

DMB

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<input checked="" type="checkbox"/>	RA	PRP <i>Aug 13</i>
<input type="checkbox"/>	A/RA	DE
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DOCUMENTATION TRANSMITTAL

To: Store & Webster - CIO  
PO Box 1963  
Midland, MI 48640

Transmittal No: CIO- 0051  
Date: May 18, 1984

Attention: Geroge Carter

The documentation listed below      is provided herewith, X was previously provided on 5-15-84 ; as requested by George Carter .

Documentation Description: Nonconformance Report - M01-9-2-074

CIO      has X has not been placed on routine transmittal for the described documentation.

*Janne Keane*  
Signature

8405300023 840518  
PDR ADOCK 05000329  
S PDR

- CC RJCook, NRC Site (w/a, unless voluminous)
- JJHarrison, NRC Region III (w/a, unless voluminous)
- DDJohnson, SMO (w/o)
- JGKeppler, NRC Region III (w/a, unless voluminous)
- BHPeck, SMO (w/o)
- NIReichel, SMO (w/o)
- RAWells, MPQAD (w/o)
- CMThompson - File 24.2 (w/a, unless voluminous)

MAY 24 1984

*IEO 1/11*



QA 87-0

## NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION

PAGE 1 OF 6

1. NCR NUMBER:

M01-9-2-074

2. START-UP SYSTEM: NTS000		3. PRIORITY CODE: 1		4. TREND CODE: H-7		5. ACTION ITEM NO: S-1566	
6. PROJECT: MIDLAND PROJECT		7. NONCONFORMING PART NO: See Block 17		8. NONCONFORMING PART NAME: SUPPORT STEEL		9. DATE ISSUED: 6-19-82	
10. NONCONFORMING PART SERIAL NUMBER: N/A		11. RESPONSIBLE ORGANIZATION: Bechtel		12. LOCATION IN PLANT: See Block 17		13. DATE OF REVISION:	
14. DISTRIBUTION: ACTIONEE: JARutgers INFO: RLAkers AJBice WRBird JEBrunner JWCook RMCollins, Jr MLCurland LHCurtis DLDaniels		15. LE Davis MADietrich DEHorn JAHorsch RDJohnson BWMarguglio REMcCue DBMiller BHPeck ESmith DATaggert RAWells JLWood ALAB		16. REQUIREMENT: Bechtel Technical Specification 7220-C-233, Rev 23, Section 7.2 requires the following: "Welded joints shall be made in accordance with the Code for Welding in Building Construction, AWS D1.1-72, and the section on Welded Joints of AISC Manual of Steel Construction." (See page 2)			
17. FILE NUMBER: 16.0 <i>AK</i>		17. NONCONFORMANCE: Bechtel NCR 935 identified welding defects found during receipt inspection on vendor supplied structural beams which had been released by SQR Inspector No. 335. Consumers Power Company letter 66FQABO, W R Bird to L A Driesbach dated March 6, 1980 requested a reinspection of beams released by SQR Inspector No. 335 to determine if similar problems existed on other structural beams. Bechtel QC identified approximately 2400 beams associated with SQR Inspector No. 335 and purchased on P.O. (See page 2)					
19. ENGINEERING DISPOSITION REQ?		YES	NO	18. RECOMMENDED PART CORRECTIVE ACTION: Bechtel QC to 100% reinspect all beams purchased under P.O. F-3103 and repair or obtain Project Engineering disposition for any defective welds found as a result of the reinspection.  (See page 2)			
20. Q-LIST EQUIP. INVOLVED?		X					
21. PROCESS CA REQ? (SEE BACK)		X					
22. HOLD TAGS APPLIED?		X		23. LOCATION OF TAGS: See Attachment A			
24. REPORTABLE PER SO. 501e)1?		To be determined		25. REPORTED BY:		26. REPORTED TO:	
29. NCR ORIGINATED BY: <i>ALAB</i>		30. WRITTEN REPLY REQUIRED: July 15, 1982		31. SUPERVISOR'S SIGNATURE/DATE: <i>Donald E Horn</i> 6/19/82			
32. PART CORRECTIVE ACTION PROPOSED:							
33. QA CONCURRENCE-SIG/DATE:							
34. PART CORRECTIVE ACTION VERIFIED:							
35. VERIFIED BY-SIG/DATE:							
36. HOLD TAGS REMOVED BY-SIGNATURE/DATE:				37. NCR CLOSED BY - SIGNATURE/DATE:			



# NONCONFORMANCE REPORT

PROJECT: ENGINEERING AND CONSTRUCTION -

## PROCESS CORRECTIVE ACTION

MO1-9-2-074  
NCR SERIAL NUMBER:

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38. QA ASSESSMENT OF ROOT CAUSE(S):

TO BE DETERMINED BY PROCUREMENT  
SUPPLIER QUALITY IN BLOCK 39

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 Procurement Supplier Quality

41. QA RECOMMENDATION FOR PROCESS CA:

Determine root cause and formulate process corrective action based upon actual root cause(s) including assuring that there are no generic supplier related problems of a similar nature and that the current supplier quality system is effective in preventing shipment of defective material.

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:

Block 16 (REQUIREMENT) cont.

