE, SPECIMENS CAST ON 6-9-81 WERE MEASURED AT 82°F. TEST DATA IS ATTACHED "Q" LIST # 1.205. NO HOLD TAGS APPLIED.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
B. Dellmore	6-10-81	[signature]	6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BECHTEL POWER CORPORATION
MIDLAND NUCLEAR POWER PLANT JOB 7220

REPORT OF CONCRETE CYLINDERS

43 QC Acceptance	Date
Control No.	File No.

1. Placement Identification: A(621.75)C'
2. Date Placed: 6-9-81
3. Placement Location: AUX. BLDG. ELEV. 614

PLANT DATA — Source: ALLIED CONCRETE — Cement Brand & Type: AETNA - TYPE I.

4. Mix: D-1
5. Class: I
6. "Q" List: ☑ Yes ☐ No
7. Required Strength: 5,000 PSI At 90 Days
8. Test Data At: FIELD - E.O.L.
9. Unit Weight ASTM-C-138-74: 147.29 Lbs/Ft.³
10. Yield: 27.03
11. Moisture: Sand ASTM-C-566-67(72): 1.9 % — Stone 1: 0.0 % — Stone 2: N/A %
12. Water/Cement & Pozzolan Ratio: .43 Max .41 Act.
13. Ticket No.: 44366
14. Truck No.: 18
15. Time of Testing: 0942 Hrs at 9 Yards
16. Time of Molding: 0950 Hrs
17. Slump ASTM-C-143-74: 3½" Inches
18. Air Content ASTM-C-231-75: 4.3% %
19. Temp: Concrete: 75 °F
20. Temp: Air: 71 °F
21. Initials: SAT, JJ, TAB
22. Initial Curing ASTM-C-31-68: 72 °F To 82 °F
23. Stripped ASTM-C-31-68: 6-10-81 At 0728 Hrs
24. Initials: SAT

COMPRESSIVE STRENGTH DATA ASTM-C-39-71 620 10-24-81

25. Specimen Identification	26. Date Molded	27. Date Tested	28. Age	29. Total Load in Pounds	30. Actual Cyl Diam	31. Actual Cyl Area	32. Type of Break	33. Cure: Field	33. Cure: Lab	34. Strength PSI
4933F-1707	6-9-81	6-16-81	7							
1708	"	"	7							
1709	"	7-7-81	28							
1710	"	"	28							
1711	"	9-7-81	90							
4933F-1712	6-9-81	"	90							

35. Standard Cylinder: ☑ 6" x 12" ☐ Cube ☐ Core ☐ Other
40. Remarks

36. Age (Days)	37. Tested By	38. Checked By	39. Checked by QC Rec

41. Laboratory Supervisor Signature
42. Date

Type of Breaks: A = Cone, Mortar Failure B = Cone, Aggregate Failure C = Shear, Mortar Failure D = Shear, Aggregate Failure E = Other

7220-QCF-39 Rev. 3

Page 2 OF 2

Page 1 OF 2

NCR # 15 Page 2 of 2

G/M

A-Lab

CONTACT: RICK KOWALSKI

NONCONFORMANCE REPORT

5/11 NONTESTABLE

1. PROJECT NAME: MIDLAND	JOB NO. 7220				19. NO. 3506	20. PAGE 1 OF 2
2. UNIT(S): COMMON	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: COATING MATERIAL		5. ITEM LOCATION: PAINT STORAGE AREA	
6. P.O. OR SPEC NO.: A 41	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: SUPPLIER	10. ~~CONTRACTOR~~/SUPPLIER: CARBOLINE	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. NO. A41		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Established By ( )Client ( )Eng ( )FLD	

16. NONCONFORMING CONDITION:

SPEC. A41 REV 7 SECTION 8.1 STATES IN PART "THE COATING MATERIAL SHALL BE MIXED AND PREPARED FOR APPLICATION IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATION". E 2220-A41-S-1 CARBOLINE PRODUCT DATA SHEETS FOR PHENOLINE 305 HAS NO RECOMMENDATIONS AS TO THE SPECIFIC PROCESS OF MIXING OTHER THAN THE MIXING RATIO. TWO BATCHES OF PHENOLINE 305 GRAY (BATCH NUMBERS 160392M & 160393M) WHEN MIXED, (CONTINUED)

17. REPORTED BY: James C Reich DATE: 6/10/81

18. VALIDATED BY: R. Smith DATE: 6/11/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 19NCR NO 3506

BLOCK #16 CONT.

ACCORDING TO RECOMMENDED RATIOS, EXHIBITED A SEPERATION OF RESIN & PIGMENT RENDERING CONDITION OF PAINT INDETERMINATE.

HOLD FOR ENGINEERING DISPOSITION, Q LIST #2.20 2 HOLD TAGS APPLIED

Gene Quayle Notified

NONCONFORMANCE REPORT

SW Codes 1PEA & 1JEA

1. PROJECT NAME: Midland	JOB NO.: 7220				19. NO. 3507	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: NA	REV: NA	4. ITEM DESCRIPTION: Class 1E Electrical Cables		5. ITEM LOCATION: Diesel Bldg. Bay 2 Elev. 634'6"	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA	9. SOURCE: Construction	10. CONTRACTOR/SUPPLIER: NA		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO. See Block 16 NO.	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD		

16. NONCONFORMING CONDITION:

There is no evidence of QC. Verification for Cables listed on page #2 passing thru Vias listed rendering the Quality of the cables indeterminate.

Q No. 3,007

10 Hold Tags Applied

Hold for Engineering disposition (Continued on Page 2)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
L.E. Lemons	6/11/81	R.K. Siple	6/11/81

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Block 16 Continued

Cable Scheme Nos.	Vias Not Verified	Ref. Criteria
1AB5306B	1ADA005 1ASL151	FCN 3813
1AG1101B		
1AG1107C		
1AG1107D		
1AG1108E		
1AG1113C		
1AB5304E		
1AA0502G	All Vias	E-37
1AD1115A		
1AD1116A		

Block 11 Continued

I.R. Numbers same as Cable Scheme Nos. listed above.

C.E. Lemons 6/11/81

FE: STEVE PAYNE

NONCONFORMANCE REPORT

S/U NO. - NONTESTABLE

1. PROJECT NAME: MIDLAND — JOB NO.: 7220 — 19. NO. ~~3408~~ 3508 — 20. PAGE 1 OF 1

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
Common	N/A	N/A	CUT REBAR	Aux. Bldg EL. 599'-0 Rm. 213 NORTH WALL

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
C-306.(Q) REV. 7	N/A	P/N N/A REV N/A SER NO. N/A	CONSTRUCTION PIPE FITTERS	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	NO. C-306 & REV. 7	( ) YES (X) NO	( ) YES ( ) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: APPENDIX D, SECT. 1.2, STATES IN PART: "REINFORCING BARS SHALL NOT BE CUT IN THE FOLLOWING STRUCTURAL ELEMENTS WITHOUT PROJECT ENGINEERING OR RESIDENT ENGINEERING APPROVAL." SECT. 1.2.3, "COLUMNS, BEAMS, PILASTERS, OR AREAS OF CONGESTED REINFORCING." CONTRARY TO THIS, ONE STIRRUP BAR WAS CUT IN A BEAM IN A SOUTH FACE WALL 3'-9 NORTH OF LINE FK AND 7'-1½ W/I.4 AT EL. 609'-5. Q-LIST # 1.203, 1 HOLD TAG APPLIED.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Ronald S. Foot	6-9-81	W. McCaul	6/12/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

ENG. CONTACTED: S. HARVEY

NONCONFORMANCE REPORT

S/U CODE: INDETERMINATE

1. PROJECT NAME	JOB NO.	19. NO. 3509	20. PAGE 1 OF 1
MIDLAND	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
INDETR.	N/A	N/A	1 PC) W8×31-20-0, ASTM: A-36, HT-# 65780	FOSEYVILLE LAYDOWN AREA

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
F-50286	N/A	P/N N/A REV N/A SER NO. N/A	SUPPLIER	FEDERAL PIPE AND STEEL

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO R-1-00-15004 NO G-33 REV-13	( ) YES (X) NO	( ) YES (X) NO	(X) Rec'g ( ) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION:

SPECIFICATION 7220-G-33(Q) REV. 13 PARAGRAPH 4.0 REQUIRES, IN PART, THE ABOVE MATERIAL TO HAVE A C.M.T.R. AND TRACEABILITY, CONTRARY TO THIS A C.M.T.R. CAN NOT BE SUPPLIED BY THE VENDOR LEAVING THE QUALITY OF THE MATERIAL INDETERMINATE.

HOLD FOR ENGINEERING DISPOSITION

Q LIST - # INDETERMINATE

ONE (1) HOLD TAG APPLIED

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
J B Mattioli	6-12-81	[signature]	6/12/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	‡ air	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

ENGR. CONTACTED: C. LOUTZENHEISER

NONCONFORMANCE REPORT

S/U CODE: INDETERMINATE

1. PROJECT NAME: MIDLAND			JOB NO.: 7220			19. NO. 3510	20. PAGE 1 OF 2
2. UNIT(S): INDETER.	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CABLE TRAY FITTINGS			5. ITEM LOCATION: POSEYVILLE	
6. P.O. OR SPEC NO.: F-50420	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: SUPPLIER	10. CONTRACTOR/SUPPLIER: BURNDY HUSKY		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. P100-15243 NO. E-55, Rev 4		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO		13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION: SPECIFICATION 7220-E-55 REV 4, PARAGRAPH 8.12 STATES IN PART, "IF . . . EVIDENCE OF INFERIOR MATERIAL OR POOR DESIGN OR WORKMANSHIP EXISTS, IT WILL BE CAUSE TO RETURN ALL MATERIAL . . . SUCH EVIDENCE INCLUDES . . ." AS STATED IN 8.12.2, "CRACKED STEEL OR MISFORMED TRAY, FITTINGS OR ACCESSORIES." ACCORDINGLY, THE TRAY FITTINGS LISTED ON PAGE 2 OF 2 ARE RIPPLED ALONG THE LOWER EDGE OF THE CURVATURE OF THE SIDERAILS, LEAVING THEIR QUALITY INDETERMINATE. (CONTINUED ON PAGE 2 OF 2)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
W. F. Sherwood	6/16/81	[illegible]	6/16/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

NONCONFORMANCE REPORT (CONT'D) PAGE 2 OF 2 NCR NO 3510

ITEM #	QTY. RECEIVED	ID #		HOLD
5	10	SLNI-24V090-24	74577095	3
11	10	SLNI-24VI90-12	74576093	10
12	10	SLNI-24VI45-12	74576053	10
14	10	SLNI-24V090-12	74577095	10
15	10	SLNI-24V045-12	74577053	9
16	6	SLNI-24V030-12	74577033	4
26	6	SLNI-18VI60-12	74566075	6
27	6	SLNI-18V090-12	74567095	6
28	6	SLNI-18V060-12	74567073	6
29	10	SLNI-18V045-12	74567053	6
30	10	SLNI-18V030-12	74567033	7
31	10	SLNI-18VI30-12	74566033	2
37	6	SLNI-12VI60-12	74556075	6
38	10	SLNI-12VI30-12	74556033	4
39	10	SLNI-12V090-12	74557093	10
40	6	SLNI-12V060-12	74557073	6

Q LIST # 3.005
HOLD FOR ENGINEERING DISPOSITION
4 HOLD TAGS APPLIED

Discussed With:
Bill Swenson

NONCONFORMANCE REPORT

S/U# 1JEA

1. PROJECT NAME: Midland			JOB NO.: 7220		19. NO. 3511	20. PAGE 1 OF 2
2. UNIT(S): ONE	3. DRAWING/PART NO.: FSK-M-1HBC-498-6	REV: 2	4. ITEM DESCRIPTION: FW# 26 C1 (See Block 16)		5. ITEM LOCATION: Diesel Gen. Supply Line	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: QC	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER — IR NO/NO: P-1.10-FSK-M-1HBC-498-6-1		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD	

16. NONCONFORMING CONDITION:

Requirement: M-204 states in part, "Prior to installation all piping shall be ~~required~~ visually checked for cleanliness. Heat numbers shall be marked on all fittings and pipe and shall retain this identification until it is installed in the piping system and identification has been recorded in the record isometric or other record document". Condition: FW#26C1 was installed without cleanliness verification and documentation by QC. The following

17. REPORTED BY: Louis L. Glotz — DATE: 6-13-81

18. VALIDATED BY: [signature] — DATE: 6-15-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

16 Cont. material was installed without QC verification or documentation of heat No.'s. ON Dwg FSt m 1HBC-498-6.

Between F.W. No.'s	Description
32 & 47	Pup
48 & 11	Pup
16 & 19	Pup
19 & 20	Coupling
20 & 21	Pup
25 & 26	90° Elbow

Q List No. is 4.525

NO Hold Tags Applied

Discussed with Bill Swensen

A-Lab

5/U # 13 EA

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO.: 3512	20. PAGE 1 OF 2
2. UNIT(S): One	3. DRAWING/PART NO.: FSK-M-1HBC-498-3 (2) FSK-M-1HBC-498-2 (1)	REV	4. ITEM DESCRIPTION: See Block 16	5. ITEM LOCATION: Dsl. Gen. Engine Lines	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: QC	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER — IR NO./ NO.: 1HBC-498-3-1A		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD

16. NONCONFORMING CONDITION:

Requirement: M-204 States in part, "Pipe numbers shall be marked on all fittings and pipe and shall retain this identification until it is installed in the piping system and identification has been recorded in the record isometric or other record document. Condition: Pipe between F.W. #10 (dwg. FSK-M-1HBC-498-2) and F.W. #11 (dwg. FSK-M-1HBC-498-3), Coupling between F.W. #11 and F.W. #12 (dwg. FSK-M-1HBC-498-3) were installed without QC.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Dave F. Hunt	6-15-81	W. E. Smith	6-15-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 19NCR NO 3512

Block 16 Cont. Verification or documentation of heat numbers.

Q List No. is 4.525 No Hold Tags Applied

PERSON CONTACTED - B HULSEY

NONCONFORMANCE REPORT

5/11 2 PYED

1. PROJECT NAME: MIDLAND			JOB NO.: 7220			19. NO. 3513	20. PAGE 1 OF 1
2. UNIT(S): 2	3. DRAWING/PART NO.: CABLE CODE B25	REV: 46	4. ITEM DESCRIPTION: CABLE 2AMUD03A			5. ITEM LOCATION: EL. 620 CONT BLDG, ELEV 11	
6. P.O. OR SPEC NO.: E-26	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. 2AMUC03A NO.		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD		

16. NONCONFORMING CONDITION: CONTRARY TO F.P.E 4.000 PARAGRAPH 6.5 AND 6.7 THE MINIMUM BEND RADIUS OF CABLE 2AMUD03A WAS EXCEEDED BY 1.5 INCHES MAKING THE QUALITY OF THE CABLE INDETERMINATE. THE VIOLATION WAS FOUND IN THE COILED SECTION OF CABLE LOCATED IN TRAY 2AUB01

Q-LIST # 3.001 2 HOLD TAGS APPLIED HOLD FOR ENG DISP.

17. REPORTED BY: Robert J. Arnold DATE: 6/9/81

18. VALIDATED BY: [illegible] DATE: 6/15/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Discussed With B. Swenson

NONCONFORMANCE REPORT

SIU #1 JEA

1. PROJECT NAME: Midland		JOB NO.: 7220		19. NO. 3514	20. PAGE 1 OF 2
2. UNIT(S): 1&2	3. DRAWING/PART NO.: See Block 16	REV: —	4. ITEM DESCRIPTION: Internal Cleanliness (See Block 16)		5. ITEM LOCATION: Yard
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: G.C.	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO. NO. M-204 Rev 14		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) F.L.D

16. NONCONFORMING CONDITION: Requirement: M-204 Rev 14 Para 6.4 states in part "Prior to installation all piping shall be visually checked for cleanliness." PSPG6.1 Para 3.3.3.4.6 states in part "Inspect... are mandatory inspection points beyond which work shall not proceed past the where the designated activity is no longer inspectable without the consent of the Responsible QCE.

Condition: See Continued Block 16

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James A Brownell	6-15-81	[signature]	6-16-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

BLOCK 16 CONTINUED:

FSK-M-1HBC-497-2 REV 1 WELD #7 NO DOCUMENTATION OF CLEANLINESS WAS NOTED BY G.C.

FSK-M-1HBC-3-1 REV 2 FIELD WELD'S 243 HAVE NO DOCUMENTATION OF G.C. VERIFIED CLEANLINESS

INTERNAL CLEANLINESS IS A REQUIRED INSPECTION ON THE P.I.C & P.W.I.C PER G. LIST # 4.5.25 AS NO TAGS WERE FOUND

Discussed with John Franklin

NONCONFORMANCE REPORT

S/O 2166

1. PROJECT NAME: Midland			JOB NO. 7220			19. NO. 3515	20. PAGE 1 OF 2
2. UNIT(S): 2	3. DRAWING/PART NO.: FSK-24BC-128-1	REV: 2	4. ITEM DESCRIPTION: Inconsistent identification of FW43, FW50, FW38 from Dwg FSK-24BC-128-1			5. ITEM LOCATION: EL 565' RM 29	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: Const	10. CONTRACTOR/SUPPLIER: Bechtel		
11. INSPECTION CRITERIA (X) DWG ( ) SPEC (X) OTHER	IR NO./NO. FW100-43,50,38 PSP G-3.2 Rev 6	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD		

16. NONCONFORMING CONDITION:

Requirement: PSP G-3.2 Rev 6 states, "Nonconformances A deficiency in characteristic, documentation or procedure which renders the quality of an item unacceptable or indeterminate."

Condition: 1.) There are descrepancies between Dwg FSK-24BC-128-1 and the installed pipe as follows:

17. REPORTED BY: C. Paul Kane DATE: 6/15/81

18. VALIDATED BY: [signature] DATE: 6-16-81

( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Field Welds

Per Dwg	As scribed
50	38c1
43	50
38	50c1

These descrepancies render the Quality Control documentation for Field Welds 50c1, 43, 38c1 Indeterminate

Condition: 2.) The HT code on the 2"x1" reducing insert at FW50 (per Dwg) no longer exists, now the material Traceability is indeterminate per condition #1 above

Q-list # 4.103 4 Hold TAG's Applied

CONTROLLED BY
FIELD ENGINEERING
RECEIVED
AUG 82 1981
CIVIL ENGINEERING
BECHTEL, INC. 77220
TO E.
Rd.
Pipeline
Pipeline
Pipeline

Engineer/Contractor: W Dudley

NONCONFORMANCE REPORT

S/I # Indeterminate

1. PROJECT NAME: Midland			JOB NO.: 1233			19. NO. 3516	20. PAGE 1 OF 1
2. UNIT(S): Indeter	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: #6 Valve, Heat #s M02845, M02866			5. ITEM LOCATION: Perryville	
6. P.O. OR SPEC NO.: F 56691	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: Supplier	10. CONTRACTOR/SUPPLIER: Penn Drain		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO 1244A/1244A/1244A/1244A NO G-33, Rev 13	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION:

Purchase order 2233-F-56691, Reference Specification 2323A-33, Rev 13, the characteristics of which require a CMTR. Upon TWX 81026694427, the mechanical test results indicate the #6 valves did not meet the minimum tensile and yield strength requirements, leaving the quality of the material indeterminate.

S/I Test # indeterminate

IR Held Tag applied Held for Engineering Disposition

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
W.F. Sherwood	6/16/81	W.E. Dennis	6-16-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Discussed With:
Bill Swenson

NONCONFORMANCE REPORT S/U # 2JEA

1. Project Name: Midland	Job No.: 7220			19. No. 3517	20. Page 1 of 2
2. Unit(s): Two	3. Drawing/Part No.: FSK-MPY-80 Sh. 2	Rev: 4	4. Item Description: F.W. #1 (4"-2HBC-17)	5. Item Location: 2T78A Diesel Oil Storage Tank	
6. P.O. Or Spec No.: N/A	7. Serial No.: N/A	8. Replacement Part P/N: N/A REV: N/A SER NO.: N/A	9. Source: QC	10. Contractor/Supplier: N/A	

11. Inspection Criteria: [ ] DWG [ ] SPEC [X] OTHER NO. PSP-G-6.1 Rev.5 IR NO. 6-1
12. [X] ASME AUTHORIZED INSPECTION REQ'D [X] YES [ ] NO
13. SKETCH ATTACHED [ ] YES [X] NO
14. Discovered During: [ ] REC'G [X] CONST [ ] TEST
15. Equip Furnished By: [ ] CLIENT [X] ENG. [ ] FLD

16. Nonconforming Condition: Requirement: AAPD PSP G-6.1 Rev. 5 para. 3.3 states "Project Quality Control inspection activities describe the minimum inspection activities and tasks that must be performed by Construction Quality Control to verify that work performed... conforms to the inspection reference criteria" Condition: F.W. #1 (4"-2HBC-17) Dwg. FSK-MPY-80 Sh. 2 was welded out without a Welding Inspection Record or documentation

17. Reported By: Don Gleaf Date: 6-16-81
18. Validated By: W/ R. Jones Date: 6/17/81

21. Routing: [X] TO FIELD ENGINEERING [ ] TO OTHERS (SPECIFY)

22. [ ] Field Engineering Disposition [ ] FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

23. Project Engineering Disposition

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJECT CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. Disposition Results

26. QC Acceptance

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Cont: therefor leaving this weld indeterminate

G List No. 4.526 N D Hold Tag Applied

Discussed With:
Bill Svenson

NONCONFORMANCE REPORT S/U #1EA

1. Project Name	Job No.			19. No. 3518	20. Page 1 of 2
Midland	7220				
2. Unit(s)	3. Drawing/Part No.	Rev	4. Item Description	5. Item Location	
One	FSK-M-1HBC-3-3	1	FW's #3, #7, #11, and #19 (1HBC-3-3)	Yard Piping - Diesel Gen. Supply Line	
6. P.O. Or Spec No.	7. Serial No.	8. Replacement Part	9. Source	10. Contractor/Supplier	
N/A	N/A	P/N N/A REV N/A SER NO N/A	QC	N/A	

11. Inspection Criteria	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
☐ DWG ☐ SPEC ☒ OTHER NO PSP-G-3 & Rev. 5	☒ YES ☐ NO	☐ YES ☒ NO	☐ REC'G ☒ CONST ☐ TEST	☐ CLIENT ☒ ENG ☐ FLD

16. Nonconforming Condition

Requirement: AAPD PSP G-6.1 Rev. 5 Para. 3.3 States, "Project Quality Control inspection activities describe the minimum inspection activities and tasks that must be performed by Quality Control to verify that work performed ... Conforms to the inspection reference criteria". Condition: F.W. #3, F.W. #7, F.W. #11 and F.W. #19, on Dwg FSK-M-1HBC-3-3 Rev. 1 Were welded ~~out~~ USI A-46 without

17. Reported By: Paul Blatz Date: 6-6-81

18. Validated By: W. G. Smith Date: 6-15-81

21. Routing: ☒ TO FIELD ENGINEERING ☐ TO OTHERS (SPECIFY)

22. ☐ Field Engineering Disposition ☐ FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

23. Project Engineering Disposition

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJECT CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. Disposition Results

26. QC Acceptance

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Cont. a Welding Inspection Record or documentation Therefore leaving these welds indeterminate.

QC List No. 4.525 No Hold Tags Applied

Discussed With:
Bill Swenson

NONCONFORMANCE REPORT

S/U #1 JEA

1. Project Name: Midland	Job No.: 7220			19. No.: 3519	20. Page: 1 of 2
2. Unit(s): One	3. Drawing/Part No.: FSK-M-1HBC-4-2 (4), FSK-M-1HBC-498-1 (1)	Rev: —	4. Item Description: FW's #3R1 & #4R1 (1HBC-4) FW. #8R1 (1HBC-4)	5. Item Location: Yard Piping Diesel Gen Supply Lines	
6. P.O. Or Spec No.: N/A	7. Serial No.: N/A	8. Replacement Part: P/N N/A REV N/A SER NO. N/A	9. Source: QC	10. Contractor/Supplier: N/A	
11. Inspection Criteria: ☐DWG ☐SPEC ☒OTHER TR NO N/A NO PSP G-6.1 Rev 5	12. ASME AUTHORIZED INSPECTION REQ'D: ☒YES ☐NO	13. SKETCH ATTACHED: ☐YES ☒NO	14. Discovered During: ☐REC'G ☒CONST ☐TEST	15. Equip Furnished By: ☐CLIENT ☒ENG ☐FLD	

16. Nonconforming Condition:

Requirement: AAPD PSP G-6.1 Rev. 5, Par 3.3.3 states, "Project Quality Control inspection activities describe the minimum inspection activities and tasks that must be performed by Construction Quality Control to verify that work performed ... Conforms to the inspection reference criteria." Condition: FW #3R1 & FW #4R1 Dwg FSK-M-1HBC-4-2 Rev 4 and FW #8R1 Dwg FSK-M-1HBC-498-1 Rev. 1 were welded out

17. Reported By: [signature] Date: 6-16-81

18. Validated By: [signature] Date: 6-16-81

21. Routing: ☒TO FIELD ENGINEERING ☐TO OTHERS (SPECIFY)

22. ☐Field Engineering Disposition ☐FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

23. Project Engineering Disposition

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJECT CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. Disposition Results

26. QC Acceptance

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Cont. without a Welding Inspection Record or documentation Therefore leaving these welds indeterminate

G List No. 4.526 No Hold Tags Applied

MECH. R HENDRICKS.

A-fab

0

NONCONFORMANCE REPORT

S/O CODE: 2 BHA.

1. PROJECT NAME	JOB NO.			19. NO. 3520	20. PAGE 1 OF 1
MIDCBHD	7220				
2. UNIT(S) 2	3. DRAWING/PART NO. MR-78-159X	REV -	4. ITEM DESCRIPTION 18" S30 WLD SMLS TP304 Pipe Spool # 2 ECB-2-S-611-1-2	5. ITEM LOCATION W.H SE #1	
6. P.O. OR SPEC NO. M-102 REV 11	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N ____ REV ____ SER NO. N/A	9. SOURCE SUPPLIER	10. CONTRACTOR/SUPPLIER ITT GRINNELL	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. C-00-15265 NO. M-201 REV 8	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD	

16. NONCONFORMING CONDITION:

Specification 7220-M-201 Rev. 8 Para 6.3.7.C states in part: All bends shall be smooth, free from cracks and surface defects, without buckles and truly circular. Contrary to the above the subject pipe spool has buckles approximately 1 ft from the end of the pipe continuing for about 3 ft up the bend of the pipe, leaving the status of the pipe spool indeterminate. QC number is N/A. Hold Engineering disposition. / Hold tag applied to the nonconforming item.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
[signature]	6/17/81	[signature]	6/18/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

NONCONFORMANCE REPORT

S/U - NON TESTABLE

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3521	20. PAGE 1 OF 2
2. UNIT(S): COMMON	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CUT REBAR	5. ITEM LOCATION: AUX BLDG 674'-6" N/3 & S/5	
6. ~~P.O.~~ OR SPEC NO.: C-231 Rev 19	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE CONSTRUCTION ELECT	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER — IR NO. N/A NO C-231 (Q) P. 19	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION:

APPENDIX E, SECT 2.2, STATES IN PART, "... TWO BARS MAY BE CUT EACH WAY, EACH FACE, PROVIDED THE MINIMUM RADIAL DISTANCE TO THE NEXT CUT BAR ON THE SAME FACE, IN THE SAME DIRECTION, IS AT LEAST TEN FEET." CONTRARY TO THIS, A THREE NORTH/SOUTH BAR WERE CUT IN VIOLATION OF THE SPEC. ON THE SLAB @ 674'-6". I HOLD TAG APPLIED. Q. LIST 1, 20.3

17. REPORTED BY: William C Karle — DATE: 6-16-81

18. VALIDATED BY: R. E. Smith — DATE: 6-18-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

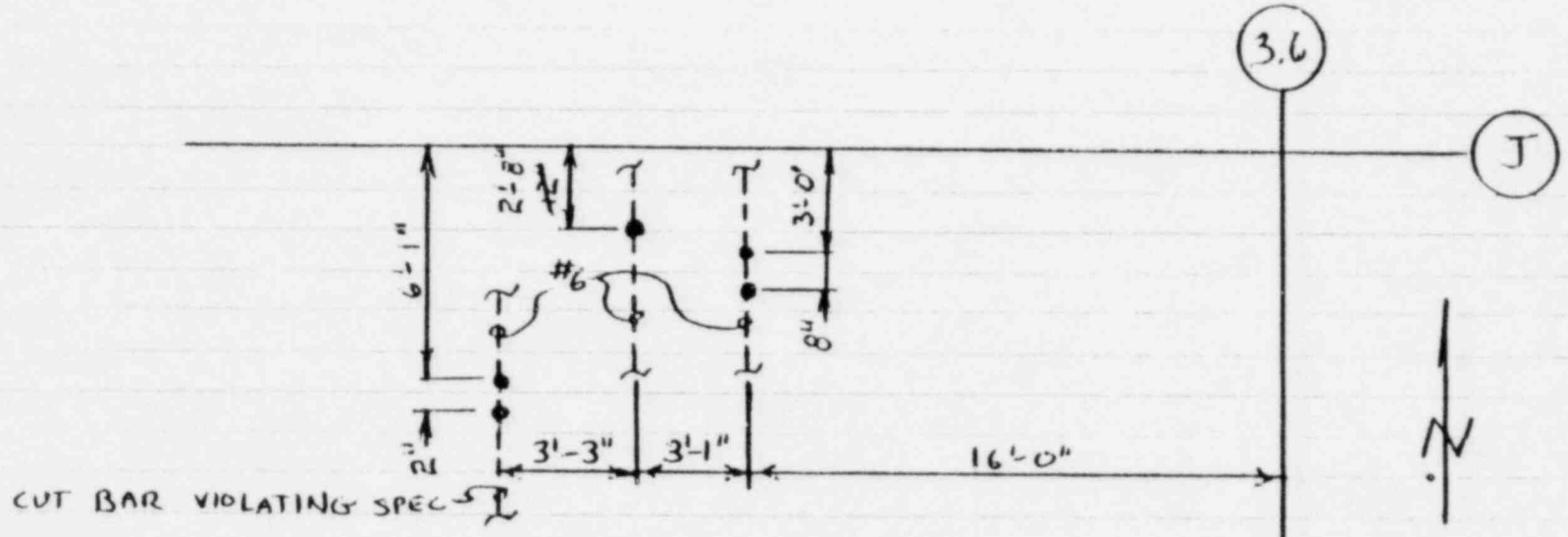
AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE



SLAB PLAN @ 674'-6"

AUX BLDG - RM 700

NOT TO SCALE

S-●-S - DENOTES CUT REBAR

REF. - CA-124 sh. 31A REV 2

White Copy - Originator
Canary Copy - Field Engineer
Pink Copy - PQAE
Goldenrod Copy - QC

DISCUSSED WITH BILL SWENSON

NONCONFORMANCE REPORT

S/C # 1.EA

1. PROJECT NAME: MIDLAND	JOB NO.: 722C					19. NO. 3522	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: FSK-M-1HBC-4-E	REV: 2	4. ITEM DESCRIPTION: MATERIAL TRACEABILITY			5. ITEM LOCATION: YARD	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: G.C.	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER — IR NO. SEE BLOCK 16 NO. M-324 REV 14		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD		

16. NONCONFORMING CONDITION: REQUIREMENT: M-324 REV 14 PAR 4.1.3 STATES IN PART "PIPE, FITTINGS AND VALVES SHALL BE MARKED WITH A HEAT NUMBER OR HEAT CODE AND SHALL RETAIN THIS IDENTIFICATION UNTIL IT IS INSPECTED AND SUBASSEMBLIES OR INSTALLED IN THE PIPING SYSTEM AND THE IDENTIFICATION HAS BEEN RECORDED IN THE RECORD TRACEABILITY OR OTHER RECORD DEVICE."

CONTINUED ON PAGE 2

17. REPORTED BY: James McBrearty — DATE: 6 17 81

18. VALIDATED BY: M. E. Brite — DATE: 6-18-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

ITEM 16 CONTINUED:

CONDITION: (1) ON FSK-M-1HBC-4-8 REV 2 THERE ARE RECORDED HEAT NUMBERS OR HEAT CODES ON GEIR PLIC-FSK-M-1HBC-4-8-1 FOR THE FOLLOWING PIPE (NCR 3526-17-81) FITTINGS AND PIPE:

BETWEEN:	FW1 + FW2	1½" 90° ELBOW
	FW 19 + FW 17	1½" PIPE
	FW 24 + FW 25	1½" PIPE
	FW 34 + FW 36	1½" COUPLING
	FW 36 + FW 37	1½" PIPE
	FW 37 + FW 38	1½" COUPLING
	FW 38 + FW 39	1½" PIPE

(2) ON FSK-M-1HBC-4-8-REV 2 THE RECORDED HEAT NUMBERS AND HEAT CODES ON GEIR PLIC-FSK-M-1HBC-4-8-1 SHOW THE ~~FWC~~ (NCR 3526-17-81) FOLLOWING CONFLICTS

BETWEEN	SHOWN ON DRAWING AS	RECORDED AS - HT #
FW2 + FW3	1½" PIPE	1½" 90° ELBOW - RH2°X
FW3 + FW4	1½" COUPLING	1½" PIPE - M6-5511
FW4 + FW5	1½" PIPE	1½" COUPLING - SACE
FW5 + FW6	1½" COUPLING	1½" PIPE - M6-5511
FW6 + FW7	1½" PIPE	1½" COUPLING - SF2FE
FW7 + FW8	1½" COUPLING	1½" PIPE - M6-5511
FW8 + FW9	1½" PIPE	1½" COUPLING - SF2FG
FW9 + FW10	1½" COUPLING	1½" PIPE - D41C96
FW10 + FW11	1½" PIPE	1½" COUPLING - SACE
FW11 + FW12	1½" COUPLING	1½" PIPE - M6-5511
FW12 + FW13	1½" PIPE	1½" COUPLING - SF2E
FW13 + FW14	1½" COUPLING	1½" PIPE - D41C96

THE ABOVE DISCREPANCIES BETWEEN THE QUALITY OF THE WELD IRMS INDETERMINATE

Q-List 4.4.4.5.25 (NCR 3526-17-81) NO HOLD TAGS APPLIED

DISCUSSED BY PHONE BEC SUPERVISOR

NONCONFORMANCE REPORT

NCR # 1 REV

1. PROJECT NAME	JOB NO.	19. NO. 3523	20. PAGE 1 OF 2
MIDLAND	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
1	FSK-M-1116X-1-3	2	INTERNAL CLEARANCES ON FW #14	YARD

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	REV	SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	N/A	N/A	N/A	G.C.	N/A

11. INSPECTION CRITERIA ( ) DWG (X) SPEC (X) OTHER	IR NO. SEE BLOCK 16 NCAI 2.4 Rev VIII	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD

16. NONCONFORMING CONDITION:

REQUIREMENT: M-204 Rev 14 Para 6.4 states in part "Prior to installation all piping shall be visually checked for cleanliness." PSP G-6.1 Para 3.3.3.a.6 states in part "Inspection are mandatory inspection points beyond which work shall not proceed past where the designated activity is no longer inspectable without the removal of the restrictive cover."

Continued on Page 2

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
James McDonnell	6-17-81	W. E. Smith	6-19-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 19NCR NO 3523

BLOCK 16. CONTINUED

CONDITION: ITEM 14 OF FSK-M-1HHBC-4-E REV 2 HAS BEEN DOCUMENTED CLEANLINESS VERIFICATION BY Q.C. INTERNAL CLEANLINESS IS A REQUIRED INSPECTION POINT ON THE FUEL AND FUEL PROGRAMS (REF FUEC-FSK-M-1HHBC-4-S-1)

QLIST 4.5.25

NO HOLD TAGS APPLIED

NONCONFORMANCE REPORT

S/U - NON TESTABLE

Afjb

1. PROJECT NAME: MIDLAND	JOB NO.: 7220				19. NO. 3524	20. PAGE 1 OF 1
2. UNIT(S): 2	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CUT REBAR		5. ITEM LOCATION: AUX. BLDG. EL. 577'0 RM. 217 EAST WALL	
6. ~~P.O. OR~~ SPEC NO.: C-306(Q) REV. 7	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N: N/A REV: N/A SER NO.: N/A		9. SOURCE: CONST.	10. CONTRACTOR/SUPPLIER	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. N/A NO. C-306 (Q) REV. 7		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FELD	

16. NONCONFORMING CONDITION: APPENDIX D, SECT. 1.2, STATES IN PART: "REINFORCING BARS SHALL NOT BE CUT IN THE FOLLOWING STRUCTURAL ELEMENTS WITHOUT PROJECT ENGINEERING OR RESIDENT ENGINEERING APPROVAL". SECT. 1.2.3, "COLUMNS, BEAMS, PILASTERS OR AREAS OF CONGESTED REINFORCING." CONTRARY TO THIS ONE #11 VERT. BAR 6'2" W/7.2 WAS CUT IN NORTH FACE OF A PILASTER AT COL. LINE D AND 7.4 AT EL. 606'9. Q-LIST # 1.2.03 11 HOLD TAG APPLIED

17. REPORTED BY: Bernard S. Holt DATE: June 17, 81

18. VALIDATED BY: R. E. Smith DATE: 6/18/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

A-Jobb

S/U - NON TESTABLE

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND	JOB NO. 7220			19. NO. 3525	20. PAGE 1 OF 2
2. UNIT(S): COMMON	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CUT REBAR	5. ITEM LOCATION: 674'-0" H LINE BETWEEN 7.2 & 7.8	
6. P.O. OR SPEC NO.: C-306(Q) R.7	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: CONST.	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. N/A NO. C-306(Q) R.7	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED (X) YES ( ) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION: APPENDIX D, SECTION 2.2 STATES IN PART, "TWO BARS MAY BE CUT EACH WAY, EACH FACE, PROVIDED THE MINIMUM RADIAL DISTANCE TO THE NEXT CUT BAR ON THE SAME FACE, IN THE SAME DIRECTION, IS AT LEAST TEN FEET." CONTRARY TO THIS, THREE VERTICAL BARS WERE CUT WITHIN A TEN FOOT RADIAL DISTANCE. "Q" LISTED 1.203, I HOLD TAG APPLIED

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Jim Cook	6-17-81	B. E. Smith	6-18-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

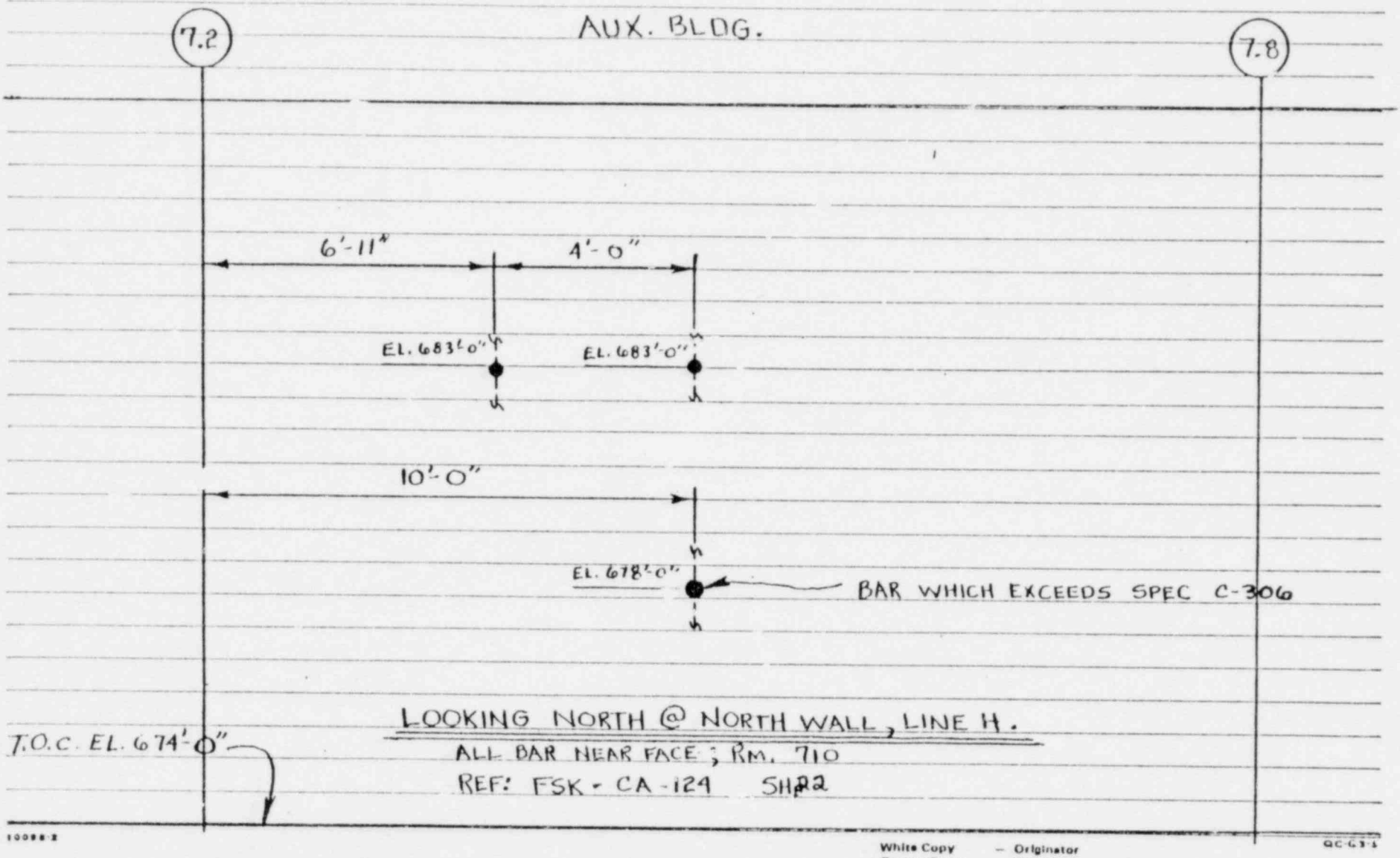
AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE



LOOKING NORTH @ NORTH WALL, LINE H.

ALL BAR NEAR FACE; RM. 710

REF: FSK - CA-129 SH 2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

Gene Daigle Notified NONCONFORMANCE REPORT SW. Cables 26NC & 26SA

1. PROJECT NAME	JOB NO.			19. NO. 3526	20. PAGE 1 OF 3
Midland	7220				
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
2	NA	NA	Class 1E Electrical Cables	See Block 16	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N NA REV NA SER NO. NA	9. SOURCE	10. CONTRACTOR/SUPPLIER	
E-22	NA		Construction	NA	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. See Block 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )F.D	

16. NONCONFORMING CONDITION: It has been noted that oil from a crane located above I.B. 2853'3 has been dripping onto cables 2882411 A&B, 2882403 A&B and 2882424 E&W Rendering the Quality of the cables indeterminate.

The above condition was reported to Quality Control on 4/19/81 by Nuclear Nett NRC AD representative, requesting that effected cables be tagged. Continued on page 2

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
E. S. Fennell	4/19/81	R.D. Apple	6/19/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Continued

Q No 3.00 & 3.007

G Hold Tags applied Hold for Engineering Disposition

Block 11 continued

I.R. Nos. 2852411 A & B, 2852403 A & B and 2852424 E & W

Block 5 Continued

Located outside of North face of secondary shield wall at I.B. 285573 to 2VV-57D Az. 10° to 30° Unit 2 Containment Elev. 659'

C.E. Lowe 6/19/81

PERSON CONTACTED
A. BRADSHAW

NONCONFORMANCE REPORT START-UP * IPSA

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3527	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION: BIL CABLES 1AD1001AG & 1AD1001AM	5. ITEM LOCATION: AUX BLDG 614', UNIT 1 BATTERY ROOM N-A	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV SER NO.	9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA (X) DWG ( ) SPEC ( ) OTHER IR NO. See Block 16 NO. 7220-E22-49-1	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client (X)Eng ( )FLD	

16. NONCONFORMING CONDITION:

REQUIREMENT: 7220-E22-49-1, THE VENDOR'S REQUIREMENT FOR MINIMUM BENDING RADII FOR CABLE STATES IN PART, "... WHERE THE CABLE, EITHER SINGLE OR MULTIPLE CONDUCTOR, TO BE BENT HAS A DIAMETER LESS THAN ONE (1) INCH, THAT CABLE MAY BE BENT TO A PERMANENT, NON-TENSION BEND WHOSE RADIUS

E

17. REPORTED BY: J. Mello — DATE: 6-18-81

18. VALIDATED BY: J.K. E. Smith — DATE: 6/19/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

(BLOCK 16 CONTINUED)

IS NO LESS THAN FOUR (4) TIMES THE CABLE DIAMETER..."

CONDITION: CONTRARY TO THE ABOVE, THE BLACK CONDUCTORS OF CABLE SCHEME NUMBERS 1AG1001AG AND 1AG1001AM ARE BENT INTO A LOOP WHOSE RADIUS IS 3¼". THE CABLES ARE 350 MCM CABLES WITH A DIAMETER OF .95±". TERMINATIONS IN 1DIO.

FOUR QC HOLD TAGS APPLIED.

QCI# 3,003

HOLD FOR ENGINEERING DISPOSITION

A-Fab

F.E. Larry Morris

NONCONFORMANCE REPORT

S/u Code: Non-testable

1. PROJECT NAME: Midland	JOB NO. 7220			19. NO. 3528	20. PAGE 1 OF 2
2. UNIT(S): 1 And 2	3. ~~DRAWING~~/PART NO.: R-2R, D-14-17	REV: N/A	4. ITEM DESCRIPTION: Penetrations and Lower Dome Liner Plate	5. ITEM LOCATION: Hardware at Jobsite Software SQD-Ann Arbor	
6. P.O. OR SPEC NO.: C-50A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV SER NO.	9. SOURCE: Vendor	10. ~~CONTRACTOR~~/SUPPLIER: Delta Southern Boiler	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER ~~HI NO~~ NO. C-50A		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD

16. NONCONFORMING CONDITION:

During the Ann Arbor S.Q.D. documentation review of Southern Boiler QVD, the following four major non-conforming conditions were observed: A) Document Legibility, B) Omission of Chemical and Mechanical Values on CMTR's, C) Omission of Material Spec. and/or Grade Designation on CMTR's, D) NDE Test Report which fails to reflect test procedures or Specification used for examination. The following will provide details and specific examples on the general conditions observed.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
M.S. Martinez	5-18-81	E Smith / DLD	6/19/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

A. Requirements: Technical Specification Paragraph 10.2 requires Certified Material Test Reports (CMTR) for materials used.

Deviations: These CMTR's require all chemical and mechanical values to be legible for proper evaluation to applicable specifications. Contrary to the above, the attached CMTR from Armco Steel for heat #81989 (exhibit #1) reflect illegible chemical and mechanical values. Due to this illegible condition, proper evaluation of CMTR for compliance can not be made.

B. Requirements: Various Material Specifications (example: SA-516) require chemical and mechanical values to be reflected on each CMTR.

Deviations: Contrary to the above, the attached CMTR from Armco Steel for heat #82452 (exhibit #2) and CMTR from Alloy Rod Company for heat #07R6490 (exhibit 3) both fail to reflect the required chemical values. The attached CMTR from Hobart Brothers Company for serial/lot #L1-63-G1 (exhibit #4) fail to reflect the required mechanical values as indicated per applicable Material Specification.

C. Requirements: Material Specifications and/or grade designation is an essential requirement to properly evaluate CMTR.

Deviation: The attached CMTR's from Alloy Rod Company heat #401A4231 (exhibit #5) fails to reflect material spec. and/or grade designation. Consequently, above mentioned CMTR can not be evaluated for acceptance.

D. Requirements: Technical Specification C-50A, Paragraph 10.2.7, requires "Magnetic Particle Test Reports with passing or failing results and Magnetic Particle Testing Procedure".

Deviations; Contrary to the above requirements, the attached (exhibit #6) NDE Report for Magnetic Particle Testing fail to reflect procedure or specification used for examination.

"Q" list # 1.109, Hold pending final disposition. No hold tags applied.

CERTIFICATE OF TESTS

P.O. Box 1367, Houston, Texas 77001 NCR 3528 Page 3 of 9

Exhibit #1

DESCRIPTION	BAR OR HEAT NO.	NO. PCS	YIELD PSI	TENSILE PSI	% ELONG.	% REDUCT.	BEND TEST	HOMO TEST	BRIN	IMPACT ORIEN.	IMPACT TYPE TEMP.	NOTCH SIZE 1	2	3	AVG
B.R. [illegible]					24										
[illegible]	81968	1		54700			ok	ok							
	B		49400	63100	27.0										
		1		54700			ok	ok							
	B		42600	61100	25.5										
		1		55700			ok	ok							
	B		43000	64000	25.5										
		1		58300			ok	ok							
	B		45000	64000	28.0										
		1		55300			ok	ok							
	B		48100	64000	27.5										
		1		61100			ok	ok							
	D		44500	63000	31.0										
		1		54000			ok	ok							
	B		47000	65000	28.5										
		1		54000			ok	ok							
	H		43000	61000	28.0										
		1		54000			ok	ok							
	E		43300	64000	32.5										
		1		54000			ok	ok							
	B		45000	63000	31.0										
		1		55000			ok	ok							
	D		42000	64000	33.0										

Subscribed and sworn to before me this [illegible] day of [illegible]

Notary Public, Harris County, Texas

HEAT	C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Al	V	B	Cb	Al	N
[illegible]	[illegible]	[illegible]	.013	.013	.25										

CERTIFIED FOR CONSTRUCTION
DELTA SOUTHERN COMPANY
By: [illegible] Date: 11/8/72

THE CHEMICAL, PHYSICAL OR MECHANICAL TESTS REPORTED HEREIN ARE CORRECT AS CONTAINED IN THE RECORDS OF THE CORPORATION

AUTHORIZED SIGNATURE R. Scott

Ref # 8
ILLEGIBLE

5/8 3/4 7/8

Reindeer + acceptiol
11 Chmst. 8 5 73
Bechtel Corp

CERTIFICATE OF TESTS

ARMCO Armco Steel Corporation
P. O. Box 1367, Houston, Texas 77001

NCR 3528 Page 4 of 9 *

S/O 92291 - 92?1

Exhibit #2

OUR ORDER NO.	CUST. ORDER NO.	SHIPPED VIA	CAR INITIAL AND NO.	DATE SHIPPED	SHIPPING INSTRUCTIONS OR BILL OF LADING NO.	DATE MFD.
THS 8051	S 33749					

DESCRIPTION	BAR OR PLATE NO.	NO. PCS.	YIELD PSI	TENSILE PSI	% ELONG.	% REDUCT.	BEND TEST	HOMO TEST	BRIN	IMPACT: ORIEN.	TYPE TEMP.	NOTCH SIZE 1	2	3	AVG.
H. R. CARBON STEEL PLATES FOR PRESSURE VESSELS NORMALIZED ASME SA-516 GRADE 60 LONG CHARPY V NOTCH 15 LBS AVG 10 LBS MIN AT -30°F PER PLT IN ACCORDANCE WITH 1968 ASME BNPV CODE SECT III PARA N330 RPT LATERAL EXPANSION IN INCHES & PERCENT SHEAR FOR INFO ONLY					8"							make 10 Copies			
HEAT 82452 1/2" 81-1/2 x 257	pl9774	2	46000	65100	30.5		ok			L	-30°F	104	112	118	111
										% SHEAR		100	100	100	100
Normalizing Temp. 1650°F										LAT EXP		.080	.089	.090	.086
HEAT 36060 1-1/2" 60-1/2 x 352	pl9868	1	42300	61000	34.0		ok			L	-30°F	257	258	264	260
										% SHEAR		100	100	100	100
Normalizing Temp. 1650°F										LAT EXP		.095	.095	.096	.095
HEAT 70212 1" 87 x 322-1/2"	pl9374	1	46600	64900	30.0		ok			L	-30°F	122	134	176	144
										% SHEAR		70	75	100	82
HEAT 78236 1/2" 101 x 260-1/2"	pl9603	2	46600	64600	30.5		ok			LAT EXP		.081	.086	.090	.086
										L	-30°F	106	106	107	106
Normalizing Temp. 1650°F										% SHEAR		100	100	100	100
HEAT 57847 1/2" 86-1/2 x 363	pl9095	1	47400	66600	31.5		ok			LAT EXP		.080	.080	.083	.081
										L	-30°F	100	104	114	106
										% SHEAR		75	80	100	85
	pl9096	1	47700	66200	31.0		ok			LAT EXP		.071	.076	.084	.077
Normalizing Temp. 1650°F										L	-30°F	105	140	140	128
										% SHEAR		75	100	100	92
										LAT EXP		.074	.085	.086	.082

REF. #3

No Chemicals

HEAT	C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Ti	V	B	Cb	Al	N
22110	.12	.96	.010	.018	.22	.08	.26	.05	.16		.001				
82111	.12	.91	.010	.024	.20										
58594	.08	1.07	.010	.022	.19	.17	.16	.04			.01				
25879	.13	.92	.010	.016	.20	.02	.05	.02	.07		.004				
76969	.12	1.16	.012	.022	.22										

CERTIFIED FOR CONSTRUCTION
DELTA SOUTHERN COMPANY
By: Date:

Subscribed and sworn to before me this 8 day of June
D. E. Harris
Notary Public, Harris County, Tex.

14720

RECEIVED
JUN 10 1970
PURCHASING DEPT.

