

PRINCIPAL STAFF			
PA	DRP	DE	
D/RA		DRMS	
A/RA		DRMA	
RC		SCS	
PAO		ML	
SGA		File	
ENF			

STONE AND WEBSTER MICHIGAN, INC. *DMB*
P.O. BOX 1963, MIDLAND, MICHIGAN 48640

DATE	5/12/84
J.O. NO.	14509
P.O. NO.	
LTR. NO.	SWM-120
REF.	

DEAR SIRs:

THE FOLLOWING ARE ☒ ATTACHED ☐ SENT SEPARATELY:

<input checked="" type="checkbox"/> COPIES	<input type="checkbox"/> PRINTS	<input type="checkbox"/> REPRODUCIBLES	<input type="checkbox"/> MICROFILM APERTURE CARDS
EACH OF			
<input type="checkbox"/> DRAWINGS	<input type="checkbox"/> SPECIFICATIONS		
<input checked="" type="checkbox"/> DOCUMENTS	<input type="checkbox"/> NOTES OF CONFERENCE		

STATUS		PLEASE NOTE	SENT FOR YOUR	
<input type="checkbox"/> FINAL	<input type="checkbox"/> APPROVED	<input type="checkbox"/> REVISIONS	<input type="checkbox"/> OMISSIONS	<input type="checkbox"/> APPROVAL <input type="checkbox"/> COMMENT
<input type="checkbox"/> PRELIMINARY	<input type="checkbox"/> APPROVED AS REVISED AS DEFINED IN SPECIFICATION	<input type="checkbox"/> ADDITIONS	<input type="checkbox"/> CORRECTIONS	<input type="checkbox"/> USE <input type="checkbox"/> INFORMATION
<input type="checkbox"/> NO COMMENT	<input type="checkbox"/> UNACCEPTABLE	<input type="checkbox"/> COMMENTS	<input type="checkbox"/>	<input type="checkbox"/> FILES <input type="checkbox"/> CONCURRENCE
<input type="checkbox"/> SUGGESTIONS AS NOTED	<input checked="" type="checkbox"/> OPEN	<input checked="" type="checkbox"/> ACTION		

YOUR ATTENTION IS DIRECTED TO THE FOLLOWING:

RELEASED FOR: <input type="checkbox"/> FABRICATION <input type="checkbox"/> PURCHASE OF NECESSARY MATERIALS	
<input type="checkbox"/> PLEASE REVISE AND SUBMIT	<input type="checkbox"/> PRINTS <input type="checkbox"/> REPRODUCIBLES <input type="checkbox"/> MICROFILM APERTURE CARDS
<input type="checkbox"/> PLEASE SUBMIT	<input type="checkbox"/> PRINTS <input type="checkbox"/> REPRODUCIBLES <input type="checkbox"/> MICROFILM APERTURE CARDS OF <input type="checkbox"/> DOCUMENTS <input type="checkbox"/> DRAWINGS <input type="checkbox"/> SHOP DETAIL
<input type="checkbox"/> PLEASE RETURN ONE COPY EACH OF THIS MATERIAL BEARING YOUR APPROVAL OR COMMENTS.	
<input type="checkbox"/> PLEASE ACKNOWLEDGE RECEIPT OF THIS MATERIAL BY SIGNING AND RETURNING THE ENCLOSED COPY OF THIS FORM	
<input type="checkbox"/> WE TRUST THAT THESE NOTES ARE IN ACCORDANCE WITH YOUR UNDERSTANDING. IF NOT, PLEASE ADVISE US	

IMPORTANT SHOULD ANY REVISION TO DOCUMENTS OR DRAWINGS RETURNED HEREWITH INVOLVE A PRICE INCREASE THE SUPPLIER MUST NOTIFY STONE & WEBSTER PURCHASING DEPARTMENT WITHIN TEN (10) DAYS EVEN THOUGH A DEFINITE ESTIMATE CANNOT BE GIVEN AT THE TIME. OTHERWISE, THE PURCHASER WILL CONSIDER THE REVISIONS MADE WITHOUT COST.

The following Open CIO Item/Hold Point Notification(s) is (are) attached for your action/information:

ITEM 085

DISTRIBUTION:

DLQuamme, CPCo (original)
NIRichel, CPCo
RAWells, CPCo
JGKeppler, NRC
JHarrison, NRC
BLBurgess, NRC (site)
APAmoruso (2)
Job File C.3 (2)
KRArndt/Chrono w/o attach
Initiator

8405300606 840518
PDR ADOCK 05000329
S PDR

J. E. Karr
J. E. Karr
CIO Program Manager

MAY 24 1984

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ITEM/HOLD POINT NOTIFICATION FORM

Sheet 1 of 1

STONE & WEBSTER CONSTRUCTION IMPLEMENTATION OVERVIEW MIDLAND NUCLEAR PLANT J.O. NO. 14509

ITEM NUMBER 085	HOLD POINT NUMBER
<input checked="" type="checkbox"/> TRACKED ACTION ITEM	
<input type="checkbox"/> TRACKED INFORMATION ITEM	
<input type="checkbox"/> TRACKED RECOMMENDATION ITEM	
<input type="checkbox"/> UNTRACKED ITEM	
<input type="checkbox"/> HOLD POINT NOTIFICATION	

REFERENCE(S)
PQCI Review

CONDITION DETAILS

See attached letter. Serial Number SWM-120.