AWS D1.1-72, Section 3.6.4, requires "For buildings and tubular structure undercut shall be not more than 0.01 in. deep when its direction is transverse to primary tensile stress in the part that is undercut no more than 1/32 in. for all other situations."

AWS D1.1-72, Section 2.7.1.2 (2) requires "The maximum fillet weld size permitted along the edges of material shall be 1/16 in. less than the thickness of base metal, for metal 1/4 in. or more in thickness unless the weld is designated on the drawing to be built out to obtain the full throat thickness."

AWS D1.1-72, Section 8.15.1.6, requires "Fillet welds in any single continuous weld shall be permitted to under run the nominal fillet weld size required by 1/16 in. without correction provided that the undersize weld does not exceed 10% of the length of the weld....."

Block 17 (NONCONFORMANCE) cont.

numbers F-3043, F-3091, F-3103, F-15765, F-16781, F-17119, F-17306, F-17626, F-19753, and F-24897 and reported this data on FQCL-962 dated January 21, 1982.

In order to provide a reduction of the original request, MPQAD conducted an overinspection on 78 structural beams purchased on one order only (P.O. F-3103) to determine if nonconformances existed in the field.

Contrary to the requirements listed in block 16, 66 weld joints were nonconforming out of 146 overinspected. This represents 41 of the 78 structural beams overinspected. Welding defects and beam locations are listed in Attachment A.

Block 18 (RECOMMENDED PART CORRECTIVE ACTION)

Project Engineering to devise a plan to determine the acceptability of welding on beams purchased under purchase orders: F-3043, F-3091, F-15765, F-16781, F-17119, F-17306, F-17626, F-19753, and F-24897.

NOTE: It is expected that many of the beams are totally inaccessible or will at least be difficult to inspect and repair.

ATTACHMENT A

<u>Beam 10</u>	<u>Location</u>	<u>Number of Defec- tive Weld Joints</u>	<u>Defects</u>
2B2	A	4	Undersize welds-1/4" specified 1/8-3/16 actual
7AH1	A	1	Lack of fill, arc strikes, pinhole porosity
8AH1	A	1	Undersize welds-3/8" specified 1/4" actual
10B2	B	2	1/16" undercut
13B1	B	2	1/16" to 3/32" undercut
10B1	C	1	1/16" undercut
10B2	C	1	1/16" undercut
10B3	D	1	Insufficient throat
10B2	D	4	1/16" to 1/8" undercut
13B1	D	1	1/16" undercut
10B2	D	2	1/16" undercut
10B1	E	2	1/16" to 3/32" undercut
10B2	E	4	1/16" to 1/8" undercut-1 joint also has undersize weld
13B1	E	2	1/16" to 3/32" undercut
10B2	E	2	1/16" to 1/8" undercut
10B1	F	1	1/16" undercut
10B2	F	1	1/16" undercut
13B1	F	2	1/16" to 3/32" undercut
10B2	G	3	1/16" to 3/32" undercut
13B1	G	1	1/16" undercut
10B3	G	1	Insufficient throat

ATTACHMENT A (cont.)

<u>Beam 10</u>	<u>Location</u>	<u>Number of Defec- tive Weld Joints</u>	<u>Defects</u>
10B2	G	2	1/16" undercut
10B2	H	4	1/16" to 3/32" undercut- 1 weld joint also has undersize weld
10B2	H	2	1/16" to 3/32" undercut- 1 weld joint also has undersize weld

The following nonconforming welds are undersize from the weld specified on the vendor drawing but meet the minimum weld size requirement of AWS D1.1-72 Section 2.7.1.1.

<u>Beam 10</u>	<u>Location</u>	<u>Number of Weld Joints</u>	<u>Specified Weld Size</u>	<u>Actual Weld Size</u>
10B4	B	1	1/4"	3/16" to 1/4"
10B4	C	1	1/4"	3/16" to 1/4"
10B3	C	1	1/4"	3/16" to 1/4"
10B3	D	1	1/4"	3/16"
10B3	F	2	1/4"	3/16"
10B4	F	1	1/4"	3/16"
10B4	F	1	1/4"	3/16"
10B3	F	2	1/4"	3/16"
10B4	G	1	1/4"	3/16"
10B3	G	1	1/4"	3/16"
10B3	H	1	1/4"	3/16"
10B4	H	1	1/4"	3/16"
10B4	H	1	1/4"	3/16"
10B3	H	2	1/4"	3/16" to 1/4"
10B3	I	1	1/4"	3/16" to 1/4"
10B4	I	1	1/4"	3/16" to 1/4"
10B3	I	1	1/4"	3/16" to 1/4"

ATTACHMENT A (cont.)

LOCATION OF BEAMS WITH DEFECTIVE WELDS

- A. Aux. Bldg. - Elevation 675' 0" - column lines 5.1 & A
- B. Containment 1 - Elevation 688' - 9" - near column 10
- C. Containment 1 - Elevation 688' - 9" - near column 12
- D. Containment 1 - Elevation 688' - 9" - near column 16
- E. Containment 1 - Elevation 688' - 9" - near column 17
- F. Containment 2 - Elevation 688' - 9" - near column 2
- G. Containment 2 - Elevation 688' - 9" - near column 2
- H. Containment 2 - Elevation 688' - 9" - near column 6
- I. Containment 2 - Elevation 688' - 9" - near column 8