DELTA SOUTHERN COMPANY

PAGE 2

THE CHEMICAL, PHYSICAL OR MECHANICAL TESTS REPORTED HEREWITH ARE CORRECT AS CONTAINED IN THE RECORDS OF THE CORPORATION.

SIGNED Ron Grant
METALLURGICAL DEPT.

"THIS CERTIFIED TEST REPORT HAS BEEN DELIVERED TO A CONSIGNEE OF MATERIAL PURCHASED FROM ARMCO STEEL CORPORATION. TO AVOID THE POSSIBILITY OF ITS MISUSE, ON THE REDELIVERY OF THIS REPORT TO A THIRD PARTY IT MUST BE RECERTIFIED BY AND UNDER

CERTIFICATE OF TESTS

ARMCO Armco Steel Corporation
P.O. Box 1228 Houston, Texas 77001

Exhibit #2

OUR ORDER NO.	CUST. ORDER NO.	SHIPPED VIA	CAR INITIAL AND NO.	DATE SHIPPED	SHIPPING MARK, LOAD NO.	DATE
THS 8051						

DESCRIPTION	BAR OR PLATE NO.	NO. PCS.	YIELD PSI	TENSILE PSI	% ELONG.	% REDUCT.	BEND TEST	HOMO. TEST	Brinell	IMPACT TYPE	CHARPY NOTCH	SIZE	1	2	3	AVG	
H.R. CARBON STEEL PLATES FOR PRESSURE VESSELS NORMALIZE ASME SA-516 GRADE 60 WITH LONG CHARPY V-NOTCH IMPACTS OF 15'LBS AVG 10'LBS MIN AT -30°F PER PLT IN ACCORD WITH 1968 ASME B & PV CODE SECT III PARA N 330 RPT LATERAL EXPANSION IN INCHES & PERCENT SHEAR FOR INFO ONLY					8"												
HEAT 82452 1/2 X 261-1/4	P19965	2	47300	64800	30.0		ok			L	-30°F		122	132	132	129	
										% SHEAR			80	100	100	93	
										L.E.			.084	.093	.095	.091	
HEAT 36C3C 1/4 90 X 289"	P19872	1	48200	65900	31.0		ok			L	-30°F		46	56	62	55	SIZE 1/2"
										% SHEAR			100	100	100	100	
										L.E.			.075	.076	.078	.076	
	P19873	1	49400	65400	30.0		ok			L	-30°F		44	45	45	45	"
										% SHEAR			100	100	100	100	
										L.E.			.070	.071	.076	.072	
	P19874	1	49800	66200	27.0		ok			L	-30°F		44	48	52	48	"
										% SHEAR			100	100	100	100	
										L.E.			.069	.071	.072	.071	
	P20002	1	52000	65100	29.0		ok			L	-30°F		50	52	53	52	"
										% SHEAR			100	100	100	100	
										L.E.			.071	.082	.082	.078	
	P 20003	1	50100	65200	27.5		ok			L	-30°F		46	50	50	49	"
										% SHEAR			100	100	100	100	
										L.E.			.075	.079	.080	.078	

RECEIVED
JUN 12 1970
PIPE SUPG DEPT.

Ref. #3

NORM. SIZING TEMP: 1650°F NO Chemicals For Heat #81989

HEAT	C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Ti	V	B	Cb	Al

CERTIFIED FOR CONSTRUCTION
[illegible]

Subscribed and sworn to before me this 10 day of June 1970

D. E. Pierman
Notary Public, Harris County, Texas

THE CHEMICAL, PHYSICAL OR MECHANICAL TESTS REPORTED HEREWITH ARE CORRECT AS CONTAINED IN THE RECORDS OF THE CORPORATION.

SIGNED Ron Durst
METALLURGICAL DEPT.

Reviewed + accepted
H. Clements 8-5-70

[illegible] BOUTIERE
PAGE FOUR

"THIS CERTIFIED TEST REPORT HAS BEEN DELIVERED TO A CONSIGNEE OF MATERIAL PURCHASED FROM ARMCO STEEL CORPORATION. TO AVOID THE POSSIBILITY OF ITS MISUSE, ON THE REDELIVERY OF THIS REPORT TO A THIRD PARTY IT MUST BE RE-CERTIFIED AT AND UNDER THE NAME OF SUCH CONSIGNEE."

WELDERS SUPPLY COMPANY
2080 Industrial Road
Baton Rouge, Louisiana

ALLOY RODS COMPANY
Division of Chemetron Corporation

Certificate of Analysis

Exhibit #3

Customer Order No. _____

_____ Order No. _____

Shipped _____

This material conforms to Specification MIL-E-22200/1

X-Ray Satisfactory Type MIL 7018

Trade Name: Atom Arc 7018

Diameter Size: 1/8"

Lot Number: 1923H1A

Heat Number: 07R6490

NO Chemicals

Carbon	
Manganese	
Chromium	
Nickel	
Silicon	
Columbium	
Tantalum	
Molybdenum	
Tungsten	
Copper	
Titanium	
Phosphorus	
Sulphur	
Vanadium	
Iron	
Ferrite	

Mechanical Properties
Typical

	As Welded	Stress Relieved 2 Hours @ 1150°F
Yield Str.(Psi)	68,500	62,000
Tensile Str.(Psi)	75,000	72,000
Elongation, %	30	34
Red. of Area, %	75.5	77

(Specification Requirements)

	As Welded	Stress Relieved 2 Hours @ 1150°F
Yield Str.(Psi)	(60,000/75,000)	(55,000 Min.)
Tensile Str.(Psi)	(70,000 Min.)	------
Elongation, %	(24 Min.)	(24 Min.)
Red. of Area, %	----	----

REF. #4

State of Texas)
County of Dallas) SS

Subscribed and sworn to before me
this 10th day of December, 1969

SEAL Edwin Tiegen
Notary Public

My commission expires: June 1, 1971

The undersigned certifies that this report is correct and that no significant change has been made in any of the elements described in the qualification approval.

ALLOY RODS COMPANY
Division of Chemetron Corporation

CERTIFIED FOR CONSTRUCTION
DELTA SOUTHERN COMPANY BY Frank Smith

NCR 3528

FILLER METAL CERTIFICATE
HOBART BROTHERS COMPANY

No. Copies Req: 3

Ref: 16898

Type: EB-28

To: Louisiana Welding Supply Company, Inc.
1931 Plank Road
Baton Rouge, Louisiana

Diameter: .045"

Serial No.: L1-63-01 - 46770

Quantity:

The above filler metal complies with the following specification and requirements as noted:

Exhibit # 4

AWS A5.18-69 ; ASTM _____, Class E-70S-6

MIL - _____

Others _____

Chemical Analysis of:
(X) Filler Metal
( ) Typical Weld Metal
( ) Actual Weld Metal

Mechanical Properties:
( ) Typical ( ) Actual
( ) As Welded ( ) Stressed Relieved @ _____

Carbon	.11	Phosphorous	.017	Tensile Strength, PSI	
Manganese	1.48	Sulfur	.017	Yield Point, PSI	
Silicon	.94	Molybdenum		Elongation in 2"	
Chromium		Columbium		Reduction of Area	
Nickel		Aluminum		Charpy V-Notch Impact @	
Copper	.04	Magnesium			

NO PHYSICAL PROPERTIES Ref #7

Remarks: H. Clements Revised & accepted 3/12-71

CERTIFIED FOR CONSTRUCTION
DELTA SOUTHERN COMPANY
By: _____ Date: 3/12/71

STATE OF OHIO
COUNTY OF MIAMI
Subscribed and sworn to before me this 22nd day of February 1971

Ralph E. Osgood
NOTARY PUBLIC RALPH E. OSGOOD, Notary Public
In and for Miami County, Ohio
My Commission Expires May 24, 1971

The undersigned certifies that the above is correct to the best of his knowledge and belief.
By _____
R.E.Sanders-Filler Metal Dept.

HOBART BROTHERS COMPANY

J-19344

NCR 3528 Page 7 of 9

[redacted] Equipment Co.
P.O. Box [redacted]
Houston, Texas

ALLOY RODS COMPANY
Division of Chemetron Corporation

[redacted] Fabrication
Delta Southern
Baton Rouge, La.
P.O. #33855

Certificate of Analysis

Exhibit # 5

NO Material Grade designation

Customer Order No. _____

_____ Order No. _____

Shipped April 30, 1970

This material conforms to Specification _____

"CORE WIRE ANALYSIS" Type _____

REF. #2

E.G. SFA, AWS

Trade Name: Atom Arc 7018

Diameter Size:	3/16"	1/8"	7/32"
Lot Number:	A020J1A	D007H1A	D008J1A
Heat Number:	05R938	401A4231	402A6261
Carbon:	.09	.08	.08
Manganese:	.45	.49	.50
Chromium:			
Nickel:			
Silicon:	.044	.005	.008
Columbium:			
Tantalum:			
Molybdenum:			
Tungsten:			
Copper:			
Titanium:			
Phosphorus:	.088	.088	.010
Sulphur:	.028	.017	.020
Vanadium:			
Iron:			
Ferrite:			

K. Clements
Reviewed + accepted
3/12/71

State of Texas)
County of Dallas) ss

Subscribed & sworn to before me this 5th day May, 1970

Seal Elvin Jaeger
Notary Public

My commission expires: June 1, 1971

The undersigned certifies that this report is correct and that no significant change has been made in any of the elements described in the qualification approval.

ALLOY RODS COMPANY
Division of Chemetron Corporation

By [redacted]

CERTIFIED FOR CONSTRUCTION
DELTA SOUTHERN COMPANY
By _____ Date: 3/10/71

NRR 3528

Page 81 of 91

DELTA SOUTHERN CO. NON-DESTRUCTIVE TESTING REPORT

Exhibit #6

NCR 3528 Page 9 of 9

INSPECTION DEPARTMENT

No Specification or Procedure Indicated

S/O		TYPE TEST: MAGNETIC PARTICLE — INSIDE	DATE
CUST. SOUTHERN BOILER & TANK WORKS, INC.		SPECIFICATION — OUTSIDE	
EQUIPTMENT USED: KH-15	TRANSDUCER	AMPLITUDE 100 AMP. / AMPERAGE PER INCH	COUPLANT METHOD: PROD. DC
INSPECTOR:		WITNESSED BY: H. Clements	10-22-70 10-28-70

DESCRIPTION OF ITEM TESTED: PIPE PEN. TO REINF. PLATE

ACCEPT ✓ | ASSEMBLY - R-2-R | REJECT

PEN. MK.	TO PC. MK.
7	SYR
11	SYR
62	SYR
15	SYR
31	SYR
16	SYR
50	SYR
52	SYR

REF. #1

NDT Level NOT Required

CERTIFIED FOR CONSTRUCTION
DELTA SOUTHERN COMPANY
By: [illegible] Date: [illegible]

REPAIR DATE	REINSPECTED DATE	ACCEPT	
INSPECTOR:	WITNESSED BY:	REJECT	

NONCONFORMANCE REPORT

S/I - NONTESTABLE

1. PROJECT NAME: MIDLAND	JOB NO.: 7220						19. NO. 3529	20. PAGE 1 OF 2
2. UNIT(S): Common	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CUT REBAR				5. ITEM LOCATION: AUX EL 44 ~~an~~ 348 S.G 4 G	
6. ~~P.O. OR~~ SPEC NO.: C-306(Q) r.7	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: CONSTRUCTION PIPEFITTERS	10. CONTRACTOR/SUPPLIER: N/A			
11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO. N/A NO C-306(Q) r.7		12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO	13. SKETCH ATTACHED: ( ) YES ( ) NO	14. Discovered During: ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By: ( ) Client ( ) Eng (X) FLD			

16. NONCONFORMING CONDITION: APPENDIX D, SECT 1.2, STATES, "REINFORCING BARS SHALL NOT BE CUT IN THE FOLLOWING STRUCTURAL ELEMENTS WITHOUT PROJECT ENGINEERING OR RESIDENT ENGINEERING APPROVAL." SECTION 1.2.4 STATES, "BUNDLED BARS (NOT INCLUDING REPLACEMENT STEEL) AND #14 AND #18 BARS. CONTRARY TO THIS, ONE #11 VERTICAL BAR OF A #11 VERTICAL BUNDLE WAS CUT (CONT. ON NEXT PAGE)

17. REPORTED BY: William C Kuhn — DATE: 6-18-81

18. VALIDATED BY: F. G. Smith — DATE: 6/22/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 1 PAGE 2 OF 2 14. NCR NO. 3529

BLOCK 16 (CONT.) AT THE SOUTH FACE OF G-LINE WALL
1'-5½" EAST OF 5.6 AT ELEV. 621'-2".
ONE (1) HOLD TAG APPLIED 1Q: LIST #1.203

10098 2

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

Start Up Code: Indeterminate

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.			19. NO. 3530	20. PAGE 1 OF 4
Midland	7220				
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
N/A	N/A	N/A	Unistrut Welded Fittings	N/A	
6. ~~P.O.~~ OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER	
~~N/A~~ E-52	N/A	P/N N/A REV N/A SER NO. N/A	Supplier	Unistrut	

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO. N/A NO. E-52, Rev. 2	( ) YES (X) NO	( ) YES (X) NO	(X) Rec'g ( ) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: Bechtel specification 7220/E-52, Rev. 2, para. 6.3.8, requires "Verification reports documenting the findings of inspections conducted on channel combinations of two or more units and special fittings during the manufacturing process and on all final finished products."

Contrary to this, the documentation received for welded Unistrut does not contain these verification reports. The certificate of compliance submitted

(Continued on page 2)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
M L Sherwood	6/19/81	[illegible] E. Smith	6/23/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

(Block 16 continued)

by Unistrut contains a blanket statement (see page 3 of 4) to certify the welds. Bechtel SDDR #2007 addresses this matter (see page 4 of 4) and has been rejected, leaving the status of the Certificate of Compliance indeterminate.

Hold for Engineering disposition

Q List # indeterminate

Number of Hold tags applied: ~~Indeterminate~~ 6/19/81 30

ATTACHMENTS: Sddr #2007

Certificate of Compliance

UNISTRUT CORPORATION

WORLD HEADQUARTERS • ELIZABETH AT CLINTON • WAYNE, MICH. 48184
TELEPHONE (313) 721-4040 • TELEX 23-5457

CUSTOMER Bechtel Power Corporation

PURCHASE ORDER NO. 7220-F-31830 Rel 10

FACTORY JOB NO. 2090-0606

PART NAME Unistrut Fittings & Accessories

PART NUMBER See below

DATE SHIPPED

SHIPPER NO.

REFERENCE: Unistrut Detroit
P. O. 23562

THIS IS TO CERTIFY THAT THE PARTS DESCRIBED HEREON HAVE BEEN PROCESSED IN ACCORDANCE WITH YOUR PURCHASE ORDER INSTRUCTIONS, INCLUDING APPLICABLE INTERNAL UNISTRUT CORPORATION SPECIFICATIONS. THE INFORMATION CONTAINED HEREIN HAS BEEN TRANSCRIBED FROM CERTIFIED TEST AND PROCESS SHEETS IN OUR PLANT. OUR FILE IS SUBJECT TO YOUR EXAMINATION AT ANYTIME DURING NORMAL BUSINESS HOURS.

The following item is fabricated from material conforming to ASTM specification A-570, Grade C and is electrogalvanized in accordance to ASTM specification A-164-71, designation type RS - P-1006-1420 EG.

The following items are fabricated from material conforming to ASTM specification A-576, and is electrogalvanized in accordance to ASTM specification A-164-71, designation type RS - P-1008 EG, P-1010 EG.

The following item is fabricated from material conforming to ASTM specification A-446, Grade A, coating designation G-90 of ASTM specification A-525 - P-2407 PG.

The following items are fabricated from material conforming to ASTM specification A-575-73, test designation A-370-76 and are electrogalvanized in accordance to ASTM specification A-164-71, designation type RS - P-1047 EG, P-1334 EG, P-1357 EG, P-1376 EG, P-1376A EG, P-1380 EG, P-1737 EG, P-1956 EG, P-1957 EG, P-2073A EG, P-2324 EG, P-2326 EG, P-2329 EG, P-2328 EG, P-2558-07 EG, P-2558-10 EG, P-2558-15 EG, P-2558-20 EG, P-2558-30 EG, P-2558-40 EG, P-2484 EG, J13503 EG.

The following items are fabricated from material conforming to ASTM specification A-307-76B, Grade A and are electrogalvanized in accordance to ASTM specification A-164-71, designation type RS - HHCS025075 EG, HHCS037100 EG, HHCS050150 EG.

Unistrut fittings are arc welded (GMAW) in accordance to Unistrut procedure 20-01-017.

UNISTRUT CORPORATION

BY C. L. Cook
QUALITY CONTROL MANAGER

CC: CUSTOMER
Q.C. FILE

NCR 3530

Supplier Deviation Disposition Request

EXHIBIT B
7220-G-23
Rev. 7

FOR SUPPLIER USE	
Supplier SDDR No.	Date Submitted
1	2-13-81

NOTE: The reverse side of this form contains the instructions for its preparation and use. Items marked with an asterisk (*) are for Bechtel entries only.

FOR BECHTEL USE	
* Bechtel SDDR No.	* Date Received
2007	2-17-81

Supplier shall complete all blocks 1 through 28 with black ink or typewriter. Use NA for Not Applicable.

1. Supplier Name Pipemart Detroit Ser. Address P.O. Box 458 City & State Wayne, MI ZIP 48184

2. Supplier's Order No.	3. Supplier's Part No.	4. Supplier's Part Name	5. Date Deviation Determined	6. Previous SDDR No. & Date
7884	N/A	N/A	2-26-81	

7. Bechtel P.O. No.	8. Bechtel Part No.	9. Bechtel Part Name	10. Bechtel Inspector Notified	11. Bechtel Eng. Notified
7220-F-31838	N/A	N/A	N/A	Carl Szabelski

12. Qty or Serial No.

13. Deviation Description (Attach extra sheets, photographs, sketches, etc. as necessary)

The technical specification 7220-I-520 rev. 2. under the heading document requirements 6.3.8 requires. . . Verification reports documenting the findings of inspections conducted on channel combinations of two or more units and special fittings during the manufacturing process and on all final finished products.

14. Supplier's Disposition Classification: ☐ Use As Is ☐ Repair ☒ Modify Bechtel Requirement

15. Proposed Disposition and Technical Justification: (Attach extra sheets, sketches, etc. as necessary)

We have six welding machines making our back to back and other combination channels of which we conduct approximately twenty tests per machine per day along with all of our other fitting machines making the above mentioned specification impractible for us to comply with. Also it is quite impossible for us to separate the channel and fittings on your orders from other orders in our plant. We will continue to send a statement of conformance and a certificate of compliance with each order.

16. Associated Supplier Document Change (s):

17. Cost Effects:

18. Supplier's Authorized Representative
Signature: George W. Wisman
Name: George W. Wisman
Title: Representative
Date: 2-13-81

* 19. Bechtel Engr. Action:
☐ Proposed Disposition Accepted
☒ Proposed Disposition Rejected
Engr. Follow-up: ☐ Dwg Change ☐ Spec/Req. Change ☐ Other Suppliers Affected ☐ Other

NONE

* 20. Bechtel Disposition Statement Including Justification (Attach extra sheets, sketches, etc. as necessary)

THE G321D FORM REQUIRES VERIFICATION REPORTS IN ACCORDANCE WITH PARAGRAPH 6.3.8 OF THE TECHNICAL SPECIFICATION SO THAT THE CLIENT MAY STORE THE DOCUMENTS IN ACCORDANCE WITH ANSI N45.2-1971. APPENDIX C OF THE TECHNICAL SPECIFICATION DOES NOT IMPOSE THE QUALITY ASSURANCE RECORDS ELEMENT OF ANSI N45.2-1971 ON THE VENDOR.

* 21. Bechtel Acceptance		Date	Verification Signatures		Date
QS	D. T. Knauf	5/12/81			
PE	G. W. Las Cruces	5-13-81	22. Supplier		
PCE	W. Travis	5-14-81	* 23. Bechtel Supplier Quality Representative		
QA	D. Hughes	5/12/81			

NRR 3350 Rec'd 4 of 4

Discussed with:
Linda Haven

NONCONFORMANCE REPORT

S/U # 3BGA

1. Project Name: Midland	Job No.: 7220			19. No. 3531	20. Page 1 of 1
2. Unit(s): Two	3. Drawing/Part No.: M-604 Sh. 11	Rev: 6/F5	4. Item Description: FW #3 (2HCC-47-604-11-2)	5. Item Location: Aux. Bldg.	
6. P.O. Or Spec No.: N/A	7. Serial No.: N/A	8. Replacement Part P/N N/A REV N/A SER NO. N/A	9. Source: QC	10. Contractor/Supplier: N/A	
11. Inspection Criteria ☐DWG ☒SPEC ☐OTHER IR NO. P-618-604-11-1 A NO.		12. ASME AUTHORIZED INSPECTION REQ'D ☒YES ☐NO	13. SKETCH ATTACHED ☐YES ☒NO	14. Discovered During ☐REC'G ☒CONST ☐TEST	15. Equip Furnished By ☐CLIENT ☒ENG ☐FLD

16. Nonconforming Condition:

Requirement: M-204 states in part - "Prior to installation all piping shall be visually checked for cleanliness". Condition: F.W. #3 was installed without QC verification or documentation of cleanliness.

Q List No. 4047 — Hold Tag Applied

17. Reported By: [signature] Date: 6-19-81

18. Validated By: CR [signature] E Sanders Date: 6/23/81

21. Routing: ☒ TO FIELD ENGINEERING ☐ TO OTHERS (SPECIFY)

22. ☐ Field Engineering Disposition ☐ FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

23. Project Engineering Disposition

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJECT CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. Disposition Results

26. QC Acceptance

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

A-fab

S/u: OECC

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19. NO.	20. PAGE
Midland	7220	3532	1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
Common	0-614-10-50	0	Attachment Weld	Aux Bldg El 606'7"

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N	REV	SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER
NA	NA	NA	NA	NA	Const	NA

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	NO. M204	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: Requirement: M204 Paragraph 3 states that fabrication and installation of piping shall be in accordance with ASME Section III. Accordingly, ASME Section III, NC-3645 states "External and internal attachments shall be designed so as not to cause flattening of the pipe..." Condition: Stanchion welded to pipe on hanger sketch 614-10-50 was designed and installed with a full penetration weld. This has QA list # 4.144 / Hold Tag Applied

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
J. Mulder	6/23/81	R.K. Siple	6/23/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

caused flattening of the pipe. the pipe is flattened approximately 3/16".

J Miller 6/23/89

STEVE HARVEY

NONCONFORMANCE REPORT

S/U CODE INDETERMINATE

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3533	20. PAGE 1 OF 1
2. UNIT(S): INDETERMINATE	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: P.O. 7220 F-50236 Item # 67 ONE (1) Pc. 2½" x 96" x 240" – A-36 PLATE	5. ITEM LOCATION: POSEYVILLE	
6. P.O. OR ~~SPEC NO.~~: F-50286	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N ____ REV N/A SER NO. ____	9. SOURCE: SUPPLIER	10. ~~CONTRACTOR~~/SUPPLIER: FEDERAL PIPE AND STEEL	
11. INSPECTION CRITERIA ( ) DWG (M) SPEC ( ) OTHER — IR NO. R-1-00-15005 NO. G-33 Rev. 13	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (M) NO	13. SKETCH ATTACHED ( ) YES (M) NO	14. Discovered During (M) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (M) FLD	

16. NONCONFORMING CONDITION: QUALITY CONTROL INSTRUCTION R-1-00 ACT. NO. 3-1 STATES IN PART TO REVIEW THE QUALITY VERIFICATION, DOCUMENTATION REQUIRED BY THE PROCUREMENT DOCUMENTS FOR AVAILIBITY, LEGIBILITY & TRACEABILITY. CONTRARY TO THE ABOVE THE MATERIAL TEST REPORT SUBMITTED BY THE VENDOR FOR THE MATERIAL RECEIVED ON AE0-15005 IS NOT LEGIBLE AND TRACEABLE. LEAVING THE STATUS OF THE MATERIAL INDETERMINATE. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINATE. ONE (1) HOLD TAG APPLIED.

17. REPORTED BY: F Kanchwala. DATE: 6/23/81

18. VALIDATED BY: AND G Smith DATE: 6/24/81

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

F.E. J. Eddy

NONCONFORMANCE REPORT

S/u Code : Indeterminate

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3534	20. PAGE 1 OF 2
2. UNIT(S): 1 & 2	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: CORNER & LADA SWAY STRUTS & SPRING CANS	5. ITEM LOCATION: INDETERMINATE	
6. P.O. OR SPEC NO.: SEE BLOCK 16	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: SUPPLIER	10. CONTRACTOR/SUPPLIER: CORNER & LADA	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO. N/A NO.		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD

16. NONCONFORMING CONDITION:

PIPE SUPPORTS, HANGERS & RESTRAINTS SHALL BE IN ACCORDANCE WITH ASME SEC. III SUB/SEC NF 1974 EDITION. PURCHASE ORDERS F-29255 & 56, 29898 & 99, 29894, 30704, 31903, 32166, 32947 AND 33923 WERE PLACED WITH CORNER & LADA FOR SWAY STRUTS & SPRING CANS. DOCUMENTATION PROVIDED WITH THE COMPONENT SUPPORTS STATED EXCEPTION TO WELD EXAMINATION AS REQUIRED BY PARA. NF 5213 & 5222 (CONTD PG 2)

17. REPORTED BY: [signature] DATE: 6/25/81

18. VALIDATED BY: DDO [signature] DATE: 6/26/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BLOCK 16 (CONT'D)

IN THAT THE WELD EXAMINATION IS NOT DOCUMENTED AS IS REQUIRED, THE QUALITY OF THE COMPONENT STANDARD SUPPORTS IS INDETERMINATE.

"Q"-list #'s indeterminate. Hold pending final disposition.
No hold tags applied.

with :
and

NONCONFORMANCE REPORT S/U # 2 BGA

Midland

Jct. No. 7220

19. No. 3535

20. Page 1 of 1

1. Unit(s)	3. Drawing/Part No.	Rev	4. Item Description	5. Item Location
TWO	M-604-15	8/F2	2½" 2CCC GT-2(404-1-033) S/N 4	Aux. Bldg.

6. P.O. Or Spec No.	7. Serial No.	8. Replacement Part	9. Source	10. Contractor/Supplier
N/A	N/A	P/N N/A REV N/A SER NO. N/A	QC	N/A

11. Inspection Criteria: ☐ DWG ☒ SPEC ☐ OTHER — IR NO P.1.30-604-15-1A — NO QCI Act. 2.8

12. ASME AUTHORIZED INSPECTION REQ'D: ☒ YES ☐ NO

13. SKETCH ATTACHED: ☐ YES ☒ NO

14. Discovered During: ☐ REC'G ☒ CONST ☐ TEST

15. Equip Furnished By: ☐ CLIENT ☒ ENG ☐ FLD

16. Nonconforming Condition:

Requirement: Quality Control Instruction Act. 2.8 States, "Inspect the valve or in-line component "internals" prior to the final installation closure to confirm it is free from damage." Contrary to the above: Valve, 2½ 2CCC-GT-2(404-1-033) was installed and did not have activity 2.8 signed by Quality Control prior to the final closure.

Q List No. 4.0410

1 Hold Tag Applied

17. Reported By [signature] Date 6-24-81

18. Validated By [signature] Date 6/24/81

21. Routing: ☒ TO FIELD ENGINEERING ☐ TO OTHERS (SPECIFY)

22. ☐ Field Engineering Disposition ☐ FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

23. Project Engineering Disposition

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJECT CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. Disposition Results

26. QC Acceptance

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BECHTEL

Closed NCR's

6/81

S/B

LOG OF NONCONFORMANCE REPORTS

PROJECT NAME [1] Midland JOB NO. [1] 7220 PAGE [8] 88

[2] NCR NO.	[3] DATE	[4] NONCONFORMANCE DESCRIPTION / REMARKS	[5] DISPO.	[6] DATE NCR CLOSED	[7] CLOSED BY
1333	4-28-78	C-233. Hatch Cover MK# 4S1 was received at the jobsite with one shear stud broken off.	Repair	7-28-78	G. Yeisley
1334	4-28-78	C-50. Equipment Hatch s/n 30398 has a charred area on the exterior coating covering approx. 5'.	Repair	6-16-81	E. Dutton
1335	5-2-78	E-20. 12" Weld Neck Flange, 2Z-141, has scratches on the raised machined surface.	Rework	5-25-78	F. R. Ringe
1336	5-2-78	A-13. Concrete Block Wall #44 - Work on wall was started without QC notification. Elev. 634' "E" & 5.6	Use as is	8-21-78	S. Gelnett
1337	5-3-78	C-208. Cement Users Tests #67 & 66 exceeded test range of 1200 tons.	Use as is	7-25-78	T. Lieb
1338	5-5-78	F-26614. 5" SA-106 GR. B Sch. 80 CS Pipe delivered to jobsite with only the Heat #'s marked on the material.	Use as is	6-12-78	D. Duff
1339	5-8-78	E-20. Elec. Penetration Assembly-pkgs lacking Quality Verification pkg & Qualification Test.	Doc. Rework	12-28-79	J. Miller
1340	5-8-78	Dwg. E-717. W8x17 Beam & Seismic Tray Hanger enclosed in concrete block wall - The Beam Bolts were not torqued.	Repair Rework	12-27-78	A. Lobrovich
1341	5-8-78	M-64. Tanks received have excessive rust, loose dessicant cutting sl..., weld flux & documentation problems.	Doc.Rework Reject	11-6-78	J. Slifer
1342	5-9-78	M-305. Material did not have heat numbers or heat codes marked on the pipe. Missing G-321-D, Mill Test - no heat #'s.	Doc Rework	5-17-78	H. D. Foster
1343	5-9-78	E-20. Quality Verification Package for Weld Neck Flange P/N50013077-01 has not been received @ the jobsite.	Doc Rework	6-16-78	J. R. Slifer
1344	5-9-78	Dwg. A-20. Block Wall #40 has been constructed with no provisions to accomodate installation of rebar or lintel for opening.	Rework	12-28-78	S. Gelmett
1345	5-17-78	F-13440. Structural Embedments, numerous problems noted in a review of the weld inspection records	Rework Reject	Use as is 8-9-78	J. C. Huron
1346	5-17-78	Misc. Structural Steel, Numerous PO #'s, numerous problems noted in a review of the weld inspection records.	Use as is	8-9-78	P. VanderVeer
1347	5-11-78	C-231. Grout Pads for Unit 2 RPV Sole Pads have unsound areas. Elev. 602' -3⅛"	Reject Repair	7-24-78	K. Fitzgerald
1348	5-12-78	Spool 1HCB-14-S612-6-2. Existing spool identification does not agree with design dwg. 2 8" pieces no heat ID	Rework	8-15-78	L. Brown
1349	5-11-78	C-140, C-174. Concrete coverage for #11 Int. Wall Bars exceeds limits @ Const. joint of temporary opening. AB 685'	Use as is	5-19-78	J. Moyers
1350	5-11-78	C-233. Channel Embeds numbered 1SWBWE1-L, 1SWBWE1-R & 1SWBWE2 have welded joints that are neither snug nor flush	N/A	6-2-78	J. W. Miller
1351	5-12-78	Dwg. C-277. One #8 vertical rebar cut @ the temporary penetration in 5.6 line wall. Aux. Bldg. Elev. 642'6"	Use as is	6-22-78	S. Gelnett

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PROJECT NAME 1 Midland Units 1 & 2 JOB NO. 1 7220 PAGE 8 106

2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1675	11-28-78	M-1.11. Pressure safety Valves. 90 day inspection is overdue. work request has been written to facilitate this.	use as is	2-16-79	C.R.Fugate
1676	11-28-78	M-1.27. Pressurizer spray control valves. F-1-256. inspectionis overdue.	Use As Is	1-26-79	C. Fugate
1677	11-28-78	M-163 Recir. Air cooling unit fans. 30 day and 90 day inspection is overdue. Storage preventing inspection.	Use As Is	1-20-79	F. Mahala
1678	11-29-78	P&ID M-414. Thermowell, OTW-1426B. installed without internal damage verification.	Use As Is	3-22-79	E. Urbanawiz
1679	11-30-78	M-1.16. RCS Makeup Pump # 1P58A.No QA Data Package received for item.	Doc. Rework	11-8-79	R. Valentine
1680	11-30-78	M-1.7. Reactor Collant Pump Internals. Discrepencies in QA Data Packages.	Doc. Rework	6-18-81	R. MacGlashan
1681	11-30-78	C-182. Control Room-Suspended Ceiling. wrong size anchors used , several of the anchors don't provide for fullengagement	Rework, Use as is	4-23-79	E. Dutton
1682	11-30-78	M-129. Nuclear Service Valves. Discrepancies in Doc. Package.	Doc. Rework	2-28-79	D. Delaney
1683	12-1-78	M-14. Aux. Feedwater Pumps with Turbine Drivers. Total compliance to F-10 form not acheived.	Use As Is	~~1-11-80~~	~~C. Spinks~~
1684	12-1-78	E-39.. Type 1 Wireway Supports wrong welds allied.	Use As Is ~~Rework~~	6-14-79	L. Harrison
1685	12-4-78	M-106AC. Pipe hanger Supports & Restraints. received with specific discrepancies.	Rework	1-9-80	R. Montreuil
1686	12-1-78	F-30537. ASTM A-307 Hex Nuts. ASTM A-194 were shipped instead of ASTM A-307.	Use AS Is	3-23-79	R, Montreuil
1687	12-4-78	M-75.. Service water pump motor. no maintenance inspections have been performed.	use as is	1-23-79	C. Fugate
1688	12-4-78	F-31963. 200 Pcs. of 7/8"-9 A-325 Heavy Hex Nuts. received without required marking.	Reject	12-18-78	J. L. Gray
1689	12-5-78	J-207. Control Panels. Glass in doors control panels broken	Repair	8-12-80	S. Gelnett
1690	12-5-78	C-231. Concrete Curing. Curing Temp. dropped below allowable spec. for 12 hours.	use as is	1-2-79	A. Lamach
1691	12-7-78	FSK-M-2HBC-207-1. SW22 weldedw/o a QCIR being written or AI selecting designated hold points.	Rework	12-14-78	D. Fredianelli
1692	12-7-78	A-41. Paint in storage @ Standish Fab shop fell below minimum temperature requirement.	Uae As Is	1-29-79	R. [illegible]entine
1693	12-8-78	[illegible]-168 Reactor Building Purge Isol- [illegible]ation Valves. [illegible]achine surface for victualic gasket [illegible] has discontinuities.	Reject	4-23-79	D. [illegible] Delaney

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PROJECT NAME [1] Midland JOB NO. [1] 07220 PAGE [8] 110

[2] NCR NO.	[3] DATE	[4] NONCONFORMANCE DESCRIPTION / REMARKS	[5] DISPO.	[6] DATE NCR CLOSED	[7] CLOSED BY
1750	1-9-79	E-11-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-11	Use As Is	8-27-79	R. Moray
1751	1-9-79	E-13-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-13	Use As Is	1-23-80	C. Spinks
1752	1-9-79	E-19-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-19	Use As Is	8-14-79	R. A. Moray
1753	1-9-79	E-21-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-21	Use as is	2-23-79	R. Moray
1754	1-9-79	E-22-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-22	Use As Is	8-3-79	R. Moray
1755	1-9-79	E-26-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-26	Use as is	2-23-79	R. Moray
1756	1-9-79	E-45-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-45	Use As Is	8-30-79	R. Moray
1757	1-9-79	E-49-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-49	Use As Is	2-9-81	D. Delaney
1758	1-9-79	E-205-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-205	Use As Is	7-25-79	R. A. Moray
1759	1-9-79	J-201-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-201	Use As Is	7-17-80	R. Moray
1760	1-9-79	J-202-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-202	Use As Is	7-17-80	R. Moray
1761	1-9-79	J-204-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-204			
1762	1-9-79	J-207-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-207	Use as is	5-18-79	R. A. Moray
1763	1-9-79	J-255-A. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-255	Use As Is	6-11-81	R. MacGlashan
1764	1-9-79	J-256-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-603	Use As Is	11-16-79	R. A. Moray
1765	1-9-79	J-258-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-605	Use as is	5-14-79	R. A. Moray
1766	1-9-79	J-275-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-275	Use As Is	5-4-81	D. Delaney
1767	1-9-79	M-14-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-14			

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PROJECT NAME 1 Mid land JOB NO. 1 07220 PAGE 8 167

2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
2803	12-12-79	F-32338. Incorrect amounts and types of documentation received for bolts, washers, and plates.	Doc. Rework	1-14-80	R. Montreuil
2804	12-12-79	F-36336. P.O. Item #3. Nuts not stamped with required grade symbol. P.O. Item #1, bolts have illegible heat number.	Rework	1-21-80	J. Kramer
2805	12-12-79	I-202. Control panels 1C30 & 2C30. Fuse labels do not contain rating or type of fuse.	Rework	10-3-80	C. Stevens
2806	12-13-79	Tendon H32-206. Cont. 2, buttonheading caused indentations in one wire.	Reject Use As Is	12-13-79	P. Vanderveer
2807	12-14-79	FSK-M-1HBC-196-2H-5. Anchors installed in abandoned anchor holes, do not meet minimum edge distance nor center to center per Spec. C-305.	Use As Is	~~12-26-79~~ 2-19-80	~~T. Provencher~~ E. Urbanawiz
2808	12-14-79	Spec. C-305. Abandoned anchor holes not within minimum edge distance; abandoned anchors torch cut at concrete surface.	Use As Is Rework	2-1-80	S. Kirker
2809	12-11-79	Spec. M-326. Anchor bolts on hangers do not have a method to secure or lock the nuts.	Rework	10-22-80	E. Urbanawiz
2810	12-13-79	Spec. C-304. Cross the flange welding done on the top flange of a W27 x 102 beam.	Use As Is	3-4-80	E. Dutton
2811	12-14-79	F-37260. Spec. M-305 requires G-321-D submitted with documentation to refer to Rev. 5. Documentation submitted refers to Rev. 3.	Doc. Rework	2-1-80	F. Kanchwala
2812	12-17-79	45T-36S. Gauge no. 17 not calibrated to acceptable standards before being sent to field per Field Inst. Manual C2-146.	Use As Is	2-28-80	P. Vandervee
2813	12-18-79	E-616 Sh. 2. Type 14 conduit supports has cross flange stitch welding not completed within Spec. E-42 guidelines.	Use As Is	3-24-80	J. C. Miller
2814	12-18-79	Spec. C-231. During concrete curing, surface temperatures dropped into the 40°'s for a total of 14 hours.	Use As Is	2-28-80	K. Gunser
2815	12-18-79	M-613-5. FW #39 welded without QCIR W-1.00A being initiated, nor internal cleaness verified on QCIR P-1.10.	Rework	12-28-79	F. Brautigam
2816	12-18-79	M-129A. Valve 3/4" ECB-CK; received from vendor with a deep scratch in the center of a ground out area on the body.	Reject ~~Rework~~	4-23-80	J. Kramer
2817	12-18-79	F-38501. 90° elbow (33 pieces) received do not have required manufacturer's mark.	Reject	1-11-80	J. Kramer
2818	12-19-79	Spec. A-41. Paint storage fell below minimum temperature requirement.	Use As Is	12-20-80	S. Kirker
2819	12-19-79	E-42. Tray support installed with welding contrary to Spec. C-304.	Use As Is	3-19-80	J. W. Miller
2820	12-19-79	E-42,Spec. G-27. Fillet welds made on conduit support with angle varying 30°-60° contrary to angle degree & weld size made.	Repair	6-8-81	J. W. Miller
2821	12-19-79	P.O. M-18; Spec. C-1008. Different mounting brackets supplied by vendor than called for in spec. Bolts supplied are also inadequate.	Use As Is	4-14-80	C. Cameron

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PROJECT NAME [1] Midland JOB NO. [1] 07220 PAGE [8] 176

[2] NRC NO.	[3] DATE	[4] NONCONFORMANCE DESCRIPTION / REMARKS	[5] DISPO.	[6] DATE NCR CLOSED	[7] CLOSED BY
2974	4-10-80	C-2. Tendon #V72-1, has indentations along its length and wire diameter varies beyond acceptable range.	Reject Use As Is	5-6-80	P. Vanderveer
2975	4-11-80	Sk. 2-613-2-8, 2-611-3-25, calls for 1/4" fillet welds joining the structural tubing to wide flange; flare bevel groove welds are used.	Rework	9-19-80	E. Urbanawiz
2976	4-14-80	M-'80. Service Water Self-cleaning strainers, qualification test status report being re-reviewed, leaving status of material indeterminate.			
2977	4-17-80	Seismic tray support installed contrary to FCN-E-845: Dwg. E-756 Sh. 1.	Repair	5-30-80	J. W. Miller
2978	4-18-80	Spec. M-204. Pipe spool 1DBC-633-6-9 has been ground, violates minimum wall thickness requirements.	Repair	2-19-81	P. Guiette
2979	4-18-80	C2-146, Tendons V19-1, V23-1 & V61-1 were cut off prior to the completion of buttonheading on these tendons.	Use As Is	8-7-80	S. Gelnett
2980	4-18-80	E-708, 709. Welds of support steel for tray supports are not available for visual inspection, beams installed & concrete walls poured.	Repair	6-26-80	J. Miller
2981	4-22-80	C-2146. One section of a wire on tendon V97-1 identified during buttonhead inspections as being cracked.	Reject Use As Is	5-6-80	P. Vanderveer
2982	4-24-80	ASTM C-618-72. Results of user's test #88 for chemical & physical analysis of flyash shows minimum requirement is not met.	Use As Is	6-26-80	B. DeArmond
2983	4-24-80	Spec. C-208. Cylinders during concrete curing, temperature exceeded minimum required contrary to ASTM C-31-69.	Use As Is	6-12-80	S. Kirker
2984	4-24-80	C-2. post tensioning. 13 wires on tendon V-22-1 exceed the nominal diameter specified for tendons.	Test & Use As Is	6-24-80	P. Vanderveer
2985	4-24-80	During repull of scheme cable #1AB5537D a cut in the outer jacket was found.	Repair	5-16-80	C. Urbany
2986	4-29-80	Scheme cables 1BB2420A, 1BA0610C were pulled prior to issuance of work request directing repull, no QC witness or in-process inspection.	Rework	5-14-80	C. Urbany
2987	4-29-80	F-44893. Bolts require charpy V notch test per spec. G-33, test results were below lateral expansion minimum.	Reject	8-8-80	F. Kanchwala
2988	5-1-80	Spec. C-304, AISC Section 6.2, bolt material placed in a calibration device to indicate tension, several failed these tests.	Reject		
2989	5-1-80	Dwg. E-540. Spec. J-201. Control panels, shield cables are being run along with power or control cable which is contrary to spec.	Use as is	9-15-80	J. Cloe
2990	5-1-80	F-35375, 31095, 38235, 33577, 29363, 30210, variable springs do not meet the maximum published working range at full compression test.	Reject	5-22-80	J. Kramer
2991	5-1-80	E-22. Cable 2BB5634A, when cable was cut at 2B56 for termination water ran out of cable.	Use As Is	6-3-81	D. Preslar
2992	5-1-80	M-51AC. Component cooling water heat exchanger, 1E-73B, two arc burns found on the bottom side.	Std. Repair		

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2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3031	6-13-80	Spec. C-230 Water meter has not been calibrated per spec.	Rework	7-22-80	T. Lieb
3032	6-13-80	Portion of the post-tensioning movable gantry is striking some of the vertical grease cans that are on top of the vertical tendons.	UseAsIs	6-16-81	P. Vanderveer
3033	6-17-80	Dwg. C-266, 3/4" anchors installed in locations that are under the min, or exceed max. vert./horiz. edge distance per drawing.	Rework Use As Is	10-1-80	E. Dutton
3034	6-18-80	E-650 Sh 1, E-42. Raceway supports installed contrary to drawing requirements.	Use As Is	9-3-80	J. Miller
3035	6-20-80	C-2 Tendons were stressed with a gauge whose claibration was indeterminate.	Use As Is	9-15-80	P.Vanderveer
3036	6-20-80	FSK-M-1HBC-145-1 Vertical #11 rebar cut in excess of spec allowances while drilling for hanger installation	Use As Is	8-13-80	T. Gelnett
3037	6-23-80	P. O. M-127A Rev. 12 Valve I.D. requirements are conflictory between the M.R. and vendor drawings	Use As Is Doc Rework	9-16-80	R. MacGlashan
3038	6-23-80	P-46088 Contrary to Spec. CRD-C588-78A shrinkage of grout is less than its original volume	N/A	7-1-80 ~~6-26-80~~	B. DeArmond
3039	6-25-80	P.O. F-46833 12 of the 25 cases of paint delivered to jobsite were found to be seeping paint from containers & 1 case was missing	Reject	10-1[illegible]-80	F. Kawchwala
3040	6-26-80	Dwg. M-619-5. In the installation of FW 134, heat applied to carbon steel without field welding engineering instructions.	Use As Is	8-25-80	C. Fugate
3041	6-27-80	PQCI SC-1.05 requires that field density of relative densities be retested, contrary to this, 7 have not been retested.	Use As Is	~~10-3-80~~	B. DeArmond
3042	7-1-80	Material used as welded attachments for component supports as listed on NCR, not purchased from ASME or Bechtel approved suppliers.	Rework		
3043	7-1-80	F-45447. Threaded Nelson Studs, no statement of conformance or certificate of compliance submitted by vendor. AEO-13033	Doc Rework	7-9-80	F. Kanchwala
3044	7-1-80	F-30042. Honey Comb Crushable Element, G-321-D supplied by vendor on AEO-13062 does not have his signature in block 21.	Doc Rework	7-10-80	F. Kanchwala
3045	7-1-80	E-541, Dwg. E-42. Conduit 2BE013, embedded in floor of purge Rm # 703, has been core drilled.	Repair	7-31-80	J. Petrosino
3046	7-2-80	M-104A. Shop fab. c.s. piping has been coated with an unidentified base shop coating contrary to Spec. G-3.			
3047	7-3-80	FSK-M-0HBC-67-1, FSK-M-1HBC-184-1, socket welds installed without cleanliness varification and documentation by QC per Spec. M-204.	Use As Is	9-22-80	C. R. Fugate
3048	7-9-80	F-46747. Transducers, received on AEO-13114, no statement of conformance submitted by vendor.	Doc Rework	8-5-80	F. Kanchwala
3049	7-9-80	F-46905. Selector SW Operator, statement of conformance has not been received.	Doc Rework	7-21-80	J. Kramer

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[2] NRC NO.	[3] DATE	[4] NONCONFORMANCE DESCRIPTION / REMARKS	[5] DISPO.	[6] DATE NCR CLOSED	[7] CLOSED BY
3050	7-11-80	F-46216. Doors. Dimensions of door when received are not as specified on P.O.	Reject	8-11-80	J. Kramer
3051	7-11-80	F-4608, Item 7, tube steel, heat no. 42934. No certified material test report received for this heat number.	Doc Rework	8-18-80	J. Kramer
3052	7-11-80	F-45396. socket weld orifice flange, no quality verification documentation supplied, AEO-13208.	Doc Rework	7-23-80	F. Kanchwala
3053	7-15-80	F-45571, socket head cap screws & nuts, have marking 8 instead of 8 8c.(hex nuts); marking B8 instead of B8c (cap screws)	Reject	9-18-80	J. Kramer
3054	7-15-80	Spec. C-306. grouted anchor bolt holes for hanger 638-13-6 were drilled in the secondary shield wall without project approval, no concrete drilling permit.	N/A	7-17-80	S. Schumitch
3055	7-11-80	F-45571. Heavy hex nuts to be ASTM A-194 Grade 8C, markings are 8 on hex nuts.	N/A	7-29-80	J. Kramer
3056	7-17-80	Spec. C-27, Dwg. 2-632-1-4, two embeds used for hanger 26" 2ELB-10-H35 were not preheated.	Use As Is	9-23-80	E. Urbanawiz
3057	7-18-80	Spec. A-14. Test sample of the mortar was not taken on the 3rd consecutive working after the first day of masonry work.	N/A	8-4-80	B. DeArmond
3058	7-21-80	E-20 Spec. Elec. Pene. Module; only 22 cables exist in module 780501-1-06 & terminals X10, 11, 12 could not be identified.	Use As Is	12-15-80	J. Miller
3059	7-21-80	Spec. C-306. 3 grouted anchor bolt holes for hanger (Sk FSK-M-2ECB-1-AH2) drilled in sec. shield wall w/o concrete permit or QC notification.	Use As Is	11-10-80	Tim Gelnett
3060	7-23-80	Spec. C-208. Contrary to spec. requirements, 4 yds. of C-1 concrete was placed with 3/4" aggregate not meeting project specs.	Use As Is	9-17-80	B. DeArmond
3061	7-24-80	C-305. 3/4" anchors installed with center-to-center spacing reduced without prior approval,	Use As Is	8-27-80	S. Gelnett
3062	7-25-80	ASTM C 94-78a. admixture vial - WRDA, out of tolerance for ACC C-1 concrete placed 7-24-80.	Rework	8-21-80	B. DeArmond
3063	7-25-80	ASTM C 94-78a. concrete aggregate, aggregate out of tolerance.	Use As Is	9-17-80	B. DeArmond
3064	7-25-80	ASTM C-31-69. Initial cure of concrete specimens were maintained at a temperature exceeding the required range.	Use As Is	11-7-80	B. DeArmond
3065	7-28-80	Dwg. E-755 Sh. 1. Tray support installed with incorrect size fillet weld per FCR E-1990	Use As Is	9-19-80	J. Miller
3066	7-28-80	Dwg. A-52. Block wall #12 exceeds the height shown on the drawing. detail 8.	Reject	6-16-81	P. Vanderveer
3067	7-29-80	FW #2 on spool IHCC-46-603-13-1, completed w/o QA records to control & identify filler material or weld process, or weld inspection.	Rework		
3068	8-1-80	E-26. 600 Volt control cable, no sealing cap on end of cable, sealing cap torn off, insulation jacket torn.	Rework	9-12-80	C.Urbany

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3127	9-18-80	E-60, reel # C-0117, excessive peeling of outer insulating jacket of cable	Reject	2-18-81	M.F. Slocumb
3128	9-22-80	Spec C-231, 2 Rebar cut within a radial distance less than the minimum 10' requried.	Use As Is	11-4-80	J. Sercu
3129	9-22-80	Control Valve, 2XV-0431B, on FSK-M-2HCC-47-1, installed without nameplate; has no serial number.	Rework	12-12-80	C. Fugate
3130	9-23-80	NPS Sway Struts have varying degrees of disengagement of the self aligning bushing.			
3131	9-23-80	M-106, 2-619-2-30, Mechanical Shock Suppressor has a self aligning bushing disengaged			
3132	9-23-80	F-47785 6" Concrete blocks were contrary to the purchase order	Reject	10-8-80	J. Kramer
3133	9-24-80	Initial cure of concrete specimens temp. of 60°-80°F were not maintained during the first 24 hr. after molding	Use As Is	11-7-80	B. DeArmond
3134	9-24-80	E-12 Battery Racks 1&2 DQ1 & 1&2 DQ2 have rust and corrosion	N/A		
3135	9-24-80	E-6.42 SH2 HDI Anchors instal. contrary to center to center & center to edge spacing per FPG-2.100	Use As Is	2-26-81	D.S. Preslar
3136	9-25-80	E-11 & E-51 (MCAR-1-41) Buss Bar 90° bends on a transformer are broken	Use As Is	6-2-81	D. Preslar
3137	9-25-80	F-45841 Pipe with Heat No. 06094 & HT# 05520 has numerous pits & scale like condition	Reject	6-4-81	R. MacGlashan
3138	9-26-80	F-47360, One 18" stainless steel pipe received on AEO-13614 was found damaged	Reject		
3139	9-26-80	Excessive tendon cut of length, H21-022 was cut 2½" from end contrary to the required 11/8" stated in C2-146 Rev. 5B	Reject	10-16-80	P. Vanderveer
3140	9-26-80	C2-158, Vertical Tendon Grease Can-V-108-1 does not meet requirements per C2-146, Filter caps not properly plugged	Rework	12-09-80	M. Stark
3141	9-29-80	M-018, 1 1/4x40" Long Foundation Anchor Bolt for Diesel Gen. #1G-12 has thread damage	Use As Is	11-25-80	C. Fugate
3142	9-30-80	Portion of Fin Blade on Truck #18 was measured per NRMCA checklist & was found excessively worn	N/A	10-17-80	R. Siple
3143	9-29-80	C-306, Cut rebar allowance exceeded per Section 2.2	Use As Is	11-4-80	J. Sercu
3144	9-29-80	Spec C-24, Sluice Gate Stems, OM-91 A&B, were bent or bowed during compression	N/A		
3145	9-30-80	314 HDT Anchor #2,3,&4 Center to center spacing do not meet requirements per FPG-2.100	Use As Is	2-26-81	D.S. Preslar

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3165	10-9-80	Dwg. C-45, Lift thickness of uncompacted backfill exceeded the 4" requirement per Spec. C-211.	Reject	10-22-80	C. Pavledes
3166	10-14-80	C-230 Fineness Modulus of concrete sand over successive test samples varied more than 0.20 form the average.	Use As Is	12-03-80	B. DeArmond
3167	10-13-80	Post-Tensioning Field Installation Manual C2-146-12, double end stressing, H32-030, does not meet requirements per manual.	Rework Reject	11-19-80	M. Stark
3168	10-13-80	Dwg. E-644 Sh.2, Conduit to control broads were installed with ½"x 20" machine screws not ½"x20" & 6 to 8 machine screws instead of 4.			
3169	10-14-80	Cross Flange Welding, the installation of a type 14 Conduit Support on a W24x160 beam doesn't meet require. per E-42 Sh. 306A	Use As Is	11-11-80	J.C. Miller
3170	10-14-80	F-47635, Carbon Steel Pipe received on AEO-13692 has no documentation.	Doc. Rework	10-24-80	F. Kanchwala
3171	10-14-80	M-1.7, Spare parts for Reactor Coolant Pumps, no documentation or TWX received with material.	Doc. Rework	2-09-81	R. MacGlashan
3172	10-14-80	C2-146, Stressing gauge #N-133 not accurate & replaced by gauge #N-286. Last tendon not rechecked with new gauge.	Use As Is	1-5-81	P. Vanderveer
3173	10-15-80	Magna Magic, BPC #2079, Not in tolerance during recalibration per Peabody Testing proc. Items tested are indeterminate.	Rework	6-8-81	E. Dutton
3174	10-15-80	Dwg. M-326, Generic defficency in the disengagement of the self-aligning bushings in the end piece of sway struts & snubbers.			
3175	10-16-80	Pipe spool 2GCB-33-611-5-1 has 1" half coupling installed without verification of cleanliness by QC at FW #60, Spec. M-204	Use As Is		
3176	10-16-80	Spec. M-18 Aux Sub-Base, Mounting brackets and anchor bolt holes are not installed according to drawing.	Repair Rework		
3177	10-20-80	E-723 Sh. 1, Siesmic cable tray supports were not installed or welded according to the drawing.	Use As Is	2-03-81	J.C. Miller
3178	10-22-80	PGS-113, Pipe Guide Support for Hgrs. PSK-M-2HBC-9-1-H's, 3-4-5-6-8 Itm 2HBC-13-1-H2, 2HBC-13-2-H4-5, 2HBC-355-2-H10, 2HBC-497-4-H2 insuf. clear	① UseAsIs ② Rework		
3179	10-22-80	Allowance of cut rebar exceeded requirements per Spec. C-306	Use As Is	12-11-80	K. Gunser
3180	10-23-80	Spec. C-231, Pour #Y(629)A exceeded the maximum 12 hr. cure at the minimum temp. of 40°	Use As Is	12-17-80	P. Vanderveer
3181	10-23-80	ASTM C31-69, Concrete specimens during the first 24 hr. after molding temp. exceeded the 80° requirements.	Use As Is	2-13-81	B. DeArmond
3182	10-24-80	Spec. C-305, Hgrs. 0-618-1-12 & 14 have anchor bolts installed without full thread engagement & wrong washer used.	Rework	3-25-81	R. Grubich
3183	10-27-80	Feedwater Pump 1P-056, Arc strike on 1" vendor supplied cooling water piping for the pump repaired without QCIR.			