Note: Items marked with an asterisk may impact 120D Phase I/Phase II release.

☒ YES (PAGE NO'S) 8 ☐ NO

ATTACHMENTS

DATE RESPONSE REQ'D. 5/25/84	INITIATOR/DATE <i>J. D. Larkin</i> 5/18/84	INITIATION APPROVED/DATE <i>J. D. Larkin</i> 5-18-84
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RESPONSE (SEE NOTE)

☐ YES (PAGE NO'S) ☐ NO

ATTACHMENTS

EST. CORRECTIVE ACTION COMPLETION DATE	RESPONDENT	TITLE	DATE
RESPONSE ACCEPTED	DATE	RESPONSE VERIFIED/CLOSED	DATE

NOTE - FOR TRACKED ACTION ITEMS ONLY, EXPLAIN CLEARLY OR REFERENCE ATTACHMENTS FOR:

1) CAUSE OF OBSERVED CONDITION 2) CORRECTIVE ACTION TAKEN 3) PREVENTIVE ACTION TAKEN

600-010(NL)



STONE & WEBSTER MICHIGAN, INC.

P. O. Box 1963, MIDLAND, MI 48641-1963

Mr. D. L. Quamme
Consumers Power Company
Midland Nuclear Plant
3500 E. Miller Road
Midland, MI 48640

May 18, 1984

J.O. No. 14509
SWM-120

Docket No. 50-329/330
CIO Review of PQCI's
Construction Implementation Overview
Midland Nuclear Power Plant

During a review of PQCI's, the following observations were noted. Some are of an editorial nature and, although no response to CIO is required, they should be addressed in future PQCI revisions. Items of significance that require a response to CIO are so noted.

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
C-9.30	0	a. Activities 5.1 and 5.2 (Page 13) do not have activity codes assigned.	No
C-6.00	8	a. Reference to FIC, Paragraph 4.6 should be 5.6.	No
		b. Paragraph 3.2.A.4. Reference to Tensile Strength should be "Average Tensile Strength".	No
C-3.01	3	a. The attachment has an instruction referring to the back page. Back page of attachment is not included.	No
		b. Action 2.5F, Reference to C-42-71 should be C-42-72.	No
		c. Supplemental procedure to C-42-72, which provides installation tolerances, is not referenced in the PQCI.	No
C-1.31	6	a. Reference criteria does not include MPQAD F-2M, AAPD/P5PG.3.2 and MPQAD B-3M-1.	No

DLQ

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May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
C-1.91	0	a. FCR C6946 is listed as an inspection criteria but is disapproved.	No
		b. FIC 4.200 should be included as reference criteria.	No
C-8.51	5	a. The PQCI required hold points to be identified by the words "HOLD POINT" but the letter "H" is being used.	No
C-1.81	3	a. PQCI does not reference a Personnel Certification Section.	No
		b. Section 2.7, Page 10, does not address qualitative acceptance criteria for grout only by reference to appropriate specification.	Yes
		c. Special Instruction Number 6 requires an NCR for nonconforming conditions. Page 10 of the PQCI requires "additional tests" for material changes without requiring an NCR.	Yes
*C-1.40	12	a. Specification C-231, Paragraph 17.1, requirement for grout repair to be free from shrinkage cracks is not reflected in the PQCI.	Yes
E-1.0	17	a. E42B, Sheet 301, reference to P-2558-71 should be P-2558-7 (Typo).	No
*		b. FCR E3550 allows use of power strut clamps and straps. E42B, Sheet 301, disallows same.	Yes
*E-1.60	8	a. Conflicts in cable training radius dimensions. Page 22 gives no radius or "later" drawing requirement is 12 inches.	No
		b. PQCI references Drawing E-42, Sheet 10C, as a reference criteria. Sheet 10C is a blank sheet. Correct references are 5C and 5D.	No
E-5.0	15	a. The second note in Paragraph 2.6B does not apply.	No