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3203	11-11-80	Contrary to Spec. A-15 four units of Nukem 109 Nu-Klad Filler compound-Batch #810235 with older shelf date than spec. allows.	Reject	1-27-81	F. Kanchwala
3204	11-11-80	F-47869. Upon inspections of subject flanges 4 of 8 pieces were found to be damaged on raised face sealing surface.	Use As Is	2-2-81	F. Kanchwala
3205	11-12-80	Contrary to Spec. C-231 containment 2 dome repair CC(778)c had one recording of acummulative time below 50°F of 16 hours.	Use As Is	1-07-81	S. Gelnett
3206	11-13-80	Dwg. M-657-45. Two welding IRs were generated for weld 113A and is also located in two places.	Use As Is		
3207	11-13-80	F-47527. Contrary to G-33, the material test report received for the clevis mat. received on AEO-13794 does not have physical prop.	Reject	12-24-80	R. MacGlashan
3208	11-13-80	Dwg. M-619-7 Rev. 8/F2 was completed without obtaining the necessary AI action.	Use As Is	4-17-81	E. Stanklewicz
3209	11-18-80	Dwg. M-603-18. Contrary to PQCI W-1.00 FW 23 was completed with no PQCI W-1.00A being issued.	Use As Is	2-25-1	R. Amos
3210	11-19-80	Contrary to Spec. C-2, during the buttonheading process on H13-041 one wire was sheared in half by the buttonhead machine.	Reject	12-06-80	P. VanderVeer
3211	11-18-80	Contrary to Spec. C-208, on 11-16-80 tank #8 had a temperature of 69°F exceeding the minimum temperature by 1°F.	Use As Is	1-13-81	B. DeArmond
3212	11-19-80	Spec. C-304, Dwg. C-192 shows the monorail in Sc. R was cross flange welded to existing W30x99 with a 5/8" fillet weld.	Use As Is	1-21-81	N. Plante
3213	11-19-80	M-120AC & Spec. M-204. A gouge exists in one end of the valve and porosity is visible in the bottom of the gouges area.	Std. Repair	1-22-81	J. Kramer
3214	11-19-80	M-349A Rev.4. 34 piece thermostat G-321-D & Spec. requirements and/or eng. do not differentiate between OVD & eng. procedures and qualification reports; no OVD submitted.			
3215	11-20-80	Spec. M-481 Rev.18. Two 900# weld neck R.F. flanges, sch 80 were installed on plant side of tanks OVT 28A and B should be sch 120.	Reject	5-26-81	R. Amos
3216	11-26-80	Dwg. 619 sh 3 Pipe spool 2HBC-102-S-619-3-4 has an arc gouge that is 3/4" x 1 7/8" x 1/4" deep (approx)	Repair	6-5-81	J. Clark
3217	11-26-80	Dwg. M-604-9 Valve (404-2-161)S?N 10 was installed with several gouges on the outside surface there by leaving the integrity of this indet.	UseAsIs	2-18-81	G. Fulmer
3218	11-26-80	PO F-45573 Contrary to Spec C-233 no G-321D has been received Both CMTRs received are illegible making the material indeterminate	Doc Rework	12-04-80	R. MacGlashan
3219	11-26-80	M-18-AC No certificate of compliance or CMTR were received for stud & nut for Valve #77001-139 Serial No. N61848-00-0004	Doc Rework	1-21-81	R. MacGlashan
3220	11-26-80	Contrary to Spec. C-306 4 anchor bolt holes were core drilled for H. FSK-M-1CCA-42-1-H7 & one 1CCA-42-1-AH6 One rebar was cut on hanger FSK-M-1CCA-42-1-AH7	Use As Is	2-23-81	P. Vanderveer

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3258	1-14-81	E-630 Sh. 2, 2 type 14 conduit supports installed with cross flange welding contrary to E-42.	Use As Is	3-6-81	J.C. Miller
3259	1-15-81	C2-146, Tendon H13-045 was supplied with only 168 wires contrary to INRYCO's system for Post-Tensioning.	Use As Is	3-24-81	P. Vanderveer
3260	1-15-81	Dwg. C-233 A-F3103-198, Spec. C-304, Cross flange welding to beam 16B: performed without prior Project Engineer's approval.	Use As Is	4-10-81	E. Dutton
3261	1-15-81	Spec. C-304, Cross flange welding to access platform structural steel, performed without prior approval of Project Engineer.			
3262	1-16-81	M-614 8, 8" HCC-GT-L (414-009), The nuclear identification tag is missing from the valve.	Rework	2-10-81	G. Fulmer
3263	1-20-81	F-49256, Hex bolts, nuts and washers; certificate of compliance doesn't state Type 3 required by ASTM-A325, Mat. not marked by type	Doc. Rework/Reject	2-2-81	M. Slocumb
3264	1-21-81	$1\frac{1}{2}$" diameter anchor bolts for hanger 604-5-2: can't be traced to any specific ASTM/Grade.	N/A	2-10-81	R. Huron
3265	1-21-81	E-7, Motor Control Centers-bolts missing on banking assemblies of back to back or back against wall with no rear entry.	Rework		
3266	1-23-81	Stock ASME NF Steel procured from sub-vendors who were not ASME or Bechtel approved. (Several P.O.'s- see NCR)	Reject		
3267	1-26-81	E-697 Sh.1, Electrical supports welded using Procedure P1-A-LH with E-8018 electrode; Spec. C-304 requires E-7018 & E-7016	Use As Is	2-25-81	J.C. Miller
3268	1-26-81	E-643, Conduits 2BH048, 2BH049, 2BH050 & 2BH051 have bends which exceeds the 4 - 90° maximum requirements.	Use As Is		
3269	1-26-81	M-3, Fuel Pool Cooling Heat Exchange #CE-76A was found to have an arc burn located on the upper west end.	Std. Repair		
3270	1-27-81	Attachments welds welded to Line OHCC-15-S-614-8-2 installed with full penetration welds, flattening of the pipe;contrary to M204 requir.			
3271	1-28-81	Included angles of the 4 connectors between the P1001 stru/flat surface of the steel is less than 60° contrary to Specs C-304 & G27	Repair	6-4-81	J.W. Miller
3272	1-29-81	During pullback of WR #301 consisting of 22 cables, the maximum allowance cable tension was exceeded, Dwg.E-37	Rework	5-19-81	R. Spisich
3273	1-30-81	C-306 states the minimum radial distance between two cut bars be at least 10 feet; contrary to this cut bar allowances exceeded.	Use As Is	4-30-81	P. Vanderveer
3274	1-30-81	C-2 states wires with defects greater than 0.005" deep shall be defected, Tendon H21-015 2 wires sheared off & 1 wire gouged 0.007".	Use As Is	4-20-81	S. Gelnett
3275	2-2-81	Tray support shown on Dwg. E-741 does not agree with "AS Build" Condition.	N/A		
3276	2-2-81	Spec. G-33 does not include structural steel to be used in the installation of ASME Sec. III class 2 & 3 pipe supports.			

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3277	2-2-81	PO 46941 does not contain material certification in accordance with requirements of NA 3767.4	It (1) Doc Rwk, It (2) Reject		
3278	2-2-81	PO F-45563 has rigging beam, plate & beam assemblies with dry paint thickness in excess of Spec. C-233 requirements	Rework	2-24-81	P. Vanderveer
3279	2-3-81	M-1.31 No documentation or TWX has been received for 2 master specialtie series 800 pushbutton assemblies PT#851-24416-002	Doc Rework		
3280	2-3-81	During pullback per WR794 there were 17 cables rendered indeterminate because maximum allowable tension was exceeded	Rework	6-3-81	J. Lange
3281	2-3-81	Spec. C-208 states that 2"x2" cubes be in a moist condition & maintained at a temp. of 73.4 &.3° R. Contrary to this the temp. was 69°	Use As Is	3-12-81	B. DeArmond
3282	2-3-81	M-125B Contrary to Spec. M-204 an arc burn was discovered on SS check valve 2½ HCC-CK-RL2 (403-1-087)			
3283	2-6-81	E-428 limits tube steel length to 24", contrary to this 3 type 11B conduit supports have been revised so tube is 28".	Use As Is	3-17-81	J.W. Miller
3284	2- 1	Penetration circumferential weld testing doesn't meet requirements of ASME Sub.-Sec. NE Sec III			
3285	2-9-81	Tendons H13-027 & H13-047 lost an indeterminate amount of grease during greasing operation.	(1) UseAs It (2) Rework	2-24-81	P. Vanderveer
3286	2-9-81	Contrary to Dwg. A-52 Block wall 26B has only 2 No.5 rebars installed horizontally as a bond beam.	Rework	3-9-81	J. Musser
3287	2-9-81	Contrary to Dwg. A-72 Schedule I linear plate coating repairs were 3rd or 4th coated w/o required dry film thickness limits verified.	Use As Is	4-14-81	E. Dutton
3288	2-9-81	Cut rebar for Oct. & Nov. wasn't reported until Jan.5, 1981 contrary to C-305 Section 3.0.	Doc Rework	2-26-81	S. Gelnett
3289	2-9-81	Contrary to A-72 General Note #6, instrumentation supports failed to meet requirement as tested to FPA 1000.	Reject	5-19-81	R. Kramer
3290	2-10-81	Bottom N. anchor bolt for H-617-1-7 was installed w/o QC inspection of anchor hole prior to installation, contrary to PQCI C-1.50 R.7	Rework	2-13-81	W. Smith
3291	2-10-81	E-632 Sh.2 anchors for pull box No. 1BJ815 being installed prior to holes being inspected, contrary to PQCI C-1.50 & Spec C-305.	Use As Is	6-9-81	T. Hahn
3292	2-12-81	E-536, Embedded conduit 2AC007 was penetrated while drilling for expansion anchors.	Rework Repair	6-26-81	C. Lemons
3293	2-13-81	Spec. C-231 states in part horiz. rebar shall not be cut; during core drilling a horiz. & 2 vert. rebar were cut.	N/A	3-24-81	P. Vanderveer
3294	2-13-81	P.O. F-48098 upon inspection, hex nuts were found to have injuious defects, also contrary to ASME SA-194 6 nuts were not marked.	Reject	3-3-81	M.F. Slocumb
3295	2-16-81	M-603 Sh.12, Installation of pipe causing flattening of pipe(M204); 1" ½ coupling flattened pipe from welding (M-488).	Reject	3-20-81	J. Miller

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3296	2-16-81	Supports for 2BJ993, 2CJ994, and 2DJ995 installed against drawing E-42B and Spec. C-305	Rework		
3297	2-17-81	Contrary to Spec. C-306, 3 horizontal and 3 vertical rebars were cut within 10 feet.	Use As Is	4-14-81	R. Huron
3298	2-17-81	SC-1.05-221, specimens cast on 2-13-81 were measured at 82°F, contrary to ASTM C31-69 which states temperature be 60°-80°F.	Use As Is	6-16-81	B. DeArmond
3299	2-18-81	A(B-21) 600V Control Cable has been stripped of outer jacket, and all insulation in a section exposing bare conductors of cable.	Reject	3-3-81	H. Waatti
3300	2-19-81	Contrary to P.O. F-49469, the test certifications of the ½" and 1½" plates do not state that they have been normalized.	Doc. Rework	4-30-81	M. Slocumb
3301	2-19-81	Spec. C-305, Ultrasonic Testings shows anchors to be 7" in length making embedment depth over 5".	Use As Is		
3302	2-19-81	Contrary to PQCI C-1.50, there are no QC records indicating inspections have been performed on conduit support anchors, listed on NCR.			
3303	2-19-81	Contrary to Spec. M-326, Baseplate for Hanger P2.10-1-638-14-22 has been grouted without QC record of inspection.	Rework		
3304	2-19-81	Spec. C-305, Holes for expansion anchors weren't inspected prior to installation, also qualification of installer wasn't documented.	Rework		
3305	2-19-81	Spec. M-204, 6" valve 2PV 1975A does not have N stamp data tag.	Rework		
3306	2-23-81	Spec. C-231 and SCN-10001 requires lean concrete backfill curing requires protection from freezing; haven't been verified.	Use As Is	4-30-81	P. Vanderveer
3307	2-24-81	P.O.-E-26, Contrary to IOM BEBC-4750 cable 2AA0502M was cut from reel E26-000G3448 and installed.	Use As Is	4-15-81	J. Lange
3308	2-25-81	C-1.50-FSK-M-1GGB-37-1-H8, 4 anchor bolts were installed without QC inspection of anchor holes prior to installation.; PQCI C-1.50 Rev7	Rework	3-24-81 6-24-81	L. Glatz W. Smith
3309	2-25-81	Spec. C-231, Minimum clear distance between core drilled hole and doorway opening agreed at 11"; Contrary, hole drilled at only 8½".	Use As Is	5-5-81	P. Vanderveer
3310	2-25-81	Spec. C-306, two north-south bars were cut less than 5 feet apart and there is less than 10 feet to next cut bar.	Use As Is	5-5-81	P. Vanderveer
3311	2-25-81	Spec. C-231, contrary to this spec. 1 vertical and 1 horizontal bar were cut in addition to 4 existing cut vert. bar & 2 horiz. bar.	Use As Is	5-5-81	P. Vanderveer
3312	2-26-81	Hgr. 1-604-12-21, 3 expansion anchors were installed without QC inspection of anchor holes prior to installation, Contrary to PQCI C-1.50	Rework	3-24-81 6-24-81	R. Grubich W. Smith
3313	3-2-81	Spec. M-374AC R-1,00-14615, Seismic test procedures have only a Code 3 approval, contrary to Spec. M-374 Para. 5.5.1	Doc. Rework	4-22-81	R. MacGlashan
3314	3-2-81	Holes for expansion anchor for Hanger 611-6-41 wasn't inspected prior to installation, contrary to PQCI C-1.50.	Insp. Rework	4-27-81 6-25-81	L. Glatz W. Smith

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3315	3-2-81	Contrary to PQCI C-1.50, there are no QC records that inspections have been performed on junction boxes 2BJ1798 and 2BJ1797.			
3316	3-3-81	Per PQCI C-1.50, 4 expansion anchors were installed for Hgr. 0-665-1-4 without QC inspection of anchor holes prior to installation.	Inspec. Rework	3-25-81 6-24-81	L. Glatz W. Smith
3317	3-3-81	Dwg. M-604 Sh.6, there is no heat # or code identif. marked on pipe between welds 75c1 & #37 & #29c2 & 45c1 on Sp. 2HCB-16-S604-6-2.	Rework		
3318	3-4-81	C-1.50-2-619-3-28, 2 anchor bolts were installed prior to QC inspection of requirements per PQCI C-1.50.	Inspec. Rework		
3319	3-4-81	R-1.00-14551,P.O. 49482 requires a CMTR, contrary to this, the steel sheet received on this order didn't have CMTR's.	Reject	4-23-81	M. Slocumb
3320	3-4-81	C-1.50-FSK-M-1HBC-155-1-H6, 4 expansion anchors were installed without QC inspection prior to installation.	Inspec. Rework	4-28-81 6-24-81	L. Glatz W. Smith
3321	3-6-81	E-52 states the finish for shannels be done in accord. w/ ASTM A-153-78, contrary mat. received on AEO-14655 was done in accord. w/ ASTM A-386	Use As Is	3-9-81	R. MacGlashan
3322	3-6-81	E-60, Reel #4387 was found to have an end cap installed over end of cable therefore making quality indeter. at this time.	Rework	6-23-81	R. Spisich
3323	3-6-81	E-26, QVP for cable reels have no cert. confirming that no insulation repair was performed; cable from these reels was installed.	Use As Is	4-21-81	R. Spisich
3324	3-6-81	2-604-4-14, (8) 5/8" anchors were installed prior to QC inspection, contrary to PQCI C-1.50 Rev.7.	Test Rework	3-24-81 6-24-81	R. Grubich W. Smith
3325	3-5-81	Dwg. E-36 calls for conduit 1BJA058 to be 2" conduit between 1BJ491 and 1BJA24 as shown on Dwg. E-608 Sh.2, contrary to this it is 3".	Rework	5-14-81	C. Lemons
3326	3-9-81	Contrary to PQCI-C-1.50, 4 expansion anchors for Hgr. 2-604-13-14 & 2 exp. anchors for 2-604-16-16 were installed prior to QC inspect.	Test Rework	3-24-81 6-24-81	L. Glatz W. Smith
3327	3-9-81	M612 Sh.6, there are no heat # or code identified on pipe or recorded on any documentation of Spool 1HCB-1-S612-6-11, contrary to Sp.M204	Rework		
3328	3-9-81	Sp.C-231, #6 E-W bar was cut at top of slab, a 6"ϕhole drilled & the dist. from W30x116 beam was field meas. at 2½",contrary to REM#C-2808.	Use As Is	5-11-81	P. Vanderveer
3329	3-10-81	Contrary to Spec J-204 Rev.7, 200 modules / accessories don't specify what is Q & Non-Q, making mat. indeter. as to it's use.			
3330	3-11-81	Contrary to PQCI C-1.50, East expansion anchor bolt for 1-603-17-3 was installed without QC inspection of bolt hole.	Test Rework	3-24-81 6-24-81	L. Glatz W. Smith
3331	3-11-81	2-639-14-15 (16) anchors were installed prior to QC inspection, contrary to PQCI C-1.50.	Test Rework	3-24-81 6-24-81	L. Glatz W. Smith
3332	3-11-81	Dwg. C-96, existing grout pads on QM96A thru QM96D & QM91A&B are irregular w/ numerous voids, also leveling nuts weren't installed.	Reject	6-3-81	E. Dutton
3333	3-16-81	Contrary to Bechtel Welding Standard Performance Spec. WQ-1, Rev.12, welders listed on NCR were found not to be qualified for the welds installed.			

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3353	3-25-81	J-201 Rev.8 & Spec. C-3, locations in Control Panels 0C20, 1C11, & 1C13 have no coating & bare metal is exposed. Peeling paint.	Std. Repair		
3354	3-25-81	Contrary to Requirements of Dwg. E-47, Panel 1C47 contains Class 1E & Non-Class 1E cable not employing a 6" separation.	Rework		
3355	3-26-81	Dwg. M-488 Rev.7, based on re-inspection of field installed "O-lett" fittings, the O-letts listed on NCR don't meet dwg. requirements.	Rework		
3356	3-26-81	Contrary to PQCI C-1.50, 2 east expansion anchor bolts for 2-605-2-13 were installed without QC inspection of holes.	Test Rework	4-8-81 6-24-81	L. Glatz W. Smith
3357	3-26-81	MI-1 R-2.20-14325, Contrary to QCIR R-2.20 R.4, the CMTR states the mat. conforms to Spec.B211-76, but no '76 Ed. for B211 mat. leaving it indeter.			
3358	3-26-81	M-1.13 R-2.20-144, Contrary to PQCI R-2.20 R.4, the B&W C.ofC. hold status hadn't been completed therefore making status of mat. indeter.			
3359	3-26-81	C-231, Contrary to Gen. Proc. Sec. II.3 of Manuf. Bulletin 08 1277-5 Star Grout, a core drilled hole was repaired w/o surf. being rough	Reject	4-10-81	J. Sercu
3360	3-27-81	Contrary to M-488 R.7, 2" ½ couplings have been welded to 6" run-pipe on EBB line classes for welds listed on NCR.			
3361	3-31-81	Contrary to PQCI C-1.50, (4) expansion anchor bolts for 2-617-9-6 were installed w/o QC inspection of anchor bolt holes.	Test Rework	4-9-81	L. Glatz
3362	3-31-81	P.O. F-46711 R-1.00-14607, the computer mode control SBM switch has no traceability to its documentation contrary to R-1.00 Rev. 10.	Doc Rework	4-16-81	M. Slocumb
3363	3-31-81	Spec. C-305, expansion anchors on 1HCD-204-H1 has exceeded maximum embedment depth.	Use As Is		
3364	4-1-81	2-617-9-6, (6) expansion anchor bolts were installed w/o QC inspection of anchor bolt holes, contrary to PQCI C-1.50.	Test Rework	4-9-81 6-24-81	L. Glatz W. Smith
3365	4-1-81	Contrary to Spec. C-305, expan. anchors on FSK-M-1CCC-16-5-H4, FSK-M-1CCB-16-2-H10, & FSK-M-2HCD-507-1H2 exceeded max. embed. depth.	Use As Is		
3366	4-1-81	Contrary to Spec. M-204 Para. 5.2.1, a 1" nozzle coming from flued head #1Z20 has been bent on approximently a 20° angle.	Reject		
3367	4-1-81	Contrary to P.O.F-46194 & Specs. C-208&C-230, the lab. test report doesn't indicate the applicable ASTM design, or year nor other Spec	Doc. Rework	5-29-81	B. DeArmond
3368	4-2-81	Contrary to Spec. C-231, the concrete forms were removed on the 6th day on Blk.wall 22 E&F. The sidewalls were left uncured indet. time	Use As Is	5-15-81	P. Vanderveer
3369	4-3-81	Dwg. E-47, Cabinet 2C47 has Class 1E & Non-Class 1E circuits with separation less than 6".	Rework		
3370	4-3-81	FMP 132-0,1,2,3, no detail is provided on these drawings for the make up of the scheme strips on states terminals.	Use As Is	6-18-81	J. Durham
3371	4-6-81	Cable 2BB6404J jacket insul. has been bunched up causing wrinkles over approx. 8" of cable near end at 2C166, quality of cable indeter	Rework		

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3372	4-6-81	Dwg.A-72 R.10 states the min. acceptable adhesion valves for Sy.#25 shall be 400PSI, coatings on Cont.1&2 Reac. Head Serv. failed to meet require.	Doc. Rework	4-29-81	M. Slocumb
3373	4-7-81	P.O. E-50286 AEO-14737, the heat # on the CMTR does not match the heat # on the material, leaving the status of the mat. indeterm.	Rework		
3374	4-7-81	Contrary to PQCI C-1.50, no inspection was performed on 2 type 1A supports for 2RIB089 & 6 type 1A supports for conduit 2RTC011.	Reject	5-12-81	R. Kozak
3375	4-8-81	Contrary to PQCI E-4.0, Act. 2.4, tension was exceeded on cable B11 for scheme #2AD1001AF, making the quality of cable indeterminate.	Use As Is		
3376	4-8-81	Contrary to PQCI C-1.50, anchor bolts for Type 571 conduit support in 428 was installed prior to QC inspection of holes.			
3377	4-8-81	Contrary to SF/PSP G-1.1, 1P-139 A&B Aux. Fuel Oil Pump Motors & 1P-138 A&B Lube Oil Keepwarm Pump Motor were installed w/o drwgs.&Specs	Rework insp.	6-8-81	R. Runyon
3378	4-9-81	Contrary to QCNM PSP-G6.1, field welds 6,9,&10 Dwg. FSK-M-2HCB-55-2 were fabbed & installed w/ no final insp. making it impos. for final	Test Rework	4-28-81 6-24-81	K. Gustafson W. Smith
3379	4-10-81	Contrary to PQCI C-1.50, (4) expansion anchors for hanger 2-604-15-3 were installed w/o QC inspection of anchor holes.	N/A shit.	6-2-81	C. Fugate
3380	4-13-81	Dwg. M619-5 8"-HBC-GT-1MO-1996A valve, contrary to SpecM-204 the motor housing endcap has a hole in it approx. 5/8"x1" lg.	Rework	6-19-81	R. Wellington
3381	4-13-81	Contrary to Spec. M-204, the pipe betw. FW's 97-57 have no mat. I.D. this fact is also documented on P-1.10-610-4-2 log #9031 reassembly			
3382	4-13-81	Dwg. FSK-DVI-M619-6 Conn.#1 socket weld 14 fitup & welded w/o AI concur., also Sw13 was made w/o QC verif. & document;PSP-G6.1&M-204,	Use As Is		
3383	4-15-81	Contrary to Spec.M-204, FW#15 on Sp. 1GCB-26-610-2-1 @ flued head 12-28 in Unit 1 was welded won obtaining the verif. of cleanliness			
3384	4-15-81	Contrary to Spec. C-231, (3) horiz. bars were cut within a 10' on the south face of Hk line wall at El. 659'-0".	Inspect. Rework		
3385	4-15-81	PSP G-6.1 (2) 3/4"EBC-GB valves, at FW18&19, 457-2-226 & 457-2-225 were installed without a P-1.30 Inspection Record.	It.1 Rwk. It.2 N/A		
3386	4-15-81	M-106 FR48, Spherical bushing retainers for the special #88E Fig81H constant supports were damaged & one support dented in spring cover	Test Rework	6-29-81	C. Cross
3387	4-16-81	Contrary to PQCI C-1.50, expansion anchor bolts for 2-604-11-13 were installed without QC inspection of holes	Rework		
3388	4-16-81	Contrary to PQCI C-1.50, there are no QC records indicating insp. has been performed on 2 TypeIA supports for conduit 1AC134.	N/A	4-17-81	R. MacGlashan
3389	4-17-81	Spec. A-41, K-1.00-14892 Batch # on Comp. C doesn't agree with Batch # on cans therefore making status of material indeterminate.	Rework	5-15-81	L. Hall
3390	4-17-81	E-42 Sh.9 gives requirement for indoor surface mounted conduit, 2AG-108 has arc strikes & deep grind marks on conduit.			

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3391	4-20-81	M-18, Contrary to SF/PSP G-1.1, on Diesel Gen. M-2.00-1G-12, 1G-11, & 2G-11 items appear to have been installed w/o assembly drawings.			
3392	4-21-81	Contrary to G-33, P.O.50286 R-1.00-14751 Item #27, a CMTR has been submitted w/ heat #37067, the mat. has heat #37064.	Doc. Rework		
3393	4-21-81	Contrary to PSP G6.1, Hanger FSK-M-2ECR-4-1 H1 installed without any QC documentation, leaving integrity of hanger installation indeter.	Rework		
3394	4-23-81	Spec. C-305, several locations having more than 2 bars cut were discovered during a review of cut rebar asbuilt drawings.			
3395	4-24-81	F-50822 R-1.00-14920, the batch #'s of Comp. C doesn't agree w/ the batch #'s on containers, paint is more than 3 mos. old upon arrival	N/A	4-24-81	F. Kanchwala
3396	4-25-81	Contrary to PQCI C-1.50, bottom expansion anchor bolts for 2-604-3-34 were installed without QC inspection of anchor bolt holes.	Test Rework		
3397	4-24-81	E-60, during installation of cable 2AI005D, it was tensioned to point where it broke into 2 pieces, one end attached to 2ATA018.	Reject		
3398	4-24-81	E-26, during install. of cable 2AI1018L it was tensioned to point where it broke into 2 pieces, separated end attached to 2ATA019.	Rework		
3399	4-27-81	F-49406 R-1.00-14803, no conformance of compliance has been received on the 3" sparling hydrant flowmeter.	Doc. Rework	6-2-81	M. Slocumb
3400	4-27-81	Contrary to E-42B sh.306A, Type 14 support exceeded the max. weld size & length to edge of beam flange, also excessive grinding done.			
3401	4-27-81	E-22, the minimum bend radius of cable 2AD1001AN was exceeded by 3" contrary to FPE 4.000 Para. 6.5 and 6.6.	Reject		
3402	4-27-81	Contrary to M-204, Socket welds #1,2,&7 on Dwg. FSK-M-0HCC-64-1 R.2 & S/w #36 on FSK-DVI- M604-8 R.1 were installed w/o QC verifi. & doc.	Rework		
3403	4-28-81	E-49180 R-1.00-14784 no QVD package has been submitted by the vendor for the material received on AE0-14784	Doc. Rework	5-14-81	F. Kanchwala
3404	4-29-81	Contrary to FPE-4.000 Rev.3 6.7, B-11 Cable 1BB6404A has violated the minimum bend radius.			
3405	4-29-81	Contrary to FPE-4.000 Rev.3 6.7, B-05 Cable 1BB6404A has violated minimum bend radius at the point of termination in MCC1B64 Unit 1c.			
3406	4-29-81	Contrary to M-204, FW 1 on Dwg. FSK-M-2CCP-104-1 was welded without cleanliness inspection by QC.	Use As Is	5-28-81	R. Runyon
3407	4-29-81	In 2B18 Units 282 and 283, the quality of the Ground Fault Sensors & Ground Fault Coil Sensors is indeterminate.	Rework		
3408	4-29-81	Contrary to PQCI C-1.50, expansion anchors on 2-604-3-11 were installed prior to insp., Contrary to C-305 7 anchors embedded 3" & 1 4¹".			
3409	4-29-81	Contrary to PQCI C-1.50, expansion anchor bolt for 1-612-3-29 was installed without QC inspection of holes.	Test Rework	5-14-81	C. Cross, Jr.

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3410	4-29-81	Contrary to Spec. C-305, due to installation of anchors prior to QC inspection of holes, requirements of spec. couldn't be verified.			
3411	4-29-81	Contrary to Spec. C-306, 3 vertical bars were cut within 10' on the south face of C line wall at Elev. 614'-0".	Use As Is	6-16-81	P. Vanderveer
3412	4-29-81	Contrary to Spec. C-306, 3 North/South bars were cut within 10' on the slab @ 624'-0".	Use As Is	6-16-81	P. Vanderveer
3413	4-29-81	QC inspection can't be made of welded metal screens on 1&2G-11 & 1&2G-12 due to lack of procedure on Form 84 or FCR-M3709.	Use As Is	6-4-81	J.C. Miller
3414	4-29-81	Contrary to Spec. M-204 Para. 4.1.3, 1½" reference strainer 1YS-5201-B does not have "N" stamp plate.	Rework		
3415	4-30-81	Contrary to PQCI C-1.50, expansion anchor bolts for hgr. 0-657-45-108 were installed without QC inspection of holes.	Test & Rework		
3416	5-1-81	Contrary to M-75-56-5, extensive damage was found inside the howl to Pump OP-75A during impeller inspection.	Rework		
3417	5-1-81	Contrary to FPE-4.000 Rev.3, the minimum bend radius for cable scheme 2AB6304D has been exceeded.			
3418	5-1-81	E-42A, (4) Class 1E cables outer jackets have been gouged. Scheme #'s of cables involved are: 2BB2430E & G, 2BB2431N & 2BQ403N.	Repair		
3419	5-1-81	F-50684 R-1.00-14890, #2 angle 6x4x½x40 ASTM A-36 has no CMTR, contrary G-33.	Reject	5-21-81	M. Slocumb
3420	5-4-81	E-60, During the pull of WR #A5048 & 948 consisting of 28 cables, codes I07 & 08, the max. allowable bulk cable tension was exceeded.	Use As Is	6-18-81	H. Waatti
3421	5-4-81	Contrary to M-204, flanges & adjacent pipe at FW 7&8 were divided from the subassembly w/o transfer of spool ID's to the parted pieces	N/A	6-4-81	R. Kramer
3422	5-4-81	Contrary to WQ-1-2, 1" ½ coupling at FW 94 was installed 4/29/81 by welder not qualified by the process P1-AT-LH Rev. 4.	Rework		
3423	5-4-81	Contrary to Dwg. E-13-8-9, the middle mounting holes on both sides of panel 1D10 were not used & 2 extra holes were drilled in back.			
3424	5-4-81	M-18, Diesel Gen. Bldg. 2G-11 intake, during inspection of F-20-4925 it was noted that there is a gouge in the elbow.			
3425	5-4-81	Contrary to Spec. M-18, as fit-up & welded 02-465-21-BC for Bay 3&4 have root gap spacing in excess of ¼". M-2.00 2G-11 & 2G-12.	Reject		
3426	5-4-81	Contrary to Dwg. E-42B Sh.306A a Type 14 conduit support ICG032 (EC-1-6-172) doesn't meet length & size of welds specified.	Use As Is	6-8-81	J. W. Miller
3427	5-5-81	Contrary to ASME Sec. III & Spec. M-204, Spool 48"IHBB-27-S512-3-1 F/w 26 has nominal wall thickness of .375 & offset of weld is ¼".			
3428	5-5-81	F-50286, Contrary to Spec. G-33 Para.4.0, Items 51 & 53 of AEO-14907 do not have a CMTR for flat bar steel purchased.	Doc. Rework	6-10-81	M. Sherwood

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3429	5-5-81	Contrary to F-50676, R-1,00-14891 the 10GA steel sheet has no P.O. # or heat # or weather proof tag.	Rework	6-22-81	M. Slocumb
3430	5-5-81	Contrary to Spec. C-306, (3) E/W bars were cut with a 10' radial distance.	Rework	6-16-81	P. Vanderveer
3431	5-5-81	Contrary to FPE-4.000 Rev. 3 Para. 6.7, the minimum bend radius for scheme cable 2AB6301H has been violated in two places.	Reject		
3432	5-6-81	Contrary to Spec. M-75-56-5, the impeller for Service Water Pump OP-75C is battered and gouged.			
3433	5-8-81	Contrary to FPE-4.000 Rev.3 Para 6.7, the minimum bend radius for scheme cable #2BB2413A has been exceeded.	Reject	6-3-81	L. Rosemayer
3434	5-8-81	Contrary to Spec. M-204, 1" s/s valve Dwg. FSK-M-1CCB-33-2 item #365 SN: VK-23-17 has no nuclear stamp tag or ID tag.	Rework		
3435	5-8-81	Contrary to E-55 & ASTM A386-78, coating on material doesn't meet the spec. requirements, making mat. indeterminate. R-1.00-14973.	Rework	5-14-81	F. Kanchwala
3436	5-8-81	FSK-M-CHCC-33-2-H2 Contrary to PQCI-C-1.50 anchor bolts for the afore mentioned hanger were installed without QC inspection of holes	Test Rework		
3437	5-12-81	Contrary to Spec. C-230, conduit penetrations 1BJA102 & 1BJA103 were grouted using masterflow '814' grout.	N/A	6-16-81	P. Vanderveer
3438	5-12-81	Contrary to Specs. J-568 & J-233, R-1,00-14906 has documentation problems on resistance temperature detector assy - items 25 & 26.			
3439	5-14-81	Contrary to Spec. C-306, (3) vertical vars were cut within a 10' radial distance.			
3440	5-14-81	Contrary to Spec. C-306, one stirrup bar was cut in pilaster without Project or Resident Engineer approval.			
3441	5-14-81	Contrary to Spec. C-306, excessive bars were cut within a 10' radial distance.			
3442	5-14-81	Contrary to PQCI C-1.50, (3) expansion anchors were installed for hgr. 2-604-15-33 without QC inspection of holes.	Test Rework	6-22-81	K. Gustafson
3443	5-14-81	Contrary to Spec. C-306, (2) E/W bars were cut in excess of spec. allaowance on 599' slab.			
3444	5-14-81	Contrary to Spec. C-231, (3) North/South bars were cut within a 3' distance.			
3445	5-14-81	Contrary to Spec. M-326, for item #1 hgr. 0-619-6-14 a full penetration weld was used to Proc. P1-A-LH w/o backing ring or gougeing.	Rework		
3446	5-14-81	Contrary to Dwg. E-42A Rev.49 Sh.6, damage was done to tray sections listed on page 2 of NCR.	Rework		
3447	5-14-81	Contrary to PQCI C-1.50, (3) expansion anchors were installed for hgr. 1-657-2-28 w/o QC inspection of holes.	Test Rework	6-22-81	K. Gustafson

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3448	5-15-81	Contrary to PQCI C-1.50 Act 2.3.B, (6) 3/4" expansion anchors were installed prior to hole characteristics being verified for C-1.50-79	Rework		
3449	5-15-81	Contrary to FPE-4.000 Rev.3, the minimum bend radius for scheme cable #OBW030N has been exceeded.	N/A		
3450	5-18-81	Contrary to FCR-E-2143, the back half of the motor terminal boxes for 1&2VV-57A,B,C,D have been painted carbo-zinc green.			
3451	5-18-81	Contrary to Spec. M-342, after completion of hydrotest EA-CT-23-PT-2 the cleanliness of the piping on Spools OHBC-15 line indeterminate.			
3452	5-20-81	Contrary to G-33, F-50855 chemical analyses & physical tests for Type II cement received hasn't been completed on AEO-14951.	Doc Rework		
3453	5-20-81	Contrary to PQCI C-1.50 & Spec. C-305, anchor bolts installed prior to inspection, w/o QC verification of installers & bending. (EH-1582)	Rework	6-1-81	T. Hahn
3454	5-20-81	Contrary to DCN #2 Dwg. C-2022 Rev. 1&2, during settlement monitoring upon review of doc. received, piezometer readings were omitted.			
3455	5-20-81	Contrary to Spec. A-41, painter PT-52 applied a top coat of phenoline 305 by gun type to indeterminate # of Q Areas.	Use As Is	6-20-81	E. Dutton
3456	5-20-81	During the inspection of the A490 Type 3 bolts purchased on P.O. F-47410 (item 14) 51 of the 203 were found to be Type 1.	Reject	6-23-81	M. Sherwood
3457	5-20-81	Contrary to Dwg. E-47, terminal strips TBA1 & A2 have non-Q cables routed thru the floor with less than the allowable required separation	Rework		
3458	5-20-81	Scheme cable #2AB2312A was pulled thru slot ASC393 into MCC 2B23 w/o prior QC notification & insp. Bend radius for B11 cable was 10¼".	Reject		
3459	5-20-81	Contrary to Spec. C-304, a W12x36 tos 624'6" added for cable tray support has areas of grind marks which approach 1/8".	Std. Repair	6-17-81	J. W. Miller
3460	5-21-81	Contrary to FCR-E-2300 Dwg. E-42A R.49, 1AG063 scheduled conduit installed is indeterminate if an oversize situation exists.	Use As Is	6-24-81	J. W. Miller
3461	5-21-81	Contrary to Spec. C-230, concrete placement A(623)A' of 5/14/81 had a record test air content of 7.1%.			
3462	5-21-81	Contrary to Dwg. M-481 R.19, (6) 900# [illegible]d neck raised face flanges 4" ODBC-1 yard piping scheduled 80 were installed in the vault.	Reject		
3463	5-21-81	Contrary to PSP-6.1 Art.3.3.3.a.5, Act. 2.3, fit-up, on the PW-1.00 for 2CCB-63 & 70 were bypassed during construction.			
3464	5-22-81	Contrary to FPE 5.000 Rev.3, scheme cable #2AA05001B has violated the minimum bend radius requirements.	Use As Is	6-22-81	W. Fedorow
3465	5-22-81	Contrary to FPE 4.000 Rev.3, scheme cable #0EI005A exceeds the minimum bend radius.	Use As Is		
3466	5-22-81	Contrary to PQCI C-1.50, (4) 3/8" anchors were installed to support box 2BJ1841 byoassing three hold points.			

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2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO	6 DATE NCR CLOSED	7 CLOSED BY
3467	5-22-81	Contrary to PQCI C-1.50 & Spec. C-305, (6) expansion anchors for hgr. 2-604-3-10 were installed w/o QC inspection & exceed 4" embed.			
3468	5-26-81	Dwg. M604-17, PW-1.00-604-17-92, there is no acceptable criteria for installation of elbowlets at FW 92, contrary to PSP G-1.1 Rev.3.			
3469	5-26-81	Contrary to Spec. M-204, 1" valves 1XV0324B (024) & 1XV0324A (026) don't have an "N" Stamp data tag for Dwg. FSK-M-1HCC-75-1.	Doc. Rework		
3470	5-26-81	Contrary to FPG-5,000, seal water return cooler #1E-59A has approximately 23 arc strikes. See NCR for the locations.	Rework		
3471	5-27-81	Contrary to Spec. M-204, Para 6.4, FW #1 Conn. #12 on Dwg. FSK-DVI-M-610-6 R.1 was fabbed w/o QC verification or doc. of cleanliness.	Use As Is	6-22-81	L. Glatz
3472	5-28-81	Contrary to Spec. C-305 & V.P. E-49-1-5, E-19-3-9, & E-11-1-5, battery chargers and inverters not anchored properly.			
3473	5-28-81	Contrary to Spec. M-204, an area of small pipe line FSK-M-1HCC-33-1 has been damaged.			
3474	5-29-81	R-1.00-15081, 240 each - 1" CBA-GB valves purchased from Grand Gulf has documentation problems.	It.1&2 Doc.Rwk. It.3 N/A		
3475	5-29-81	Three Type 14 supports for conduit 2CG033 are welded across a beam flange other than specified in E-42.			
3476	6-1-81	Contrary to Spec. C-233, NCR written to track the work for pipe restraints listed on page 2 that are remaining to be completed.			
3477	6-1-81	Contrary to Spec C-321, there exists 2-7" core drilled holes with a clear distance of 1".	N/A		
3478	6-1-81	Contrary to Spec. C-306, (4) horizontal bars were cut within a '0' radial distance.			
3479	6-2-81	Contrary to Spec. C-306, grade B7 studs received on P.O. F-47542 R-1.00-14909 does not have all the documentation.	Doc. Rework		
3480	6-2-81	Contrary to PSP G-6.1, on Dwg. M-604 sh.8 FW88 fit up was bypassed and joint welded without AI concurrence.			
3481	6-2-81	Contrary to what Dwg. 1-610-7-21 sub 4/F1 shows, shop weld #1's actual condition is 3/16" or less all around.	Rework		
3482	6-2-81	QC has no citeria for acceptance of warpage for hgr. 2-604-15-27, therefore leaving quality of beam indeterminate.			
3483	6-3-81	Contrary to Spec. C-231, there exists 2-3" core drilled holes with clear distance of 3", & 2-6" holes with no clear distance.			
3484	6-3-81	Contrary to Spec. ASME SA 194, 6 of the 72 ASME SA 194 grade 8M type 316 nuts don't have markings.	Reject	6-18-81	M. Sherwood
3485	6-3-81	M-127B, R-1.00-15159, QA manual not yet approved.			

LOG OF NONCONFORMANCE REPORTS

PROJECT NAME 1 Midland JOB NO. 1 07220 PAGE 8 203

2 NRC NO	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3486	6-3-81	Contrary to Letter #BCCC-5385, FW-8,9,&10 on Dwg. FSK-MPC-2-2016 are not accessible for reinspection.			
3487	6-3-81	Contrary to Letter #BCCC-5385, FW-1,2,&3 on Dwg. FSK-MPC-1-1019 are not accessible for reinspection.			
3488	6-3-81	C-2.10-22, Non-Q shiming material was used contrary to Dwg. C-350 Detail A and FCN #C804.			
3489	6-4-81	Contrary to Spec. M-204, Q.C. has no documented cleanliness for FW 15,16,&27C3 on Dwg. M611 sh.4, prior to welding.			
3490	6-4-81	Contrary to E-42B sh.332 R.2, P1001 double strut was used on two type 12 supports rather than P1001A3 triple strut.	Rework		
3491	6-4-81	Contrary to PSP G-6.1, valve 10" ECB-GT-LX (410-042) on Dwg. M610 sh.4 was installed without Act. 2.8.			
3492	6-5-81	M-611 Sh 4 Contrary to M-204 QC has no documented cleanliness for FW 5C1 & 6 on spool 2ECB-24-611-4-4			
3493	6-5-81	Contrary to PSI Act, 2.8, valves 2½"-HCC-6B(404-1-005) & 2½"-2SV-0418(404-1-004) are installed w/o Act 2.8 signed by QC prior to closure.			
3494	6-8-81	Contrary to PQCI P-1.30, valve 1MO-1024A (410-103) on Dwg. M-610 sh4 was installed without an IR being issued.			
3495	6-8-81	Contrary to Spec. M-204 & BQAM Sec.5250, QC doesn't have doc. that supports the validity of the vibro-etched heat # on pipe.			
3496	6-8-81	Contrary to ASME code Sec. III NCA 3800, the CofC accompanying the fittings received on R-1.00-14859 (P.O. F-3139) doesn't have all info.	Doc. Rework	6-16-81	M. Sherwood
3497	6-8-81	Contrary to Spec. M-326, hgr. sketch 1-603-7-12 Sub.4 specifies the use of grouted anchors, actual installation consists of expansion.			
3498	6-8-81	Contrary to ASME Sect. III, valve 2½"-2SV0421A(404-1-81) installed without the nameplate with the Nuclear Code stamp.			
3499	6-10-81	C-1.60-321, contrary to Spec. C-306, during review of April's cut rebar asbuilt dwgs., 3 N/S bars were cut within 10'.			
3500	6-10-81	Contrary to Spec. M-204 & PSP G6.1, FW 43 on M-617 sh.6 was welded without QC documentation of cleanliness inspection.			
3501	6-10-81	Contrary to Spec. M-204 Para. 4.1, the leak chase material welded to the flued head at Pene 1Z-51 has no material I.D..			
3502	6-10-81	Contrary to Spec. M-204 Para. 4.1, the leak chase material welded to the flued head at Penetration 2Z-51 has no material I.D..			
3503	6-10-81	Hydrotest BN-CT-2 & 6 were performed without the water chemistry analysis to verify Grade II testing, contrary to FPB-1.000 & T-1.00.	Rework	6-24-81	C. Fugate
3504	6-10-81	Contrary to PSP 6.1, Act. 2.3 fly up on PQCI PW-1.00 Rev.1 was bypassed during construction.			

LOG OF NONCONFORMANCE REPORTS

BECHTEL

PROJECT NAME: Midland JOB NO: 07220 PAGE: 204

NRC NO.	DATE	NONCONFORMANCE DESCRIPTION / REMARKS	DISPO.	DATE NCR CLOSED	CLOSED BY
3505	6-10-81	SC-1.05-238, contrary to ASTM C-31-69, specimens cast on 6-9-81 were measured at 82°F.			
3506	6-11-81	Contrary to Spec. A-41, A-41-5-1 carboline product data sheets for phenoline 305 has no recommendations as to specific process of mixing.	Use As Is	6-24-81	R. Bennett
3507	6-11-81	There is no evidence of Q.C verification for cables listed on page 2 of NCR passing thru ...ias listed, rendering cables indetermin.			
3508	6-12-81	...ontrary to Spec. C-306, one stirrup bar was cut in a beam in south ...face wall without P.E of R.E. appro.al.			
3509	6-12-81	Contrary to Spec. G-33, a CMTR can not be supplied by the vendor for R-1.00-15004 on P.O. F-50286, leaving material indeterminate.	Reject		
3510	6-16-81	Contrary to Spec. E-55, the tray fittings listed on NCR page 2 received on R-1.00-15243 P.O. F-50240 are ripped.			
3511	6-15-81	Contrary to Spec. M-204, FW #26c1 on FSK-M-1HBC-498-6-1 was installed w/o QC verification & doc. of cleanliness, also mat. missing heat #.			
3512	6-15-81	Contrary to Spec. M-204, pipe & coupling between FW #10 & FW 11, FSK-M-1HBC-498-3, were installed w/o QC verifi. of clean. & heat #'s			
3513	6-15-81	Contrary to FPE 4.000 para. 6.5&6.7, the minimum bend radius of cable 2AMH003A was exceeded by 1.5".			
3514	6-16-81	Contrary to Spec. M-204, FW#7 on FSK-M-1HBC-497-2 & FW's #2&3 on FSK-M-1HBC-3-1 have no documentation of QC cleanliness verification.			
3515	6-16-81	Contrary to PSP G-3.2 R.6, there is inconsistent identification of FW #43, 50, & 38 from Dwg. FSK-M-2HBC-128-1.			
3516	6-16-81	Contrary to Spec. G-33, the #6 rebar received on R-1.00's-14964, 14965, & 14966 didn't meet the minimum strength requirement.	Reject		
3517	6-17-81	Contrary to PSP G-6.1 R.5 Para. 3.3, FW #1 Dwg. FSK-MPY-80 sh.2 was welded out without an IR or documentation.			
3518	6-17-81	Contrary to PSP G-6.1 R.5 Para. 3.3, FW #3, 7, 11, & 19 Dwg. FSK-M-1HBC-3-3 were welded out without an IR or documentation.	N/A	6-24-81	L. Glatz
3519	6-17-81	Contrary to PSP G-6.1 R.5 Para. 3.3, Fw 38R1 & 4R1 dwg. FSK-M-1HBC-4-2 & FW #8R1, FSK-M-1HBC-498-1 welded out w/o IR or documentation.			
3520	6-18-81	Contrary to Spec. M-201 Rev.8, pipe spool 2ECB-2-S611-1-2 has buckles for about 2' up the bend of the pip..			
3521	6-18-81	Contrary to Spec. C-231, 3 N/S bars were cut in violation of the spec. on the slab at 674'-6".			
3522	6-18-81	Contrary to Spec. M-204 Rev. 14, there is no material traceability on FW's listed on NCR page 2 to Dwg. FSK-M-1HBC-4-8.			
3523	6-18-81	Contrary to Spec. M-204 & PSP G-6.1, FW 14 on FSK-M-1HBC-4-8 Rev.2 has no documented cleanliness by Q.C..			

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland — JOB NO.: 7220 — 19. NO. 1334 — 20. PAGE 1 OF 1

2. UNIT(S): Unit 1 — 3. PART NO.: N-132 — REV: N/A — 4. ITEM DESCRIPTION: Equipment Hatch — 5. ITEM LOCATION: Unit 1 EL 668' 6" Azimuth Poseyville Laydown

6. P.O. [redacted]: 7220-C50B-AC Rev. 10 — 7. SERIAL NO.: 30398 — 8. REPLACEMENT PART P/N N/A REV SER NO. — 9. SOURCE: Supplier — 10. [redacted] SUPPLIER: W. J. Wooley Company

11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO. R-1,00-2925 NO. C-50 Rev 13 — 12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO — 13. SKETCH ATTACHED ( ) YES (X) NO — 14. Discovered During (X) Rec'g ( ) Const ( ) Test — 15. Equip Furnished By ( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION:

Specification 7220-C50 Rev. 13, Para 11.4 requires the equipment hatch to be coated on the exterior and interior surfaces. Upon receipt inspection of the equipment hatch listed above, a charred area was observed on the exterior coating. The area covers approximately five (5) feet around the perimeter of the hatch. "Q" number is 1.1013. Hold pending final disposition. 1 hold tag(s) applied to the nonconforming item(s).

17. REPORTED BY: [signature] DATE: 4/27/78

18. VALIDATED BY: [signature] DATE: 4-28-78

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

The damaged coating will be repaired in accordance with the standard repair procedure of specification ~~C-110~~ A-41 after installation of the hatch cover is complete.