DLQ

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May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
P1-1.41	0	a. Activity Number 3.4 Verification that NF support bolts are "Tight". Tight requires a quantitative value.	Yes
		b. Activity Number 2.1b refers to nitrogen or clean, dry air for blowdown. Purity of nitrogen, cleanliness, and dryness need to be defined. Commercial standards are available.	Yes
P-2.30	5	a. 3.2.1 There is an inconsistency between Specification M-326 and this PQCI. The PQCI states the tolerances as \pm (number) whereas the specification only states the number.	Yes
		b. 3.2.2.c As stated above, the PQCI states the tolerance of \pm 4 inches whereas the specification states just 4 inches; need to clarify which is correct.	Yes
		c. 3.3.1.b Attachment 1 to the PQCI is inconsistent with the specification (e.g., group A8 of specification and PQCI).	Yes
		d. 3.3.1.e.2 Attachment 2, Figure K-1, is inconsistent with Appendix K of M-326. Note: Appendix K, Figure K-1 provides, in addition to what is provided in PQCI, a α , L' and a "note 2".	Yes
		e. 3.3.1.e.3, 3.3.1.e.4 The references in the inspection criteria column should be 5.2.1.c.4.c and 5.2.1.c.4.a, not 5.2.1.4.c and 5.2.1.4.a.	Yes
		f. 3.3.1.e.5 Since Section 3.3 covers length, width, and thickness, Subsection 3.3.1.e.5 should state the wall thickness shall be greater (see Specification M-326, Paragraph 5.2.12.c). It also has to be questioned as to what the specification means by just saying greater (greater than what).	Yes
		g. 3.4.1.a.2 Attachment 6, Page 9, to the PQCI has been changed by Change Notice CN-P-2.30-05-1; however, the change still does not meet the requirements of Specification M-326, Page H-10. This attachment is for size of fillet weld which is included; however, it is missing the column on "adjuster nut thread UNC class 2B".	Yes

DLQ

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May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
P-2.30	5	h. 3.5.2.c Wording in paragraph should say "seat angle" and not "seal angle" according to specification.	No
		i. 3.8 Attachment 6, Page 1, is not consistent with Specification M-326, Appendix O.	No
		j. 3.9 Appendix R of Specification M-326 is not part of Attachment 7 of PQCI.	No
		k. 3.11.1.c This paragraph in PQCI does not provide enough information. The specification states that "snubber assemblies may deviate from the design orientation by 2 degrees provided the resultant swing angle of the installation pipe does not exceed 5 degrees (4 degrees for hanger rods)".	Yes
		l. 3.11.1.f.4 Page 3 of Attachment 2, Figure K-2, is inconsistent with Specification M-326, Appendix K, Figure K-2. There is an additional note 2 in specification.	No
		m. 3.12.3 Table 4.1 in Attachment 7 of PQCI is not consistent with Table 4.1 of Specification C-305, Appendix C.	Yes
		n. 3.12.5 Table 4.2 of Attachment 7 to PQCI is not consistent with Table 4.2 of Specification C-305, Appendix C.	Yes
		o. PQCI states/references Appendix C, 2.9, C-305. There is no such reference.	No
		p. 3.12.11 Attachment 7, Pages 5 and 6 of PQCI, is not consistent with Page p2 of C-305.	Yes
		q. 3.12.1 This Activity Number states that the test torque values are contained in Table 4.1 of Attachment 7. This table is not consistent with the Specification C-305 (see 3.12.3 above). In addition, the specification states test torque values to be obtained from Tables 4.1, 4.1A and 4.3	Yes
*		r. 3.5.4.e Need to reflect what is stated in AWS D1.1 Code, Paragraph 8.15.1.5, "3/8 inch in any linear inch of weld and shall not exceed 3/4 inch in any 12 inch length of weld".	Yes

DLQ

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May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
*P-2.30	5	s. Need to verify under subheading "expansion anchors" no leveling nuts have been used under the base plate, Paragraph 4.20 of C-305.	Yes
P1-1.41	0	a. Activity Number 2.3c requires verification of ASME high strength bolts and does not address bolt type or material.	Yes
		b. Activity Number 3.1 does not reflect size and ratings required in Specification CP-7. No tubing material specification (SA or ASME) is addressed in CP-7 or PQCI.	Yes
		c. Activity Number 3.2 requires verification of system orientation and configuration without a reference criterion being addressed.	Yes
PF-1.110	0	a. Document Number 7220/M-18-549 is referenced as Rev 1. It is a vendor document in its third submittal and should therefore be Rev 3.	Yes
		b. Specification CP-7 requires an NCR for mismatch. Activity Number 24 does not require verification of this requirement.	Yes
		c. Fit up requirements in CP-7, Paragraph 7.10b (1-5) are not referenced in the PQCI.	Yes
PW-1.00	8	a. PQCI has no attribute for verification of distortion due to welding.	Yes
		b. PQCI does not address inspection criteria to verify compliance with 7220-M-204Q, Page 7a, Paragraph 3 (distance between welds, attachments and hangers).	Yes
P-1.01	2	a. PQCI was issued 2/13/84. Approval was not until 2/27/84.	No
		b. Page 1 of 19 does not show revision number.	No
		c. There is a page 20 of 19?	No
		d. Vendor Document Number 7220/M-18-549 is in its third submittal and should be Revision 3, not	