[signature] 5/5/78

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X		X	

[signature] 5/5/78
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Damaged coating repaired in accordance with spec. A-41 See CB-50-C-81 for documentation

[signature] 6-16-81

26. QC ACCEPTANCE [signature] 6-16-81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

NONCONFORMANCE REPORT

S/A 182 BBC

1. PROJECT NAME	JOB NO.	19. NO. 1680	20. PAGE 1 OF 2
Midland	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
Unit 2	B & W QRM 48-1182	2	Reactor Coolant Pump Internals	Whse. 71 Poseyville Grid 02E

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N N/A REV SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER
M 1.7	See Blk. 16		Supplier	Babcock & Wilcox

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG ( ) SPEC (X) OTHER	See Blk. 16	(X) YES ( ) NO	( ) YES (X) NO	(X) Rec'g ( ) Const ( ) Test	(X) Client ( ) Eng ( ) FLD
NO.	PQCI R-2.20 Rev. 4				

16. NONCONFORMING CONDITION:

PQCI R-2.20 Rev. 4 Act 2.0 states "Review the contents of the B & W Data Package for availability, legibility and traceability in accordance with the requirements of the B & W Quality Requirements Matrix(QRM)." Contrary to the above, the following descrepency have been noted in QA Data Packages supplied for the Reactor Coolant Pump Internals and Driver Mounts listed below: Note: Attached Certificates of Conformances(8 Units) are attached to the original NCR.

Continued on Page 2

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
John R Shiffer Jr	11-30-78	J.F. Barclay	11-30-78

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

12-5-78

Procurement Supervisor to obtain proper documentation from B&W.

Dale Shaw 12-6-78

L Ward 12/6/78

S.P.R # NSS-0012 #59 Sent to Engineering Dcc

S.R.R NSS-0013 #26 w/file 12/6/78

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework (Doc)	reject	repair	use as is

G. Miller B&W 12-6-78
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

J.F. Barclay 12-8-78
PROJ CONSTR QC ENGINEER DATE

J.W. Kolinski 12-11-78
AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Corrected data packages received 6-13-80 as documented on CPCo letter 157FQA80, however the NPGD QA Hold is still in affect on the B&W Cof C.
DADelaney 4/15/81

R

Certificate of conformances from NPGD QA releasing QA Hold. Therefore closing this NCR
E.R. Swanson
6/18/81

26. QC ACCEPTANCE E.R. Swanson 6/18/81

QC ENGINEER DATE

S.L. Miller 6/10/81
AUTHORIZED INSPECTOR DATE

Block 16 Continued

I. S.C. Pump-Bechtel Equipment No. 2151B, B & W Mark No. 28C-P1B2, Byron-Jackson(B-J) S/N 69HC00h, QCIR # B-2.20-35.

A. B & W Nuclear Power Generation Division(BWCD) has a QA Hold placed on the B & W Certificate of Compliance.

B. Contract Variations 87-095-00 are not present in the QA Data Package.

C. Heat Exchanger Assembly

1. Stud for securing the Heat Exchanger to the Driver Mount(Ht. No. 8093199 Route Card No. 150775) have no mechanical properties or impact testing listed.

2. 2 inch Hex Nuts(Ht. No. h0387 Route Card No. h63h0) have no mechanical or chemical properties listed only a certificate of conformance.

3. Thermowells(Route Card No. 93902) have no cobalt analysis or volumetric examination.

D. Seal Cartridge Assembly

1. No Certificate of Conformance supplied for the Shaft Sleeve-seal, Split Hanger Ring, Split Jog-Out 3rd seal, Tube Seperators, Back-Up Ring or locating plate-shaft sleeve.

E. Driver Mount Assembly

1. MTR for the 5½ Hex Nuts(Ht. No. 6052378 Route Card No. V-191910) is illegible.

2. Stud and Stud Bracket(Ht. No. 5180h2 Route Card No. V190263) have no mechanical properties listed.

F. No Certificate of Conformance for cleaning was supplied for this pump.

G. Seal Flange Pipe assembly

1. No Documentation was supplied for any components of this assembly.

II. S.C. Pump-Bechtel Equipment No. 2151C, B & W Mark No. 28C-P1A2, B-J S/N 69HC00h2, QCIR # B-2.20-35, QCIR # B-2.00-49

A. B & W NPGD has a QA Hold on the B & W Certificate of Conformance.

B. QA Data Package and Certificates of Conformances are less the Heat Exchanger which has since been received at the jobsite.

✓ C. Contract Variation-no CVAR listed on the Supplier Certificate of Conformance are present in the QA Data Package.

— D. No ASME Code Data Report present in package.

Continued on Pg 3

Block 16 Continued

E. Seal Cartridge Assembly

1. Same as paragraph I.B.1. above.

F. Driver Mount Assembly

1. No radiograph reader sheet present for the Bottom Flange(Route Card No. 150377 HT. No. 1[illegible]11) as called on the B-J Documentation Checklist.

2. MTR for the 5/8 Hex Nuts(HT. No. 6058378 Route Card No. 99285) is illegible.

3. No Chemical properties listed for studs or stud bracket(HT. No. 51[illegible]0 Route Card No. 15[illegible])

G. Seal Flange Pipe Assembly

1. Same as paragraph I.C.1. above.

III. I.C. Dumm-Bechtel Equipment No. 2151B, B & W Part No. 2 C-B1A1, B-J S/O 6[illegible]001, [illegible]-2.20-37

A. B & W HTCD has a QA Hold on the B & W Certificate of Compliance.

B. No CVA in QC Data Package.

C. Heat Exchanger Assembly

1. Heat No. 68h47 for Heat Exchanger Flange(Route Card No. 150[illegible]9) inaccurately recorded on B-J Documentation Checklist as 768h7.

2. MTR for the Studs for between the Heat Exchanger to the Driver Mount(HT. No. 8[illegible]09 Route Card No. 150775) lacks the Mechanical and Impact Testing.

3. Same as paragraph I.C.3 above.

D. Seal Cartridge Assembly

1. Heat number 16550 is record on the B-J Documentation Checklist for the Coil-Connection Flange Reducing Device(Route Card No. 151965) and on the MTR as 87h46.

2. Same as paragraph I.D.1 above.

E. Driver Mount Assembly

1. Same as paragraph I.E.1 above.

2. Same as paragraph I.E.2 above.

F. Seal Flange Pipe Assembly

1. Same as paragraph I.C.1 above

Continued on Page 4

Block 16 Continued

IV. L.C. Pump-Bechtel Equipment No. 3P51A, B & W Part No. 230-HBH, B-J S/O 6011003, [illegible] 3-2.00-65

A. B & W (PDC) has a QA Hold on the B & W Certificate of Conformance.

B. No ASME Code Data Report in the data package.

C. QA Data Package and Certificate of Conformances are less the Heat Exchanger which has since been received at the jobsite.

D. Shaft Impeller Assembly

1. The B-J Documentation Checklist indicates Ferrite Content to be supplied for the shaft(Mt. No. 2[illegible] Route Card No. 116838)whereas Heat Chart is supplied. Note: All other Data Packages for L.C. Pump Internals require the Heat Chart.

E. Driver Mount Assembly

1. Bottom Flange(Mt. No. 15558-1 Route Card No. 45905)has no documentation.

2. Top Flange(Mt. No. 15422/8251 Route Card No. 46344)has the heat no. list 15422/8251 on the B-J Documentation Checklist.

3. The MTR for the 5[illegible] inch Hex Nuts(Mt. No. 6052378 Route Card No. 152[illegible])is illegible.

4. Same as paragraph II.F.3 above.

F. Seal Cartridge Assembly

1. Same as paragraph I.D.1 above.

2. The coil connection pressure reducing device(Route Card No. 151965)has heat # 16550 on B-J checklist while the MTR has # 87446.

3. The tube coil pressure reducing device(Route Card No. 151960)has heat # 24776 on B-J checklist while the MTR has # 87446.

G. Seal Flange Pipe Assembly

1. Same as paragraph I.G.1 above.

Continued on Page 5

Block 16 Continued

V. I.C. Pump-Bechtel Equipment No. 1P51B, B & W Part No. 13C-P1A1, P-J S/E 63-P-0045, QCIR # 3-2.20-35

A. B & W HMCO has a QA Hold on the B & W Certificate of Conformance.

B. Heat Exchanger Assembly

1. Same as paragraph I.C.3 above.

C. Rotating Baffle Assembly

1. Heat No. 4410331 for the Inner Cylinder(Route Card No. 150777)is listed as 4410331 in the B-J Documentation checklist.

D. Seal Cartridge Assembly

1. Socket Head Cap Screw(Ht. No. 5061814 Route Card No. 46635) have no mechanical properties listed.

2. Same as paragraph I.D.1 above.

E. Driver Mount Assembly

1. Same as paragraph I.E.1 above.

2. Same as paragraph I.E.2 above.

F. Seal Flange Pipe Assembly

1. Same as paragraph I.C.1 above.

VI. I.C. Pump-Bechtel Equipment No. 1P51A B & W Part No. 13C-P1A2, P-J S/E 63-P-0046, QCIR # 3-2.20-33

A. B & W HMCO has a QA Hold on the B & W Certificate of Conformance.

B. Closure Studs(Ht. No. 114136 Route Card No. 45024)MTR is illegible.

C. Heat Exchanger Assembly

1. Hex Nuts for the Heat Exchanger to Driver Mount Studs(Ht. No. 40307, Route Card No. 46301)has no mechanical properties listed.

2. Same as paragraph I.C.3 above.

D. Driver Mount Assembly

1. Same as paragraph I.E.1 above.

2. No documentation present for the Stud-Bracket(Ht. No. 5F30H2, Route Card No. F-10073)in the Data Package.

Continued on Page

Block 16 Continued

E. Seal Flange Pipe Assembly

1. Same as paragraph I.C.1 above.

F. No CVAI in QA Data Package.

VII. S.C. Pump-Bechtel Equipment No. 1P51C, B & W Part No. 1XX-P1B1, B-J S/O 691-3-0068, OCR# 3-8.8C-3

A. B & W HP6D has a QA Hold on the B & W Certificate of Conformance.

B. Heat Exchanger Assembly

1. Same as paragraph I.C.3 above.

C. Seal Cartridge Assembly

1. Weld plug(Mt. No. 301954, Route Card No. 250818)MTR has no mechanical properties listed.

2. Same as paragraph I.D.1 above.

D. Driver Mount Assembly

1. Same as paragraph I.E.1 above.

2. Same as paragraph I.E.2 above.

E. Seal Flange Pipe Assembly

1. Same as paragraph I.C.1 above.

F. No CVAI present in QA Data Package.

VIII. S.C. Pump-Bechtel Equipment No. 1P51D, B & W Part No. 1XX-P1B2, B-J S/O 691-3-0068, OCR # 3-8.8C-65, OCR # 3-8.20-50

A. B & W HP6D has a QA Hold on the B & W Certificate of Conformance.

B. Seal Cartridge Assembly

1. Same as paragraph I.D.1 above.

C. Driver Mount Assembly

1. Top Bracket(Mt. No. h95hh22, Route Card No. V190721) has the heat listed as h95hhC on the B-J documentation checklist.

2. Certificate of Compliance only was supplied 5'-8 Hex nut(Mt. No. 6052378 Route Card No. T0[illegible]).

3. Same as paragraph VI.B.2 above.

Continued on 7

Block 16 Continued

B. Seal Flange Pipe Assembly

1. Item as encoded 'C.' above.

2. To (W) current in QA Data package.

3. Heat exchanger Assembly

1. Thread dirt (note cited in QVQC) has no volumetric exam in the QA Data Package.

"A" numbers are A.015, A.016, A.025 and A.026. Hold pending final disposition. Exclude item(s) noted in the nonconforming item(s)

JPL 12-6-78

Block 16 Con't.

A conditional release was been granted to allow relocation of storage of the Reactor Coolant Pump ~~internals~~ MOTOR SUPPORT STANDS AND CLOTH. Corrections or removal can be accomplished without causing damage or contamination to associated plant equipment or structure.

PFE	DATE	PFQCE	DATE
PQAE	DATE	A.I.	DATE

A conditional release has been granted to allow relocation of storage and installation of the reactor coolant pump internals and motor support stands. (see attached B&W correspondence 5/31/79) Correction or removal can be accomplished without causing damage or contamination to associated plant equipment or structure.

PFE	DATE	PFQCE	DATE
PQAE	DATE	A.I.	DATE

BECHTEL MIDL

B&W PGG LYN
MAY 31, 1979

MR. W.J. LEE
B&W CONSTRUCTION COMPANY
MIDLAND, MICHIGAN

RELEASE FOR INSTALLATION OF RC PUMP INTERNALS NSS-12/13, 12542

GLD #422
NPGD QA ENGINEERING HAS ISSUED THE FOLLOWING STATEMENT ON THE CONSUMERS RC PUMP INTERNALS:

"THE RC PUMP INTERNALS WERE SHIPPED IN AN NPGD QA HOLD STATUS BECAUSE AT THE TIME OF SHIPMENT, THE INDEPENDENT REVIEW OF THE PUMP STRESS REPORT WAS NOT COMPLETE. THIS REVIEW HAS NOW BEEN COMPLETED. HOWEVER, BECAUSE OF UNRESOLVED DISCREPANCIES FOUND DURING THE NPGD QA RE-REVIEW OF THE RC PUMP INTERNALS QA DATA PACKAGES, THIS HOLD CANNOT YET BE RELEASED. NONE OF THE DISCREPANCIES FOUND IN THE RC PUMP INTERNALS QA DATA PACKAGES HAVE ANY IMPACT ON THE QUALITY OF THE RC PUMP INTERNALS. CONSEQUESTLY, AS FAR AS NPGD QA IS CONCERNED, THE RC PUMP INTERNALS CAN BE INSTALLED PENDING RESOLUTION OF THE QA DATA PACKAGE DISCREPANCIES. IT IS EXPECTED THAT THESE DISCREPANCIES WILL BE RESOLVED AND THE PACKAGES UPGRADED BY JULY 31, 1979."

G.L. DUPRIEST, PROJ. MGMT., BABCOCK & WILCOX COMPANY,
LYNCHBURG, VIRGINIA
(BECHTEL MIDL

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19. NO.	20. PAGE
Midland	07220	1763	1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
1&2	N/A	N/A	Nuclear Service Control Valves	N/A

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
J-255-A	N/A	P/N N/A REV N/A SER NO. N/A	Supplier	Copes Vulcan

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG ( ) SPEC (X) OTHER IR NO. N/A NO. BEBC 2606	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION: Q Material on this PO has been identified by Project/ Quality Engineering to be indeterminate in regards to satisfactorily completion qualification test requirements per spec. J-255.

Q # 5.022. No hold tags applied.

17. REPORTED BY [signature] DATE 1-9-79

18. VALIDATED BY [signature] DATE 1-9-79

19. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

20 ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Project engineer to evaluate

V R Gladen 1-12-79

23. PROJECT ENGINEERING DISPOSITION SEE PAGE 2 OF THIS REPORT, COMMENTS TAKEN FROM QUALIFICATION TEST REVIEW (QTR) FORM.

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			✓

J J Schmanski 5/5/81
PROJECT FIELD ENGINEER DATE

T K Whitaker 4/30/81
PROJECT ENGINEER DATE

[signature] 5/6/81
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Q.C. AGREE with Project Engineering to USE AS IS.

[signature]
6/11/81

26. QC ACCEPTANCE [signature] 6/11/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Continued.

A conditional release is granted to install the Q Material on this NCR. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

W. Miller AVB 1-12-79
PE Date

L.D. Barclay 1-12-79
PFQCE Date

L. Smith 1-14-79
or LOAE Date

REVIEW BY P/QE GROUP	RESOLUTION BY CONTROL SYS
SEISMIC ANALYSIS APPEARS OK, CALCULATIONS NOT CHECKED	SEISMIC ANALYSIS REVIEWED BY PROJECT STRESS GROUP (7220-J255A-19-1) P/QE SIGN OFF ON 12-28-78
⚠ NO EVIDENCE OF QUALIFICATION FOR VALVE OPER. TO EITHER 344 OR 382	ALL OPERATORS (D-100-60) ON VALVES SHIPPED TO DATE ARE AIR OPERATED SO IEEE ~~IEEE~~ 382 IS NOT APPLICABLE. (1-12-79) IEEE 382 IS FOR ELECTRIC VALVE OPERATORS; IEEE 344 ALLOWS SEISMIC QUALIFICATION BY ANALYSIS WHICH IS PROVIDED BY J255A-19-1 AND MEETS SPECIFICATION J255 AND G-10.
⚠ NO EVIDENCE OF COMPLIANCE TO IPCEA S-19-81 SECT. 6.19.6 PER G-10	VENDOR IS NOT SURE THAT WIRING IS IPCEA S-19-81 SECT 6-19.6 "FLAME TEST" QUALIFIED. VENDOR REQUESTED TO VERIFY WIRING QUAL. AIR OPERATED VALVES DO NOT USE WIRING FOR CONTROL AND THE ONLY WIRING ON ASSEMBLY IS FOR POSITION SWITCHES, WHICH ARE NOT BEING USED. USE AS IS. C.O. Bissell C/S 315-81 Q.E.M. R.C. Haller. DWL 3-18-81 328-81

RECEIVED JAN 18 1979 DECHTEL SSC A.A.

NONCONFORMANCE REPORT S/U Non-testable Item

1. Project Name: Holland	Job No.: 07220			19. No. 2820	20. Page 1 of X
2. Unit(s): 2	3. Drawing/Part No.: F-42	Rev: 13	4. Item Description: Weld Seismic Conduit Supports	5. Item Location: 2B#3 see Sht #6	
6. P.O. Or Spec No.: N/A	7. Serial No.: N/A	8. Replacement Part P/N N/A REV N/A SER NO. N/A	9. Source: Engineering	10. Contractor/Supplier: N/A	

11. Inspection Criteria: ☐DWG ☒SPEC ☐OTHER NO C304-83 & C304-84 NO G-27
12. ASME AUTHORIZED INSPECTION REQ'D: ☐YES ☒NO
13. SKETCH ATTACHED: ☐YES ☐NO
14. Discovered During: ☐REC'G ☐CONST ☐TEST
15. Equip Furnished By: ☐CLIENT ☐ENG ☒FLD

16. Nonconforming Condition: Requirement: AWS-D1.1-72, paragraph 2.1.1.4 states that a fillet weld may be used in a skewed connection when the included angle is not less than 60°. Further G-27, rev 11; GWS-Structural, rev 2 paragraph 4.1.3.4 states that "T" fillet welded joints may not be skewed less than 60°.

Condition: F-42 rev 13, Type 520 conduit support has longitudinal brace (See Sht 2)

17. Reported By: Edgar Cruz Date: 12/18/79
18. Validated By: P.S. Buckley Date: 12-19-79
21. Routing: ☒ TO FIELD ENGINEERING ☐ TO OTHERS (SPECIFY)

22. ☐ Field Engineering Disposition ☒ FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

Field engineering recommends project engineering evaluation and disposition.

Revised disposition) Field Engineering recommends that Project Engineering revise top 4" plate shown on page 4 to accommodate cable tray spaced 3" from wall. P.S. Buckley 12-27-79

23. Project Engineering Disposition: Project Engineering has determined the original weld detail was incorrect. Quality Control is to inspect connection as shown on sheet (3) and ~~REWORK~~ REPAIR as necessary. See RFI-C-2608 {4} P.A. 5/29/80 Walt A. Calmus

Thomas Reynolds 5-10-80

Drawing F42 (0) Sheet 520 is to be changed as shown on Sheet (4) {6 & 7} P.A. 5/29/80 ECN 4/24/80

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS
		X	

PROJECT CERTIFIED ENGINEER: P. Boor 3-11-80 DATE
PROJECT ENGINEER: W.A. Calmus P.E. 3/10/80 DATE
PROJECT CONSTR QC ENGINEER: [illegible] 3-12-80 DATE
AUTHORIZED INSPECTOR ____ DATE ____

25. Disposition Results

~~Six Supports Not Based on Test Data~~ ~~Per Ref 1 - Pg 6~~ ~~Ref 3 Requirements~~ ~~on C304-683 & C304-684~~ ~~Qualified 3-12-80~~. Void due to new disposition P.S. Buckley 6/6/80

Six Supports Rejected Per Block 23, And Documented On C304-683 & C304-7630. E42B Dcn 71 Covers Sht 520 For Block 23. Ghillet 6 8 81

26. QC Acceptance: Ghillet 6 8 81
QC ENGINEER DATE
AUTHORIZED INSPECTOR DATE

See Pg 8 for Continuation

Rec'd Unsatisfactory 5/29/80 P.A.

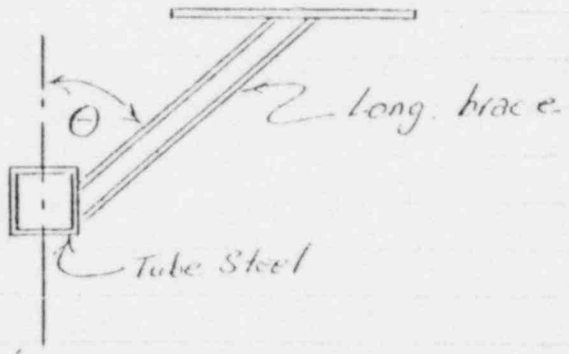
Block # 16 continued

see sketch 12/18/79

detailed with the include angle, θ, varying from 30° to 60°. The actual included angles, θ, for the installed supports are: (All Elevs approx 619')

AZ	Longbrace θ	Elec. Support #
361°	45°	EC2-33-216
366°	45°	EC2-33-182
370°	45°	EC2-33-124
376°	45°	EC2-33-120
382°	40°	EC2-33-118
388°	31°	EC2-33-215

Hold 12/18/79



Hold for Engineering Disposition
Six (6) Hold Tags Applied
QList 3.006

Jim Alexander notified 12/18/79
Jeff Miller and Dave Herrick notified 12/17/79

Block #23 Continued

Project Engineering Redisposition

Redisposition: Welding shall be ~~perform~~ performed in accordance with details shown on ~~xxx~~ pages 6 and 7. The change ~~will be~~ incorporated in DWG. E-42 B (Q) Sheet 520 By DCN # 21

ADW 5/26

R.K. Engeler 5-26-81

David J Huizenga 5-15-81

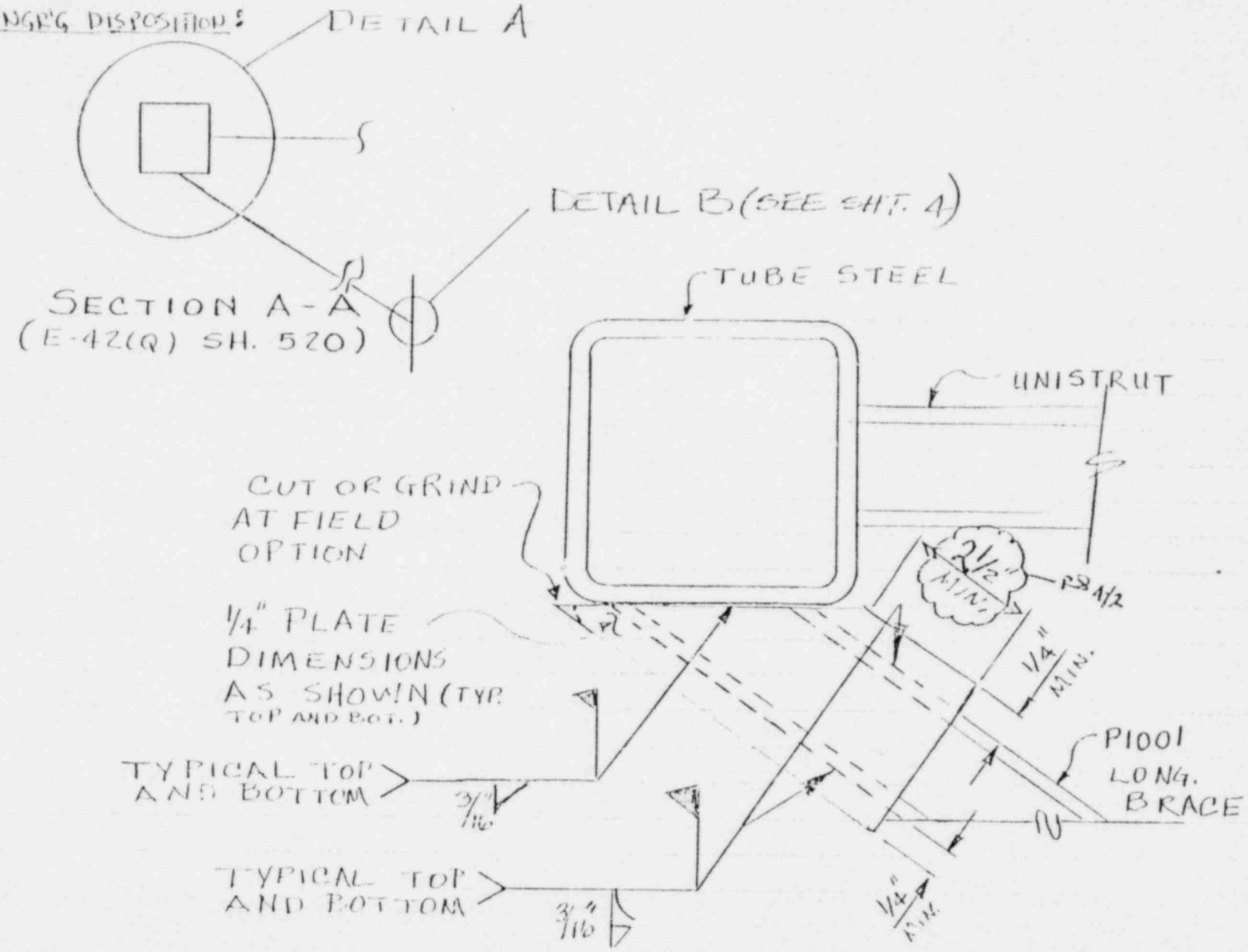
Cindy 5/20/81

J.L Hoekenga 5-20-81

Roy J. Williams for BPK 5/26/81

BLOCK 23 (CONT'D):

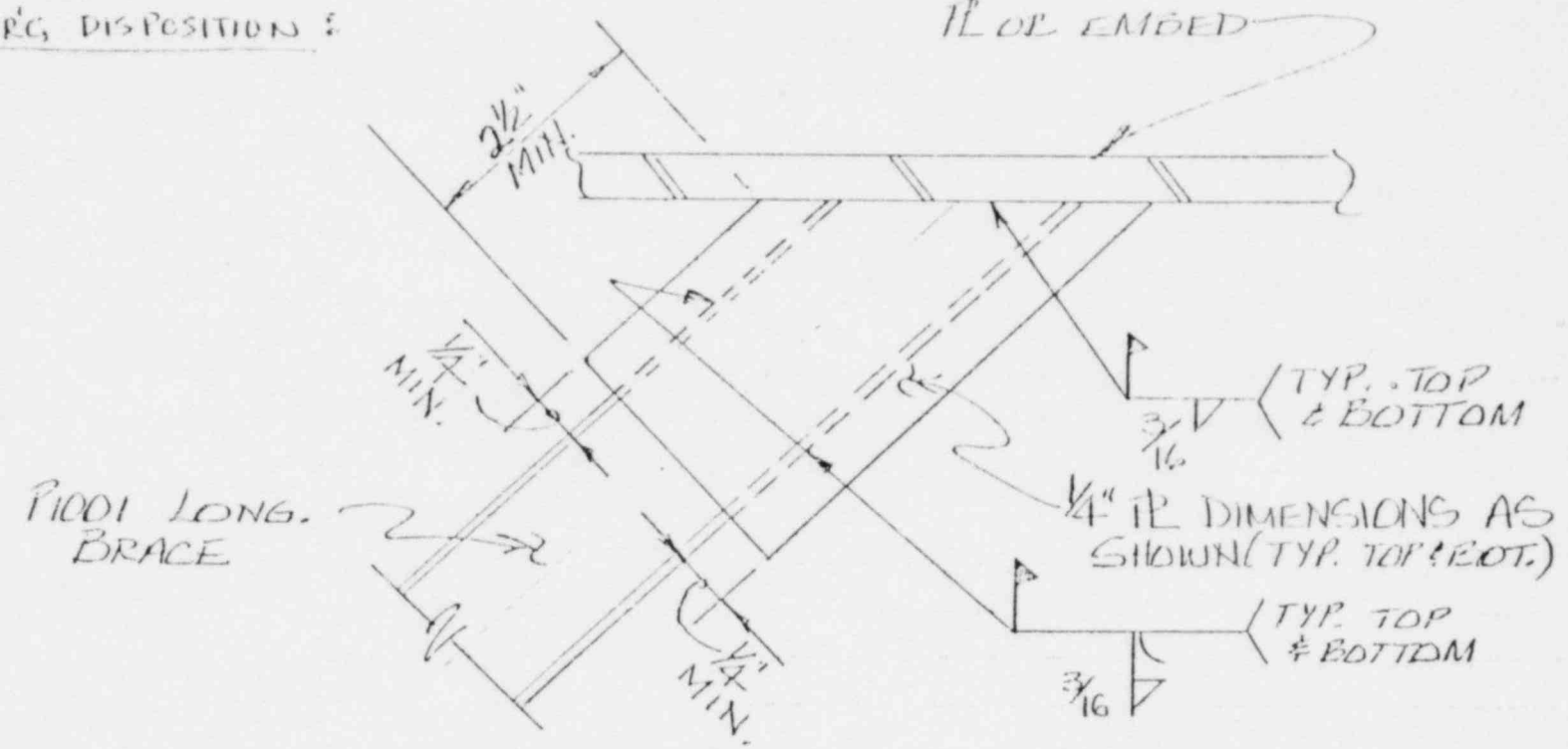
PROJ ENGR'G DISPOSITION:



DETAIL A

BLOCK 23 (CONT'D)

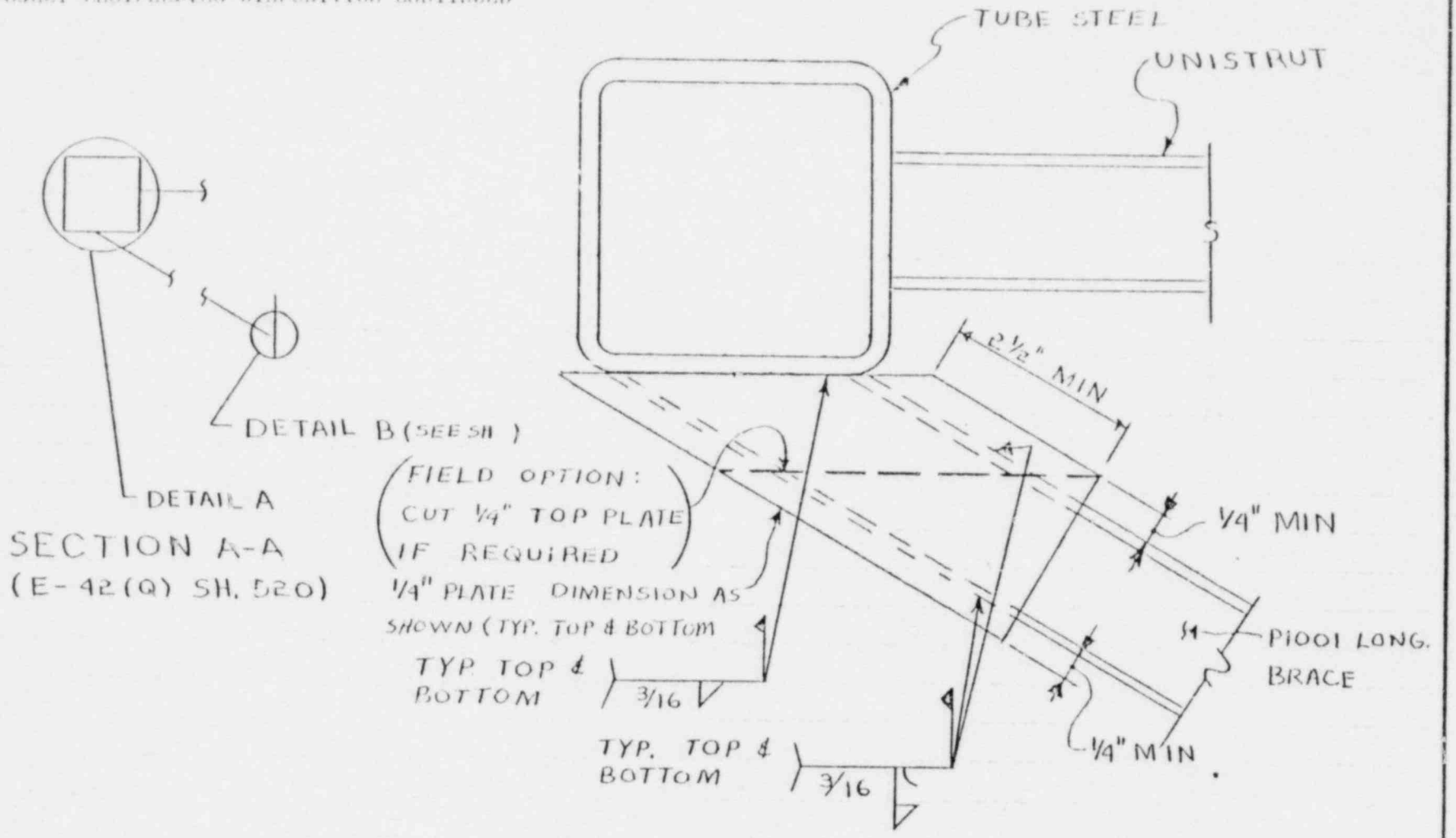
PROS ENGR'G DISPOSITION:



DETAIL B

BJS 4/2/80
Q3

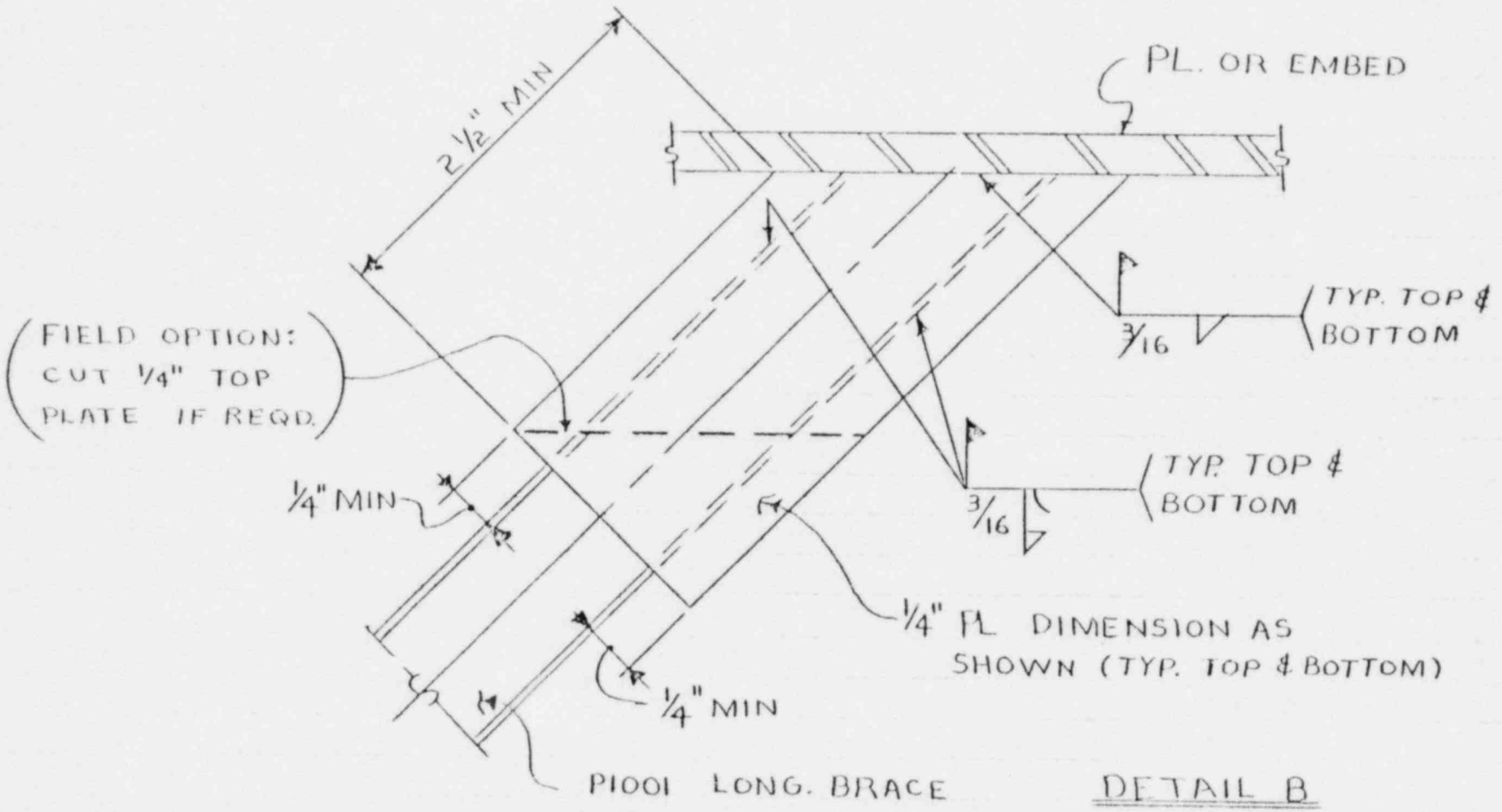
Block #23 Continued
PROJECT ENGINEERING DISPOSITION CONTINUED



DETAIL A

Block #23 Continued

PROJECT ENGINEERING DISPOSITION CONTINUED



DETAIL B

8 8 BH S-15-54

NONCONFORMANCE REPORT (CONT'D)

20. PAGE 5 OF 5 19. NCR NO. 2850

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
		X	

PROJECT FIELD ENGINEER — DATE 4-2-80

PROJECT ENGINEER — DATE 4/2/80

PROJECT CONSTR QC ENGINEER — DATE 4-2-80

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
		X	

PROJECT FIELD ENGINEER — DATE 6/1/81

PROJECT ENGINEER — DATE 5/29/81

PROJECT CONSTR QC ENGINEER — DATE 6/2/81

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

A-Lab

1

NONCONFORMANCE REPORT

S/u 7PHL

1. PROJECT NAME: Midland	JOB NO.: 07720		19. NO.: 2991	20. PAGE 1 OF 2
2. UNIT(S): II	3. DRAWING/PART NO.: N/A	REV: —	4. DESCRIPTION: Cab. 2BB5634A (3/c - 350 MCM Cable Code B11)	5. ITEM LOCATION: Aux Area 3/614
6. P.O. OR SPEC NO.: E-22	7. SERIAL NO.: N/A	8. REPLACEMENT PAR. P/N N/A REV N/A SER NO. N/A	9. SOURCE: Supplier	10. CONTRACTOR/SUPPLIER: Essex

11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO. N/A, NO. E-22

12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO

13. SKETCH ATTACHED: ( ) YES (X) NO

14. Discovered During: ( ) Rec'g (X) Const ( ) Test

15. Equip Furnished By: ( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION: Cable 2BB5634A was cut at the Cat Shop off Reel # 4763, End Caps were put on cable at that time with no report of water in cable. There was also no water reported when cable was Terminated at 2B64. However when the cable was cut at 2B56 for Termination, water ran out of the cable and formed a puddle on the floor. Q-List 3.006 2 Hold Tags applied Hold for Engr. Disp

17. REPORTED BY: L Campbell — DATE: 4/29/80

18. VALIDATED BY: [signature] — DATE: 5-1-80

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Nitrogen purge cable to verify that no moisture is present and megger test cable. If end results show quality of cable has not been degraded, then use as is.

B. Matthews 5-12-80

23. PROJECT ENGINEERING DISPOSITION

THE VENDOR (ESSEX) HAS PERFORMED TESTING ON SAMPLES KNOWN TO HAVE CONTAINED WATER. THE PURPOSE OF THE TESTING WAS TO DETERMINE WHETHER CHANGES HAD OCCURRED IN THE ELECTRICAL, PHYSICAL, AND LONG TERM MOISTURE ABSORPTION PROPERTIES OF THE INSULATION MATERIAL. ADDITIONAL TESTS WERE

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

[signature] 5/20/81
PROJECT FIELD ENGINEER — DATE

[signature] 5-18-81
PROJECT ENGINEER — DATE

[signature] 5/28/81
PROJECT QUALITY ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

Cable listed in block 4 has been purged per block 23. (Ref. FER dated 3/20/81, Pg 3.) Use-as-is, per block 23, after purging requires no further action. Dale S. Presley 6-3-81

26. QC ACCEPTANCE: Dale S. Presley 6-3-81
QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

(Blk. 16 cont.)

A conditional release is granted on cable for required purging, termination, testing, turnover and energization. Corrections or removal can be accomplished without causing damage or contamination to associated plant equipment or structure. [illegible]

[illegible] 2/20/81
PE Date

[illegible] 2/20/81
PEQCE Date

[illegible] 2/20/81
MPQAD Date

[illegible] 2-20-81
PQAE Date

(BLOCK 23 CONT.)

PERFORMED TO DETECT THE PRESENCE OF CONDUCTOR CORROSION AND TO DETERMINE THE EFFECTS OF IRRADIATION ON SO4 SALTS.

THE TEST DATA DEMONSTRATES THE ABILITY OF THE CABLE TO MEET ALL THE REQUIREMENTS OF THE SPECIFICATION AND PERFORM ITS INTENDED FUNCTION AFTER INTERNAL EXPOSURE TO WATER.

TEST DETAILS AND RESULTS HAVE BEEN SUBMITTED BY THE VENDOR AND ARE ON FILE. TEST DATA HAS BEEN REVIEWED BY PROJECT ENGINEERING AND MPQAD (CPC).

CABLES ARE TO BE PURGED PER T220-EZZ-41 AND USE A.S.I.S.

[illegible] 2/20/81
P. Kowal QE 2/20/81

[illegible]
Started

FIELD ENGINEER'S REPORT FORM

SYSTEM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3/20/81 PAGE 1 3 OF 1 3

NCR

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN 2971
	C.P.Co. NCR # M-81-1-1-010	
	PER ABOVE NCR # M81-1-1-010 ESSEX B11 CABLE (3c-350 MCM) IS TO BE PURGED WITH NITROGEN PER V.P. E22-41-1.	
		CABLE # 2BB5634A WAS NITROGEN PURGED PER V.P. E22-41-1.
	THE TEST INDICATED THAT NO MOISTURE WAS PRESENT IN CABLE # 2BB5634A.	

REMARKS: WITNESSED BY Q.C.E. - H. WAATTI 6-3-81

9-20-81

D. BARNHOUSE

D. Barnhouse

SIGNATURE 3/20/81

ROUTE

B.J. COLLIN
J.W. SLOCUMB
D. FERGUSON
T/O

FILE

CC. MIKE SCHAFFER - CP.Co. - Q.A.

PAGE 3 OF 3 NCR 2971

Corrected Copy

CONTACT: LARRY MORRIS F.E. NONCONFORMANCE REPORT

S/4 - NON-TESTABLE

1. PROJECT NAME: MIDLAND 1&2	JOB NO.: 7220				19. NO. 3032	20. PAGE 1 OF 3
2. UNIT(S): UNIT #1	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: POST-TENSIONING GREASE CANS		5. ITEM LOCATION: CONT. #1	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA: (X) DWG ( ) SPEC ( ) OTHER — IR NO. N/A NO. RV 11EE13C-1	12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO	13. SKETCH ATTACHED: ( ) YES (X) NO	14. Discovered During: ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By: N/A ( ) Client ( ) Eng ( ) FLD		

16. NONCONFORMING CONDITION:

A CONDITION EXISTS AT THE TOP ELEVATION OF THE EXTERIOR WALL OF CONTAINMENT #1 WHERE A PORTION OF THE POST-TENSIONING MOVABLE GANTRY IS STRIKING SOME OF THE VERTICAL GREASE CANS THAT ARE POSITIONED ON THE TOP OF THE VERTICAL TENDONS. THE DAMAGE RANGES FROM SCRATCHES IN THE PROTECTIVE COATING TO LARGE DENTS, WITH SCRAPES IN THE CAN THAT CONSTITUTE A REDUCTION IN THE CANS WALL THICKNESS. HOLD FOR ENG DISP. UC HOLD TAGS APPLIED.

17. REPORTED BY: Paul Jacobs — DATE: 6/12/80

18. VALIDATED BY: L. Zimmerman — DATE: 11/20/80 6/13/80

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

THE TENDON PLATFORM GANTRY HAS BEEN REWORKED SO THAT FURTHER DAMAGE SHOULD NOT RESULT. THE PRESENT CONDITION OF THE NOTED GREASE CANS IS SUCH THAT ADEQUATE PROTECTION OF THE TENDON END

23. PROJECT ENGINEERING DISPOSITION

SINCE THIS NCR WAS CITED, THE CAN ON THE TOP OF TENDON V-45-1 HAS LEAKED FILLER MATERIAL DUE TO THE DAMAGE CAUSED BY THE PLATFORM GANTRY. PROJECT ENGINEERING HAS DETERMINED THAT THIS CAN SHALL BE REPLACED WITH A SUITABLE UNDAMAGED CAN. THE FOLLOWING IS AN OUTLINE OF THE REPLACEMENT PROCEDURE.

(CONT'D ON PG 3 OF 3)

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X		X	

SEE PG. 3 OF 3

PROJECT FIELD ENGINEER — DATE: 9/10/80

PROJECT ENGINEER — DATE: 9/22/80

(NSS) CONSTR QC ENGINEER — DATE: 9/22/80

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

The can on tendon V-45 was reworked in accordance with Projects Disposition. The rework was found acceptable as Blanscet 9/26/80

26. QC ACCEPTANCE — 6/16/81

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Add to Disposition 4/2/81 P.H.

BLOCK # 16 CONTINUED

VERTICAL CANS DAMAGED

V-1	V-15	V-22	V-45	V-63	V-103
3	16	23	47	65	105
5	17	25	49	67	107
7	18	37	51	69	109
9	19	39	53	89	
11	20	41	59	97	
13	21	43	61	99	

THE GREASE CAN'S TUBE WALL THICKNESS AS DESCRIBED ON Pg. 18 OF C2-146 REV. 5B AND DRAWING C2-158-1 IS .125" - .135". - PV 7/28/80

BLOCK 22 CONTINUED...

ANCHORAGE IS PROVIDED AND LOSS OF SHEATHING FILLER DUE TO THE DAMAGED CANS IS NOT OCCURRING. THE FIELD RECOMMENDS THAT FINAL DISPOSITION AND/OR CORRECTIVE ACTION ON THE CANS THEMSELVES BE DELAYED UNTIL USE OF THE TENDON PLATFORM AND GANTRY MECHANISM IS NO LONGER REQUIRED, I.E. AT THE COMPLETION OF ALL POST TENSIONING ACTIVITIES ON CONTAINMENT #1. L.E. Morris 7/8/80 7/8/80 7/31/80

BLOCK No. 23 CONT'D

1. REMOVE THE DAMAGED CAN AND CLEAN THE TENDON ANCHORAGE OF ALL REMAINING FILLER MATERIAL.
2. INSTALL THE REPLACEMENT GREASE CAN ASSEMBLY AND PUMP OR POUR NEW (UNUSED) FILLER INTO THE OPEN CAN PLUG, TAKING CARE NOT TO ENTRAP AIR. FILLER REPLACEMENT WILL BE CONSIDERED COMPLETE WHEN THE ANCHORAGE IS COVERED BY 1/2" (1'-0") OF FILLER, I.E. THE FILLER LEVEL IS 1 1/2" (1'-0") ABOVE THE TOP OF THE HIGHEST BUTTONHEAD IN THE ANCHORAGE.

CHANGES BY DB 8/27/80

3. CLOSE THE PLUG IMMEDIATELY AFTER FILLING IS COMPLETE.
4. AT ALL TIMES DURING THE OPERATION THE TENDON ANCHORAGE SHALL BE PROTECTED FROM THE WEATHER.

BECAUSE THE POSSIBILITY EXISTS THAT ADDITIONAL GREASE CAN DAMAGE MAY OCCUR DURING THE REMAINING STRESSING OPERATIONS, THE GREASE CANS USED IN BLOCK 16 (EXCEPT V-45-1) WILL BE EVALUATED WHEN STRESSING OPERATIONS ARE COMPLETE. AT THAT TIME THE FIELD ENGINEER WILL SURVEY THE CANS AND REPORT THEIR STATUS TO PROJECT ENGINEERING IN THE FORM OF AN FER. EVALUATION OF THESE CANS AT THE END OF STRESSING OPERATIONS WILL NOT AFFECT THE QUALITY OF THE POST-TENSIONING SYSTEM OR THE INTEGRITY OF THE CONTAINMENT STRUCTURE.

IN THE INTERIM, CARE SHALL BE TAKEN TO AVOID ANY ADDITIONAL DAMAGE. THE DAMAGED COATING ON ALL AFFECTED CANS SHALL BE REPAIRED IN ACCORDANCE WITH ESTABLISHED PROCEDURES. ANY DAMAGED CANS THAT ARE DISCOVERED TO BE LEAKING SHALL BE REPLACED AS DESCRIBED ABOVE FOR TENDON V-45-1 AND DOCUMENTED WITH AN FER.

THIS IS AN INTERIM DISPOSITION. PROJECT ENGINEERING WILL PROVIDE FINAL DISPOSITION OF THESE AND ANY ADDITIONAL DAMAGED CANS BASED ON THEIR CONDITION AS DESCRIBED BY THE FER, AND ANY OTHER INVESTIGATION DEEMED NECESSARY.

T.A. Bruce 8/22/80
Design Engr. 8/26/80

REWORK: TENDON V-45-1 GREASE CAN
REPAIR: DAMAGED COATING ON ALL CANS
USE AS IS: THE REMAINING CANS IN BLOCK #16, PENDING FINAL DISPOSITION

P. Reiley 8/27/80
P. Reiley - GE - 8/28/80
NO DRAW. OR SPEC. REV. REQUIRED
COORDINATION WITH GE ONLY

BLOCK 22 REVISED . . . . (X) Field Engineering Recommended Disposition To Project Engineering

SINCE POST TENSIONING ACTIVITIES HAVE BEEN COMPLETED THE TENDON ACCESS PLATFORMS AND GANTRY HAVE BEEN REMOVED FROM THE BUILDING. AN INSPECTION OF ALL GREASE CANS ON THE TOP END OF UNIT 1 VERTICAL TENDONS WAS PERFORMED ALONG WITH A VISUAL AND MEASUREMENT INSPECTION OF THE GREASE CAN REMOVED FROM TENDON V-45-1 (REPLACED WITH A 'NEW' CAN). A FIELD ENGINEERS REPORT IS ATTACHED WITH THE DETAILS AND MEASUREMENTS. THE FIELD RECOMMENDS A 'USE AS IS' DISPOSITION FOR ALL OTHER GREASE CANS ON THE UPPER END OF VERTICAL TENDONS ON CONTAINMENT # 1.

3/31/81

3/31/81

FIELD ENGINEER'S REPORT FORM

#112

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3/25/81 PAGE 1 OF 2

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	CONT # 1 POST TENSIONING	
	REFERENCE: NCR-3032, FER #108 BY LIMBERIS ON 2-15-81	
	THE GREASE CAN FROM TENDON V-45-1 WAS DISECTED SO THAT WALL THICKNESS MEASUREMENTS COULD BE TAKEN AT THE DAMAGED AREA. THE NOMINAL WALL THICKNESS SHOWN ON STRUCTURAL DRAWING NO. 17D W18B IS 0.125" TO 0.135". ALL MEASUREMENT OF THE SECTIONS SAMPLED ARE WITH IN THIS RANGE WHERE THE CAN WAS UNDAMAGED. THE DAMAGE TO THE TUBE SECTION OF THE CAN ISSUED AS BUTT HEADS, PROTRUDING FROM THE TOP OF A HYDRAULIC MOTOR WHICH POWERED THE TROLLEY ON THE GANTRY OF THE POST TENSIONING PLATFORM, WOULD DENT SLICE, AND/OR GOUGE THE METAL OF THE GREASE CAN AS THE GANTRY MOVED AROUND THE CONTAINMENT BUILDING. THE UPPER 24" CAN ON V-45-1 LEAKED AT THE SEALING GASKET ONLY. THERE WERE NO THROUGH THICKNESS PENETRATIONS OF THE TUBE SECTION DUE TO THE BUTT HEADS ON THE GANTRY. THE THINNEST MEASURED WALL THICKNESS OF THE TUBE IN THE DAMAGED AREA IS 0.082". AN INITIAL SURVEY OF THE OTHER 24" VERTICAL GREASE CANS ON UNIT 1 SHOWED THAT THREE OTHER CANS (V-41, 43, & 51) HAD DENTS APART THE SAME SIZE AS IN V-45 AND SIMILAR LOCATION GOUGES. OTHER CANS (SEE NCR FOR 2) HAD SMALLER DENTS AND SOME GOUGES. IT WAS DECIDED THAT ONLY CANS SHOWING ANY SIGNS OF DAMAGE WOULD BE INSPECTED.	

NCR-3032 pg 5/6

REMARKS: PICTURES (NON-REPRODUCIBLE) OF V-45 AND OTHER CANS ARE AVAILABLE AT JOBSITE IN L. LIMBERIS.

SIGNATURE

ROUTE

T. CULLEN
CIVIL NUCLEAR
W. C. CUL
T. O. C.

FILE QUAL. 1

NCR 3032

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/25/81 PAGE 2

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED

OF FILLER MATERIAL. THE FIELD BELIEVES THAT THE CAN FROM V-45 REPRESENTS A WORST CONDITION FOR ALL THE CANS ON CONT. 1. IT WAS THE ONLY CAN WHICH LEAKED DUE TO [illegible] IN THE CAULTRY.

ALL GREASE CANS HAVE SINCE HAD THE FITTINGS REPAIRED SO THAT FURTHER DETERIORATION WOULD NOT OCCUR. THE GREASE CAN AT THE TOP OF V-45 HAS BEEN REPLACED THUS THE FIELD FEELS NO FUETHER CORRECTIVE ACTION IS REQUIRED AND NCR-3032 SHOULD BE DISPOSITIONED "USE AS IS" FOR THE OTHER CANS.

NCR-3032 B 6/6

REMARKS:

ROUTE

PM Hoffman 4-7-81

NCR 3032

FILE

SIGNATURE

BLOCK 23 (CONT.) PROJECT ENGINEERING DISPOSITION (FINAL)

PROJECT ENGINEERING HAS REVIEWED THE EXISTING CONDITION AS DESCRIBED BY THE ATTACHED FIELD ENGINEER'S REPORT AND HAS DETERMINED THAT THE GREASE CANS LISTED ON BLOCK 16 SHALL BE "USED-AS-IS". SUBSEQUENT TO PROJECT ENGINEERING'S INTERIM DISPOSITION, THE CAN ON TOP OF RECEIVER V-65-1 HAS BEEN REPLACED AND FILLED WITH GREASE AND THE COATING ON THE OTHER DAMAGED CANS HAS BEEN REPAIRED TO PREVENT CORROSION. FIELD ENGINEERING'S RECENT SURVEY INDICATES THAT ALL OF THE ~~CANS~~ TYP CANS ARE SOUND AND SHOW ~~ABOUT~~ NO SIGNS OF LEAKAGE.

BECAUSE THE GREASE IN THE CANS AND SHEATHING 14" CONTRACTED AS IT COOLED AFTER THE INITIAL FILLING OPERATION, THE CANS WILL NOT EXPERIENCE FUTURE GREASE PRESSURES SIGNIFICANTLY HIGHER THAN THOSE ALREADY ENCOUNTERED. THIS INDICATES THAT THE CANS SHOULD PERFORM SATISFACTORILY, WITHOUT LEAKING, THROUGHOUT THE LIFE OF THE PLANT.

BECAUSE THE CAN EXHIBITING THE WORST DAMAGE HAS BEEN REPLACED AND THE REMAINDER OF THE CANS ARE FUNCTIONING AS ORIGINALLY INTENDED, PROJECT ENGINEERING CONSIDERS THE SUBJECT GREASE CANS ADEQUATE FOR "USE-AS-IS".

No SPEC. OR DRWG. CHANGE REQUIRED.
COORDINATE WITH QE ONLY.

R.E. Mauk 05-20-81

T.F. Engle 5/18/81
D. Timmons 5/18/81
D.J. Scribner
for S.L. Sobkanki 5/19/81

Bar & TB S/FF.

NONCONFORMANCE REPORT (CONT'D)

20. PAGE 1 OF 1 — 19. NCR NO. 3032

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
			X
PROJECT FIELD ENGINEER		DATE	5/27/81
PROJECT ENGINEER		DATE	5/20/81
PROJECT CONSTR QC ENGINEER		DATE	6/2/81
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

F.E. G. Coaster

NONCONFORMANCE REPORT

Non-Testable Unit 3/11/81

1. PROJECT NAME: Midland | JOB NO.: 7220 | 19. NO. 3066 | 20. PAGE 1 OF 1

2. UNIT(S): Common | 3. DRAWING/PART NO.: Dwg A-52 sht #1 | REV: 9 | 4. ITEM DESCRIPTION: Block Wall #12 | 5. ITEM LOCATION: Aux. El 644'

6. P.O. OR SPEC NO.: N/A | 7. SERIAL NO.: N/A | 8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A | 9. SOURCE: Construction | 10. CONTRACTOR/SUPPLIER: N/A

C 3-7-81 P.H.

11. INSPECTION CRITERIA (X) DWG ( ) SPEC ( ) OTHER IR NO. C-1-80-47 NO. A-52 | 12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO | 13. SKETCH ATTACHED ( ) YES (X) NO | 14. Discovered During ( )Rec'g (X)Const ( )Test | 15. Equip Furnished By ( )Client ( )Eng (X)FLD

16. NONCONFORMING CONDITION: Detail #8, Wall Reinforcing Schedule, on Dwg A-52 shows that the maximum wall height of an 8" thick block wall, with top connection, is 16'-6". Contrary to this, Block Wall #12 has been constructed and is approx. 18' high. Top connections have been provided per details 6 and 7. Hold for Eng. disposition. No hold tags applied. QA Ist #1.205

C 3-31-81 PH

17. REPORTED BY: S. Gillett | DATE: 7/28/80 | 18. VALIDATED BY: EG Kaufman | DATE: 7/30/80

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Field recommends to "use as is" based on stairway details noted on dwg. A-54, Rev. 7.

Gillett 7-31-80

23. PROJECT ENGINEERING DISPOSITION

ENGINEERING RECOMMENDS, BASED ON STRUCTURAL ANALYSIS, THAT THE BLOCK WALL BE REMOVED & REPLACED BY REINFORCED CONCRETE WALL. DETAILS & REINFORCEMENT WILL BE SHOWN ON STRUCTURAL DRAWINGS

K. Vidhya 12-16-80

12-16-80

2-20-81

3/11/81

3/11/81

ED Disposition 3/31/81 PH

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER 2/11/81 DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

BLOCK WALL WAS REMOVED PER DISPOSITION

12/16/81

26. QC ACCEPTANCE 4/16/81

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BLOCK #23 CONTINUED:

PROJECT ENGINEERING RECOMMENDS, BASED ON STRUCTURAL ANALYSIS, THAT THE BLOCK WALL BE REMOVED. THE WALL IS BEING REDESIGNED BY PROJECT.

Jon Schumann 3/11/81

G. L. Hackwater for S.L. Sobkowski. 3-18-81

BECHTEL

NONCONFORMANCE REPORT (CONT'D)

20. PAGE 3 OF 3 — 19. NCR NO. 3066

ORA 3/11/81

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
	X		

PROJECT FIELD ENGINEER — DATE 3/24/81

PROJECT ENGINEER — DATE 3/21/81

PROJECT CONSTR QC ENGINEER — DATE 3/26/81

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DAT

S/U 1PNA, 2PNA, 1PKA, 2PKA, 1PNB, 2PNB
1PKB, 2PKB, 1PPA 2PPA, 1PPB, 2PPB
1PNC, 2PNC, 1PND, 2PND, oPPC, oPPD
oPPE, oPPF, oPPG

Corrected Copy

NONCONFORMANCE REPORT

1. Project Name: Midland	Job No.: 722.0					19. No. 3136	20. Page 1 of 3
2. Unit(s): 1 & 2	3. Drawing/Part No.: N/A	Rev: N/A	4. Item Description: Buss Bar 90° Bends			5. Item Location: Aux Bldg & Service Water Bldg	
6. P.O. Or Spec No.: E-11 & E-51	7. Serial No.: N/A	8. Replacement Part P/N N/A REV N/A SER NO N/A	9. Source: Supplier	10. Contractor/Supplier: Solidstate Control			
11. Inspection Criteria: ☐DWG ☐SPEC ☒OTHER IR NO See Page 2. NO MCAR-1-41		12. ASME AUTHORIZED INSPECTION REQ'D: ☐YES ☒NO	13. SKETCH ATTACHED: ☐YES ☒NO	14. Discovered During: ☐REC'G ☒CONST ☐TEST	15. Equip Furnished By: ☐CLIENT ☒ENG ☐FLD		

16. Nonconforming Condition: MCAR-1-41 issued by L.A. Dreisbach 9-17-80 (including references) CPCo NCR M-01-6-0-10 reported that one leg of a buss bar in a transformer had broken at a 90° bend. This buss bar was a part of a transformer in Battery Charger 1D27 supplied by Solidstate Control. CPCo lab analysis has stated that the cause of failure has been established as fatigue cracking (continued Page 2)

17. Reported By: Carl C. Hellenbeck Date: 9-25-80

18. Validated By: [signature] Date: 9/25/80.

21. Routing: ☒ TO FIELD ENGINEERING ☐ TO OTHER (SPECIFY) [signature] 10/2/80

22. ☐ Field Engineering Disposition ☒ FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

PROJECT ENGINEERING to RESOLVE George P. Fitzgerald 10/15/80

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS
			✓

[signature] 5/20/81
PROJECT FIELD ENGINEER DATE

[signature] 5-BSI
PROJECT ENGINEER DATE

[signature] 5/20/81
PROJECT CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. Disposition Results: Use-As-Is per block 23 Requires no further action. Dale S. Prealer 6-2-81

23. Project Engineering Disposition: THE CONDITION HAS BEEN INVESTIGATED BY PROJECT ENGINEERING, CONSUMERS POWER COMPANY AND SOLIDSTATE CONTROLS INCORPORATED. EXTENSIVE METALLURGICAL TESTING AND ANALYSIS HAS BEEN PERFORMED BY CONSUMERS POWER COMPANY. (SEE MCAR 41 FINAL REPORT DATED 5-4-81) THE FAILED BUS BAR IN 1D27 HAS BEEN DETERMINED TO BE AN ISOLATED CASE AND NOT LIKELY TO OCCUR IN OTHER SCI EQUIPMENT. THE TRANSFORMER IN 1D27 HAS BEEN REPLACED. NO ADDITIONAL CORRECTIVE ACTION IS REQUIRED. USE AS IS. P.B. Caldwell 5-5-81 AMJ D Prexley-QE- 5/6/81 EGS 5/6/81

26. QC Acceptance: Dale S. Prealer 6-2-81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Continued

at the inner bend radius of the buss. This transformer has been replaced under CWP 1PKB-E-0092.

It has been requested by L A Dreisbach 9-17-80 in MCAR-1-41 that Q.C, issue NCR and place hold tags on each item of "Q" listed equipment supplied by Solidstate Control with buss bars having one or more 90° bend.

The following "Q" listed equipment supplied by Solidstate Control has buss bar with one or more 90° bends.

1D15, 1D17, 1D25, 1D27, 1X51, 1X52, 1X54, 1X55, 1X56, 1X53, 0X57, 0X58
2D15, 2D17, 2D25, 2D27, 2X51, 2X52, 2X54, 2X55, 2X56, 2X53, 0X93, 0X94, 0X95

It is indeterminate whether fatigue cracking exists in the above listed equipment buss bars, because the 90° bend buss bars have been coated with a varnish like dip and fractures if any can not be seen through this coating.

Block 11 continued E6.0-72, 34, 93, 64, 118, 48, 74, 65, 276-289, 306-308

"Q" list 3.107 & 3.202 Hold for Engineering Disposition 25 Hold Tags Applied

Block 16 continued

Upon further investigation of "Q" listed equipment supplied by Solid State Control having 1 or more 90° Buss Bar bends, Q.C. has discovered 8 more "Q" listed equipment they are as follows 1Y10, 2Y10, 1Y30, 2Y30, 1Y20, 2Y20, 1Y40, 2Y40. Eight(8) more hold tags applied for a total of 33 Hold tags applied

Gale D. Hallenbeck 10-2-80
L Smith 10/2/80

Blk. 16 cont.)

A conditional release is granted to release all equipment listed on this NCR, for cable pulling, terminating and energizing. Corrections or removal can be accomplished without causing damage or contamination to associated plant equipment or structure. JR

ITE J L Betts 12/3/80 Date

Asst E Emmert 12-3-80. PEQCE Date

MPQHD M J Schaffer 12/3/80 Date

RECOMMENDED BY JOE BUFF

A-Lab

NONCONFORMANCE REPORT

5/N # — ~~N/A~~ indeterminate

4 6/9/81

1. PROJECT NAME: Midland	JOB NO: 7220					19. NO. 3137	20. PAGE 1 OF
2. UNIT(S): N/A	3. DRAWING/PART NO: NA	REV: NA	4. ITEM DESCRIPTION: 1" T 304 SA-312 Sch 40 PIPE HT 05520 HT 06094			5. ITEM LOCATION: Roseville Laydown	
6. P.O. OR SPEC NO: F-45841	7. SERIAL NO: NA	8. REPLACEMENT PART P/N NA REV NA SER NO NA		9. SOURCE: VENDOR	10. CONTRACTOR/SUPPLIER: AL TECH		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER P.S. NO NA NO SA-312		12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO		13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g ~~Inspect~~ ( ) Test	15. Equip Furnished By ( ) Client (X) Eng (~~Const~~)	

16. NONCONFORMING CONDITION:

REQUIREMENT: THE ASME BOILER AND PRESSURE VESSEL CODE (PART A) SECTION II PARA. 12 STATES "THE FINISH PIPES SHALL BE REASONABLY STRAIGHT AND FREE FROM INJURIOUS DEFECTS AND SHALL HAVE A WORKMANLIKE FINISH."

CONDITION: CONTRARY TO THE ABOVE, 1 HOLD TAG APPLIED

Q-LIST # — NA

17. REPORTED BY: K. Fugate DATE: 9-24-80

18. VALIDATED BY: W. R. Emmett DATE: 9/25/80.

19. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Remainder of pipe to be sent back to vendor. ~~NO REPLACEMENT~~

12.5.80 FSimonosky

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
	X		

J. J. Gilmartin, BECHTEL FIELD ENGINEER — DATE 12/5/80

PROJECT ENGINEER — DATE

W. R. Emmett, PROJ CONSTR QC ENGINEER — DATE 12/10/80

AUTHORIZED INSPECTOR — DATE 12-10-80

See pg 3 for concurrence

25. DISPOSITION RESULTS

1880 FT (54 PC's) were returned to VENDOR ON SHIPPING NOTICE 7220-19597. Balance of PIPE was used in field or scrapped.

6/9/81

26. QC ACCEPTANCE: 6/9/81

QC ENGINEER — DATE

J. A. Griffin, AUTHORIZED INSPECTOR — DATE 6/9/81

Block # 16 Cont.: The 1" T 304 SA-312 Sch 40 Pipe Heat Numbers 06094 and 05520 furnished By AL Tech on P.O. F-45841 has many pieces of pipe that have numerous pits and a scale like condition on the surface of the pipe.

S K Fugate
9-24-80

Blk 22 cont.)
Construction attempted to use approximately 1140 feet of this pipe. Some of the material used was found to be unacceptable at the time of use and was scrapped. That pipe that was acceptable was installed, witnessed, and documented by QC. Field and QC Engineering investigation of the remaining lot of pipe supplied on purchase order F-45841 finds it to be unacceptable, therefore the remaining pipe should be rejected and returned to the supplier. D R Pendleton 9-18-81

NCR-3137 Page 3 of 4

Bechtel

SHIPPING NOTICE

JOB NO. 7220 S.N. NO. 7220-14597

DATE May 6, 19 81

CONSIGNED TO McJunkin Corporation ATTN: RON WORLEY

ADDRESS McJunkin Road, Nitro, West Virginia 25143

ROUTING Consolidated - Collect

SHIP VIA	COLLECT	PREPAID	PURCHASE ORDER NO.	O S & D NO.	ORIGINAL MRR NO.
AIR EXPRESS			N/A	N/A	AEO-12769
EXPRESS			MATERIAL ORIGINALLY PURCHASED O N P.O. NO.	VENDOR	
RAIL FREIGHT			7220-F-45041(O)	McJunkin Corporation	
MOTOR FREIGHT	XXX		REASON FOR SHIPMENT: Material has pits and surface defects - Do not replace		
PARCEL POST			SHIPMENT AUTHORIZED FOR BECHTEL BY: D. Hickerson/D. Delaney (Q-Listed)		BILL OF LADING ATTACHED: Yes
BEARER					

ITEM NO.	QUANTITY	UNIT	COMPLETE DESCRIPTION
1	1880	Ft.	1 inch seamless ASME SA 312, T304, Sch 40 Section III Class 2 Pipe
or	94	pcs	Random 20 ft.
			NCR-3137

RETURN AUTHORIZED BY: Ron Worley

AUTHORIZATION NUMBER: #31-42750-00

COMPANY McJunkin Corp.

CREDIT TERMS: Full

SHIPPER
Bechtel

ADDRESS 3500 E. Miller Road
Midland, Michigan 48640

PER Jan Bielawski Jr
E. E. Lawrence:kkm

ACCEPTED FOR SHIPMENT

DATE 5-6-81

CARRIER Consolidated - Collect

PER

SN NO. 7220-14597

Bechtel Power Corp., agents for Consumers Power Co.

3230 (5-68)

NONCONFORMANCE REPORT (CONT'D) 20. PAGE 4 OF 4 19. NCR NO. 3131

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
	✓		

PROJECT FIELD ENGINEER — DATE 5/19/81

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE 5/19/81

AUTHORIZED INSPECTOR — DATE 5/19/81

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

A-Lab 392

DISUSSED WITH R. SWEET, PEABODY

NONCONFORMANCE REPORT

START UP: VARIOUS

1. PROJECT NAME: MIDLAND UNITS 1 & 2	JOB NO.: 7220			19. NO. 3173	20. PAGE 1 OF 2 3 6
2. UNIT(S): 1 & 2	3. DRAWING/PART NO.: SEE BLOCK 16	REV	4. ITEM DESCRIPTION: SEE BLOCK 16	5. ITEM LOCATION: SEE BLOCK 16	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE CONST. CONTRACTOR/SUPPLIER: SUBCONTRACTOR PEABODY TESTING		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER PROC. NO. 3.21.A.1-2303-2 IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Engr ( ) FLD	

16. NONCONFORMING CONDITION:

PEABODY TESTING PROCEDURE FOR MAGNETIC PARTICLE EXAMINATION 3.21.A.1 REV 2303-2 STATES THAT THE AMPERAGE FOR A PROD SPACING OF 4" SHALL NOT EXCEED 400 AMPERES. CONTRARY TO THIS, MAGNA MAGIC BPC# 2079 ON RECALIBRATION WAS FOUND TO BE GENERATING APPROXIMATELY 50 AMPERES MORE THAN WHAT WAS INDICATED ON THE METER. BPC# 2079 WAS SIGNED OUT TO PEABODY TESTING FROM 3-14-80 THRU 6-26-80. THEREFORE THE ITEMS INSPECTED DURING THIS PERIOD ARE INDETERMINATE. (CONT'D)

17. REPORTED BY: [signature] DATE: 10-15-80

18. VALIDATED BY: [signature] DATE: 10/15/80.

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends that all items specified in page 2 of this NCR to be retested with a calibrated instrument and properly documented per spec. G27(Q).

[signature] 10-20-80

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

[signature] PROJECT FIELD ENGINEER DATE 10/22/80

[signature] PROJECT ENGINEER DATE 10/23/80

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

See page 3 of 3 for disposition results. NDE reports are for C.S.I.'s applicable IA's

[signature] 6-8 81

26. QC ACCEPTANCE [signature] 6-8-81

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

CONT'D FROM PAGE 1 BLOCK 16:
HOLD FOR ENGRG. DISPOSITION Q LIST: VARIOUS 16 HOLD TAGS APPLIED

ITEM DESCRIPTION & QCIR #	ISO	UNIT	AREA	ELEV.
PIPE RESTRAINT, C-304-1354W	C-835	1&2	AUX	704'
PIPE RESTRAINT, C-304-1428W	C-838	1&2	AUX	659'
PIPE RESTRAINT, C-304-1550W	C-834	1&2	AUX	634'-6"
PIPE RESTRAINT, C-304-1428W	C-838	1&2	AUX	647'
PIPE RESTRAINT, C-304-1428W	C-838	1&2	AUX	667'-6"
PIPE RESTRAINT, C-304-1428W	C-838	1&2	AUX	659'
PIPE RESTRAINT, C-304-1428W	C-838	1&2	AUX	667'-6"
PIPE RESTRAINT, C-304-947W	C-835	1&2	AUX	704'
PIPE RESTRAINT, C-304-1354W	C-835	1&2	AUX	704'
PIPE RESTRAINT, C-304-1581W	C-834	1&2	AUX	643'
PIPE RESTRAINT, C-304-1595W	C-834	1&2	AUX	643'-6"
PIPE RESTRAINT, C-304-1515W	C-404	1	CONT	646'
PIPE RESTRAINT, C-304-1515W	C-404	1	CONT	646'

FIELD WELD	System	ISO	UNIT	AREA	ELEV.
9	HBD-490	M-652 SH-1	1	D. GEN. BLDG	674'-8"
10	HBD-487	M-652 SH-1	1	D. GEN BLDG	674'-8"
11	HBD-487	M-652 SH-1	2	D. GEN BLDG	674'-8"

Block #25

ITEM DESCRIPTION & QCIR#		ISO/DWG	ACCEPTABLE MAGNETIC PARTICLE REPORT
PIPE RESTRAINT	C304-1354W	C835	#12420
PIPE RESTRAINT	C304-1428W	C838	#13345, #13346, #13347, #13348, #13349
PIPE RESTRAINT	C304-1550W	C834	#15411
PIPE RESTRAINT	C304-947W	C835	#13508
PIPE RESTRAINT	C304-1581W	C834	#13528
PIPE RESTRAINT	C304-1595W	C834	#13527
PIPE RESTRAINT	C304-1515W	C404	DWG C404 don't requires MT, therefore MT's will not be redone.

FIELD WELD	SYSTEM	ISO	
9	HBD-490	M-652SH-1	#14113
10	HBD-487	M-652-SH1	#14114
11	HBD-487	M-652-SH1	#14115

Peabody Testing
X-Ray Engineering Company

FOSTER CITY — MAIN OFFICE 1118 Chess Drive, Foster City, CA 94404 (415) 573-6000

CERTIFIED REPORT of NONDESTRUCTIVE EXAMINATION

CUSTOMER: Bechtel Power Corporation
DATE: 3-17-81
ADDRESS: P.O. Box 2167, Midland, MI 48640 XRE 2303
N.D.E. REPORT NO.: 1414
JOB OR PROJECT LOCATION: Midland Nuclear Power Project
P.O. NO.: 7220-FSC-206
PLAN OR DWG. NO.: M652-1 REV. N/A
SURFACE CONDITION: ☒ AS GROUND ☐ AS WELDED ☐ AS FABRICATED
EXAMINATION STANDARD: ☒ G-27 ☐ 7220-C-111 REV II ☐ _____ OTHER
ACCEPTANCE STANDARD: ☐ ASME SEC III ☒ ANSI B31.1 ☐ AWS D1.1 ☐ C-111 APPOX C OTHER
TYPE OF MATERIAL: ☐ SS OTHER ☒ CS ☐ _____
TEMP. OF MAT'L. °F: BPC EXP. < 600°F
TYPE OF EXAMINATION: UT ☐ MT ☒ PT ☐
N.D.T. PROCEDURE NO.: 3.21.A.1 REV. 2 AMEND. —

ULTRASONIC EXAMINATION

EQUIPMENT	TRANSDUCER	TEST BLOCK	METHOD USED	SCANNING METHOD	SENSITIVITY LEVEL
	____ MHZ ____ DIA	N/A			

MAGNETIC PARTICLE EXAMINATION

EQUIPMENT: Magna Magic BPC 2079 Exp 3-24-81
DRY ☒ WET ☐ VISIBLE ☒ FLUORESCENT ☐
AC ☒ DC ☐ RECTIFIED ☒
AMPERAGE: 400
POLE/PROD. SPACING: 4" HEAD ☐ COIL ☐
PARTICLES—COLOR: RED ☒ MX 8A GREY ☐

LIQUID PENETRANT EXAMINATION

☐ Solvent Removable ☐ Water Washable

PENETRANT BRAND #	PENETRANT BATCH #	PENETRANT DWELL TIME MIN	CLEANER BRAND #	CLEANER BATCH #	DEVELOPER BRAND #	DEVELOPER BATCH #	DEV TIME MIN	DRY ☐ WET ☐ NON-AQU. ☐
			N/A					

LINE # OR PART #	AREA EXAMINED	TYPE OF WORK	NO. OF ITEMS ACCEPTED	NO. OF ITEMS REJECTED
1HED-487	100%	NEW ☒ REPAIR ☐	1	0

TYPE OF DEFECTS CODE
C – Cracks P – Porosity NF – Non-Fusion LI – Linear Indication S – Slag LA – Lamination OTHER – Specify

ITEM # OR WELD #	ACC	REJ	DEF. CODE	REMARKS	ITEM # OR WELD #	ACC	REJ	DEF. CODE	REMARKS
12" dia. FW10	✓			FINAL					
P702									

AREA —

Technician: David K. Wann SNT-TC-1A Level II
Asst. Technician: Dave Partain
Customer: C.D. Norberg L/II
Witnessed by: _____ SIGNATURE
ENCLOSURE ADDED Yes ☐ No ☒
Page 1 of 1

PEABODY TESTING/X-Ray Engineering Company assumes no responsibility for losses of any kind due to interpretation.

FORM 112-2303

Request for N.D.E. 17115

1 PT ☐ MT ☐ RT ☐ LT ☐ Other ☐ _____

2 SYSTEM _____ 3 ISO _____ 4 WELD NO. _____

5 DIAMETER _____ 6 WALL THK. _____ 7 MATERIAL _____

8 WELDER ID _____ 9 WELD PROC. _____

10 NDE SPEC. _____ 11 UNIT NO. _____ 12 AREA _____

13 ELEV. _____ 14 LOCATION _____

15 REQUESTED BY _____ 16 DATE _____

17 REMARKS

White - NDE Coordinator Yellow - Peabody Testing Pink - Inspector Green - File

Peabody Testing
Engineering Company
FOSTER CITY — MAIN OFFICE 1118 Chess Drive, Foster City, CA 94404 (415) 573-6000

CERTIFIED REPORT of NONDESTRUCTIVE EXAMINATION

CUSTOMER: Bechtel Power Corporation
DATE: 3-17-81
ADDRESS: P.O. Box 2167, Midland, MI 48640 XRE 2303
N.D.E. REPORT NO.: 14115
JOB OR PROJECT LOCATION: Midland Nuclear Power Project
P.O. NO.: 7220-FSC-206
PLAN OR DWG. NO.: M652-1 REV. N/A
SURFACE CONDITION: [X] AS GROUND [X] AS WELDED [ ] AS FABRICATED
EXAMINATION STANDARD: [X] G-27 [ ] 7220-C-111 REV II [ ] _____ OTHER
ACCEPTANCE STANDARD: [ ] ASME SEC III [X] ANSI B31.1 [ ] AWS D1.1 [ ] C-111 APPOX C OTHER
TYPE OF MATERIAL: [ ] SS [X] CS [ ] OTHER _____
TEMP. OF MAT'L. BPC EXP. < 600°F
TYPE OF EXAMINATION: UT [ ] MT [X] PT [ ]
N.D.T. PROCEDURE NO.: 3.21.A.1 REV. 2 AMEND. —

ULTRASONIC EXAMINATION

EQUIPMENT	TRANSDUCER	TEST BLOCK	METHOD USED	SCANNING METHOD	SENSITIVITY LEVEL
	____MHZ ____DIA	N/A			

MAGNETIC PARTICLE EXAMINATION

EQUIPMENT					AMPERAGE	POLE/PROD. SPACING	PARTICLES—COLOR
Magna Magic BPC 2079 Exp 3-24-81	DRY [X] WET [ ]	VISIBLE [X] FLUORESCENT [ ]	AC [X] RECTIFIED [X]	DC [ ]	400	4" HEAD [ ] COIL [ ]	RED [X] MX 8A GREY [ ]

LIQUID PENETRANT EXAMINATION

[ ] Solvent Removable [ ] Water Washable

PENETRANT BRAND #	PENETRANT BATCH #	PENETRANT DWELL TIME MIN	CLEANER BRAND #	CLEANER BATCH #	DEVELOPER BRAND #	DEVELOPER BATCH #	DEV TIME MIN	DRY [ ] WET [ ] NON-AQU. [ ]
			N/A					

LINE # OR PART #: 2HBD-487
AREA EXAMINED: 100%
TYPE OF WORK: NEW [X] REPAIR [ ]
NO. OF ITEMS ACCEPTED: 1
NO. OF ITEMS REJECTED: 0

TYPE OF DEFECTS CODE
C — Cracks P — Porosity NF — Non-Fusion LI — Linear Indication S — Slag LA — Lamination OTHER — Specify

ITEM # OR WELD #	ACC	REJ	DEF. CODE	REMARKS	ITEM # OR WELD #	ACC	REJ	DEF. CODE	REMARKS
12" dia. FW11	✓			FINAL					
P702									

AREA —

Technician David Wawrow SNT-TC-1A Level II
Asst. Technician Dave Postma
Customer C.D. Norberg 4/II
Witnessed by SIGNATURE
ENCLOSURE ADDED Yes [ ] No [X]
Page 1 of 1

NCR 3173

5 of

FORM 112-2303

PEABODY TESTING/X-Ray Engineering Company
assumes no responsibility for losses of any kind due to interpretation.

Request for N.D.E.

1 PT ☐ MT ☒ RT ☐ UT ☐ Other ☐ _____

2 SYSTEM [illegible] 440 3 ISO 6-52-1 4 WELD NO. 7

5 DIAMETER 10 6 WALL THK. .375 7 MATERIAL P5

8 WELDER ID D 173 9 WELD PROC. GTAW-SMAW-FCAW-2

10 NDE SPEC. [illegible] 11 UNIT NO. ENF-1 12 AREA DC

13 ELEV. 677'-3" 14 LOCATION [illegible]

15 REQUESTED BY [illegible] 16 DATE 2-16-81

17 REMARKS

White - NDE Coordinator Yellow - Peabody Testing Pink - Inspector Green - File

Peabody Testing
X-Ray Engineering Company

FOSTER CITY — MAIN OFFICE 1118 Chess Drive, Foster City, CA 94404 (415) 573-6000

CERTIFIED REPORT of NONDESTRUCTIVE EXAMINATION

CUSTOMER: Bechtel Power Corporation

DATE: 3-17-81

ADDRESS: P.O. Box 2167, Midland, MI 48640 XRE 2303

N.D.E. REPORT NO.: 14113

JOB OR PROJECT LOCATION: Midland Nuclear Power Project

P.O. NO.: 7220-FSC-206

PLAN OR DWG. NO.: M652-1 REV. N/A

SURFACE CONDITION: [X] AS GROUND [X] AS WELDED [ ] AS FABRICATED

EXAMINATION STANDARD: [X] G-27 [ ] 7220-C-111 REV II [ ] _____ OTHER

ACCEPTANCE STANDARD: [ ] ASME SEC III [X] ANSI B31.1 [ ] AWS D1.1 [ ] C-111 APPOX C OTHER

TYPE OF MATERIAL: [ ] SS [ ] OTHER [X] CS [ ] _____

TEMP. OF MAT'L. °F: BPC EXP. <600°F

TYPE OF EXAMINATION: UT [ ] MT [X] PT [ ]

N.D.T. PROCEDURE NO.: 3.2.A.1 REV. 2 AMEND. —

ULTRASONIC EXAMINATION

EQUIPMENT	TRANSDUCER	TEST BLOCK	METHOD USED	SCANNING METHOD	SENSITIVITY LEVEL
	____MHZ ____DIA	N/A			

MAGNETIC PARTICLE EXAMINATION

EQUIPMENT: Magna Magic 3PC 2079 Exp 3-24-81

DRY [X] WET [ ] VISIBLE [X] FLUORESCENT [ ] AC [X] DC [ ] RECTIFIED [X]

AMPERAGE: 400

POLE/PROD. SPACING: 4" HEAD [ ] COIL [ ]

PARTICLES—COLOR: RED [X] MX 8A GREY [ ]

LIQUID PENETRANT EXAMINATION

[ ] Solvent Removable [ ] Water Washable

PENETRANT BRAND #	PENETRANT BATCH #	PENETRANT DWELL TIME MIN	CLEANER BRAND #	CLEANER BATCH #	DEVELOPER BRAND #	DEVELOPER BATCH #	DEV TIME MIN	DRY [ ] WET [ ] NON-AQU. [ ]
			N/A					

LINE # OR PART #	AREA EXAMINED	TYPE OF WORK	NO. OF ITEMS ACCEPTED	NO. OF ITEMS REJECTED
1HBD-490	100%	NEW [X] REPAIR [ ]	1	0

TYPE OF DEFECTS CODE

C – Cracks P – Porosity NF – Non-Fusion LI – Linear Indication S – Slag LA – Lamination OTHER – Specify

ITEM # OR WELD #	ACC	REJ	DEF. CODE	REMARKS	ITEM # OR WELD #	ACC	REJ	DEF. CODE	REMARKS
12" dia FW 9	✓			FINAL					
P623									

WDD 3173

AREA —

Technician: David K. Wurst SNT-TC-1A Level II

Asst. Technician: Dave Postma

Customer: C.D. Norberg 4/II

Witnessed by: WDD SIGNATURE

ENCLOSURE ADDED Yes [ ] No [X]

Page 1 of 1

6 pcs

PEABODY TESTING/X-Ray Engineering Company assumes no responsibility for losses of any kind due to interpretation.

S/U - 2EAC 5 A-Lab 1

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland | JOB NO.: 07220 | 19. NO. 3216 | 20. PAGE 1 OF 4

2. UNIT(S): 2 | 3. DRAWING/PART NO.: M619 SH 3 | REV: 7/FD | 4. ITEM DESCRIPTION: Arc Gouge in Pipe | 5. ITEM LOCATION: F/B #2, El. 635, 66' E of Col. D' N of Col. 4

6. P.O. OR SPEC NO.: N/A | 7. SERIAL NO.: N/A | 8. REPLACEMENT PART P/N N/A REV N/A SER NO N/A | 9. SOURCE: Construction | 10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER | IR NO. N/A NO. M-204 | 12. ASME AUTHORIZED INSPECTION REQ'D (X) YES ( ) NO | 13. SKETCH ATTACHED (X) YES ( ) NO | 14. Discovered During ( )Rec'g (X)Const ( )Test | 15. Equip Furnished By ( )Client ( )Eng (X)FLD

16. NONCONFORMING CONDITION:

Requirement: Spec M-204, 5.2.1, states, "Care shall be taken in handling and installation of piping to prevent surface damage."

Condition: Pipe spool 2HBC-102-S-619-3-4 has an arc gouge that is 3/4" x 1 7/8" x 1/4" deep (approx.) (See attached sketch)

Hold for Engineering Disposition / 1 (one) Hold Tag Applied / QList 4.185

17. REPORTED BY: Roland Owens | DATE: 11/17/80 | 18. VALIDATED BY: R. Smith | DATE: 11/26/80

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends Project to evaluate.

Jean L Sorin 12-5-80

23. PROJECT ENGINEERING DISPOSITION

"REPAIR" - CORRECTIVE ACTION SHALL BE TAKEN TO ELIMINATE DEFECTS IN ACCORDANCE WITH PARAGRAPHS 5.0, 6.0 & 7.0 OF ED-1 AND REPAIR PER PARAGRAPH 4.5 OF GIS-FM (REV 4) BOTH OF WHICH ARE PART OF SPEC G-27.

Rev 1-5-81 P. Pixley QE 1/6/81

24. DISPOSITION CONCURRENCE

rework	reject	repair (X)	use as is

PROJECT FIELD ENGINEER 1/19/81 DATE

PROJECT ENGINEER 1/20/81 DATE

PROJ CONSTR QC ENGINEER 1/23/81 DATE

AUTHORIZED INSPECTOR 1/23/81 DATE

25. DISPOSITION RESULTS

DEFECT REPAIRED PER GIS G-27. REPAIRS ACCEPTED BY U.T.'S AND VERIFICATION OF MINIMUM WALL (SEE ATTACHED ULTRASONIC THICKNESS MEASUREMENT TEST REPORT) SEE LOG # 10626, QCIR # M-619-3-BMR 1

26. QC ACCEPTANCE 6/5/81 QC ENGINEER DATE

6/5/81 AUTHORIZED INSPECTOR DATE

NR 12/10/80 MJH

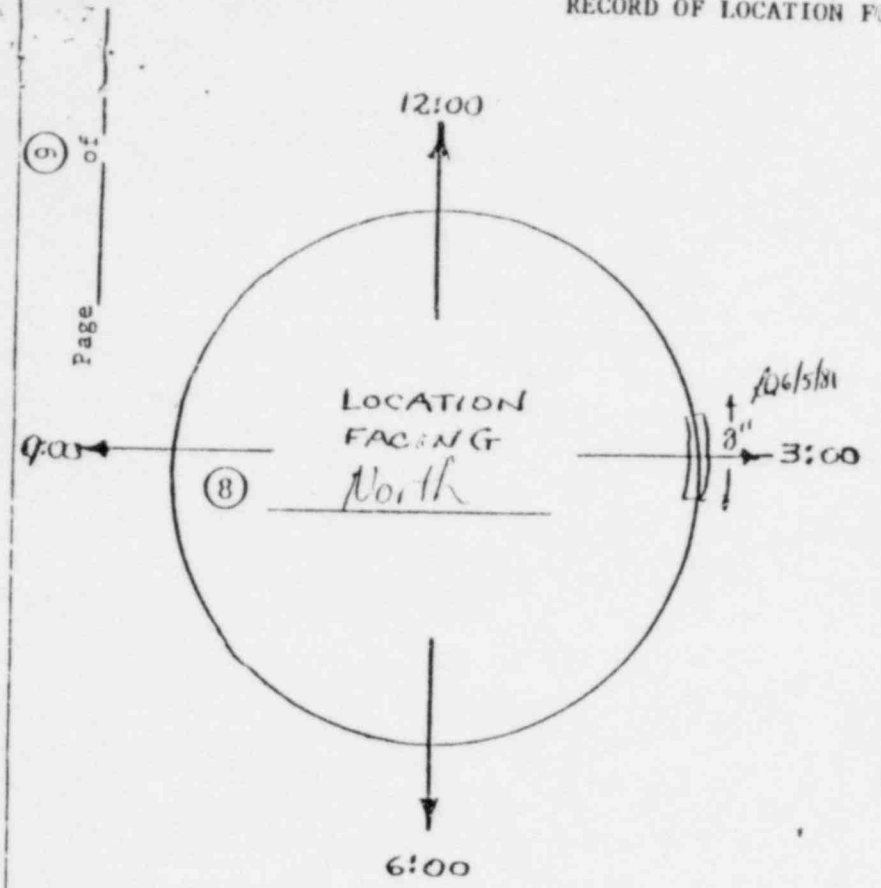
Add to Disposition 1/6/81 MJH

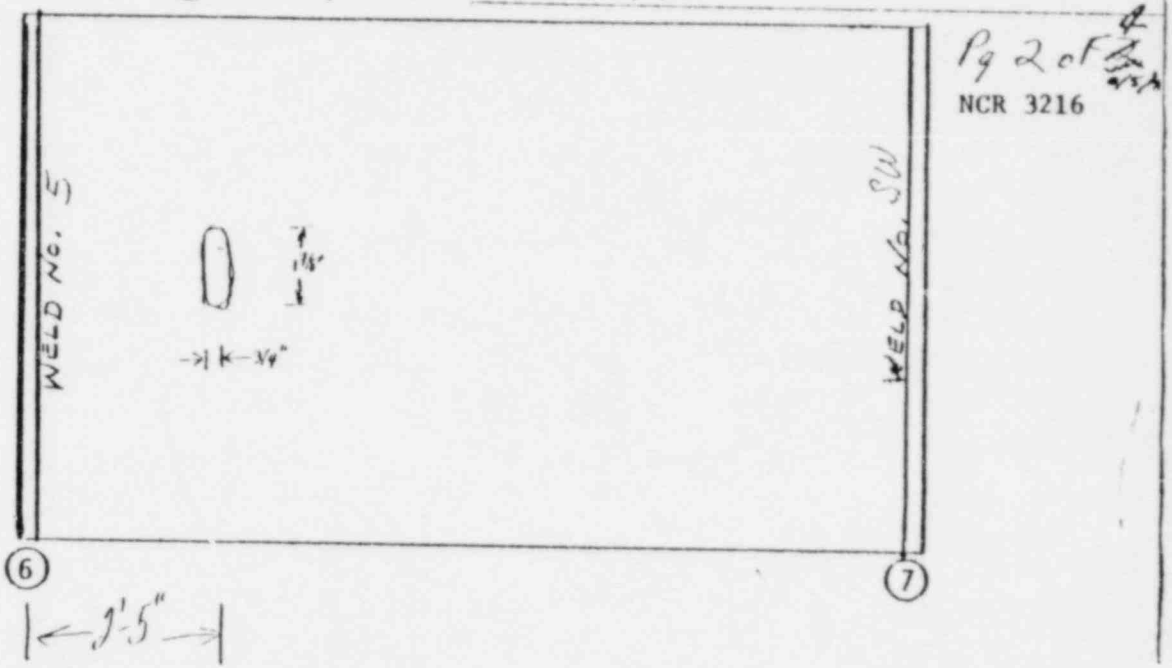
RECORD OF LOCATION FOR TEMPORARY ATTACHMENTS AND BASE METAL REPAIR

(1) QCIR # N/A (2) Log # N/A

(3) Weld Procedure N/A (4) Repair Procedure N/A

(5) NDE Requirements N/A





Looking West

Pg 2 of 4

NCR 3216

REMARKS: Pipe spool 2HBC-102-5-619-3-3 1/16 gouge

QCF-41 Rev. 0 10/2/79

QCE: [signature] DATE: 1/17/80

Peabody Testing
Ray Engineering Company

FOSTER CITY — MAIN OFFICE 1118 Chess Drive, Foster City, CA 94404, (415) 573-6000

ULTRASONIC THICKNESS MEASUREMENT TEST REPORT

CUSTOMER: Bechtel Power Corporation			DATE: 5-29-81
ADDRESS: P.O. Box 2167 Midland, MI 48640	XRE 2303		CONTROL NO. OR REPORT NO.: 15275
JOB OR PROJECT LOCATION: Midland Nuclear Power Project	P.O. NO.: 7220-FSC-206		PLAN OR DWG. NO.: M-612-3
SYSTEM: 2HBC-102	TYPE OF MATERIAL: C/S	ACCEPTANCE STANDARD: N/A	N.D.T. PROCEDURE NO.: 10 CFR 50 Appendix B

ULTRASONIC EXAMINATION

EQUIPMENT	CALIBRATION RANGE	TRANSDUCER (SIZE & FREQ.)
KB DM2 / CAL STD SDC 629 V.C. 0919 EXP 5-13-82	.100" to .500"	1/4 DIA 5 MHZ

ITEM OR WELD NO.	MINIMUM THICKNESS REQ'D (DESIGNATED BY CUSTOMER)	THICKNESS RECORDED	DISPOSITION ACCEPT	DISPOSITION REJECT	REMARKS
10" DIA					
2M2P1 ADJ					
FW 5		.320			
D-692					
D-544					

A.D. Reviewed 6/1/81

Technician: John A Rayburn SNT-TC-1A Level: III

Asst. Technician: N/A

Customer: E.R. Stoddard L II

Witnessed by: N/A SIGNATURE

ENCLOSURE ADDED Yes ☐ No ☒

Page 1 of 1

PEABODY TESTING/ X-Ray Engineering Company assumes no responsibility for losses of any kind due to interpretation

BBS FORM 17793

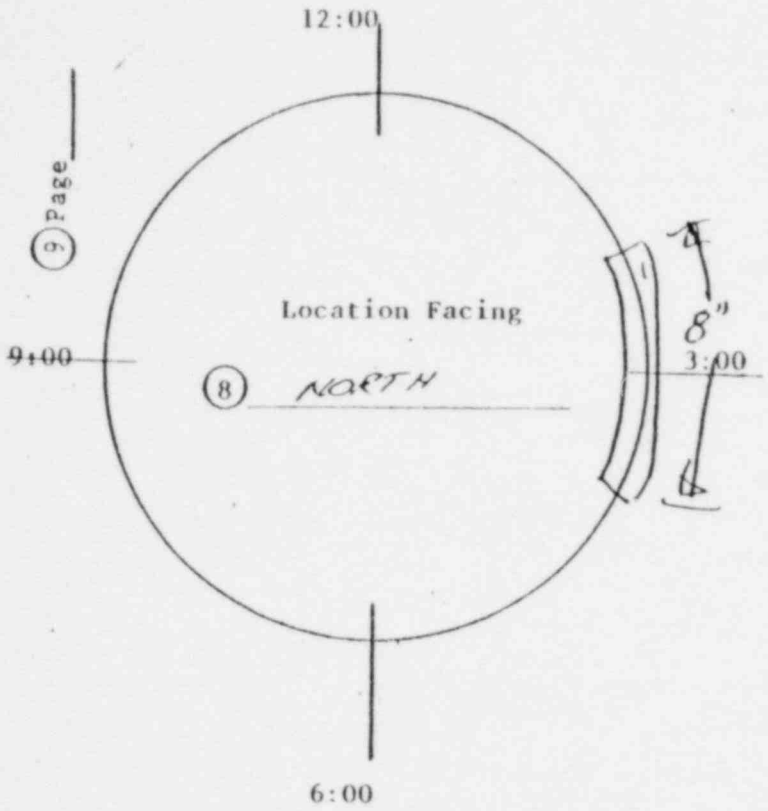
RECORD OF LOCATION FOR TEMPORY ATTACHMENTS
AND BASE METAL REPAIRS

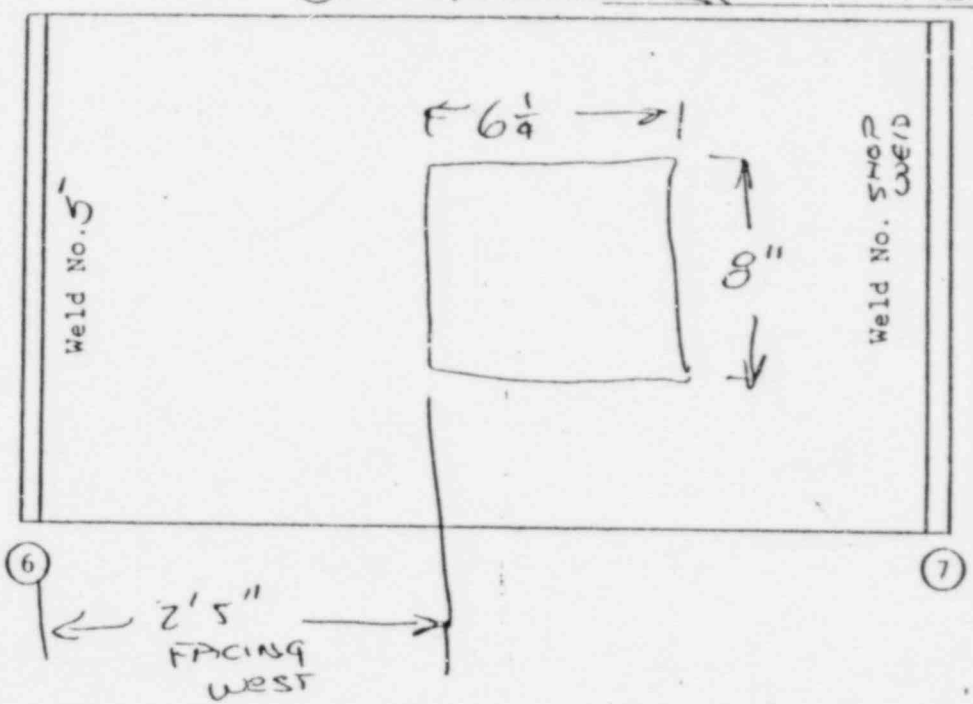
VCR 3216 B & C-Q

(1) QCIR # ~~77619-3-BMR1~~ N/A 6/5/81 (2) Log # ~~106126~~ N/A 6/5/81

(3) Weld Procedure P1-T (4) Repair Procedure ~~ED-1~~

(5) NDE Requirements Repair UT-ASME





REMARKS: UT AREA FOR WALL THICKNESS

QCE 5/28/81

QCF-41 Re 11/24/80

FE R. MILLER 1-22-81

NONCONFORMANCE REPORT

S/4 - NON TESTABLE UNIT

A fab

1

6 DIVISION AWS 2/19/81

1. PROJECT NAME: MIDLAND		JOB NO.: 7220		19. NO. 3271	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: E-758 SH 1	REV: 3	4. ITEM DESCRIPTION: WELDED CONNECTIONS - LONG. BRACES	5. ITEM LOCATION: CONT #1 SEC. SAW WALL 611 SOUTH FACE	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV SER NO.	9. SOURCE: ENG/CONST.	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. N/A NO C-304 Rev 9	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION: REQUIREMENT - SPECIFICATION 7220-C-304, REV. 9 PARAGRAPH 6.1 STATES IN PART, "WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1, SPECIFICATION 7220-G-27, AND WITH THE FOLLOWING REQUIREMENTS . . ." AWS D1.1-72 PARAGRAPH 2.7.1.4 STATES THAT A FILLET WELD MAY BE USED IN SKEWED CONNECTION WHEN THE INCLUDED ANGLE IS NOT LESS THAN 60°.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
J. W. Miller	1-27-81	[illegible]	1/28/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends disposition by Project.

B Hollin 6 FEB 81

23. PROJECT ENGINEERING DISPOSITION: Project Engineering has determined that the original weld does not conform to criteria set forth in AWS D1.1 - 72 paragraph 2.7.1.4 - All non conforming conditions are to be repaired in accordance with sketch on page 3 of NCR. (5 TH SHEET)

REM C-2906

NCR incorporated in DWG. E-758(Q), Sh. 1 per DCN # 6 2-14-81

~~DWG E-758(Q), sh. 1 will be revised~~

AWS 2-13-81

CALC #29C

QE L. D. Smyth 2-10-81 GW staff

J. Hoelscher 2-12-81

[illegible] 2-11-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
		X	

PROJECT FIELD ENGINEER [illegible] DATE 2/2/81

PROJECT ENGINEER [illegible] DATE 2/2/81

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

THE REFERENCED BRACE CONNECTIONS HAVE BEEN EVALUATED IN ACCORDANCE WITH CLAUSE 23, AND DOCUMENTED ON CALC 29C-S-4

J. Miller 6-4-81

26. QC ACCEPTANCE J. Miller 6-4-81

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

E 3/6/81 CN

E 4-27-81 P.M.

RED Disposition 5/25/81 P.M.

RED Disposition 6/21/81 P.M.

See pg 4 for Concurrence

BLOCK 16 CONTINUED,

SPECIFICATION 7220-G 27 REV 14, GWS STRUCTURAL REV 3 PARAGRAPH 4.1.3.4 STATES, "FILLET WELDED T-JOINTS ARE PREQUALIFIED WHEN THE 'T' IS SKEWED TO NOT LESS THAN 60 NOR MORE THAN 135 DEGREES."

DRAWING 7220-E-758 SH1 REV3 SHOWS 2ea LONGITUDINAL BRACES FOR TRAY SUPPORTS CONNECTED TO THE SECONDARY SHIELD WALL USING DETAIL 17B SHOWN ON DRAWING 7220-E-704 SH1, REV.8 AND 2ea. LONGITUDINAL BRACES FOR TRAY SUPPORTS CONNECTED TO EMBEDDED AND ADDED STEEL USING DETAIL 6A SHOWN ON DRAWING 7220-E-703 SH1, REV.14.

CONDITION - THE INCLUDED ANGLES OF THE FOUR CONNECTIONS BETWEEN THE P1001 STRUT IN VERTICAL ORIENTATION AND THE FLAT SURFACE OF THE STEEL IS LESS THAN 60 DEGREES.

4 EA QC HOLD TAGS APPLIED.
QLIST #3,005
HOLD FOR ENGINEERING DISPOSITION.

Blk 22 cont.)
Field Engineering recommends that Project Engineering revise Top 1/4" plate shown on page 3 to accommodate cable tray spaced 3" from wall.

P Hollin 22 April 81

Block #23 (Continued)

Project Engineering Redisposition

Redisposition: Welding shall be performed in accordance with detail shown on page 5.

The change has been incorporated on DWG. E-758 Sheet 1 Rev. 4.