DLQ

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May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
P-1.01	2	d. Revision 1 as noted.	No
*P-2.11	1	a. Pages 15 and 16, Paragraph 2.4, require a 200 degree Fahrenheit minimum preheat for material over 2 inches thickness. ASME III NF 1974. Table NF 4622.3-1 and Specification G-27 PHT 500, Rev 6, Page 5, Paragraph 5.2.12, both require 200 degree Fahrenheit preheat for material over 1-1/2 inches thick.	Yes
		b. Typo - Page 6 should be Page 8.	No
E-2.1	11	a. Scope covers "Fabrication". Body of PQCI does not include "Fabrication".	Yes
*		b. PQCI addresses no hold points. Hold points for reaming to oversize, slotted or washer correction applications should be considered.	Yes
*		c. Page 18, Item 3.9, requires inspection of "added steel" but provides no inspection criteria. Also a definition of "added steel" is required.	Yes
*		d. Special Instruction Number 6 requires QCE to attach page from vendor catalog when identification is missing or not visible. Section 5.0 requires an NCR for discrepancies in accordance with MPQAD F-2M/AAPD/PSP 6.3.2.	Yes
		e. Procedure does not require inspection of joint surfaces for cleanliness and freedom from materials that would prevent adequate seating of mating surfaces.	Yes
		f. No requirement is addressed to lightly score galvanized surfaces prior to assembly.	Yes
*		g. Specification C-304 should be evaluated in respect to ASTM A325 and ASTM A490 regarding (a) reuse of bolts, (b) retorquing of bolts, (c) washer requirements for sloped surfaces, and (d) slotted holes.	Yes
		h. Quantitative terms are required for "snug tight" and "thread run out".	Yes

DLQ

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May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
P-1.90	1	a. Paragraph 3.17A references G-27ED-1 to inspect for visual damage. ED-1 addresses repair of defects, not <u>detection</u> .	No
W-1.00	8	a. Refers to Specification G-27, Rev 1. Current revision is 21.	No
*MP-1.00	4	a. Item 2.5 references no limits for bolt torquing.	Yes
		Item 2.4.3 references no limits for measurements.	Yes
		Item 2.4.2 references no limits for machined surfaces.	Yes
		b. PQCI should address cleanliness precautions when cutting into a component such as pipe, duct or vessel.	Yes
		c. PQCI should address ANSI N45.2.3 for cleanliness zone requirements.	Yes
E-40	14	a. Conflict exists between PQCI and E-4260B. PQCI refers to tie downs in horizontal trays. E-4260B refers to tie downs in vertical trays.	Yes
		b. PQCI references a formula for cable pull tension. No source for the formula is referenced and no inspection criteria for the formula is given.	Yes
C-2.10	13	a. Procedure does not reference requirements for load indicating washers or requirements for use of bolts with nonstandard washers.	Yes
E-6.0	19	a. Activity Number 2.9B requires 2/3 turn for 9 inch bolt. AISC, 7th Edition, requires 2/3 turn for 8 inch long bolt.	Yes
P2-10	2	a. Page 35, Paragraph j, should read maximum filler size.	Yes
SM-170	2	a. More accept/reject criteria should be included in the PQCI.	No

DLQ

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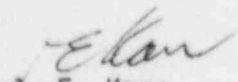
May 18, 1984

<u>PQCI No.</u>	<u>Rev</u>	<u>Observation</u>	<u>Response Required</u>
SM-170	2	b. ASME NA4460 is not addressed.	No

GENERAL

- 1) PQCI pages are numbered, QCIR pages are not. Yes
- 2) Vendor manuals are referred to as drawings (usually on Page 1, reference criteria). Yes
- 3) Specifications referenced to outdated revisions. Yes
- 4) Standards such as ANSI 45.2.6 and MPQAD Procedures B-3M-1, B-4M, and PSP-G.8.1 are referenced in the text of the PQCI but not shown as reference criteria. Yes
- *5) PQCI addressing welding should be revised to require reinspection of fit up gaps where accessible (e.g., PQCI P1-2.90 assumes all fit ups are inaccessible whereas in fact, except for piping welds, the majority of fit ups are accessible). Yes
- 6) PQCI does not provide accept/reject criteria except by reference to other documents. Yes
- *7) PQCI refer to vendor documents but should address the fact that these documents may contain special instructions or constraints. Yes
- *8) PQCI refer to vendor documents without indicating the specific documents. Yes

*Items identified with an asterisk should be evaluated for possible impact on Module 120D.


J. E. Karr
CIO Program Manager

FB:NL

cc:
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