David J Huizenga 5-15-81

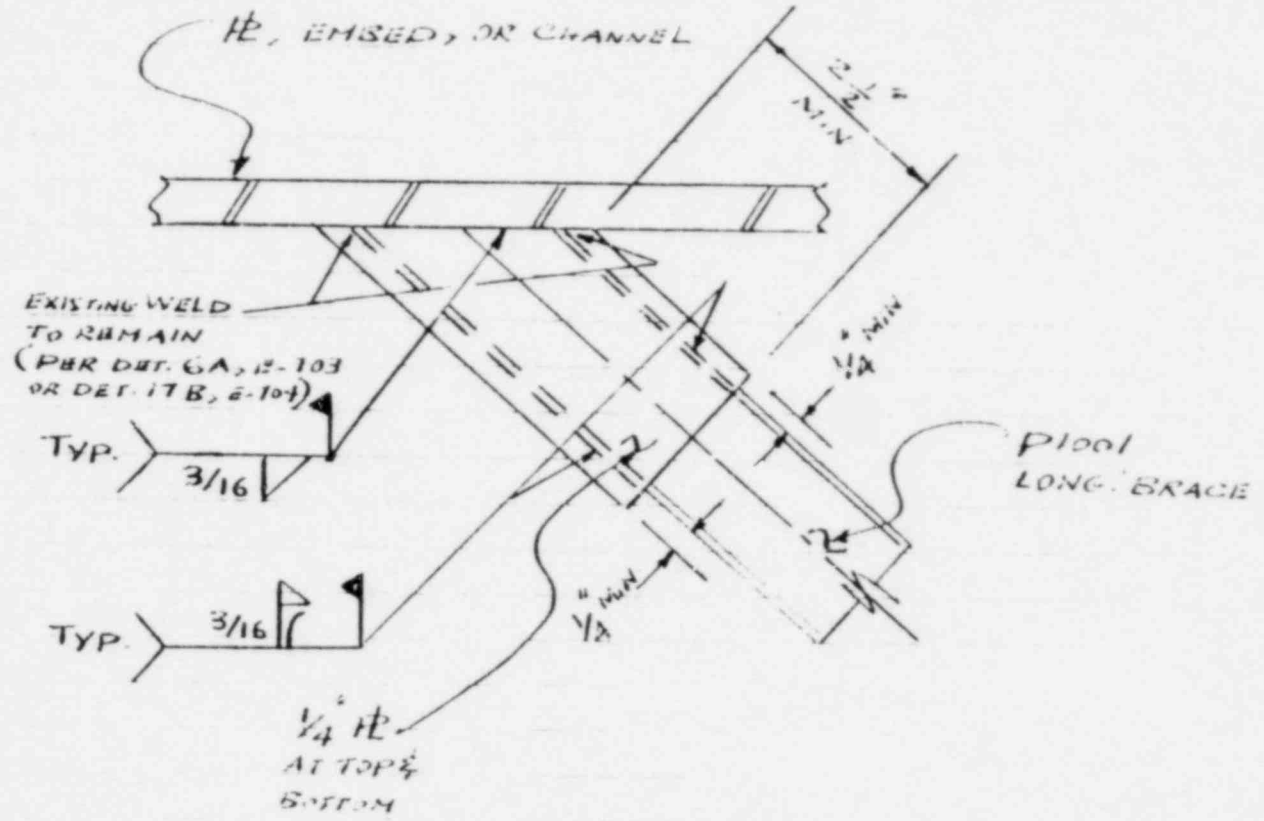
OE Kingdon 5-26-81

Gulley 5/20/81

J L Hockenbrocker 5-20-81

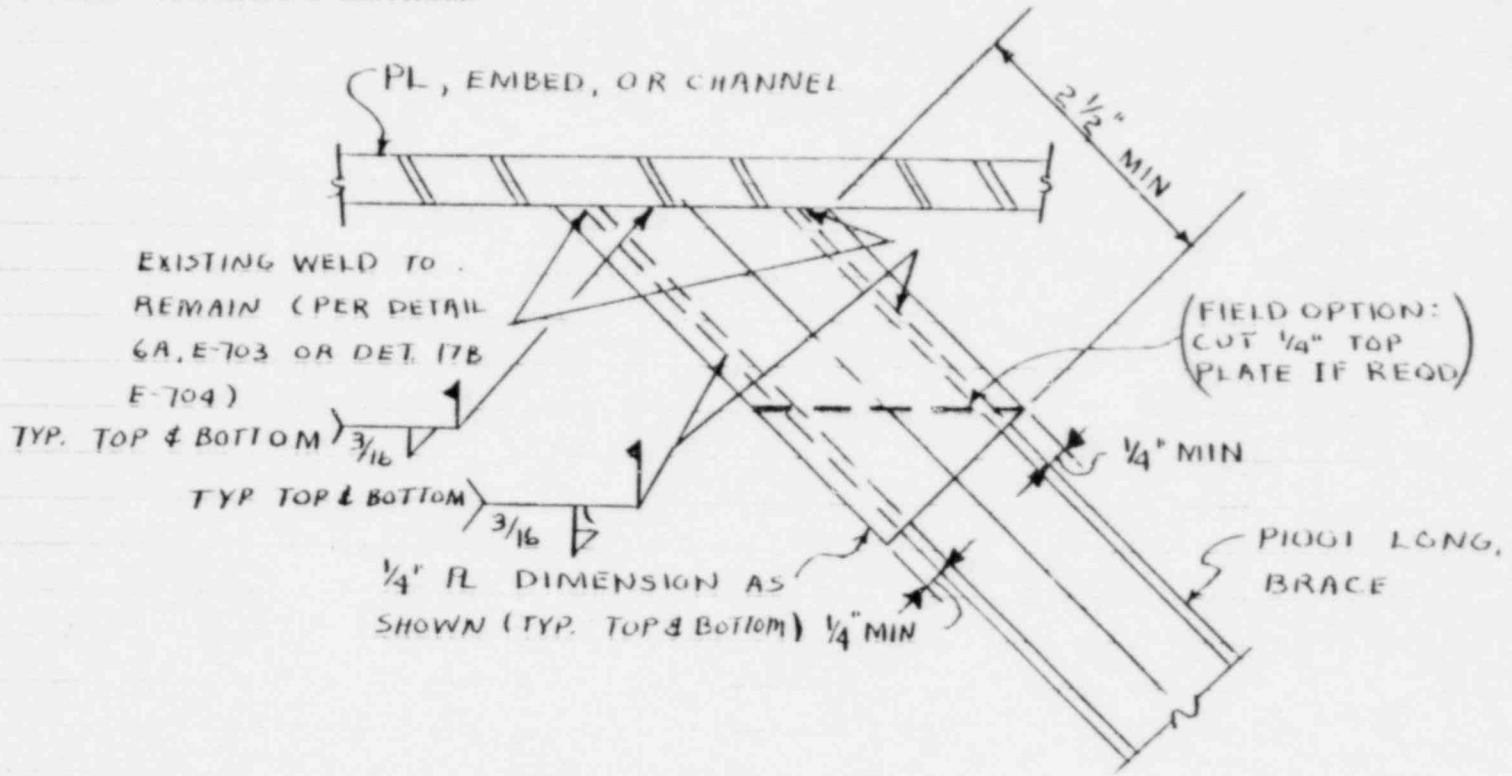
A Johnson

Project Engineering Disposition Continued



Block #23 Cont.

PROJECT ENGINEERING DISPOSITION CONTINUED



NONCONFORMANCE REPORT (CONT'D)

20. PAGE 21 OF 21 — 19. NCR NO. 71

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
			X	
PROJECT FIELD ENGINEER	J Batts/QC		DATE	6/1/81
PROJECT ENGINEER	[illegible]		DATE	5/28/81
PROJECT CONSTR QC ENGINEER	[illegible]		DATE	6/3/81
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

24. Disposition Concurrence Item	REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE	
PROJECT ENGINEER			DATE	
PROJECT CONSTR QC ENGINEER			DATE	
AUTHORIZED INSPECTOR			DATE	

B. Oldham

IGTE, 1
IGNC, IGSB, IGTB, IGTC

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3280	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: N/A	REV	4. ITEM DESCRIPTION: Cable 1BB2408 G		5. ITEM LOCATION: EL 685 RM 733
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Construction	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO./NO. 1BB2408 G	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client (X) Eng ( ) FLD	

E

16. NONCONFORMING CONDITION:

During pullback per WR 794 consisting of 17 cables the maximum allowable tension was exceed (max. tension 761 lbs ; actual tension 2955 lbs). This condition renders the following cables indeterminate:
1BB2408 G, 1BB2411 G, 1BB4401 B, 1BB4401 D, 1BB4401 E, 1BB4402 B, 1BB4402 D, 1BB4405 B, 1BB4405 D, 1BB4406 B, 1BB4406 D, 1BB4409 B, 1BB4409 D, 1BB4410 B, 1BB4410 D, 1BV201 B, 1BV201 C

17. REPORTED BY: Jeff Lange — DATE: 1-28-81

18. VALIDATED BY: [signature] — DATE: 2/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Said cables will be pulled out and scrapped. ~~Then repulled.~~ JB

[signature] 2/2/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

[signature] 2/1/81
PROJECT FIELD ENGINEER — DATE

[signature] 2/2/81
PROJECT ENGINEER — DATE

[signature]
PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

1BB4401 D, 1BB4402 D, 1BB4405 D, 1BB4406 D, 1BB4409 D, 1BB4410 D, 1BV201 C have been scrapped.
Jeff Lange 5-6-81

remaining cables all pulled out and scrapped.
Jeff Lange 6-3-81

26. QC ACCEPTANCE: Jeff Lange — 6-3-81
QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Block #16 Con't :

The overtensioning has caused some cable jacket deformation.
Q-List 3.007 18 Hold Tags applied Hold for Engineering Disposition

Engr. Mike McIntosh

S/U NON TESTABLE

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.			19. NO. 3291	20. PAGE 1 OF 2
Midland	7220				
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
1 & 2	E-632-5h-2	0	Anchors for 12 x 16 x 8 Pull box	Aux Bldg EL 685'0"	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N NA REV NA SER NO. NA	9. SOURCE	10. CONTRACTOR/SUPPLIER	
NA	NA		Const.	NA	

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO. IB3815 NO. C-42	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

3-16-81 P.H.

16. NONCONFORMING CONDITION:

QC Instruction C-150 and Spec C-305 is to provide sufficient inspection activities to assure that required quality for [illegible] related activities for expansion anchors has been achieved. Contrary to the above, an inspection hold point referenced in the PQCI 22. [illegible] activity 23-B. which directs that " Holes Shall be Inspected for, this was passed and anchors were installed prior to holes being inspected.

Cont. on Page 2

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Stanley Suttle	1-30-81	[signature]	2/10/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Anchors are to be test torqued, and have all other inspections performed per C-305. If anchors pass the test and inspections "use as is." If an anchor fails it is to be replaced in accordance with spec C-305.

[signature] 3/16/81

23. PROJECT ENGINEERING DISPOSITION

" USE AS IS "

NO CALCULATION REQUIRED.

NOTE: ITEMS IN BLOCK 16 HAVE NOT ADDRESSED THE OTHER APPLICABLE REQUIREMENTS OF SPECIFICATION 7220-C-305(Q) REV. 13

[signature] 5-27-81 | H.N. Desai 5/14/81 | V Yakhmi 5/14/81 | SS 5/11/81 | [signature] 5/14/81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

[signature] 6/8/81
PROJECT FIELD ENGINEER DATE

For Humphreys & Mellon 5-28-81
PROJECT ENGINEER DATE

[signature] 6-5-81
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

ANCHORS TESTED PER Block 22, REFERENCE C-150-EM-1672, AND FOUND ACCEPTABLE PER METHOD #2 USE AS IS PER Block 23. REQUIRES NO FURTHER ACTION

[signature] 6-5-81

26. QC ACCEPTANCE

[signature] 6-5-81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Add to Inspection 4/23/81 P.H.

The anchors are for a pull box NO" 1BJ815 Located S of H & Between 5.5 and 6.6 on Dwg E-632 Sh-2 EL 685'0".

Q-List-3.006 One Hold tag applied. Held for Engineering Disposition.

NONCONFORMANCE REPORT

System 2BGC

1. PROJECT NAME: Midland | JOB NO.: 7220 | 19. NO. 3292 | 20. PAGE 1 OF 3

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2 Aux Bld	E536 (Q)	20	Conduit 2AC007	Elev 599 Aux Bld

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A		Const.	N/A

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
(X) DWG ( ) SPEC ( ) OTHER IR NO. 2AC007 NO.	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION

Embedded conduit 2AC007 (3" PVC) was penetrated while drilling for expansion anchors in the bottom side of 599 elev slab. The conduit contains cable 2AA0512A. The hole was inspected with a boroscope (fibre optic viewing system). There was no visible damage to the cable. Location of hole: 1'-4" E/6.6 and 11'-5" S. of G line. (Continued on page 2)

E 2-23-81 P.H.

17. REPORTED BY: Gene Quayle | DATE: 2/12/81 | 18. VALIDATED BY: J. F. Russell | DATE: 2/12/81

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Use as is. Install anchor bolt and spoil threads to block hole in concrete. ~~J Verdun~~ 20 FEB 81

Rec'd Disposition 4/3/81 P.H.

23. PROJECT ENGINEERING DISPOSITION: CABLE 2AA0512A IS TO BE HI-POTTED TO DETERMINE CABLE INTEGRITY. IF CABLE PASSES HI-POT TEST THEN DRILLED HOLE IS TO BE REPAIRED AS FOLLOWS (REFER TO SKETCH): 1) INSERT 1" OF KAOWOOL, OR EQUIVALENT, INTO HOLE TO A DEPTH 1/2" TO 1" FROM CONDUIT. 2) FILL REMAINDER OF HOLE WITH GROUTING MATERIAL.

(CONTINUED ON PAGE 2)

24. DISPOSITION CONCURRENCE (See Block 23)

rework	reject	repair	use as is
		X	

PROJECT FIELD ENGINEER: [signature] DATE: 4/7/81

PROJECT ENGINEER: for K. Gibbs DATE: 4/3/81

PROJ CONSTR QC ENGINEER: J F Russell DATE: 4/6/81

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

The required Grouting is complete AND Acceptable See IR "C1.10-8011 Tim Gilbreth 6/25/81

CABLE HY-POTTED 5/5/81 - SATISFACTORILY PASSED TEST SEE HY-POT DATA ATTACHED. Ronald Hobbs

Cable satisfactory I have reviewed post Engineering Disposition [illegible] 6/26/81

26. QC ACCEPTANCE [signature] 6/26/81

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 Continued

Three hold Tags attached as follows. 1 at drilled hole, 1 attached to conduit at J.B. 2AJ301 & 1 at J.B. 2AJ364 ~~Tag~~ W/N G.C.P. 2/13/81

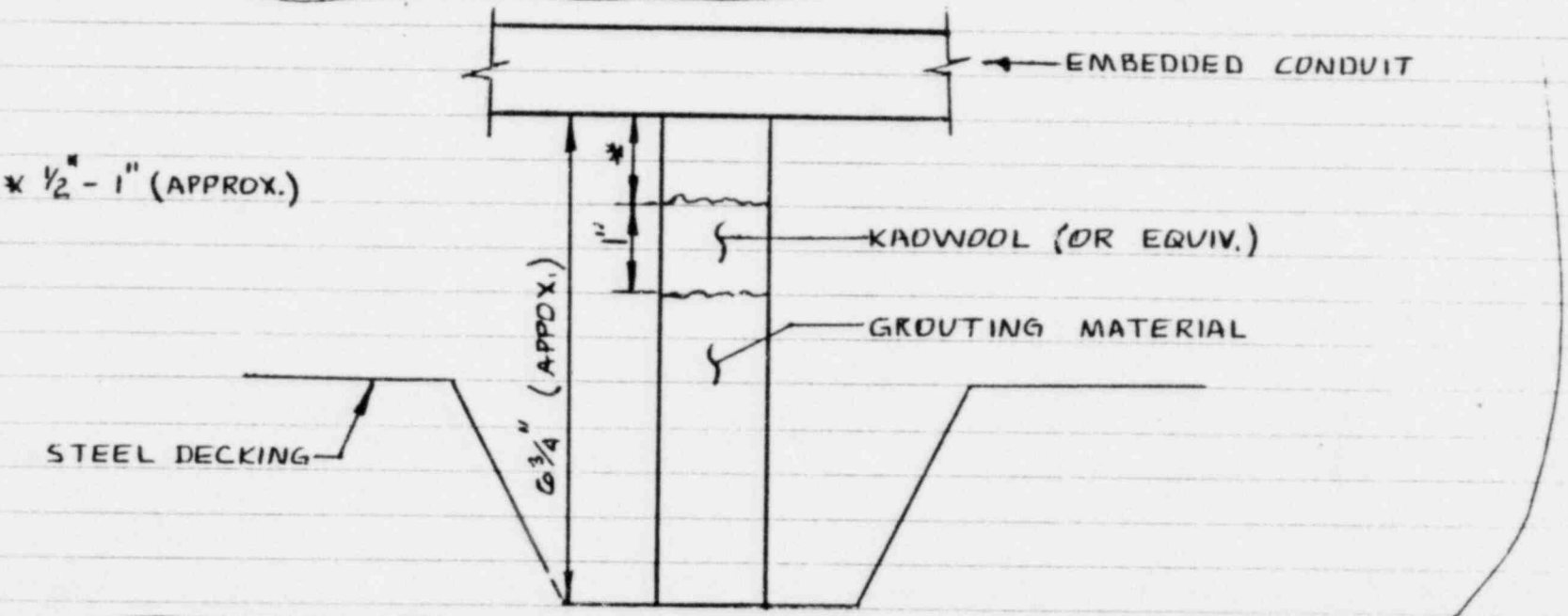
Q No. 3.006

L E Tarone 3/12/81

(BLOCK 23 CONTINUED)

IF CABLE DOES NOT PASS HI-POT TEST THAN CABLE IS TO BE REMOVED AND SCRAPPED. CONDUIT 2AC007 IS THEN TO BE STENCILED AS "ABANDONED" AND ONE END OF THE CONDUIT IS TO BE FILLED WITH CEMENT. A NEW CABLE IS TO BE INSTALLED MAKING USE OF CONDUIT 2AC008 IN PLACE OF CONDUIT 2AC007. CO 3-19-81

A.A.D. CONTACT: A. JULKA



E-42A(Q) SH. 11B NOTE 29

CONDUIT 2AC007 IS THEN TO BE REPAIRED PER ~~ABOVE SKETCH~~ AND A NEW CABLE IS TO BE INSTALLED IN PLACE OF FAILED CABLE.

A.A.D. CONTACT: A. JULKA CO 3-27

QE J. Smith 3-26-81

for BPR 3-26-81

NCR 3292 page 3 of 3

CABLE TEST FORM

Station: [illegible] Unit: 2 System Designator 2 - BGC

Equipment 2 DSK B 599 Aux.

Prerequisites as listed in Section 4.0 of the procedure are met...Initial/Date BCD 5/6/81

This data sheet is taken from the current revision of the parent procedure.

D-C TEST DATA

	Phase 1	Phase 2	Phase 3
Time Stated			
Current	μA	μA	μA
15 Sec (RCV)	14	14	22
30 Sec (2 x RCV)	13	13	21
45 Sec (3 x RCV)	13	13	20
60 Sec (TV)	13	12	20
2 Min	12	12	20
3 Min	12	12	19
4 Min	11	11	19
5 Min	11	11	19
6 Min	11	11	19
7 Min	11	11	19
8 Min	11	11 **	19
9 Min	11	12	19
10 Min	11	12	19
11 Min	12 *	12	19
12 Min	12	12	19
13 Min	12	12	19
14 Min	12	12	18
15 Min	12	12	18
KVDC after 1 Min	41.9	42.0	42.1

RCV Operating Voltage 4.16K Volts

Note: Increase voltage at a uniform rate until TV is reached. Start timing test at this point. If leakage current rises with voltage steady or decreasing, drop the voltage quickly to prevent equipment breakdown unless breakdown is wanted to locate fault.

TEST INSTRUMENTATION

Inst	CPCo #	Calib. Due Date
VDN	3742	
Set	00440	5-15-81

RCV Rated Cable Voltage

TV Test Voltage 42K

100 Microamperes (KA) = .1 Milliampere

Comments: NON-SHIELDED CABLE

KERITE 1976 4/0 AWG 5KV

* VOLTAGE INCREASE FROM 41.9KV TO 42.1KV

** VOLTAGE INCREASE FROM 42.0KV TO 42.3KV

GPE-07

Tested By: R P Dufresne 5/5/81 (Date) Approved By: _____ (Date)

witnessed by John L [illegible] 5/5/81 RC

CONTACTED: J. KELLEHER (F.E.)

S/U: NCN TESTHOLE

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3298	20. PAGE 1 OF 1
2. UNIT(S): I & II	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: INITIAL CURE OF CONCRETE SPECIMENS	5. ITEM LOCATION: FIELD	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: FIELD ENGINEERING	10. CONTRACTOR/SUPPLIER: BECHTEL	
11. INSPECTION CRITERIA: ( ) DWG ( ) SPEC (X) OTHER	IR NO. SC 1.05-22 NO. ASTM C31-69	12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO	13. SKETCH ATTACHED: ( ) YES (X) NO	14. Discovered During: ( )Rec'g ( )Const (X)Test	15. Equip Furnished By: ( )Client ( )Eng (X)FLD

C 2-23-81 P.M.

16. NONCONFORMING CONDITION: ASTM C31-69 STATES IN PART THAT THE INITIAL CURE TEMPERATURE OF CONCRETE SPECIMENS SHALL BE MAINTAINED AT A TEMP. OF 60° TO 80° F DURING THE FIRST 24 HOURS AFTER MOLDING. CONTRARY TO THE ABOVE, SPECIMENS CAST ON 2-13-81 WERE MEASURED AT 82° F. TEST DATA IS ATTACHED. "Q" LIST # 1.205. NO HOLD TAGS APPLIED.

17. REPORTED BY: B. Hammond DATE: 2-16-81

18. VALIDATED BY: [signature] DATE: 2/17/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

FIELD ENGINEERING RECOMMENDS TO "USE AS IS". THE HIGH TEMPERATURE FOR THE SHORT PERIOD OF TIME SHOULD HAVE LITTLE OR NO EFFECT ON THE 90 DAY STRENGTH.

R. P. Wehmeyer 2/23/81

23. PROJECT ENGINEERING DISPOSITION: THE EFFECT OF NONCONFORMANCE IS SLIGHTLY HIGHER EARLY STRENGTH. HOWEVER, AT 90 DAYS THE EFFECT SHOULD EVEN OUT. AS PER INFORMATION RECEIVED FROM FIELD, THE AVERAGE 90 DAY STRENGTH OF THE SPECIMENS IS 5515 PSI. THIS IS ACCEPTABLE AS PER ACI 318. THE CYLINDERS SHOULD BE ACCEPTED AS STRENGTH SPECIMENS. THE RECOMMENDED DISPOSITION IS "USE AS IS". THIS SHOULD BE CONSIDERED AS "ONE TIME DEVIATION." NO EFFECT ON SAFETY OF THE PLANT. NO SPEC CHANGE IS REQUIRED. 2/18/81 PT 5151 GS G.E. 3-5-81 05-22-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

J Betts for KEG — PROJECT FIELD ENGINEER — DATE 5/29/81

[signature] — PROJECT ENGINEER — DATE 5/31/81

[signature] — PROJ CONSTN QC ENGINEER — DATE 6/3/81

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

B. Hammond 6-16-81

26. QC ACCEPTANCE — QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

2/24/81 P.M. Approved Disposition

BECHTEL POWER CORPORATION
MIDLAND NUCLEAR POWER PLANT JOB 07220
REPORT OF CONCRETE CYLINDERS

QC ACCEPTANCE | DATE
CONTROL NUMBER | FILE NUMBER

1. PLACEMENT IDENTIFICATION: A(659.5)A A(624.0)c' A(668.0)c' A(650.0)c' | DATE PLACED: 2-13-81
3. PLACEMENT LOCATION: Aux Bldg.

PLANT DATA | SOURCE: Allied Concrete Products | CEMENT BRAND AND TYPE: Aetna Type I

4. MIX: D-1 | CLASS: I | QC TEST: ☒ YES ☐ NO | 5. REQUIRED STRENGTH: 5000 PSI AT 90 DAYS

TEST DATA AT BATCH PLANT | 6. Yield: 25.65

7. TICKET NO.: 42449 | 8. TRUCK NO.: 15 | 9. TIME OF HOLDING: 825 HOURS AT 4 YARDS | 10. INITIALS: RH JN
11. SLUMP ASTM C-143-77: 2½ INCHES | 12. AIR CONTENT ASTM C-231-75: 4.1 % | 13. UNIT WEIGHT ASTM C-138-77: 148.17 LBS/FT³ | 14. TEMP CONCRETE: 73 °F | 15. TEMP AIR: 13 °F
16. MOISTURE SAND ASTM D-566-76 STONE 1: 3.5 % , 4 % | STONE 2: N/A % | 17. WATER/CEMENT + POZZOLAN RATIO: .43 MAX. .40 ACT.
18. INITIAL CURING ASTM C-31-69: N/A °F TO N/A °F | 19. STRIPPED ASTM C-31-69: N/A AT N/A HRS. | 20. INITIALS: N/A

TEST DATA AT PLACEMENT Therm. - 366, 6-4-81

21. TICKET NO.: 42449 | 22. TRUCK NO.: 15 | 23. TIME OF TESTING: 0925 HOURS AT 4 YARDS | 24. TIME OF MOLDING: 0929 HRS.
25. SLUMP ASTM C-143-77: 5" INCHES | 26. AIR CONTENT ASTM C-231-75: 5.0% % | 27. TEMP CONCRETE: 60° °F | 28. TEMP AIR: 20° °F | 29. INITIALS: GW, CC
30. INITIAL CURING ASTM C-31-69: 70 °F TO 82 °F | 31. STRIPPED ASTM C-31-69: 2-14-81 AT 0922 HRS. | 32. INITIALS: RH RM

COMPRESSIVE STRENGTH DATA ASTM – C – 39 – 71

33. SPECIMEN IDENTIFICATION	34. DATE MOLDED	35. DATE TESTED	36. AGE	37. TOTAL LOAD IN POUNDS	38. ACTUAL CYL DIAM.	39. ACTUAL CYL AREA	40. TYPE OF BREAK	41. CURE: FIELD	41. CURE: LAB	42. STRENGTH PSI
ASS'y F-1249	2-13-81	2-20-81	7							
1250		"	7							
1251		3-13-81	28							
1252		"	28							
1253		5-14-81	90							
ASS'y F-1254	2-13-81	"	90							

43. STANDARD CYLINDER: 6" x 12" ☐ CUBE ☐ CORE ☐ OTHER | 44. REMARKS: INITIAL CURE OUT OF SPEC

45. AGE (DAYS) | 46. TESTED BY | 47. CHECKED BY | 48. CHECKED BY QC REP

49. LABORATORY SUPERVISOR | 50. DATE

* TYPE OF BREAKS: A = CONE, MORTAR FAILURE B = CONE, AGGREGATE FAILURE C = SHEAR, MORTAR FAILURE D = SHEAR, AGGREGATE FAILURE E = OTHER

person contacted - Wayne Slocumb.

NONCONFORMANCE REPORT S/U # NOT ASSIGNED

1. PROJECT NAME	JOB NO.			19. NO. 3322	20. PAGE 1 OF 1
Midland	7220				
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION	
1-11	N/A	N/A	CABLE code IES-24C/7/14	Roseville Laydown Area	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE	10. CONTRACTOR/SUPPLIER	
E-60	N/A		VENDOR	ROCKBESTOS	

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO. N/A NO. E-60	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION:

CONTRARY TO F.I.C. 4.100 PARA- 4.3

REEL # 4387 WAS FOUND NOT TO HAVE A END CAP INSTALLED OVER THE END OF THE CABLE. THEIR FORE MAKING ITS QUALITY INDETERMINATE AT THIS TIME.

QUEST # 3.004 ( ) Hold Tag Applied ( ) Hold For Engr. Disposition

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
J. Wayne Slocumb	3-5-81	R. Smith	3/6/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Cut off ten (10) feet of cable on end. Cap end of cable or reel. Purge the cable that was cut to check for water. If water is present purge whole reel. Purge of reel is not necessary if no water is present.

J. Wayne Slocumb 3/24/81 [illegible] 3/24/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

[illegible] 3/24/81
PROJECT FIELD ENGINEER DATE

R. Smith 3/25/81
PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

REEL # E60-0000B4387
WAS NITROGEN PURGED
PER V.P. E22-41-1
NO ~~NITR~~ RJS 6/23/81
MOISTURE WAS PRESENT
(F.E.R. E-1390)

Robert J. Smith 6/23/81

26. QC ACCEPTANCE
Robert J. Smith 6/23/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Contact L. Morris

NONCONFORMANCE REPORT

A-Lab
O-EAB, O-DCA

1. PROJECT NAME: Midland — JOB NO.: 7220 — 19. NO. 3332 — 20. PAGE 1 OF 2

2. UNIT(S): Com — 3. DRAWING/PART NO.: C96, C24-19-3 — REV: 8/3 — 4. ITEM DESCRIPTION: Grouting of Lift Mounting Plates — 5. ITEM LOCATION: Service Water Bldg.

6. P.O. OR SPEC NO.: N/A — 7. SERIAL NO.: N/A — 8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A — 9. SOURCE: Construction — 10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA (X) DWG ( ) SPEC ( ) OTHER — IR NO. C 1.10-410 NO. C96 (5) — 12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO — 13. SKETCH ATTACHED ( ) YES (X) NO — 14. Discovered During ( )Rec'g (X)Const ( )Test — 15. Equip Furnished By ( )Client ( )Eng ( )FLD

16. NONCONFORMING CONDITION:

1) Grout is to be placed per manufacture recommendation to obtain a solid bearing surface free of voids or irregularities.
2) Dwg C96-(5) detail #13 calls for a levelling nut to be installed under the lift mounting plate.
1) Contary to the above existing grout pads on OM96A thru OM96D and OM91A+B are Irregular with numerous

17. REPORTED BY: Edwin Dutton — DATE: 3-11-81

18. VALIDATED BY: J E Smith — DATE: 3-11-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

THE LIFT MOUNTING PLATE ON GATES OM96 A, B, C, & D AND OM91 A & B SHALL BE REMOVED. THE UNACCEPTABLE GROUT SHALL BE REMOVED AND, LEVELING NUTS SHALL BE INSTALLED ON THE BOLTS. J E Morris 4/29/81
L. J. Welsh 4/30/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
	X		

PROJECT FIELD ENGINEER — DATE 4/30/81
PROJECT ENGINEER — DATE
PROJ CONSTR QC ENGINEER J E Smith — DATE 5/3/81
AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

Unacceptable grout has been removed and leveling nuts installed.
Edwin Dutton 6-3-81

26. QC ACCEPTANCE Edwin Dutton 6-3-81
QC ENGINEER — DATE
AUTHORIZED INSPECTOR — DATE

Block # 16

Voids. 2) Contary to the above leveling nuts were not installed.

Hold for Engr. Disposition. Q list # 1,506
(This is a MPQAD identified discrepancy.)

Hold Tags applied.

SO.# 1PGB

BECHTEL

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19.	20.
MIDLAND	7220	NO. 3370	PAGE 1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
1 & 2	FMP 132-0, 1, 2, 3	N/A	480V LOAD CENTER SWITCH GEAR	EQUIPMENT ROOM EL. 714

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
E6 REV 7	N/A	P/N N/A REV N/A SER NO. N/A	ENGINEERING	~~GE~~ N/A 4/24/81

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
(X) DWG ( ) SPEC ( ) OTHER	NO. SEE BAL 16	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION: REQUIRED: DRAWINGS TO AFFECT THE CHANGE ARE GIVEN IN THE FIELD MODIFICATION PACKAGE. CONDITION: CONTRARY TO THIS, NO DETAIL IS PROVIDED ON THESE DRAWINGS FOR THE MAKE UP OF THE SCHEME STRIPS ON STATES TERMINALS. THIS CONDITION EXISTS ON ALL SIMILAR EQUIPMENT.

CONTINUED ON PAGE 2

E 4-9-81 PH. E 6/5/81 PH

17. REPORTED BY: C. Gehrke — DATE: 4-2-81

18. VALIDATED BY: [illegible] — DATE: 4-3-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Identity of scheme strips does not require additional clarification. Use as is.

D. Fiedler
8 April 81

23. PROJECT ENGINEERING DISPOSITION: IDENTIFICATION OF SCHEME NOS AKG IS PROVIDED IN DWG. E-7CC (CONNECTION LIST). ~~WHICH IS REFERENCED IN THE FMP 132-0,1,2,3~~ DWG E-7CC PROVIDES THE NECESSARY INFORMATION FOR THE MAKE UP OF SCHEME STRIPS ON STATES TERMINALS INSPECTED. NO ADDITIONAL INFORMATION IS REQUIRED ON FMP "USE AS IS"

J Snyder 6-3-81

A I Johnson 5/14/81

REQ Disposition 6/5/81 P.M. RAC to Disposition 4/10/81 P.M.

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

[illegible] 5/18/81
PROJECT FIELD ENGINEER — DATE

[illegible] 5-18-81
PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

NCR Closable as per Engineering disposition of Use As Is. 2WD 6-18-81

26) QC ACCEPTANCE Joseph A. Gallina 6/18/81
QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

3 Nov 6/3/81

2 copies of each

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 3 6-3-81 TAV 19NCR NO 3370

CONT. FROM PAGE 1 (BLOCK 16)

EXAMPLE: REFER TO MODIFICATION CHANGE REQUIRED AT OTB9 ON EG-86(3)-6 3B FMP 132

HOLD FOR ENGINEERING DISPOSITION.

NO HOLD TAGS APPLIED.

Q LIST 3.103

NONCONFORMANCE REPORT (CONT'D) 20. PAGE 3 OF 3 19. NCR NO 3370

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
			X

PROJECT FIELD ENGINEER — DATE 6/10/81

PROJECT ENGINEER — DATE 6/5/81

PROJECT CONSTR QC ENGINEER — DATE 6/15/81

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Discussed with Tim Brannell

A-Jad

Sh #11 SK-2C

1

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19. NO. 3378	20. PAGE 1 OF 3
Midland	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2	2HCB-55-2	2	See Block #16	Cont. #2

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	NA	P/N N/A REV NA SER NO. NA	Q.C.	N A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG ( ) SPEC (X) OTHER	NO. QCNM 8SB-G6.1	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION:

Requirement i Quality Control Notices Manual BSOP G-6.1, Para 3.3 States "Direct quality control inspection activities describe the minimum inspection activities and tasks that must be performed by construction quality control to verify that work performed "Q" listed ft 4,482

Continued

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Rex Pinson	4-8-81	R. Spence	4/9/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends for sw# 10 to perform radiographic examination to provide assurance of pipe withdrawal per GWS-SN amendment 3. If requirement cannot be met cut and reweld. For sw# 6 Field Engineering has evidence of fitup data and final visual. QC to perform necessary examinations. QCIR PW-10 to be initiated to record these activities. 4-13-81

23. PROJECT ENGINEERING DISPOSITION

See Revised DISPOSITION ON page 2

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
Doc			

J. W. Thornton 4/10/81
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

E. Smith 4/27/81
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE 4-13-81

25. DISPOSITION RESULTS

Field Weld No. 9 has been cut out at this time making it Non applicable to this NCR. acceptable 4-14-81 Q.C. concurs with disposition of Block 22. FW# 10 was cut and reWeld on DW100-10C Log no: 105312. FW# 6 was reinspected on DW#A-6, Log no: 102695.

26. QC ACCEPTANCE

Rex Pinson 6-8-81
QC ENGINEER DATE

J. W. Hill 6/8/81
AUTHORIZED INSPECTOR DATE

See pg. 3 for concurrence

Block 16 Cont'd. Bechtel construction during field receiving, fabrication, installation, erection, testing and subcontract surveillance conform to the inspection reference criteria. Para. 3.3.2 states "If post-process inspection of a processed item is impossible, disadvantageous or not reflective of the quality status of the item, the QCE shall include sufficient in-process inspections, witness, test or review activities to ensure quality verification. These activities and tasks shall be planned and sequenced in a systematic manner to ensure compliance with the primary documents throughout the installation process.

Condition: Contrary to this, field welds 6, 9, and 10 on Line 2"HCB-55 drawing 1SK-D-2HCB-55-2 were fabricated and installed with no documented fit up or final inspections thus making it impossible for B.C. to perform these inspections at this time leaving status of these welds indeterminate.

3 hold tags applied.

REVISED DISPOSITION: Ray Runyon 4/8/81

CUT & REWELD SW #10 IN ACCORDANCE WITH BECHTEL SPECIFICATION G-37 AND GWS-SW.

FOR SW #6 FIELD ENGINEERING HAS EVIDENCE OF FIT UP, DATE, AND FINAL VISUAL EXAMINATION. QCIR-PW-1.00 SHALL BE ISSUED PRIOR TO WELDING TO RECORD THE ACTIVITIES ON SW 10, ES ON C. DN FOR QST FINAL EXAMINATION A LINDELIE REQUIRED. D.E. Sorrell 5-13-81

NONCONFORMANCE REPORT (CONT'D)

20. PAGE 3 OF 3 5 13 81

19. NCR NO 3318

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
X			

PROJECT FIELD ENGINEER — DATE 5/14/81

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE 5/18/81

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Corrected Copy — Corrected Copy

BECHTEL — SOUTHWEST HOUSTON

NONCONFORMANCE REPORT

SWH | BCA

PROJECT NAME: MIDLAND NUCLEAR Units I & II — JOB NO.: 7220 — 19. NO. 3381 — 20. PAGE 1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
I	M-610 - SHEET 4	15/F2	1FCB-19, S-610-4-S	4'-2"S/E & 8'-3"E/S.6 AUX. BLDG

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	CONST.	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	P1.10-610-4-2 NO. 204	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: M-204-4-1-3 STATES IN PART: PIPE SHALL BE MARKED WITH A HEAT NUMBER OR A HEAT CODE AND THE ID WILL BE RECORDED IN THE RECORD ISOMETRIC OR OTHER RECORD DOCUMENT. MATERIAL ID MARKINGS SHALL BE TRANSFERED (BEFORE CUTTING) TO ALL PIECES WHERE A PART IS CUT TO MAKE MORE THAN ONE COMPONENT.

SEE PAGE 2 FOR CONT.

17. REPORTED BY: [signature] DATE: 4-8-81

18. VALIDATED BY: [signature] DATE: 4/7/81; [signature] 4/13/81; [signature] 5/4/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Field Engineering investigation reveals that the subject pipe was cut in the cambo shop on 4-11-80 and is marked with heat number 8643317. This piece of pipe was then installed in the original spool replacing a section of III Grinnell supplied pipe. However, there is no documented evidence that a QC. Engineer

23. PROJECT ENGINEERING DISPOSITION

26. CONT.
THEREFORE THIS IS NOT A NON-CONFORMING CONDITION.
[signature]
6-2-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

DOCUMENTATION FOR THE 10"x8" REDUCER BETWEEN FW 113 AND FW 5701 IS ON P-110-610-4-2 Log# 9031. QC# 4-218 Q.C. has verified THE HT # 8643317 FOR PIPE BETWEEN FW 57-92 BY THE COMBUSTION shop Q.C. INSPECTOR'S INITIALS AND DATE ON THE PIPE. QC# 6-2-81

26. QC ACCEPTANCE: [signature] 6-2-81

QC ENGINEER — DATE

[signature] 6/3/81

AUTHORIZED INSPECTOR — DATE

Corrected Copy Corrected Copy

NONCONFORMANCE REPORT (CONT'D) PAGE 2 OF 2 19NCR NO 3381

CONT OF BLOCK # 16

~~EXISTING CONDITION; THE PIPE BETWEEN FW's 99-57 HAVE NO MATERIAL I.D. THIS FACT IS ALSO DOCUMENTED ON THE P.I.D. 6010-4-2 Δ' LOG # 9031 REASSEMBLY SHEET. THIS MAKES THIS PORTION OF PIPE INDETERMINATE.~~ C.R.F. 5-1-81

Q-LIST NUMBER 4.114 S.W.P. IBCA

HOLD TAGS APPLIED (1)

Block # 16 Cont.

~~THERE IS NO DOCUMENTATION FOR THE 8"X10" REDUCER BETWEEN FW's # 57 & 113, MAKING THE TRACEABILITY INDETERMINATE~~ ~~C.R.F. 4-20-81~~ E. Brunet 4/23/81 (See block 25).

Block 16 (CONTINUED)

THE MATERIAL BETWEEN FW'S 57 AND 99 HAS INSUFFICIENT QUALITY CONTROL DOCUMENTATION TO VERIFY MATERIAL TRACEABILITY TO A CERTIFIED MATERIAL TEST REPORT.

C.R. Fugate 5-1-81

E. Gabriel 5/4/81

Blk. 22 cont.)
witnessed the transfer of heat numbers to the subject pipe.

Field Engineering recommends that this NCR be dispositioned "use as is" based on the following:
1. By inspection the pipe has a traceable heat number.
2. It is standard construction practice to transfer heat numbers and have them verified before the pipe is cut as required by M-204.

Field Engineering requests Project Engineering to determine if it is necessary to have the act of transferring heat numbers documented by QC to assure traceability of pipe.

Ken Hendricks 5-7-81

A-Job
S/4 OEAA

1

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland — JOB NO.: 7220 — 19. NO. 3382 — 20. PAGE 1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
Common	FSK-DUI-M619-6	3	Conn #1	Aux Bldg

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
NA	NA	P/N NA REV NA SER NO. NA (Mm 4-14-81)	Const	HA

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	NO. (also FSK-DUI-619-6-1-5)	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION:

Requirement: PSP 6.6.1 (7.0) states in part the Asme code authorized inspector may identify required witness and hold points for code items. M204 states inspection prior to installation all piping shall be visually checked for cleanliness. Condition: On Dwg FSK DUI M619 6 Conn #1 socket weld 14 was assigned an A.I hold point on fitup. To the contrary it was fitup and welded out with out

17. REPORTED BY: William Smith — DATE: 4-13-81

18. VALIDATED BY: (W) E. Bowden — DATE: 4/13/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Cut and reweld sw 14 per Bechtel specification 6-27, inform the authorized inspector of these activities for hold point, documentation of these welds to be recorded on QCIR-PW-100. Sw13 verification of cleanliness can be verified after sw 14 is cut open. Record cleanliness and final visual on QCIR-PW-100.

23. PROJECT ENGINEERING DISPOSITION: Dean E Bowden 4-20-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

PROJECT FIELD ENGINEER: [signature] DATE: 4/23/81

PROJECT ENGINEER: [signature] DATE: 4/24/81

PROJ CONSTR QC ENGINEER: [signature] DATE: 4/24/81

AUTHORIZED INSPECTOR: [signature] DATE: 4/24/81

25. DISPOSITION RESULTS: Sw 14 Cut, inspected by Q.C. & A.N.I & Re-welded. sw 13 cleanliness Also inspected at this time. See QCIR No. FSK-DUI-M-619-6-1-14 C1, Log. No. 102578

R. J. Wellington 6/19/81

26. QC ACCEPTANCE: R. J. Wellington 6/19/81

QC ENGINEER: [signature] DATE

AUTHORIZED INSPECTOR: [signature] DATE: 6/19/81

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 19NCR NO 3382

Block 16 Continued:
obtaining the authorized Nuclear inspector's concurrence. Also on the same Conn Sw 13 was made without cleanliness verification or documentation by Q.C.

Q list No is 4.1.8.5

I Hold tag Applied

ENGR CONTACTED: J. KELLEHER

NONCONFORMANCE REPORT

S/U CODE: INDETERMINATE

1. PROJECT NAME: MIDLAND			JOB NO.: 7220			19. NO. 3399	20. PAGE 1 OF 1
2. UNIT(S): INDETERMINATE	3. DRAWING/PART NO.: N/A	REV	4. ITEM DESCRIPTION: 3" SPARLING HYDRANT FLOWMETERS			5. ITEM LOCATION: WAREHOUSE 1	
6. P.O. ~~OR SPEC~~ NO.: F-49406	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE: SUPPLIER	10. CONTRACTOR/SUPPLIER: BITTING EQUIPMENT		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER	IR NO. R-100-14803 NO. F-49406	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD		

16. NONCONFORMING CONDITION: THE 3" SPARLING HYDRANT FLOWMETER PURCHASED ON PURCHASE ORDER F-49406 IS REQUIRED BY THE P.O. TO HAVE A STATEMENT OF CONFORMANCE AND CERTIFICATE OF COMPLIANCE. CONTRARY TO THIS, NO CONFORMANCE OR COMPLIANCE HAS BEEN RECEIVED, LEAVING THE QUALITY OF THE METER INDETERMINATE.

I HOLD TAG APPLIED HOLD FOR ENGINEERING DISPOSITION

Q LIST # INDETERMINATE

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
M.F. Stevens	4/27/81	[illegible]	4/27/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Materials Supervisor to obtain proper documentation.

L.P. Walmsley 5/5/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
DOC			

[illegible] 5/7/81
PROJECT FIELD ENGINEER DATE

[illegible] 5/7/81
PROJECT ENGINEER
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Documentation received 6/1/81 - found acceptable.
MJB 6/2/81

26. QC ACCEPTANCE M.F. Stevens 6/2/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

A-Lab

Non-Testable Unit

1

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND — JOB NO.: 7220 — 19. NO. 3411 — 20. PAGE 1 OF 23

2. UNIT(S): Common — 3. DRAWING/PART NO.: N/A — REV: N/A — 4. ITEM DESCRIPTION: CUT REBAR — 5. ITEM LOCATION: Aux. Bldg EL. 614'-0 Am. 32-9 North Wall

6. ~~NO. OR~~ SPEC NO.: C-306(Q) Rev 7 — 7. SERIAL NO.: N/A — 8. REPLACEMENT PART P/N: N/A REV: N/A SER NO.: N/A — 9. SOURCE: Construction Pipe Fitters — 10. CONTRACTOR/SUPPLIER: N/A

C 5/8/81 PW

11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER — IR NO.: N/A NOC-306(Q) Rev. 7 — 12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO — 13. SKETCH ATTACHED: (X) YES ( ) NO — 14. Discovered During: ( ) Rec'g (X) Const ( ) Test — 15. Equip Furnished By: ( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: APPENDIX D, SECTION 2.2, STATES IN PART: "TWO BARS MAY BE CUT EACH WAY, EACH FACE, PROVIDED THE MINIMUM RADIAL DISTANCE TO THE NEXT CUT BAR ON THE SAME FACE IN THE SAME DIRECTION SHALL BE TEN (10) FEET." CONTRARY TO THIS, THREE ~~HORIZONTAL~~ VERTICAL BARS WERE CUT WITHIN TEN (10) FEET ON THE SOUTH FACE OF C LINE WALL AT EL. 614'-0, Q LIST #1,203 One hold tag applied.

17. REPORTED BY: Ronald Scott — DATE: 4-20-81

18. VALIDATED BY: E. Smith — DATE: 4/29/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Project Engineering to evaluate.
L P Welaw 5/7/81

23. PROJECT ENGINEERING DISPOSITION

"REMAINING REINF. WILL SATISFY REQMTS. (CALC 23 C.4) "USE AS IS"

D. M. 05-28-81

PER FETD/5-19-81 JRN/5-21-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			✓

J Butler 6/3/81 — PROJECT FIELD ENGINEER — DATE

L P Welaw 5/27/81 — PROJECT ENGINEER — DATE

[illegible] 6/8/81 — PROJ CONSTR QC ENGINEER — DATE

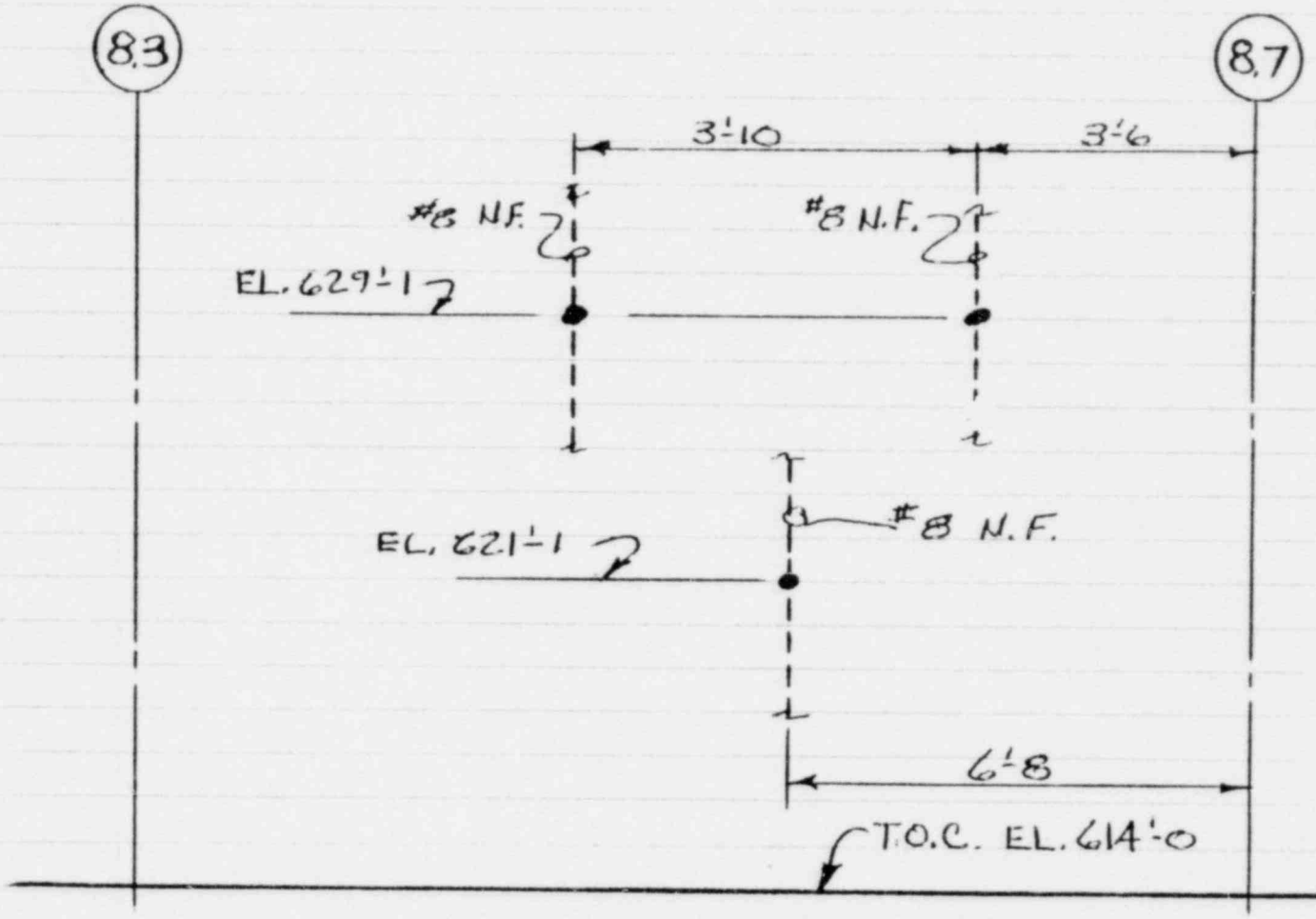
AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE [illegible] 6/8/81 — QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Add to Disposition 5/11/81 P.W.



WALL @ LINE C {WALL N° 35} PROD FABRIC COMMENT ETM 5-12-81

SOUTH FACE - LOOKING NORTH

z---●---z = LOCATION & DIRECTION OF CUT BAR

N.T.S.

CALCULATION SHEET

CALC. NO 23A.4 REV. NO.

ORIGINATOR TOM BALCEZAK DATE 5-19-81 CHECKED S.R.H DATE 5.21.81

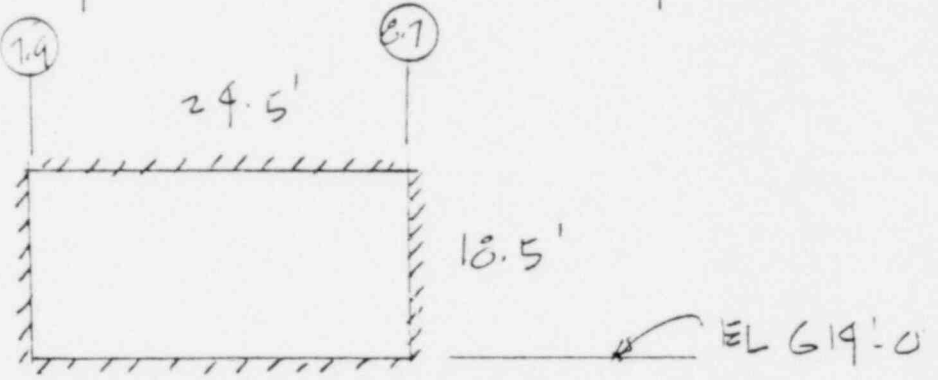
PROJECT MIDLAND AUX BLDG JOB NO. 7220

SUBJECT INT WALL N° 35 CUT BARS SHEET NO.

REF: CALC 23(P), FILE N° 31006, 31008

"NO PIPE RESTRAINT ALLOWED ON 2'-0" THICK WALL"

DIFFERENTIAL PRESSURE = 1.5 P_a = 12 PSI = 1.73 KSF



ONE FOOT STRIP:

P = 1.73 KSF $M = \frac{WL^2}{12} = \frac{1.73(18.5)^2}{12} = 49.34^{k'/ft}$

#8's @ 12: $A_s = 0.79\ IN^2/FT$

$M_u = \phi A_s f_y (d - \frac{a}{2}) = 0.9(0.79)(\frac{60}{12})(22 - \frac{.242}{2})$

$= 77.77^{k'/ft}$

A_s PROV = 0.79 IN^2/FT × 14 FT = 11.06 IN^2

− 3 CUT BARS 2.37 IN^2

A_s REMAINING 8.69 IN^2 OR = 0.62 IN^2/FT

$A_{s\ REQ'D} = \frac{49.34}{77.77} \times 0.79 = 0.50\ IN^2 < 0.62$

∴ "USE A_s IS"

DCR 3411 PAGE 3 OF 3.

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Corrected Copy

NONCONFORMANCE REPORT

Corrected Copy

Non-Testable Unit

1. PROJECT NAME: MIDLAND 7220 A J

19. NO. 3412

20. PAGE 1 OF 3

2. UNIT(S): COMMON

3. DRAWING/PART NO.: N/A

REV: N/A

4. ITEM DESCRIPTION: CUT REBAR

5. ITEM LOCATION: AUX B. 06 EL 624'-0" AM 313 A SLAB (FOLDER 324)

6. ~~PO OR~~ SPEC NO.: C-306(q) r.7

7. SERIAL NO.: N/A

8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A

9. SOURCE: CONSTRUCTION PIPE FITTERS

10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA: ( ) DWG (X) SPEC ( ) OTHER IR NO. N/A NCL-306(q) r.7

12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO

13. SKETCH ATTACHED: (X) YES ( ) NO

14. Discovered During: ( ) Rec'g (X) Const ( ) Test

15. Equip Furnished By: ( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: APPENDIX D, SECT 2.2, STATES IN PART, "...TWO BARS MAY BE CUT EACH WAY EACH FACE, PROVIDED THE MINIMUM RADIAL DISTANCE TO THE NEXT CUT BAR ON THE SAME FACE, IN THE SAME DIRECTION, IS AT LEAST TEN (10) FEET." CONTRARY TO THIS, THREE NORTH/SOUTH BARS WERE CUT WITHIN TEN (10) FEET @ 2 LOCATIONS ON THE SLAB @ 624'-0". ~~DEN INCORPORATED 12/18/80 ON A-30 CHANGE PIPEWAY ROOM NUMBER WHICH FSK'S FOR CUT REBAR ARE FILED UNDER~~. WCK 4-28-81 Q. LIST # 1.203

17. REPORTED BY: William C Karle DATE: 4/28/81

18. VALIDATED BY: SG R. Lund DATE: 5/4/81 4/29/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ~~X~~ Field Engineering Disposition (X) Field Engineering Recommends Disposition to Project Engineering

Project Engineering to evaluate.

L P Cahoon 5/5/81

23. PROJECT ENGINEERING DISPOSITION

STRUCTURAL REQUIREMENTS OF REMAINING REBARS ARE SATISFIED. (CALC 23C.9) "USE AS IS"

SS

J.M. 05-28-81

PVR 5/29/81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			✓

PROJECT FIELD ENGINEER — DATE 6/5/81

PROJECT ENGINEER — DATE 5/29/81

PROJ CONSTR QC ENGINEER — DATE 6/5/81

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE

QC ENGINEER — DATE 6/10/81

AUTHORIZED INSPECTOR — DATE

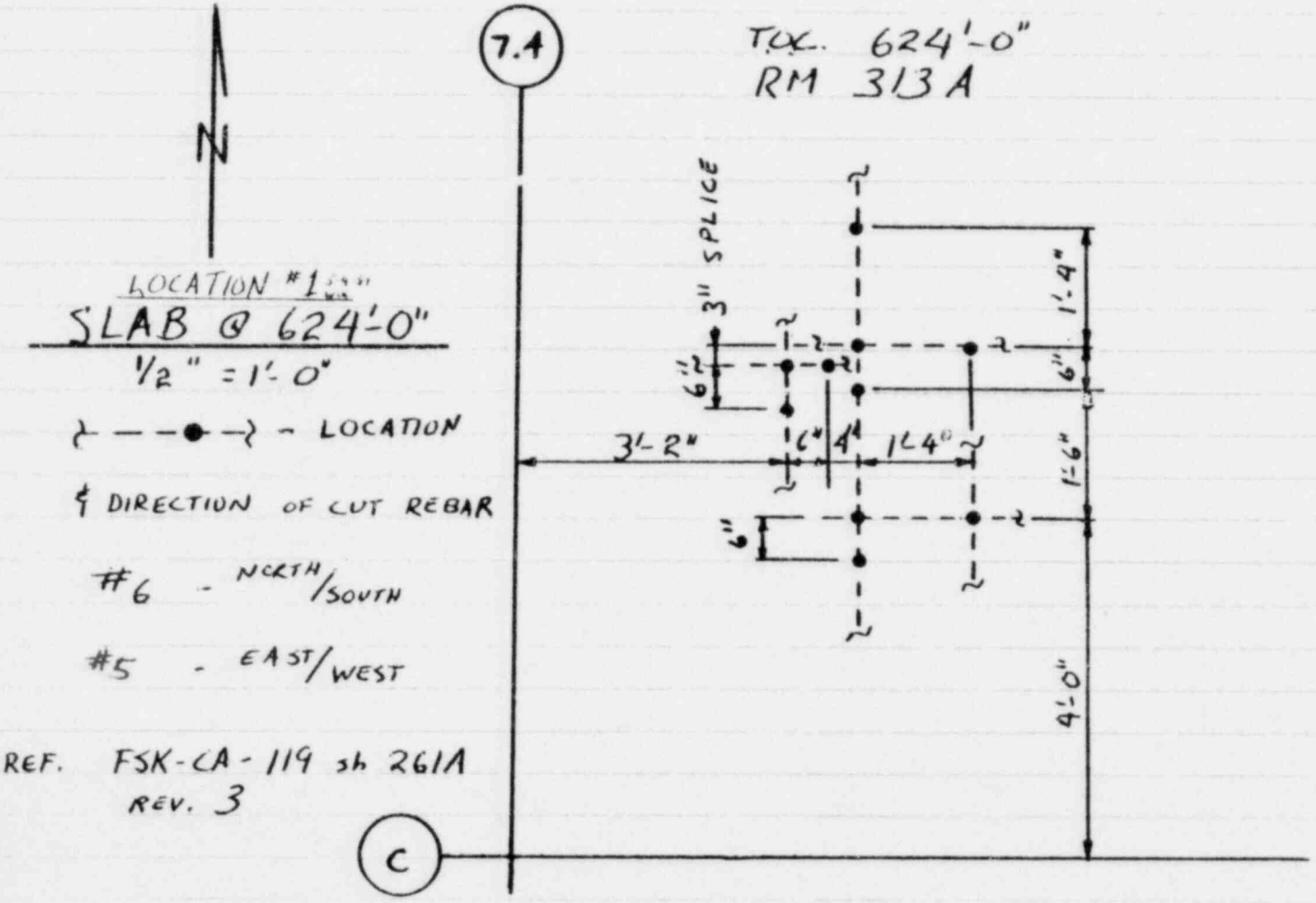
C 5/7/81 P.H.

5/8/81 PH

12hr to Inspection

Corrected Copy

NOTE: FSK-CA DWGS FOR CUT REBAR ARE REFERENCED BY ROOM NUMBER. DCN INCORPORATED 12/18/80 ON A-30 CHANGED ROOM NUMBER ON PIPEWAY, ~~RESULTING IN ALLOWING~~ me TWO FSK-DWGS FOR SAME ROOM. One hold tag applied Hold for Eng Disposition.



LOCATION #1

SLAB @ 624'-0"

1/2" = 1'-0"

→ - - ● → - LOCATION

℄ DIRECTION OF CUT REBAR

#6 - NORTH/SOUTH

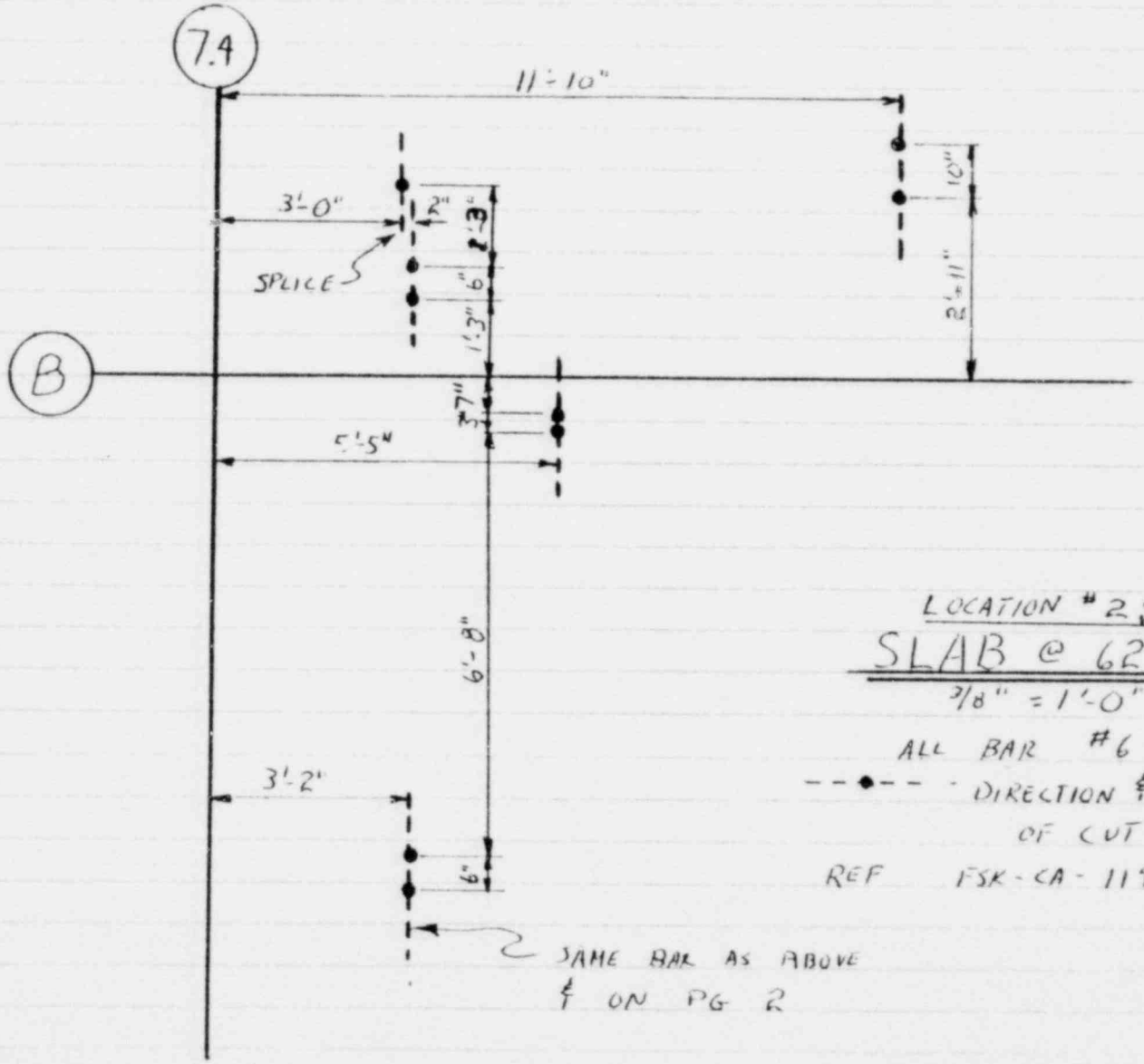
#5 - EAST/WEST

REF. FSK-CA-119 sh 261A REV. 3

Corrected Copy

~~THESE ADDITIONAL THREE BAR WERE FOUND TO BE NON-CONFORMING DURING CONSTRUCTION.~~ 5-4-81

BLOCK 16
CONTINUED



LOCATION # 2

SLAB @ 624'-0"

3/8" = 1'-0"

ALL BAR #6 U.N.O.

- - - ● - - - DIRECTION & LOCATION OF CUT BAR.

REF FSK-CA-119 sh 261A & 246A

WCK 5-4-81

CALCULATION SHEET

CALC. NO. 23C.4 REV. NO. 0

ORIGINATOR Tom Balczak DATE 5-19-81 CHECKED DLH DATE 5-21-81

PROJECT MIDLAND DIV. BLDG JOB NO. 7220

SUBJECT NCR 3212 ~~3212~~ 6/9/81 SHEET NO. 101

3412 6/9/81

REF: CALC 4L(Q) REV 1 EN 3200l, Book II

A_s prov = #6's @ 12" = 0.44 IN^2/FT × 10'-0"
= 4.40 IN^2

- A_s WT = 3(.44) = 1.32 IN^2

3.08 IN^2 REMAINING

$A_{s\,req} = \frac{3.08}{10} = 0.31\ IN^2/FT$

MOMENT CAPACITY = $\frac{0.31}{0.44} \times 44 = 31.0$ FT K

> $M_u = 6.3$

∴ ok

"USE AS IS"

PAGE 4 OF 4

NCR 3412

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A Lab

S/U-1PEA, 2PEA, 1PEB, 2PEB

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19. NO. 3413	20. PAGE 1 OF 1
MIDLAND UNITS 1&2	7220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
D&B	7220-M1B-138	7	REPAIR OF NEUTRAL GROUND RESISTOR SCREEN	DIESEL GEN. BLDG BASS 1-4

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE	10. CONTRACTOR/SUPPLIER
M1-018	N/A		CONST.	RTE DELTA CORP

11. INSPECTION CRITERIA (X) DWG (X) SPEC ( ) OTHER IR NO. NCG 27	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD

16. NONCONFORMING CONDITION: AS NOTED BY MPQA, REPAIR OF NEUTRAL GROUNDING RESISTORS 1G-11X, 1G-12X, 2G-11X, 2G-12X PER FCR-M3709, WHICH CALLS FOR WELDING EXPANDED METAL SCREEN INTO DAMAGED SCREEN SECTION OF N.G.R's WITH 3/16 x 3/16 FILLET WELD 4" LONG ON 5" CENTERS, HAS BEEN COMPLETED.

NO PROCEDURE FOR THE WELDING OF THIS SCREEN HAS BEEN NAMED ON FORM 184 OR ON FCR-M3709. THEREFORE QC INSP CANNOT BE MADE. A-LIST NO 4 SI 84.522 4 HOLD TAGS APPLIED HOLD FOR ENG. DISP.

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
J.C. Miller	4-28-81	per R. Smith	4/29/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Welds were performed per FCR M-3709 and PI-A-LH Instruct. as described in REM 1085. Use as is. (W.P. & M.T.R.S attached) R.F. Collin 1 May 81

23. PROJECT ENGINEERING DISPOSITION: COORDINATION WITH A. ET-TAHER OF PROJECT ENGINEERING HAS CONFIRMED THAT FCR-M-3709 ~~SHOULD~~ HAS HAVE BEEN ~~SHOULD BE~~ DISPOSITIONED USING WELDER PROCEDURE P1-A-LH REV. 5 (STRUCTURAL) 3/12/80 AS DESCRIBED IN RE-M-1085 ATTACHED.

PROJECT ENGINEERING CONCURS WITH THE "USE AS IS" DISPOSITION OF FIELD ENGINEERING.

5/13/81

R. Krause 5/12/81 5/13/81 J Smith QE 5-13-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			✓

PROJECT FIELD ENGINEER DATE 5/14/81

PROJECT ENGINEER DATE 5/13/81

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

"Use as is"
JCM 6-4-81
J.C. Miller 6-4-81

26. QC ACCEPTANCE J.C. Miller 6-4-81

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

See pg 2 for Concurrence

Need Nuclear Supervisor Sig

MIDLAND PROJECT

RESIDENT ENGINEER MEMORANDUM

RE- M-1085

DATE 4/30/81

SUBJECT: VENDOR PRINT 7220-M-16-138 REPAIR TO SCREEN

REF: FCR-M-3709

AAO COORDINATION: DATE 4/30/81 /TIME 9:40 AAO CONTACT A. ETTAHER

WELDING PROCEDURE P1-A-LH STRUCTURAL IS ACCEPTABLE FOR REPAIR OF SCREEN ON A REFERENCED FCR.

Uncontrolled

W. HOAG, M, PFG

RESIDENT ENGINEER J. Kramer

AAO REVIEW GROUP SUPERVISOR _____

DATE _____

23. PROJECT ENGINEERING DISPOSITION: REDISPOSITION OF 5/14/81:
COORDINATION WITH A. ET-TAHER OF PROJECT ENGINEERING HAS CONFIRMED THAT FCR-M-3709 AND REM-1085 ATTACHED HAS BEEN REDISPOSITIONED USING WELD PROCEDURE P1-A-LH REV. 3. JAN. 16, 1979.

ALL WELDING REPAIR OF THE NEUTRAL GROUND RESISTOR SCREEN HAS BEEN DONE USING WELD PROCEDURE P1-A-LH ~~STRUCT~~ REV. 3 JAN. 16, 1979 (STRUCTURAL)
THEREFORE PROJECT ~~RE~~ ENGINEERING CONCURS WITH "USE AS IS"

Larry M. Thomas RE A. Kramm 5/15/81 L Snyder QE 5-15-81

NONCONFORMANCE REPORT (CONT'D) 20. PAGE 3 OF 3 4 19. NCR NO. 3413

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
			X

PROJECT FIELD ENGINEER — DATE 5/08/81

PROJECT ENGINEER — DATE 5/08/81

PROJECT CONSTR QC ENGINEER — DATE 5/8/81

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

PERSON CONTACTED - D. BARNHOUSE

NONCONFORMANCE REPORT S/U-22 CABLES ARE INDETERMINATE, OGDB, CEAA

1. PROJECT NAME	JOB NO.	19. NO. 3420	20. PAGE 1 OF 2
MIDLAND	7220		

2. UNIT(S)	3. DRAWING/PART NO.	RF.	4. ITEM DESCRIPTION	5. ITEM LOCATION
1	N/A	45	CABLE, CODES IO7, IO8	EL-620' SERVICE WATER BLDG WEST VALVE PIT

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
E-60	N/A	P/N N/A REV N/A SER NO. N/A	CONSTRUCTION	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	IAI 1032 D NO.	( ) YES (X) NO	( ) YES (X) NO	( )Rec'g (X)Const ( )Test	( )Client (X)Eng ( )FLD

E 5/20/81 PH

16. NONCONFORMING CONDITION: DURING THE PULL OF WR # A5048 AND WR # 948 CONSISTING OF 28 CABLES THE MAXIMUM ALLOWABLE BULK CABLE TENSION WAS EXCEEDED. (MAX. ALLOWABLE BULK CABLE TENSION - 1176 LBS ACTUAL TENSION - 1231 LBS) THE SCHEME CABLE NUMBERS INVOLVED ARE IAI1018A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, X, IAI005A, D, E, F, IAI019A AND IAI053D. DUE TO EXCESSIVE TENSION THE QUALITY

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
R.J. Spivack	4/30/81	for K. Davis	5/4/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

These cables did not go over tension. The over tension occurred when the head of the pulling sock jammed in the pulling sheave. When the sock jammed. All tension from the tugger was transmitted to the pulling rope, therefore there was no over tensioning of cable. Use as is. (IAS)

B Collin 5/7/81

23. PROJECT ENGINEERING DISPOSITION BASED ON CONSTRUCTIONS DISPOSITION THAT THE PULLING SOCK JAMMED IN THE PULLING SHEAVE, AND THAT OVER TENSIONING WAS TRANSMITTED TO THE PULLING ROPE AND NOT THE CABLES, USE AS IS.

6/18/81 for QA 6/9/81 QE 6-8-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			✓

PROJECT FIELD ENGINEER — DATE 6/12/81

PROJECT ENGINEER — DATE 6/11/81

PROJ CONSTR QC ENGINEER — DATE 6/13/81

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

OK PER BLOCK 23 HDW 6-18-81

26. QC ACCEPTANCE — 6-18-81

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

RED Disposition 6/11/81 P.H.

BLOCK 16 CONTINUED:

OF THESE CABLES IS INDETERMINATE.

QUST 3.004 ID HOLD TAGS APPLIED

HOLD FOR ENGINEERING DISPOSITION

Contacted: Fadi Matoof
Bert Mark

Sw # 1808

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO. 3421	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: FX-DVI-M-010-7	REV: 0	4. ITEM DESCRIPTION: Flanges & Adjacent pipe at FW 708	5. ITEM LOCATION: Aux 5-6 & E Elev 64	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Const.	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER	IR NO. 610-1-7 FX-DVI NO Misc	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES ( ) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD

16. NONCONFORMING CONDITION:

Requirement: Spec. M-61, Rev 14, Para. 4.1.3. States, "Material Identification Markings shall be Transferred (before Cutting) to all pieces where a part is cut to make more than one Component." Bechtel III DVI I-1977 Edition, Section 3230 paragraph 6, States in part: "Whenever Material is divided, the applicable Quality Control Instruction, requires that a (Cont.)

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
D. Gluette	4/29/81	R. Brown	5/4/81

19. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

The spools were cut to allow rotation of the included orifice flanges to match the DVI sketch. The orifice flanges are marked with heat numbers that are traceable back to the original spools. Also, the orifice flanges have a field weld on each that was used to weld plugs in the unused orifice port on each flange.

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE N/A

rework	reject	repair	use as is

J.W. Gilmore 5/7/81
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

TRACEABLE IDENTIFICATION AS WAS found TO BE AS DESCRIBED IN Block 22 "Disposition". The VENDORS SPOOL DOCUMENTATION CORRESPONDED TO THE IDENTIFICATION ON THE MATERIAL. The SPOOL NUMBERS HAVE BEEN ETCHED AND VERIFIED ON THE RESPECTIVE spools. Richard Brown 6/4/81

26. QC ACCEPTANCE
Richard Brown 6/4/81
QC ENGINEER DATE
J.A. Buffin 6/4/81
AUTHORIZED INSPECTOR DATE

5/26-81

Concurrence for 50-329, 330

BECHTEL

NONCONFORMANCE REPORT (CONT'D) 4/4/8 5/26/81 1 PAGE 2 OF 2 14 NCR NO 3421

Quality Control engineer verify that the required identification marks have correctly transferred." Also, Part 7.2.3 of Procedure No. 4, Activity 2.4 states in part: "When the piping subassembly is reworked, check to see that the required transfer of identification to maintain traceability of the Components has been satisfactorily performed."

Condition: Vendor flanges & adjacent piping from ITT Grinnel Spools were divided from the subassembly without transfer of spool identification to the mated pieces. This results in a loss of traceability for the mated pieces to the appropriate Quality Verification Data Pkg.

QC Last # 4.104.
2 Weld Tags Applied.

(Block 16 cont.) The plugs were welded in prior to cutting the pipe. It should also be noted that at the time this NCR was written one of the flanges was welded back to the opposite spool. The installation isometrics will be revised to show the orifice flanges and adjacent pup pieces moved to the opposite spools. Additionally the DVI sketch will be revised to show the new location of field welds 7 and 8. However, contrary to block 16 of this NCR, traceability has not been lost, therefore this is not a non-conforming condition. [signature] 5-6-81 0855 2651

10096 E

White Copy – Originator
Canary Copy – Field Engineer
Pink Copy – PQAE
Goldenrod Copy – QC

QC-G3-3

Block 22 cont.)

Field Engineering investigation of the subject flanges and spool document packages indicate that the orifice flanges are marked with heat numbers that are traceable to the documentation packages. Further, the shop weld to the flange on spool IFCB-19-5610-7-8 is identified with welder I.D. C50 which is also traceable to the documentation package for that spool. (shop weld 'I' on the spool sheet). The shopweld to the flange on spool IFCB-19-5610-7-9 (shopweld 'A') is identified with weld I.D. C 460 which is traceable to the documentation package for that spool.

Additional evidence to assure traceability of the flanges is that fact that the shopweld 'I', identified above, is scribed with number 151-32 which corresponds with spool IFCB-19-5610-7-8 on FSK M-151 610 Sh 7(Q). Shop weld 'A', identified above is scribed with number 151-33 which corresponds with spool IFCB-19-5610-7-9 on FSK M-151 610 Sh. 7(Q).

Based on the above evidence, traceability still exists, therefore this is no longer a non-conforming condition. Anderdrake 5-27-81

BECHTEL

NONCONFORMANCE REPORT (CONT'D)

20. PAGE 4 OF 4 (8 & 26 A)

19. NCR NO. 3421

24. Disposition Concurrence Item: N/A

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE 5/29/81

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE 6/3/81

AUTHORIZED INSPECTOR — DATE 6/4/81

---

24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

---

24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

---

24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

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24. Disposition Concurrence Item:

REWORK	REJECT	REPAIR	USE AS IS

PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

PROJECT CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

NONCONFORMANCE REPORT

S/U - Non Testable

1. PROJECT NAME	JOB NO.			19. NO. 3426	20. PAGE 1 OF 2
Midland	7220				
2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION Cont#1	
1	E656 Sh 2	1	Welded Conduit Support	El 637' @ Col #7	
6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART P/N N/A REV SER NO.	9. SOURCE	10. CONTRACTOR/SUPPLIER	
N/A	N/A		Construction	N/A	
11. INSPECTION CRITERIA (X) DWG ( ) SPEC ( ) OTHER IR NO. C304-850W NO. E42B Rev1	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD	

16. NONCONFORMING CONDITION:

REQUIREMENT: Drawing 7220-E-42 B Rev 1, Sh 306A (Cross reference) Installation Rule 7K States; "Support Types 14 and 16 specify 1/8" 2@3" stitch welds for attaching unistrut to structural steel. The size and length specifidd may vary provided the following reqqirements are met:

i) Size of weld: 1/8" minimum - 1/4" maximum.

ii) Length of weld: 1 1/2" minimum - 2 1/2" maximum (Where the last weld segment stops short of the edge of the flange, the weld may be extended to the edge

17. REPORTED BY J. Hebble DATE 5-2-81

18. VALIDATED BY for E Dennis DATE 5/4/81

21. ROUTING ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends for this case only, use as is. (U.A.)

D.E. Beck 5/7/81

23. PROJECT ENGINEERING DISPOSITION

BASED ON EVALUATION OF THE RELATIVE SIZE OF WELD, MEMBER THICKNESS, LOCATION OF WELD, AND STATE OF STRESS IN THE MEMBERS, PROJECT ENGINEERING HAS DETERMINED THE NONCONFORMING CONDITION TO BE ACCEPTABLE AND RECOMMENDS TO "USE AS IS".

CAC # 0JC (G) Jeffrey C. Keenan 5/14/81

NO DWG/SPEC CHANGE REQUIRED. PEAI 5/14-5/22/81 J. Hebble

Harry D. Quinn 5/26/81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

P.E. Beck 6/1/81 PROJECT FIELD ENGINEER DATE

Chris Brandon 5/29/81 PROJECT ENGINEER DATE

for L.S. Russell 6/3/81 PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

CAC QC Hold Tag Removed

J. Hebble 6 8 81

26. QC ACCEPTANCE J. Hebble 6 8 81 QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Block 16 continued

provided the length does not exceed 3 1/2").

iii) Spacing between weld segments may vary between 1/2" minimum to 1 1/2" maximum.

CONDITION: Contrary to the above requirements, a Type 14 conduit support which previously supported a Non-Q conduit and now supports ICC032, identified as EC-1-6-172, has welds which are 5/16" and 3/8" fillets, weld segments 2 1/2" and longer, 3 3/4" and 4" welds at the edge of the flange, and skips between weld segments of 1/4" and 3/8".

Q List #3.006 One QC Hold Tag applied. Hold for Engineering Disposition.

Engineer Contacted: S. Harvey

NONCONFORMANCE REPORT

5/11 code, Indeterminate

1. PROJECT NAME: Midland
JOB NO. 7220
19. NO. 3428
20. PAGE 1 OF 2

2. UNIT(S): Indet.
3. DRAWING/PART NO.: N/A
REV: N/A
4. ITEM DESCRIPTION: A-36 3/8"x2½" flat bar / 3/16"x2" flat bar
5. ITEM LOCATION: Pooryards

6. P.O. OR SPEC NO.: F-50286
7. SERIAL NO.: N/A
8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A
9. SOURCE: Supplier
10. CONTRACTOR/SUPPLIER: Federal Pipe and Steel

11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER
IR NO. R-1.00-14907
NO. G-33 Rev. 13
12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO
13. SKETCH ATTACHED ( ) YES (X) NO
14. Discovered During (X) Rec'g ( ) Const ( ) Test
15. Equip Furnished By ( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION:
Specification 7220-G-33, Rev. 15, paragraph 4.0, Note 3, requires a CMTR for steel purchased. Contrary to this, items 51 and 53 of AEO-14907 do not have a CMTR.

Hold for Engineering disposition
A list # indeterminate
2 Weld Tags applied

17. REPORTED BY: M. F. Slocumb DATE: 5-5-81
18. VALIDATED BY: [signature] DATE: 5/5/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Material Procurement Supervisor to obtain proper documentation. If documentation is unavailable the material shall be rejected. L P Uehlein 5/7/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
DOE			

PROJECT FIELD ENGINEER [signature] DATE 5/8/81
PROJECT ENGINEER DATE
PROJ CONSTR QC ENGINEER [signature] DATE 5/11/81
AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Documentation obtained on 6/16/81
M/F Steward

26. QC ACCEPTANCE M/F Steward 6/16/81
QC ENGINEER DATE
AUTHORIZED INSPECTOR DATE

Engr Contacted Steve Hawg

NONCONFORMANCE REPORT

S/U code Indeterminate

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO.: 3429	20. PAGE 1 OF 1
2. UNIT(S): Indeter.	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: 10GA X 60" A569 Steel Sheet 2813 lbs		5. ITEM LOCATION: Roxyville
6. P.O. OR SPEC NO.: F-50676	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Supplier	10. CONTRACTOR/SUPPLIER: Dragon Steel	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER — IR NO R100-14891 NO F-50676	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION: Purchase order 7220/F-50676 states in part that the material purchased is to have Bechtel's purchase order # and heat # included on a weatherproof tag, when bundled. Contrary to this, the 10GA. steel sheet has no such markings or tag. 1 Weld tag applied. A lost indeterminate. Held for Engineering disposition.

17. REPORTED BY / DATE: M. F. Slocumb 5/1/81

18. VALIDATED BY / DATE: [illegible] 5/5/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Materials procurement supervisor to provide proper identification on material.

L. P. Wehner 5/19/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

[illegible] 5/20/81
PROJECT FIELD ENGINEER / DATE

PROJECT ENGINEER / DATE

[illegible] 5/22/81
PROJ CONSTR QC ENGINEER / DATE

AUTHORIZED INSPECTOR / DATE

25. DISPOSITION RESULTS

Verification letter received from vendor material spec'd marked as per letter. MFS

26. QC ACCEPTANCE [illegible] 6/22/81
QC ENGINEER / DATE

AUTHORIZED INSPECTOR / DATE

NONCONFORMANCE REPORT

S/U-NON TESTABLE

1. PROJECT NAME: MIDLAND — JOB NO.: 7220 — 19. NO. 3430 — 20. PAGE 1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
COMMON	N/A	N/A	CUT REBAR	E34'6" & S.C

6. ~~P.O. OR~~ SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
C-306(Q) r.7	N/A	P/N N/A REV N/A SER NO. N/A	Construction PIPEFITTERS	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER	N/A NO. C-306(Q) r.7	( ) YES (X) NO	(X) YES ( ) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION: APPENDIX D, SECT. 2.2, STATES IN PART, "... TWO BARS MAY BE CUT EACH WAY, EACH FACE, PROVIDED THE MINIMUM RADIAL DISTANCE TO THE NEXT CUT BAR ON THE SAME FACE, IN THE SAME DIRECTION, IS AT LEAST TEN FEET." CONTRARY TO THIS, THREE (3) E/W BAR WERE CUT WITHIN A TEN FOOT RADIAL DISTANCE

I HOLD TAG APPLIED

Q-LIST #1,203

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
William C Kerley	5-5-81	R. G. Brauer	5/5/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Rebar will be reworked to be within specified cut rebar allowance.

L.P. Wehmer 5/6/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

PROJECT FIELD ENGINEER — DATE 5.6.81

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE 5/6/81

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

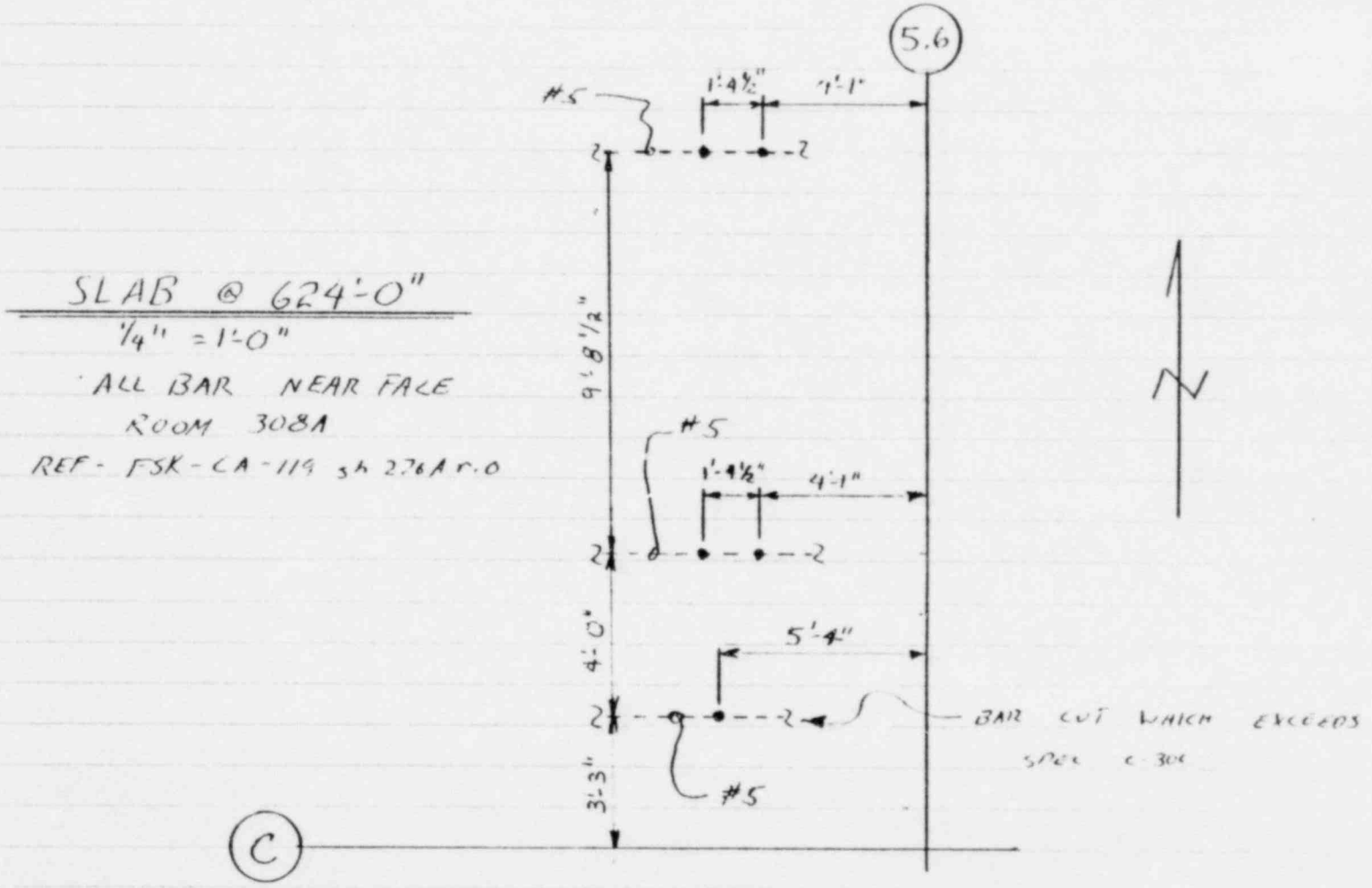
REBAR WAS REWORKED ON GCR # C 600-819

5/6/81

28. QC ACCEPTANCE — 5/6/81

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE



SLAB @ 624'-0"

1/4" = 1'-0"

ALL BAR NEAR FACE

ROOM 308A

REF - FSK - CA - 119 sh 276A r.0

Person Notified Sully, Oldham

Start-up - 2GLC

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland Project Units I & II — JOB NO. 07220

19. NO. 3433 — 20. PAGE 1 OF 1

2. UNIT(S): II. — 3. DRAWING/PART NO.: N/A — REV: N/A — 4. ITEM DESCRIPTION: Class IE Control and Power Cable — 5. ITEM LOCATION: Aux Bldg. Switchgear

6. P.O. OR SPEC NO.: N/A — 7. SERIAL NO.: N/A — 8. REPLACEMENT PART P/N: N/A REV: N/A SER NO: N/A — 9. SOURCE: Construction — 10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA: ( ) DWG ( ) SPEC (X) OTHER — IR NO. NCFE 4.000 Rev 3 — 12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO — 13. SKETCH ATTACHED: ( ) YES (X) NO — 14. Discovered During: ( ) Rec'g (X) Const ( ) Test — 15. Equip Furnished By: ( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION: Contrary to FFE 4.000 revision 3, paragraph 6.7, (6.6.P2), the specified minimum bend radius for scheme cable number 2BB24134 has been exceeded. This renders the quality of this cable indeterminate. This violation occurs at MCC 2BB24, Aux bldg, elev 644', Switchgear Rm. Q-list - 3.007(2) Two Hold Tags Applied Hold for Engineering Disposition

17. REPORTED BY: Darryl Rosmayer — DATE: 5-06-81 — 18. VALIDATED BY: L Smith — DATE: 5/8/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Cable 2BB24134 will be pulled out and scrapped. (J.W.S.)
E Collins 29 MAY 81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
	X		

PROJECT FIELD ENGINEER — DATE 5/29/81

PROJECT ENGINEER — DATE 6-2-81

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

Affected cable pulled out, scrapped, and repulled, on WR-1073.

26. QC ACCEPTANCE D Rosmayer 6-3-81
QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

CONTACT FE. Brian OLDHAM

NONCONFORMANCE REPORT

S/a NCR TESTABLE

1. PROJECT NAME: MIDLAND UNITS 1 & 2 | JOB NO.: 7220 | 19. NO.: 3637 | 20. PAGE 1 OF 3

2. UNIT(S): COMMON | 3. DRAWING/PART NO.: N/A | REV: N/A | 4. ITEM DESCRIPTION: CONDUIT PENETRATIONS 1BTA1C & 1BTA1D | 5. ITEM LOCATION: AUX BLDG. E WALL EL 595' 54' N/SL & 6' W/SL

6. P.O. OR SPEC NO.: N/A | 7. SERIAL NO.: N/A | 8. REPLACEMENT PART P/N N/A REV N/A SER NO N/A | 9. SOURCE: CONSTRUCTION | 10. CONTRACTOR/SUPPLIER: N/A

11. INSPECTION CRITERIA: ( ) DCAI (X) SPEC ( ) OTHER | 11. NO. C-210-1104 NO. C-230(Q) (1B) | 12. ASME AUTHORIZED INSPECTION REQ'D: ( ) YES (X) NO | 13. SKETCH ATTACHED: ( ) YES (X) NO | 14. Discovered During: ( ) Insp'g (X) Const ( ) Test | 15. Equip Tested - ESS: ( ) Check N/A ( ) Yes ( ) NO

16. NONCONFORMING CONDITION: TECHNICAL SPECIFICATIONS FOR SUBCONTRACT FOR OPERATING ON-SITE AND OFFSITE BATCH PLANT AND FURNISHING CONCRETE FOR THE CONSUMERS POWER COMPANY'S MIDLAND PLANT MIDLAND MICHIGAN, C-230Q (1B) SEC. T.L.B STATES. "MASTERFLOW) "814" AS MANUFACTURED BY MASTER BUILDERS Co-(SHALL BE USED)-(PERMITTED) (FOR USE UNDER EMBED PLATES WHERE GROUT THICKNESS IS 1 INCH OR UNDER)." CONTRARY TO THIS, CONDUIT PENETRATIONS 1BTA1C & 1BTA1D WERE GROUTED USING MASTERFLOW '814' GROUT. (1) HOLD TAG(S) APPLIED. & LIST #1.205 HOLD FOR FINAL DISPOSITION SEE BLK 16 (CONT'D)

17. REPORTED BY: Michael Stark | DATE: 5/12/81 | 18. VALIDATED BY: A S Russell | DATE: 5/12/81

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

FCR-C-2631 WAS approved "to allow for the usage of Masterflow 814 grout in thickness up to one inch". ~~with~~ and WHEN FCR-C-2631 was incorporated into Spec. C-230 the words "under embed plates" were inadvertently added. This was not a restriction on the FCR and was not intended to be a restriction (Continued)

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION COMMITMENT NO.: N/A

rework	reject	repair	use-as-is
X			

Scott Hall (PROJECT ENGINEER) DATE 5/18/81

PROJECT ENGINEER: A S Russell (PROJECT CONSTR QC ENGINEER) DATE 5/29/81

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

26. QC ACCEPTANCE 6.1.81

QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

(BLK 16 CONT'D)

FCR # 2431 (C-230Q) STATES THAT 'MASTERFLOW 514' GROUT IS "APPROVED ONLY TO GROUT BASE PLATES AT THIS TIME"

Michael Clark 5/12/81

(BLOCK # 22 Continued)

in the Specification. This fact was verified verbally with Ann Arbor and corrected by FCN-C-1102. Thus the grouting of the conduit penetrations identified above is in compliance with Spec C-230.

L P Wehmer 5/14/81

FIELD CHANGE NOTICE

PAGE 1 OF 1

FCN NO. C No 1102

JOB NO.	SPECIFICATION NO.	SHEET NO.	REV SYML	Q ITEM YES	Q ITEM NO	TITLE OF SPEC
7220	C-230(Q)	N/A	19	X		Operating On-Site Batch Plant & Furnishing Concrete

CHANGE PROPOSED	PREPARED BY AND DATE	CHANGE APPROVED	PFE SIGNATURE AND DATE	DISPOSITION OF FCR REQUIRED BY DATE
FCN X	Larry P. Weber 5/12/81	YES X NO	5/12/81	

REASON FOR CHANGE

Section 7.6.8 of Spec C-230 appears to have restricted the use of Masterflow 814 "for use under embed plates".

EXISTING CONDITION

Approval was given "to allow for the useage of Masterflow 814 grout in thickness up to one inch". (Ref: FCR-C-2631). There was no intent to restrict Masterflow 814 "for use under embed plates".

CONTROLLED

DESCRIPTION OF CHANGE

Reword Section 7.6.8 to Read As Follows:

7.6.8 Masterflow "814" As manufactured by Master Builders Co. (premixed) (for use where grout thickness is 1 inch or under)

Page 3 of 3 NCR-3431

RECEIVED
MAY 19 1981
QUALITY CONTROL
BECHTEL JOB 7220

Note: This has been discussed with Vin Patankar of the Ann Arbor Office

OTHER DWGS OR SPECS AFFECTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PIPING	WELDING OR OTHERS
	N/A	N/A	N/A	N/A	N/A	N/A
CHECKED BY FIELD LDE	[signature] Site Engr	N/A	N/A	N/A	N/A	N/A
CHECKED BY PE GR SUPV						

FCR ☐ APPROVED YES ☐ NO ☐

PROJECT ENGINEER SIGNATURE AND DATE

REMARKS

SBS FORM 15729

– ORIGINAL –

COPY

Discussed with Pat Max

NONCONFORMANCE REPORT

S/U # 2EGA

1. PROJECT NAME	JOB NO.	19. NO.	20. PAGE
MIDLAND	7220	3442	1 OF 1

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2	2-604-15-33	2	EXPANSION ANCHORS (2-604-15-33)	AUX BLDG EL 624'0"

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	CONST	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG ( ) SPEC (X) OTHER	NO. C-150-604-15-33	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION:

PER PROC 7220/C-1.50 REV 7, PRIOR TO INSTALLATION, ANCHOR BOLTS HOLES SHALL BE INSPECTED FOR CONCRETE DUST, PROPER ANGLE, DEPTH IS SUFFICIENT TO ALLOW EMBEDMENT, DIAMETER IS SAME AS BOLT SPECIFIED, AND FOR CUT REBAR. CONDITION: ~~FOUR~~ THREE EXPANSION ANCHORS WERE INSTALLED FOR HANGER 2-604-15-33 WITHOUT QC INSPECTION OF ANCHOR HOLES, THEREFORE BYPASSING TWO (2) QC HOLD POINTS. ANCHORS WERE UNCODED.

Q-LIST NO 4.045

1 Hold tag Applied

17. REPORTED BY — DATE: Charles Crews Jr 5/11/81 WS 5-11-81

18. VALIDATED BY — DATE: E. Smith 5-14-81

21. ROUTING: ( ) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends that subject anchor bolts be inspected utilizing method 2 (paragraph 5.2 of specification 7226-C-305). If tested bolts are acceptable, they will no longer be non conforming. Anchor bolt failures shall be repaired in accordance with paragraph 7.0 of specification to QC 305.

Gordon Lucht 5-19-81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

TEST

rework	reject	repair	use as is

PROJECT FIELD ENGINEER — DATE: 5/21/81

PROJECT ENGINEER — DATE: 6/18/81

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

Hanger inspected per Method 2 and is acceptable - QCIR C-150-2-604-15-33a Log # 110169. Karen Gustafson Malecki

26. QC ACCEPTANCE — Karen Gustafson 6/22/81

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

→ NEW INSTALLATION

NONCONFORMANCE REPORT

S/U # 16JA

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3447	20. PAGE 1 OF 1
2. UNIT(S): 1	3. DRAWING/PART NO.: 1-657-2-28	REV: 0	4. ITEM DESCRIPTION: EXPANSION ANCHORS (See Block 16)	5. ITEM LOCATION: AUX BLDG EL 645	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: CONST.	10. CONTRACTOR/SUPPLIER: N/A	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO. 241-So 657-2-4 NO.	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( )Rec'g (X)Const ( )Test	15. Equip Furnished By ( )Client ( )Eng (X)FLD	

16. NONCONFORMING CONDITION: PER PQCI-7220/C-150 REV 7, PRIOR TO INSTALLATION ANCHOR BOLT HOLES SHALL BE INSPECED FOR CONCRETE DUST REMOVAL, PROPER ANGLE, DEPTH IS SUFFICIENT TO ALLOW EMBEDMENT, DIAMETER IS SAME AS BOLT SPECIFIED, AND FOR CUT REBAR CONDITION: THREE EXPANSION ANCHORS WERE INSTALLED FOR HANGER 1-657-2-28 WITHOUT QC INSPECTION OF ANCHOR HOLES PRIOR TO INSTALLATION OF ANCHORS, THEREFORE BYPASSING TWO (2) HOLD POINTS.

Q-LIST NO. 4.5.7.1 (HOLD TAG APPLIED

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Charles Cross Jr.	5/13/81	W. E. Bonnett	5-14-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommends that subject anchor bolt(s) be inspected utilizing method 2 (paragraph 5.2 of specification 7220-C-305). If tested bolts are acceptable, they will no longer be non-conforming. Anchor bolt failures shall be repaired in accordance with paragraph 7.0 of specification 7220-C-305. C. Hendricks 5-19-81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

Test | rework | reject | repair | use as is

J. D. Shewmaker 5/21/81
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

W. E. Bonnett 6/1/81
(NO) CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Hanger inspected per Method II - See PCIR C1.50-657-2-4 Log # 81392
Karen Gustafson 6/1/81

26. QC ACCEPTANCE Karen Gustafson 6/1/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Old Addition

NONCONFORMANCE REPORT

S/U # Non-Testable

1. PROJECT NAME	JOB NO.	19. NO.	20. PAGE
MIDLAND PLANT	7220	3453	1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
2	N/A		ANCHOR BOLTS	AUX. BLDG UPPER SPREADING ROOM EVV 674'-2" E/7.2 1'-6" S/U

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	CONSTRUCTION	N/A

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO. C-150 EH 1582 NO. C 305 REV 13	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION:

REQUIREMENTS - A. PQCI C 150 REV. 7 SHOWS ACT NO. 2 3B HOLE INSPECTION TO BE A HOLD POINT.

CONDITION - CONTRARY TO THE ABOVE, ANCHOR BOLTS FOR A TYPE I SUPPORT WERE INSTALLED PRIOR TO INSPECTION OF THE HOLES.

HOLD FOR ENGINEERING DISPOSITION

@ LIST NO. 1. 2015 2 HOLD TAGS APPLIED CONT. PAGE 2

17. REPORTED BY	DATE	18. VALIDATED BY D.S.P.	DATE
TM Halm	5-14-81	J. Russell	5/20/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

~~Reject~~ ~~expansion anchors~~. Remove and reinstall new supports as per E 42B(Q) and C-305(Q). (J.P.)

BC Collins 27 May 81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

PROJECT FIELD ENGINEER — DATE 5/27/81

PROJECT ENGINEER — DATE 5/27/81

PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

SUPPORTS REMOVED

NEW SUPPORTS INSTALLED

RECORDED ON C-150 - EH 1629 AS ITEMS A-E

TM Halm 6-1-81

26. QC ACCEPTANCE

TM Halm 6-1-81

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

BLOCK 16 CONTINUED.

REQUIRMENTS - B. SPEC C 305 REV. 13 PARAGRAPH 4.0 STATES." THE INSTALLERS SHALL BE QUALIFIED TO PERFORM THIS WORK."

CONDITION - CONTRARY TO THE ABOVE. THE ANCHOR HOLES WERE DRILLED AND EXPANSION ANCHORS INSTALLED PRIOR TO Q.C. VERIFICATION OF THE INSTALLERS QUALIFICATIONS AND IDENTITY

REQUIRMENTS - L. SPEC C 305 REV. 13 PARAGRAPH 4.18 STATES." BENDING OF EXPANSION ANCHORS SHALL NOT BE PERMITTED."

CONDITION - CONTRARY TO THE ABOVE, THE BENDING OF EXPANSION ANCHORS COULD NOT BE VERIFIED.

BECHTEL

NONCONFORMANCE REPORT

NON-TESTABLE UNIT.

1. PROJECT NAME	JOB NO.	19 NO.	20 PAGE
MIDLAND	7220	3455	1 OF 2

2. UNIT NO.	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
11	A-72 Q	11	Reactor Building Liner Plate	AZ 60°-150° EL 740'-654'

6. SPEC NO.	7. EQUIP NO.	8. REPLACEMENT PART P/N	REV	SER NO	9. SOURCE	10. CONTRACTOR/SUPPLIER
A-41 Rev 7	N/A	N/A	N/A	N/A	CONST.	N/A

11. ITEM IDENTIFIED BY	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) Tag ( ) Mark (X) Spec ( ) Other: (a) C.8.50-664 (b) A-41 Rev 7	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng'g ( ) FED

16. NONCONFORMING CONDITION: Requirement: Spec. A-41, Rev 7. ~~X~~ PARAGRAPH 8.6, States Each Painter Applying Q Coatings Shall Be Qualified On Each Component of the Coating System he is Applying.

Condition: Contrary To This, Painter PT-52 Applied A Top Coat Of Phenoline 305 By Conventional Gun Type To A Inaccessible Number of Q Area's Between AZ 60°-150° And EL 654'-740'

17. REPORTED BY: William Hemmelstead DATE: 5/18/81

18. VALIDATED BY: [signature] DATE: 5/18/81

19. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

20. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Painter PT-52 was evaluated in accordance with the requirements specified per section 8.6.1 of Spec A-41 Q and was subsequently documented to be qualified for epoxy phenolic coating application on 5/19/81. Field Engineering therefore recommends that work which was completed prior to the subject (Con't)

21. PROJECT ENGINEERING DISPOSITION

PROJECT ENGINEERING AGREES WITH THE FIELD ENGINEERING RECOMMENDED DISPOSITION OF THIS NCR "USE AS IS" AS STATED ABOVE. ALSO THE FIELD COATING ENGR'S HAVE ASSURED P.E. THAT PAINTER WAS QUALIFIED AND WORK HAS BEEN 100% INSPECTED.

[signature] 6/3/81

QE [signature] 6-8-81

22. QC ACCEPTANCE [signature] 6/20/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

23. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

PROJECT FIELD ENGINEER [signature] DATE 6/12/81
PROJECT MANAGER [signature] DATE 6/11/81
PROJ CONSTR QC ENGINEER [signature] DATE 6/13/81
AUTHORIZED INSPECTOR DATE

24. DISPOSITION RESULTS

Recd 6/22/81 [signature]

BLOCK 16 CONTINUED

"Q" LISTED 220, NO HOLD TAGS APPLIED, HOLD FOR ENGINEERING DISPOSITION.

BLOCK 22 CONTINUED

painters qualification be "USE AS IS". Note that all work completed by this painter has been or will be 100% inspected to assure specification compliance

L Pulliam 6/1/81

ENG. CONTACTED: S. PAYNE

S/U CODE: INDETERMINATE

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND	JOB NO.: 7220			19. NO. 3456	20. PAGE 1 OF 1
2. UNIT(S): INDETER.	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: 203 EA 1" x 7½" A490 TYPE 3 BOLTS	5. ITEM LOCATION: WHSE. - 1	
6. P.O. OR SPEC NO.: F-47410	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: SUPPLIER	10. CONTRACTOR/SUPPLIER: RUSSELL, BURDSALL, WARD	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER IR NO. R-100-1510 NO. F-47410	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION:

DURING INSPECTION OF THE A490 TYPE 3 BOLTS PURCHASED ON P.O. -F47410 (ITEM-14) S1 OF THE 203 WERE FOUND TO BE TYPE 1.

HOLD FOR ENGINEERING DISPOSITION

S. 4. S1 - INDETERMINATE

TWO (2) HOLD TAGS APPLIED

17. REPORTED BY: M. J. Stewart DATE: 5-19-81

18. VALIDATED BY: [illegible] J. Russell DATE: 5-20-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

The Nonconforming bolts will be rejected.

L. Perkins 5/27/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
	X		

[illegible] 5/28/81
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE

J. J. Russell 6/3/81
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

Nonconforming bolts returned on SN#14936.

6/23/81
DJS

26. QC ACCEPTANCE

M. J. Stewart 6/24/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

PERSONNEL CONTACTED
J. ARMANDO 5-19-81

NONCONFORMANCE REPORT

5/4 - NON TESTABLE UNIT

1. PROJECT NAME: MIDLAND	JOB NO.: 7220					19. NO. 3459	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: E756 SH 1	REV: 6	4. ITEM DESCRIPTION: ADDED STEEL FOR TRAY SUPPORTS			5. ITEM LOCATION: CONT'D / Col 11-12 ELEV 626'	
6. P.O. OR SPEC NO.: N/A	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV SER NO.		9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: N/A		
11. INSPECTION CRITERIA: [X] DWG [X] SPEC [ ] OTHER — IR NO. C304-731(W) NO. C304 Rev 9	12. ASME AUTHORIZED INSPECTION REQ'D: [ ] YES [X] NO	13. SKETCH ATTACHED: [ ] YES [X] NO	14. Discovered During: [ ] Rec'g [X] Const [ ] Test	15. Equip Furnished By: [ ] Client [ ] Eng [X] FLD			

Jm 5-19-81

16. NONCONFORMING CONDITION:

REQUIREMENT: SPECIFICATION 7220 C-304 REV 9 PARAGRAPH 6.1.2 STATES "REPAIR, CHIPPING, OR GRINDING OF WELDS SHALL BE DONE SO AS NOT TO GOUGE, GROOVE, OR REDUCE THE BASE METAL THICKNESS."

CONDITION: CONTRARY TO THE ABOVE, A W12X36 TOS 624'6" ADDED FOR CABLE TRAY SUPPORT, HAS AREAS OF GRIND MARKS WHICH APPROACH 1/8".

E

17. REPORTED BY: Jas Mellon — DATE: 5-19-81

18. VALIDATED BY: J.T. Russell — DATE: 5/20/81

21. ROUTING: [X] TO FIELD ENGINEERING [ ] TO OTHERS (SPECIFY)

22. [X] Field Engineering Disposition [ ] Field Engineering Recommended Disposition to Project Engineering

REPAIR IN ACCORDANCE with specification 7220-C-304 (Q) Rev 9 Paragraph 11.3 Subparagraph C.

L.P. Welsen 5/30/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
		STP	

PROJECT FIELD ENGINEER — DATE 6/1/81

PROJECT ENGINEER — DATE

PROJ CONSTR QC ENGINEER — DATE 6/3/81

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS: AREA OF GRIND MARKS FILLED WITH WELD METAL & GROUND SMOOTH. Jas Mellon 6-17-81

26. QC ACCEPTANCE — DATE 6/17/81

QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 2 19NCR NO 3459

BLOCK 16 CONTINUED

HOLD FOR ENGINEERING DISPOSITION

ONE QC HOLD TAG APPLIED

Q# 3.005.

RECEIVED

PERSON CONTACTED
J. ARMANDO 5-18-81

NONCONFORMANCE REPORT S4 - NON - TESTABLE UNIT

1. PROJECT NAME: MIDLAND	JOB NO.: 7220					19. NO. 3460	20. PAGE 1 OF 2
2. UNIT(S): 1	3. DRAWING/PART NO.: E656 SH 2	REV: 1	4. ITEM DESCRIPTION: SCHEDULED CONDUIT			5. ITEM LOCATION: CONT / COL #3, ELEV 630'-5"	
6. P.O. OR SPEC NO.: N.A	7. SERIAL NO.: N.A	8. REPLACEMENT PART P/N N.A REV SER NO.		9. SOURCE: CONSTRUCTION	10. CONTRACTOR/SUPPLIER: U.E.		
11. INSPECTION CRITERIA (X) DWG ( ) SPEC ( ) OTHER	IR NO. 1AG063 NO. E421 Rev 49	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test		15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION:

REQUIREMENT: APPROVED FCR-E-3300 TO D.O. 7220 E42A, REV 49 ALLOWS THE REDUCTION IN SIZE OF FLEX CONDUIT INTO EQUIPMENT PROVIDED THE CONDUIT DOES NOT BECOME OVERFILLED.

CONDITION: CONTRARY TO THE ABOVE, 1AG063 SCHEDULED AS 1½ GRS W/HS

17. REPORTED BY: [signature] DATE: 5-18-81

18. VALIDATED BY: DSH [signature] DATE: 5/21/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Field Engineering recommend to use as is since conduit segment from junction box 1AJ208 where cable pair 2-3 can be removed to this point. Individual wires 9 # 14 can then be installed in conduit section approved per FCR-E-3300 (R)

[signature] 29 May 81

23. PROJECT ENGINEERING DISPOSITION

"USE AS IS" - PER E42(Q) REV 50 SHT 23. THE PROCEDURE OF STRIPPING THE JACKET BACK TO A BOX, LABLING THE CABLE AT THAT POINT, AND PULLING THE INDIVIDUAL CONDUCTORS INTO THE INSTRUMENT/SOL. VLV. IS ACCEPTABLE. THE TOTAL AREA OF THE (9) CONDUCTORS (WITH OUT JACKET, 2 CABLES) ROUTED THROUGH 1AG063 IS .0125 IN²/C X 9C = .1122 IN². THIS DOES NOT PRESENT AN OVERFILLED CONDITION. NO DWG. REVISION R'QD.

(REF: FCN E4252) [signature] 6/13/81 RE SAC 6-15-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

[signature] 6/18/81
PROJECT FIELD ENGINEER DATE

[signature] 6/5/81
PROJECT ENGINEER DATE

[signature] 6/2/81
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

For QC Hold Tag (Remove) [signature] 6-24-81

26. QC ACCEPTANCE [signature] 6-24-81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

BLOCK 16 CONTINUED

INSTALLED AS 3/4" FLEX. TOTAL SQUARE AREA OF 3/4" FLEX IS .53 sq in.
DWG 7220-E36 REV 53 IDENTIFIES 1AQ439B AND 1AQ451E WITH TOTAL SQUARE AREA OF .34 sq in. AS THE CABLES SCHEDULED FOR 1AG063.

IT IS INDETERMINATE IF AN OVERFILL SITUATION EXISTS.

ONE QC HOLD TAG APPLIED.

HOLD FOR ENGINEERING DISPOSITION

Q 3.06

Start-up system 2PBA

ENG. Contact: J.W. Slocumb

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.	19. NO. 3464	20. PAGE 1 OF 2
Midland Project Units I & II	07220		

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
II	N/A	N/A	Class IE Control/Instru Cable (shld)	Elv. 614' Auxiliary Building Switchgear RM 2A05

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	Construction	N/A

11. INSPECTION CRITERIA	IR NO.	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG ( ) SPEC (X) OTHER	NO. FPE 4.000 rev 3	( ) YES (X) NO	( ) YES (X) NO	( ) Rec'g (X) Const ( ) Test	( ) Client (X) Eng ( ) FLD

16. NONCONFORMING CONDITION:

REQUIREMENTS: FPE 4.000 revision 3, paragraph 6.7(6.6.1) states that the minimum bend radius for shielded, coax, and triax shall be twelve (12) times the cable diameter. The minimum bend radius for 101, shielded cable per the above mentioned requirements, is 4 9/16".

CONDITION: Contrary to the above requirements, schm.cable number 2AA05001 B has violated the minimum bend radius requirements for shielded cable at 2A05 4.16 KV Switchgear, CUB - 504. Actual bend radius of the cable equals 2 11/16".

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
A Rosmaff	5/19/81	[illegible]	5-22-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

According to new vendor information, and the latest revision of FPE 4.000, the minimum bending radius for I 01, under training condition, I s 0.95", which has not been violated. Use as is. (JRM)
A Rollins 4 June 81

23. PROJECT ENGINEERING DISPOSITION USE AS IS. REFER TO VENDOR PRINT 7220-E60-48-4. A BEND RADIUS OF 2½ TIMES THE O.D. (MINIMUM) IS ACCEPTABLE FOR PERMANENT TRAINING OF CABLES. CO 6/11/81

[illegible] 6/11/81
QC [illegible] 6-11-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

[illegible] 6/15/81
PROJECT FIELD ENGINEER DATE

Brought by G H Curtis 6/11/81
PROJECT ENGINEER DATE

[illegible] 6/18/81
PROJ CONSTR QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

PER BLOCK 23, USE AS IS, REQUIRES NO FURTHER QC ACTION.
W. Fedorow
6/22/81

26. QC ACCEPTANCE W. Fedorow 6/22/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

E 6/9/81 PAT

E

E&D Disposition 6/11/81 P.A.

Start-up system 2PBA

Block 16 continued from previous page:

The quality of scheme cable number 2AA05001 B is rendered indeterminate.

Q-List # 3.004 Two (2) Hold Tags Applied Hold For Engineering Disposition.

Discussed With: Bud Thind

S/U # 1 BCA

NONCONFORMANCE REPORT

1. PROJECT NAME	JOB NO.			19. NO.	20. PAGE
Midland	7220			3471	1 OF 2

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
ONE	FSK-DV1-M-610-6	1	SW. #1, Conn #12	Aux. Bldg.

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
N/A	N/A	P/N N/A REV N/A SER NO. N/A	Const.	N/A

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO. M-204	(X) YES ( ) NO	( ) YES (X) NO	( ) Rec'g ( ) Const ( ) Test	( ) Client ( ) Eng (X) FLD

M 6/8/81 P.H.

16. NONCONFORMING CONDITION:

Requirement: M204 Para. 6.4 States. Piping Installation Prior to installation all piping shall be visually checked for cleanliness. If examination reveals rust, loose mill scale or foreign matter, pipes shall be blown out with air before placing in position. If foreign material appears to be lodged in the pipe, it shall be removed by running fish tape, cable or chain through the pipe. Condition: Contrary to the above,

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
Louis F. Glatz	5-22-81	E. Smith	5/27/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

Use as is as the large bore line 1FCB-22 with cleanliness class "C" is going to be flushed prior to pre operational testing of the system to achieve required cleanliness level. (B.S.T.) Jim Hendricks 6-7-81

23. PROJECT ENGINEERING DISPOSITION

PROJECT ENGINEERING CONCURS WITH THE FIELD DISPOSITION RECOMMENDATIONS. PER CONVERSATION WITH J. ABEL AND R. NICOLAUS OF ANN ARBOR WE HAVE VERIFIED THAT THE CLEANLINESS CLASS FOR LINE 1FCB-22 IS CLASS 'C' AND THAT THE LINE WILL BE FLUSHED PRIOR TO PRE-OPERATIONAL TESTING OF THE SYSTEM TO ACHIEVE THE REQUIRED CLEANLINESS LEVEL.

Larry M. Shuler R.E. 6-11-81 QC [illegible] 6-11-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			X

PROJECT FIELD ENGINEER — DATE 6/3/81

PROJECT ENGINEER — DATE 6/8/81

PROJ CONSTR QC ENGINEER — DATE 6/8/81

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

Quality Control Concurres with "use as is" disposition described in Blocks 22 and 23.

Louis Glatz 6-22-81

26. QC ACCEPTANCE

QC ENGINEER Louis Glatz 6-22-81

AUTHORIZED INSPECTOR [illegible] 6/23/81 DATE

LEO Disposition 6/3/81 P.H.

NONCONFORMANCE REPORT (CONT'D) 20PAGE 2 OF 3 19NCR NO 3471

Cont. Block 16. FW #1, Conn #12 on DWG FSK-DV1-m-610-6, Rev. 1 was fabricated without verification or documentation of cleanliness by QC.

Q List No. is 4.104

1 Hold Tag Applied

ENGINEER CONTACTED:
RON HENDRICKS

Corrected Copy

NONCONFORMANCE REPORT

SLI CODE: INDETERMINATE

1. PROJECT NAME	JOB NO.		19. NO. 3484	20. PAGE 1 OF 2
MIDLAND	7220			

2. UNIT(S)	3. DRAWING/PART NO.	REV	4. ITEM DESCRIPTION	5. ITEM LOCATION
INDETER.	N/A	N/A	ASME SA 194 GRADE 8M TYPE 316 NUTS	WAREHOUSE 1

6. P.O. OR SPEC NO.	7. SERIAL NO.	8. REPLACEMENT PART	9. SOURCE	10. CONTRACTOR/SUPPLIER
F-47443	N/A	P/N N/A REV N/A SER NO. N/A	SUPPLIER	TEXAS BOLT

11. INSPECTION CRITERIA	12. ASME AUTHORIZED INSPECTION REQ'D	13. SKETCH ATTACHED	14. Discovered During	15. Equip Furnished By
( ) DWG (X) SPEC ( ) OTHER IR NO R-1.00-15052 NO ASME SA 194	( ) YES (X) NO	( ) YES (X) NO	(X) Rec'g ( ) Const ( ) Test	( ) Client ( ) Eng (X) FLD

16. NONCONFORMING CONDITION:

SPECIFICATION ASME SA 194, PARAGRAPH 11.1 STATES "ALL NUTS SHALL BEAR THE MANUFACTURER'S MARK", AND 11.2 STATES IN PART "NUTS SHALL BE LEGIBLY MARKED TO INDICATE THE GRADE AND PROCESS OF THE MANUFACTURER". CONTRARY TO THIS, 6 OF THE 72 ABOVE MENTIONED NUTS DO NOT HAVE THE PRESCRIBED MARKINGS. LEAVING THEIR QUALITY INDETERMINATE. — "Q" LIST # INDETERMINATE — 4 HOLD TAGS APPLIED — — HOLD FOR ENGINEERING DISPOSITION —

17. REPORTED BY	DATE	18. VALIDATED BY	DATE
M J Stevens	6/2/81	R A F Russell	6/18/81 6/3/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

11 DR 6-18-81

The 4 nuts in question shall be rejected and removed from jobsite by scrapping or returned to vendor. Lon Hendricks 6-18-81
Ken Ward 6-18-81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
	X		

J D Cunetto 6/18/81
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER 6/18/81
PROJ CONST QC ENGINEER 6/12/81 DATE

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

11 nuts returned on shipping notice #14973. 6/18/81 MJS

26. QC ACCEPTANCE M. J. Stevens 6/15/81
QC ENGINEER DATE

AUTHORIZED INSPECTOR DATE

Corrected Copy

(Continued, Block 16)

Quantity changed from 6 of 72 to 11 of 72.

M.F. Sherwood 6/18/81

M Delaney 6/18/81

R Smith 6/18/81

Engineer
Contractor J. Swanberg

NONCONFORMANCE REPORT

Stl code inadvertently

1. PROJECT NAME: Rialto	JOB NO.: 7220				19. NO. 3496	20. PAGE 1 OF 1
2. UNIT(S): Intake	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: Stainless Steel Subterra Lok Fittings		5. ITEM LOCATION: Warehouse 1	
6. P.O. OR SPEC NO.: F51397Rialto	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE: Supplier	10. CONTRACTOR/SUPPLIER: W. E. Lemmon		
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (X) OTHER	IR NO. R-400-19859 NON-QA 3900	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During (X) Rec'g ( ) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng (X) FLD	

16. NONCONFORMING CONDITION:

ASME code, Section III, NM-3300, paragraph NCA-3567.6. Requires the manufacturer to reference their Quality System certificate number and expiration date. Contrary to this, the certificate of compliance accompanying the above mentioned fittings does not contain this information.

Weld tag applied. Material unsuitable for Subterra application

17. REPORTED BY: W. F. Sherwood — DATE: 6/5/81

18. VALIDATED BY: R. Smith — DATE: 6-8-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

FIELD PROCUREMENT SUPERVISOR TO OBTAIN PROPER DOCUMENTATION Wm Shearer 6-10-81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
SOC			

J. P. Plumstead 6/8/81
PROJECT FIELD ENGINEER — DATE

PROJECT ENGINEER — DATE

R. D. Smith 6/8/81
PROJ CONSTR QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

Proper documentation received 6/15/81.
MJ 6/16/81

26. QC ACCEPTANCE
W. F. Sherwood 6/16/81
QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Discussed with DoBBie John

S/U # 1 BVA 2 BVA

NONCONFORMANCE REPORT

1. PROJECT NAME: Midland	JOB NO.: 7220			19. NO. 3503	20. PAGE 1 OF 2
2. UNIT(S): 1 & 2	3. DRAWING/PART NO.: M 649 - 2	REV: 7/F3	4. ITEM DESCRIPTION: LINES 1HCC-164 AND 2HCC-164	5. ITEM LOCATION: U/GLVE P.I.'S Located WATER TANK FARM	
6. P.O. OR SPEC NO.: NA	7. SERIAL NO.: NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA	9. SOURCE: Field Eng	10. CONTRACTOR/SUPPLIER: NA	
11. INSPECTION CRITERIA ( ) DWG ( ) SPEC (4) OTHER IR NO. T-1.00-BV CT-2 NO. T-1.00-BV CT-6 See Block 16	12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (M) NO	13. SKETCH ATTACHED ( ) YES (4) NO	14. Discovered During ( )Rec'g ( )Const (2)Test	15. Equip Furnished By ( )Client (4)Eng ( )FLD	

16. NONCONFORMING CONDITION: REQUIREMENT: FPB-1.000, PARA 3.6 REQUIRES FIELD ENGINEERING TO HAVE THE QUANTITY AND QUALITY OF WATER AVAILABLE. FPB-6.000, PARA 3.8.5 REQUIRES CPCo. TO PROVIDE WATER CHEMISTRY ANALYSIS SUPPORT FOR ALL DEMIN. WATER USED IN THE TESTING AND CLEANING PROGRAM. PQCI-T-1.00, REV 5, ACTIVITY 1.3.c "C" LISTED # 4.492 2 Hold Tags Applied

17. REPORTED BY: D L Fugate DATE: 6-10-81

18. VALIDATED BY: W E Lamm DATE: 6-10-81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition ( ) Field Engineering Recommended Disposition to Project Engineering

Water analysis reports were done on May 19, 1981 and also on June 16, 1981. Water was found to be within specification at time of both samplings and no water has been added to 01-79(OWST) during this span of time. Tests were conducted on 5-22-81, therefore water used during test was within specification. Rework documentation per these test reports. D L John 6/22/81

23. PROJECT ENGINEERING DISPOSITION

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
X			

Walt Lee 6/16 — PROJECT FIELD ENGINEER — 6/22/81 DATE

W E Lamm — PROJ CONSTR QC ENGINEER — 6/23/81 DATE

AUTHORIZED INSPECTOR — DATE

25. DISPOSITION RESULTS

DOCUMENTATION FOR BV-CT-2 AND BV-CT-6 HYDRO-TESTS HAVE BEEN REVISED (~~6-16-81~~ 6-24-81) (UNDATED) TO INCLUDE THE WATER ANALYSIS REPORTS. THIS NON-CONFORMING CONDITION NO LONGER EXISTS.

D L Fugate 6-24-81

26. QC ACCEPTANCE: D L Fugate 6-24-81 — QC ENGINEER — DATE

AUTHORIZED INSPECTOR — DATE

Block 16 continued (REQUIREMENT): REQUIRES Q.C. TO REVIEW THE DOCUMENTATION TO VERIFY THAT THE TESTING MEDIUM IS OF THE TYPE AND QUALITY SPECIFIED FOR THE TEST.

CONDITION: CONTRARY TO THE ABOVE, HYDRO-TESTS BN-CT-2 AND BN-CT-6 WERE PERFORMED WITHOUT THE WATER CHEMISTRY ANALYSIS TO VERIFY GRADE II WATER AS THE TESTING MEDIUM SPECIFIED BY APPENDIX "D" OF THE TEST PACKAGES FOR BN-CT-2 AND BN-CT-6.

S K Fugate 6-10-81

NCR 3503 pg 30 of 40 pgs

CHP 8101.2F2
REVISION 1

1141 26.01

ANALYSIS RESULTS FORM

1. Sample Number =81-306
2. Sample Source DWST OT-79
3. Technician BWinton
4. Sample Time/Date 0825/ 19 May 81
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides (ppm)	8133.17	<0.1
Fluorides (ppm)	8136.1	<0.1
Sulfides (ppm)		
Silicates ~~(ppm)~~ (ppb)	8149.2	<25
Suspended Solids (ppm)	8149.4	<0.1
Dissolved Solids (ppm)	calculated	≤4
Total Solids (ppm)	calculated	≤5
pH	8146.3	7.4 @ 13°C
Conductivity (μmho/cm)	8133.3	0.7 @ 13°C

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (μmho/cm)		
Particle Size (Inches)		
Sliver Size (Inches)		

D. Other Tests

		Results
Fe_2O_3	B+W Comparison Charts	75 ppb

6. Notes

7. Reagents used checked for expiration. (Initial) BAB
8. Equipment used checked for calibration or standardized as appropriate. (Initial) BAB
9. Requesting individual informed of results by phone, (mail), verbal. (Circle) Time
10. Supervisor's Approval

CHP 8101.2F2
REVISION 1

1141 26.01

WCR 3503 Pg 4 of 4 Pgs 2001

ANALYSIS RESULTS FORM

1. Sample Number 81-331
2. Sample Source DWST OT-79
3. Technician Britton
4. Sample Time/Date 2405 / 16 June 81
5. Analysis Results

A. Water Quality Type (Circle One) I II III

B. Water Quality

	Procedure Number	Results
Chlorides (ppm)	8133.17	<0.1
Fluorides (ppm)	8136.1	<0.1
Sulfides (ppm)		
Silicates ~~(ppm)~~ ppb	8144.2	<25 ppb
Suspended Solids (ppm)	8149.4	<0.1 ppm
Dissolved Solids (ppm)	Calculated	<4 ppm
Total Solids (ppm)	Calculated	<4 ppm
pH	8146.3	~~5.95~~
Conductivity (μmho/cm)	8135.3	0.4 @ 23°C

C. Flush Quality

	Procedure Number	Results
pH		
Conductivity (μmho/cm)		
Particle Size (Inches)		
Sliver Size (Inches)		

D. Other Tests

		Results
Fe_2O_3	B&W comparison chart	50 ppb

6. Notes

7. Reagents used checked for expiration. (Initial) BH/CLG
8. Equipment used checked for calibration or standardized as appropriate. (Initial) BH/CLG
9. Requesting individual informed of results by phone, mail, verbal. (Circle) Time
10. Supervisor's Approval

CONTACT: PICK KENNESEL

NONCONFORMANCE REPORT

S/N NA/TESTABLE

1. PROJECT NAME: MIDLAND			JOB NO: 7220			19. NO. 3506	20. PAGE 1 OF 2 3 ttl
2. UNIT(S): COMMON	3. DRAWING/PART NO.: N/A	REV: N/A	4. ITEM DESCRIPTION: COATING MATERIAL			5. ITEM LOCATION: PAINT STORAGE AREA	
6. ~~P.O. OR~~ SPEC NO.: A 41	7. SERIAL NO.: N/A	8. REPLACEMENT PART P/N: N/A REV: N/A SER NO.: N/A		9. SOURCE: SUPPLIER	10. ~~CONTRACTOR~~/SUPPLIER: CARBOLINE		
11. INSPECTION CRITERIA ( ) DWG (X) SPEC ( ) OTHER IR NO. NO. A41 A		12. ASME AUTHORIZED INSPECTION REQ'D ( ) YES (X) NO	13. SKETCH ATTACHED ( ) YES (X) NO	14. Discovered During ( ) Rec'g (X) Const ( ) Test	15. Equip Furnished By ( ) Client ( ) Eng ( ) FLD		

16. NONCONFORMING CONDITION:

SPEC. A41 REV 7 SECTION 8.1 STATES IN PART "THE COATING MATERIAL SHALL BE MIXED AND PREPARED FOR APPLICATION IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATION". F 7220-A41-S-1 CARBOLINE PRODUCT DATA SHEETS FOR PHENOLINE 305 HAS NO RECOMMENDATIONS AS TO THE SPECIFIC PROCESS OF MIXING OTHER THAN THE MIXING RATIO. TWO BATCHES OF PHENOLINE 305 GRAY (BATCH NUMBERS 160392M & 160393M) WHEN MIXED, (CONTINUED)

17. REPORTED BY: James Leech DATE: 6/13/81

18. VALIDATED BY: R. Smith DATE: 6/16/81

21. ROUTING: (X) TO FIELD ENGINEERING ( ) TO OTHERS (SPECIFY)

22. ( ) Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering

SEPARATION NOTED PER BLOCK 16 IS NOT A SEPARATION OF PAINT RESIN AND PIGMENT BUT RATHER A SLIGHT COLOR FLOAT. THIS COLOR FLOAT WILL HAVE NO EFFECT ON THE FINAL PROPERTIES OF THE CURED PAINT FILM AS SUPPORTED BY TWX FROM P. ROBINSON (CARBOLINE)

23. PROJECT ENGINEERING DISPOSITION

THE COATING MANUFACTURER HAS EVALUATED [redacted] THIS CONDITION AND HAS DETERMINED THERE IS NO QUALITY RELATED PROBLEM IN THE USE OF THIS MATERIAL. [redacted] AN UNDERCOAT N/A. THE ABOVE STATEMENT HAS BEEN CONFIRMED WITH PICK GARLING & T. MURPHY. R.J. Lafayley 6/23/81

[redacted] RE [redacted] 6-23-81

24. DISPOSITION CONCURRENCE

rework	reject	repair	use as is
			✓

PROJECT FIELD ENGINEER: [signature] DATE: 6/23/81

PROJECT ENGINEER: T. Temple for T. Curtis DATE: 6/23/81

PROJ CONSTR QC ENGINEER: [signature] DATE: 6/23/81

AUTHORIZED INSPECTOR DATE

25. DISPOSITION RESULTS

28. QC ACCEPTANCE: Sidney Bennett DATE: 6-24-81

QC ENGINEER

AUTHORIZED INSPECTOR DATE

BLOCK #16 CONT.
ACCORDING TO RECOMMENDED RATIOS, EXHIBITED A SEPERATION OF RESIN & PIGMENT RENDERING CONDITION OF PAINT INDETERMINATE.
HOLD FOR ENGINEERING DISPOSITION, Q LIST #220 2 HOLD TAGS APPLIED

BLOCK 22 (CONTINUED):
TO L DAVIS (BECHTEL) DATED 6-22-81 ATTACHED. THEREFORE FIELD RECOMMENDS THAT THE REFERENCED PAINT BE "USED AS IS".

R.D. Kowalski 6/23/81
L.P. Wehmer 6/23/81

7DA-41

RECITEL IIDL

TWX INFO1ARTER 1-0251051173 06/22/81
TWX CATBOLIN STL A
1447032 ST LOUIS MO 6/22/81
TWX 3109869497 RECITEL IIDL
ATTN MR DAVIS
REF 7220F501430
CATBOLINE PREDLINE 305 FINISH BATCH NUMBERS 1003921, 1003931, 1003151 MAY EXHIBIT A SLIGHT COLOR FLOAT WHEN REDUCED WITH THE RECOMMENDED PERCENTAGE OF PREDLINE THINNER. THIS POSSIBLE SLIGHT COLOR FLOAT WILL HAVE NO EFFECT ON THE COATING PERFORMANCE FOR APPLIED COLOR IN ARRAY OR BRUSH APPLICATIONS. WE DETERMINED THAT A SLIGHT COLOR FLOAT WAS BEEN OBSERVED IN BATCH NUMBER 1003931 AND THAT NO COLOR VARIATIONS HAVE BEEN OBSERVED IN THE APPLIED PRODUCT.

IF YOU HAVE ANY QUESTIONS OR REQUIRE FURTHER INFORMATION, PLEASE CONTACT MR. MIKE MCANDREW OR ME DIRECTLY.

REGARDS
PERRY A ROBINSON

1654 EST

RECITEL IIDL

MR 3506 Pg 3 of 3

Discussed With:
Bill Swenson

NONCONFORMANCE REPORT S/U #1SEA

1. Project Name: Midland	Job No.: 7220			19. No. 3518	20. Page 1 of 2
2. Unit(s): One	3. Drawing/Part No.: FSK-M-1HBC-3-3	Rev: 1	4. Item Description: FW's #3, #7, #11, and #19 (1"BC-3-3)	5. Item Location: Yard Piping - Diesel Gen. Supply Line	
6. P.O. Or Spec No.: N/A	7. Serial No.: N/A	8. Replacement Part P/N N/A REV N/A SER NO. N/A	9. Source: QC	10. Contractor/Supplier: N/A	

11. Inspection Criteria: ☐ DWG ☐ SPEC ☒ OTHER NO. PSI-G-6.1 Rev. 5 Sec. 6.1.6.6, IR NO.: N/A

12. ☐ ASME AUTHORIZED INSPECTION REQ'D ☐ YES ☒ NO

13. SKETCH ATTACHED ☐ YES ☒ NO

14. Discovered During: ☐ REC'G ☒ CONST ☐ TEST

15. Equip Furnished By: ☐ CLIENT ☒ ENG ☐ FLD

16. Nonconforming Condition:

Requirement: AAPD PSP G-6.1 Rev. 5 Para. 3.3 States, "Project Quality Control inspection activities describe the minimum inspection activities and tasks that must be performed by Quality Control to verify that work performed... Conforms to the inspection reference criteria". Condition: F.W. #3, FW #7, F.W. #11 and F.W. #19, on DWG FSK-M-1HBC-3-3 Rev. 1 Were welded ~~out~~ DSI-7.81 without

17. Reported By: Jon Glatz Date: 6-26-81

18. Validated By: D. E. Davis Date: 6-25-81 17 42

21. Routing: ☒ FIELD ENGINEERING ☐ TO OTHERS (SPECIFY)

22. ☒ Field Engineering Disposition ☐ FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

THIS IS A NO NONCONFORMING CONDITION, THESE WELDS IN QUESTION HAVE BEEN PROPERLY DOCUMENTED AT THE TIME THE WORK WAS PERFORMED. NO FURTHER WORK REQUIRED. SEE ATTACHED COPIES.

Dan E Davis 6-24-81

23. Project Engineering Disposition

24. Disposition Concurrence: N/A

REWORK	REJECT	REPAIR	USE AS IS

J. B. Duarte 6/24/81
PROJECT FIELD ENGINEER DATE

PROJECT ENGINEER DATE 6/24/81

PROJECT CONSTR QC ENGINEER DATE

J. A. Griffin 6/24/81
AUTHORIZED INSPECTOR DATE

25. Disposition Results

The nonconforming condition no longer exists. Welding documentation is on Log #57331 and Log #56497 Welding Inspection Records.

Jon Glatz 6-24-81

26. QC Acceptance

Jon Glatz 6-24-81
QC ENGINEER DATE

J. A. Griffin 6/24/81
AUTHORIZED INSPECTOR DATE

Block 16 Cont. a welding Inspection Record or documentation Therefore leaving these welds indeterminate.

Q List No. 4.525 No Hold Tags Applied

BECHTEL

Unit 1

QUALITY CONTROL INSPECTION RECORD
WELDING AND NONDESTRUCTIVE EXAMINATION
SOCKET, PARTIAL PENETRATION AND ATTACHMENT WELDS
PQCI NO. 7220/W-1.00B, REV. 7

RECORD COPY

QC File No. M-457M
Log No. 57397
QCIR No. FSK-M-1HBC-3-3 (1a)

1) System or Component 1 HBC-3
2) Engineering Specification No. SEE CRIT INSPECT Rev. INSPECT
3) ISO or Drawing No. FSK-M-1HBC-3-3 Rev. 1
4) Location – Fab Shop ( ) Field (✓) Other ( )
5) NDE Requirement PT DLG MT NA Other VT
6) NDE Procedure No. VT PCM 9 Rev. 2

		A.	B.	C.	D.
7)	Weld Numbers	3R1	7R1	11R1	NA
8)	Weld Repair Numbers	1	1	1	
9)	Welding Proc. No. & Rev.	P1-AT-LH REV 4	P1-AT-LH REV 4	P1-AT-LH REV 4	
10)	Fit up Dimension	2"	2"	2"	
11)	Dia–Sch/Thickness	1½" - .200"	1½" .200"	1½" .200"	

12) Paul W Sparrow Date 12-20-79
Prepared by (FWE) (QCE)

13) Authorized Inspector Hold Points
Act(s) No. NR 12/20/79

14) ABOVE REQUIREMENTS CERTIFIED CORRECT LWQCE Daniel Tackett Date 12/20/79

QUALITY CONTROL VERIFICATION		Welder's Name and/or Symbol	A. P548	B. P501	C. P483	D.
		Filler Material Type	E7018	E7018	E7018	

ACT No.	DESCRIPTION	C	E	A QCE	A AI	B QCE	B AI	C QCE	C AI	D QCE	D AI
1.0	PREREQUISITES			JH 12/21/79		JH 12/26/79		MLS 12-21-79 JH 12/26/79			
1.1	Inspection Criteria Review.	R									
1.2	Inspection Criteria Complete/Understood	R									
1.3	Piping IR's N/A	R									
1.4	Open NCRs 2781	R									
1.5	AI Requirements	R									
1.6	In Process Insp. Activities	R									
1.7	N/A Activities	R									
2.0	IN-PROCESS INSPECTION										
2.1	Welding a. Qualification P501, P548-P483	R		JH 12/21/79		JH 12/26/79		~~MLS~~ 12-21-79 JH 12/26/79	ERROR NOTED		
	b. Material and Equipment 1,2	S						~~MLS~~ 12-21-79	ERROR NOTED		
	c. Fit up & Preheat 6	S									
	d. Technique 2, 8	S									
3.0	FINAL INSPECTION										
3.1	Completed Weld	I		JH 12/21/79		JH 12/26/79		~~MLS~~ 12-21-79			
3.2	Nondestructive Examination	I/S		MT/PT Acc.	MT/PT Rej.	MT/PT Acc.	MT/PT Rej.	MT/PT Acc.	MT/PT Rej.	Acc.	Rej.
4.0	SUPPLEMENTARY RECORDS										
	NDE Test Reports Rep. No.										
4.3	UT Test Reports	R									
4.4	MT Test Reports	R		MT 12/21/79		MT 12/26/79		NA ~~MLS~~ 12-21-79			
4.5	PT Test Reports	R									
4.6	LT Test Reports	R									
5.0	EXCEPTIONS										
5.1	No Exceptions	R		JH 12/21/79		JH 12/26/79		~~MLS~~ 12-21-79 JH 12/26/79	ERROR NOTED		
or 5.2	Indicated Exceptions Described in Remarks	R									

NCR #2781

15. REMARKS To correct NCR # 2781

BLOCK 9 ITEM "C" USED TIG PORTION ONLY

16. Hold Points Reviewed and Accepted (Auth. Insp.) D. A. Bridgman Date 12/26/79

17. Above Results Certified Correct (QCE Level II) Brent Daly Date 12/26/79

BBS FORM 12792/REV. 9/78

BECHTEL

RECORD COPY

Unit 1

QUALITY CONTROL INSPECTION RECORD
WELDING AND NONDESTRUCTIVE EXAMINATION
SOCKET, PARTIAL PENETRATION AND ATTACHMENT WELDS
PQCI NO. 7220/W-1.00B, REV. 7

M452

QC File No. M-452.
Log No. 56-497
QCIR No. FSK-M-1HBC-3-3 (Flab)

1) System or Component 1HBC-3
2) Engineering Specification No. See Ref. Rev. CR IT
ISO or Drawing No. FSK-M-1HBC-3-3 Rev. Sheet
3) Location – Fab Shop ( ) Field (✓) Other ( )
5) NDE Requirement PT NA MT NA Other NA
6) NDE Procedure No. UT Asme Rev. 0

		A.	B.	C.	D.
7)	Weld Numbers	14	NA	NA	NA
8)	Weld Repair Numbers	NA			
9)	Welding Proc. No. & Rev.	P1-AT-Lh Rev. 4			
10)	Fit up Dimension	2"			
11)	Dia–Sch/Thickness	1 1/2" .200			

12) [signature] Date 12/5/79
Prepared by (FWE) ~~(QCE)~~

13) Authorized Inspector Hold Points
Act(s) No. 3.1 12-5-79

14) ABOVE REQUIREMENTS CERTIFIED CORRECT LWQCE [signature] Date 12/5/79

QUALITY CONTROL VERIFICATION	Welder's Name and/or Symbol	A. P16 P320	B.	C.	D.
	Filler Material Type				

ACT No.	DESCRIPTION	C	E	A. QCE	A. AI	B. QCE	B. AI	C. QCE	C. AI	D. QCE	D. AI
1.0	PREREQUISITES										
1.1	Inspection Criteria Review.	R		12/7/79							
1.2	Inspection Criteria Complete/Understood	R									
1.3	Piping IR's N/A	R		12/7/79							
1.4	Open NCRs 2766	R		12/7/79							
1.5	AI Requirements	R									
1.6	In Process Insp. Activities	R									
1.7	N/A Activities	R									
2.0	IN-PROCESS INSPECTION										
2.1	Welding a. Qualification P16, P320	R		12/7/79							
	b. Material and Equipment	S									
	c. Fit up & Preheat	S									
	d. Technique	S				12-7-79					
3.0	FINAL INSPECTION										
3.1	Completed Weld	I		12/7/79	WS						
3.2	Nondestructive Examination	I/S									
				Acc. Rej.		Acc. Rej.		Acc. Rej.		Acc. Rej.	
4.0	SUPPLEMENTARY RECORDS										
	NDE Test Reports Req. No.										
4.3	UT Test Reports	R		12/7/79							
4.4	MT Test Reports	R									
4.5	PT Test Reports	R									
4.6	LT Test Reports	R									
5.0	EXCEPTIONS										
5.1 or 5.2	No Exceptions / Indicated Exceptions Described in Remarks	R		12/7/79							

15. REMARKS Fillet Size 1/4" To Correct NCR #2766

Hold Points Reviewed and Accepted (Auth. Insp.) [signature] Date 12-10-79

16. Above Results Certified Correct (QCE Level II) [signature] Date 12-10-79

BBS FORM 12792/REV. 9/78

BECHTEL

Open QAF's

(none closed)

6/21

BECHTEL 033166

QAF A-39

QUALITY ASSURANCE FINDING

1. PROJECT/DEPARTMENT/SUPPLIER	2. TYPE OF AUDIT/SURVEILLANCE OFFICE ☐ FIELD ☐	3. AUDIT IDENT.
Midland 7220	Audit of SDDR System	6.2 Special Audit
4. AUDITOR	5. DATE OF FINDING	7. DISCUSSED WITH
A.E. Bice	5/29/81	R.C. Hollar J.R. McBride L.A. Dreisbach P.L. Gray G. Maule, E. Smith
6. CONTROLLING DOCUMENT, SECTION, PARAGRAPH, ETC.		
Nuclear Quality Assurance Manual		

8. REQUIREMENTS

The following requirements are to be considered as a totality.

1. NQAM II, No. 2, Rev 2C
   3.0 The following activities shall be described: (by Engineering) . . .
   "v. Handling and processing of procurement/supplier design change requests and nonconformance reports"

2. NQAM III, No. 4, Rev 3A
   3.1.8 "A release for shipment shall not be granted until all identified deficiencies and nonconformances are resolved, . . ."

3. NQAM V, No. 14, Rev 1B
   2.0 "Engineering, . . . identify those records which are to be QC Records."

4. NQAM V, No. 14, Rev 1B
   2.0 "Quality Control is also a record custodian and responsible for the collection, storage, and maintenance of QA records at jobsites."

9. FINDING

A special QA audit was performed to assess the availability of completed (approved and/or verified) SDDRs within Midland Project, Supplier submitted, documentation packages located in the jobsite vault. Although all interfacing organizations were found to have procedures connected with the flow of SDDRs, the end result was noted by the audit team to be less than effective as judged from a degree of lack of availability or completeness of such documents in Quality Verification Packages located in the Midland jobsite QC vault.
(Associated individual and miscellaneous problems are listed in Attachment 1. Attachments 2 through 5 provide back-up data.)

a) 98 of a sample of 188 SDDRs accepted by Engineering and expected to be available could not be located in the Supplier submitted documentation packages in the Midland site QC vault (total population in system approximately 2000). (See Attachment 2)

b) Only 12 of the 98 unlocated SDDRs could be proven from other files to be verified by the Supplier/Subcontractor and SQR (blocks 22 and 23 of the SDDR form) as matching the Engineering decision. (See Attachment 2)

c) 21 of the 98 unlocated SDDRs had been originated by Site subcontractors (no SQR assigned). These SDDRs could not be located in the QC vault (QVD packages), in the Bechtel subcontracts department, or in the subcontractors files. (See Attachment 3)

d) 34 of the 98 unlocated SDDRs indicated that further work was necessary to make the SDDR acceptable (one specifically indicating jobsite work). Accomplishment of the additional work could not be verified. (See Attachment 3)

033166

9. FINDING (Continued)

e) Three (3) SDDRs (1967, 1807, and 1579) were written by Suppliers after the associated equipment was shipped. One of the three (1807) was rejected by Engineering after such shipment.

f) A host of miscellaneous or individual problems were noted by the audit team which reflect possible difficulties within the working system of the various interfacing organizations. These are attached as information and data. Several may need specific action, but this should be decided as part of the overall action plan for this finding. (See Attachments 4 and 5)

Note: To determine the current shipping status of the material covered by the 98 unlocated SDDRs, a random selection of 20 was chosen for research. Seventeen were clearly indicated as work having been completed by Subcontractors or material shipped by Suppliers. Three were of questionable status but were not further researched.

10. RECOMMENDED ACTION/S

Investigative Action - Review the intent and flow of SDDRs in comparison with the procedures of the interfacing organizations to establish both cause and corrective action required to prevent recurrence of this problem.

Review the types of individual problems noted and perform further investigations as applicable to determine extent of similar discrepancies from the total SDDR population.

Remedial Action - Based on the types of problems noted, provide a remedial action plan to correct deficiencies noted by the audit team as well as further deficiencies noted during investigative action. Submit remedial action plan for interim review by audit team leader to assure proper attention to individual problems in attachment listing. Subfindings will be prepared by QA if necessary to administrate individual problems.

Corrective Action to Prevent Recurrence - Prepare and implement adequate procedural methods to assure availability of those required SDDR QA records as determined in the Investigative Action Review.

11. SCHEDULED COMPLETION DATE	12. RESPONSIBILITY FOR CORRECTIVE ACTION
STATUS 7/15/81	PROJECT MANAGER

13. CORRECTIVE ACTION TAKEN

14. DATE COMPLETED	15. SUBMITTED BY RESPONSIBLE AUTHORITY	16. CORRECTIVE ACTION		
		ACCEPTED	NOT ACCEPTED	QAE

17. VERIFICATION ACTIONS BY QAE

18. IMPLEMENTATION			
ACCEPTED	NOT ACCEPTED	QAE	DATE

19. DISTRIBUTION

SFP-20871

BECHTEL

Closed QAR's

6/81

(none opened)

QUALITY ACTION REQUEST

cc: D. Turnbull
E.-Corley
W. Bird
B.-Marguglio
D. Miller

AI: 823

From: M. A. Dietrich (1)
E.-A. Breisbach
Site Q.A. Job 7220

To: (2) R. C. Ash

Control Document ref.: (3) Spec. M-201

QAR Ident. No.: (4) SD-221

Action Requested: (5)
Pursuant to the AAPD QA Manager's request, the discipline QAE performed an in-depth review of Southwest Fabricators and ITT Grinnell's documentation for spools fabricated from stainless steel pipe & fittings. The review was to ascertain the type of heat treatment and the method and medium used for cooling after heat treatment. The results of the review are attached. Based on the findings that were indeterminate Project Quality Assurance requests the following action be taken: 1) Obtain from the material manufacturer a statement of conformance or evidence to determine the requirements of the specification have been met for Items No. 15, 20 & 29. 2) Apprise SQR's of the above reported conditions.

Signature: (6) [signature] Date: (7) 9-22-80 Reply Requested by: (8) 10-30-80

Reply: (9)
Corrected certification documents that verify the heat treatment of the spool piece materials have been acquired and inserted into the vault record files. Spool packages 2HCB-33-S-649-2-1, 1GCC-3-S-652-2-1, & 2HCC-164-S-649-2-1 have been reviewed by QA and found to be complete. This verification will close this action item.

Signature: (10) Date: (11)

Action Verified: (12) Date: 6-18-81 (13)

8/2/74

Revised Copy

QUALITY ACTION REQUEST

cc: W. Bird
B. Marguglio
R. Miller

AI: P-027

(1) From: M. A. Dietrich — Site Q.A. — Job 7220		
(2) To: E. Smith	(3) Control Document ref.: ASME Sec. III Div. I NA 4000	(4) QAR Ident. No.: Rev. 1 6/5/81 SD-350

(5) Action Requested: Reference Document: Sec. III Div. I Sub-Section NA 4000, Sub-Article NA 4400 outlines the requirements of control of operations and materials. Specification 7220-M-326 (Q) Rev. 5, paragraph 5.24 (a) states in part, "and the modification is performed in accordance with the supplier's authorized procedures". QAR SD-344 addresses this subject and refers to the supplier's modification procedures that specify the operations required in modification of sway struts.

Action requested: Verify that sway strut modifications that are performed on the Midland site and inspected to PQCI IP 2.10 and QCIR reference criteria 7220-M-106-695-2 are within acceptable limits of the suppliers specifications.

Attachment QAR SD-344

(6) Signature: ACM M. A. Dietrich	(7) Date: 12/11/80	(8) Reply Requested by: 12/29/80

(9) Reply: The modification (adjustment in length) of vendor sway struts has always been an "on-site" function to conform to project approved drawings. The question of alignment tolerances has not been ignored, however, has been an unresolved issue with project engineering.

Documented communications on the subject clearly shows reason for construction to proceed with installation and inspection because:

1) Project drawings require modification of components to meet designated "off standard dimensions".

(Continued on page 2)

(10) Signature: Signature on QCFM-9134/AI-1025	(11) Date: 3/11/81	
(12) Action Verified:	(13) Date: 6-3-81	

8/2/74

REPLY: Continued from page 1 - Block 9

2) Modification weld procedures were Project approved.

3) Vendor alteration procedures were either accepted as "information only" or "review not required, work may proceed".

The QAR, as addressed to Quality Control, is closed; nevertheless, the subject has been documented by action item P-040, QAR SD-358 (priority 1). The action is directed to Project Engineering for resolution.

cc: D. Turnbull
M.-Leonard-
W. Bird
D. Miller

QUALITY ACTION REQUEST

AI: P-021

From: M. A. Dietrich, C.-A.: BREISBACH (1) Site Q.A. Job 7220		
To: L. E. DAVIS (2)	Control Document ref.: FPG-2.000, Rev. 0 Para. 4.1 (3)	QAR Ident. No.: SD-346 (4)

Action Requested: (5)

Procedure FPG-2.000 Rev. 0 requires maintenance of the following training checklists in individual folders: A. Orientation Checklist; B. Work Experience Checklist; C. Job Performance Checklist; D. Training Records. Review of records for 2 individuals out of the 13 examined showed checklists listed in B&C above, missing.

Procedure FPG-2.000 Rev. 0, Para. 4.1 states in part: ". . . for employees new to Nuclear Construction, orientation will be given within 60 days on the job." Contrary to the above, training records of 2 individuals of the 13 examined, showed orientation after 4 or 5 months for employees new to Nuclear Construction.

Please advise what corrective action will be initiated.

Signature: ESM MA Dreisbach (6)	Date: 10/30/80 (7)	Reply Requested by: 11/21/80 (8)

Reply: (9)

The Field Engineering Response: In paragraph 1.0 of FOG 2.000 it states in part, "The purpose of this procedure is to establish a program which assures that . . field engineers, . . . involved in Q-listed construction on the Midland project have either received training or will receive training as necessary to support them in the execution of their work activities." Therefore, support groups to Field Engineering do not necessarily receive parts A through D. Training sessions were held to orientate the required personnel. The training files reflect the orientation and are up to date as per the procedure.

(Continued on page 2)

Signature: SIGNATURE IS ON THE TRANSMITTAL DOCUMENT (10)	Date: 11/19/80 (11)
Action Verified: ARTHUR McCLURE (12)	Date: 6/10/81 (13)

8/2/74

Bechtel Quality Assurance Department has reviewed the subject records and found them to be complete and in good order. It is to be noted that procedure FPG 2.000 requires revisions to more closely conform and follow the basic intent of Title 10CFR50, Appendix B, Point II, "Quality Assurance Program". Revising of the procedure is in process.

BECHTEL

Open FLAGS QAR's

(none closed)

6/81

cc: D. Turnbull
D. Miller
W. Bird

QUALITY ACTION REQUEST

AI: A7030

From: M. A. Dietrich (1)	Site Q.A.	Job 7220
To: E. Smith (2)	Control Document ref.: QCNM SF/PSP G-3.2 Rev. 6 (3)	QAR Ident. No.: FLAG 31 (4)

Action Requested: (5)

Based on the results of the research and the writer's inability to verify adequate resolution of the flagged condition noted in the attached flag review sheets, the following is requested.

1. Determine the quantity of "5 star grout" received on P.O. 7220-F-3147(Q) that was found to be discrepant.
2. Define the discrepancy and its effect, if any, on the "installed materials".
3. Correct as required, the discrepancies found in the records as delineated in sheets 2 & 3 of this QAR.

(See sheets # 2 & 3 for violations and spec. references.)

Signature: BDF M. A. Dietrich (6)	Date: 6/1/81 (7)	Reply Requested by: 6/15/81 (8)

Reply: (9)

Signature: (10)		Date: (11)
Action Verified: (12)		Date: (13)

8/2/74

P.O. 7220-F-46585

This P.O. generated to replace discrepant "5 star" grout.

Problem - indications are; that a quantity of "5 star grout" stored in warehouse #2 was found to be discrepant - but:

1. In violation of SF/PSP G-3.2, Rev. 6, dat 6/10/80, no NCR was originated (para. 3.2.5).

2. Reason for rejection not recorded - SF/PSP G-3.2, para. 4.2.4.

3. Disposition not recorded - SF/PSP - G3.2, para. 4.7.1

Action Required:

1. Initiate NCR per instructions contained in SF/PSP G-3.2, para. 3.2.5 and sub's - through corrective action para. 5.0 - 5.3.4.

2. Delineate reason for rejection SF/PSP G-3.2, para. 4.2.4.

3. Disposition as required by SF/PSP G-3.2, para. 4.7.1. Include disposition of "installed" materials in the questionable lots.

Problem - FMR #CA3359, Sheet #4 indicates P.O. #7220-F-31470Q should be 7220-F-3147Q.

Action Required: Correct FMR #CA3359, Sheet #4 to reflect correct P.O.

NOTE: Copies of problem documents, specs, etc. attached to action copy of this QAR to assist the investigation.

Items to be addressed, the specific problem, location, required action are as follows:

P.O. #7220-F-3147Q

1. NCR #1901 - generated due to lack of documentation: Problem - four sheets of "accepted" documentation attached to closed NCR, but only two (2) have been properly signed and dated.

   Action Required: Obtain corrected and complete with signatures the required replacement documents.

2. Problem - Master Builders C of C dated 7/31/79 references P.O. 7220-F-3149, Rel #4; should be 7220-F-3147Q, Rel #4.

   Action Required: Obtain corrected C of C delineating correct information.

3. Problem - TWX #8102669497 refers to P.O. #72222 - F-31470; should be 7220-F-3147Q (Note: P.O. 7220-F-31470 exists but not relative).

   Action Required: Correct as required (TWX is a certification).

BECHTEL

Closed MCAR's

(None Opened)

6/81

ALITY ASSURANCE PROGRAM

MANAGEMENT CORRECTIVE ACTION REPORT

MCAR-1

REPORT NO. 41

JOB NO. 7220 O NO. _____ DATE 9/17/80

I* DESCRIPTION (Including references): CPCo NCR M-01-6-0-10 reported that one leg of a buss bar in a transformer had broken at a 90° bend. The buss bar was part of a transformer in a battery charger supplied by Solidstate Control, Inc. Evaluation of that situation was determined to be not reportable. Subsequent additional investigations disclose that:

A. Cause of failure has been established as fatigue cracking initiated at the inner bend radius of the buss as established by CPCo lab analysis.

B. Approximately 26 "Q" units (transformers, inverters, battery chargers) are at the jobsite with buss bars of similar configuration. (An additional 11 non-Q items are also at the jobsite).

C. Project Engineering has advised that currently they have no justification for assuming that buss bars with this configuration would not fail in the future.

* RECOMMENDED ACTION (Optional)

1. Project Engineering:
   A. Consider this item for reportability under 10CFR Part 21.
   B. Provide direction to Construction and/or Procurement regarding the corrective action to be taken. Initiate inspections of buss bars to determine if cracks exist.
   C. Make final determination on reportability of this item on or before October 16, 1980.
2. Construction:
   A. Prepare field engineering report specifically identifying pieces of equipment, with buss bar having one or more 90° bends (supplied by Solidstate Controls), have Quality Control issue NCR, and place QC hold tags on each item of Q-listed equipment.

REFERRED TO ☒ ENGINEERING ☒ CONSTRUCTION ☐ QA MANAGEMENT ☐ _____

☐ PROCUREMENT

ISSUED BY LA Dreisbach 9-17-80
Project QA Engineer Date

Telcon LAD to WRB 9-17-80

II REPORTABLE DEFICIENCY ☐ NO | Potentially Reportable ☐ YES

NOTIFIED CLIENT WRB to Tell JWC 9-
Project Manager Date 9/17/80 Date

III CAUSE As stated in the final Bechtel report dated, May 4, 1981, the apparent cause of the failure was determined to be cyclic stresses acting on a very small bend radius at the inner radius of the bus bar 90° bend which initiated fatigue cracking. The source of the stresses that resulted in the failure remains unknown.

CORRECTIVE ACTION TAKEN

The corrective action is as outlined in the Bechtel final report dated, May 4, 1981. All corrective action is complete. The condition has been investigated by project engineering, Consumers Power Company and Solidstate Controls Inc. Extensive metallurgical testing and analysis has been performed by Consumers Power Company. The failure was determined to be an isolated case. The failed bus bar IN ID27 has been replaced. Consumers Power Company NCR M-01-6-0-010 and Bechtel NCR 3136 have been dispositioned. No additional corrective action is required.

PEL 6-20-81

AUTHORIZED BY [signature] 6-24-81
Date

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Procurement Supplier Quality Mgr. and
Div. Supplier Quality Mgr.
QA Supervisor

FORMAL REPORT TO CLIENT _____
(If Section II Applies) Date

CORRECTIVE ACTION IMPLEMENTED

VERIFIED BY DRoia 6/26/81
from Project QA Engineer Date