

CONSUMERS POWER COMPANY
MIDLAND ENERGY CENTER

50-329
50-330

Transmittal No: CSC- 7322

Date: February 10, 1984

To: Stone & Webster
P O Box 1963
Midland, MI 48640

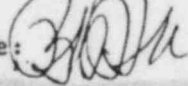
Attached Is: ☐ Partial Response To
☒ Complete Response To
☐ For Your Information
☐ Other

PRINCIPAL STAFF	
RA	DE
D/RA	DRMSP
A/RA	DRMA
RC	SCS
PAO	ML
SGA	File
ENF	

orig+3

Description:

Hold Point 015.

NIR Signature: 

cc: JGKeppler, NRC Region III w/a
JJHarrison, NRC Region III w/a
RJCook, NRC Site w/a
RAWells, MPQAD w/a
BHPeck, MEC w/a
NIREichel, MEC w/a
DDJohnson, MEC w/a

8402220202 840210
PDR ADOCK 05000329
S PDR

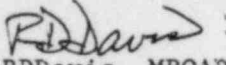
IED
FEB 15 1984

STONE & WEBSTER CONSTRUCTION IMPLEMENTATION OVERVIEW MIDLAND NUCLEAR PLANT J.O. NO. 14509		ITEM NUMBER HOLD POINT NUMBER 015	
		<input type="checkbox"/> TRACKED ACTION ITEM	
		<input type="checkbox"/> TRACKED INFORMATION ITEM	
		<input type="checkbox"/> TRACKED RECOMMENDATION ITEM	
		<input type="checkbox"/> UNTRACKED ITEM	
REFERENCE(S) PQCI PW-1.00 Revision 6		<input checked="" type="checkbox"/> HOLD POINT NOTIFICATION	
CONDITION DETAILS <p>Change Notice #AA-00004 to PQCI-1.00 deleted the requirements for the exclusive use of chromel-alumel thermocouples and extension wires for post weld heat treatment and also certification of the accuracy (calibration) of the thermocouples by means of a certificate of compliance.</p> <p>Stone & Webster's concern is that only having verification of calibration of temperature controlling, indicating and recording instruments is inadequate because it neglects the sensing device. If the temperature sensor (thermocouple and extension wire) is incorrect or out of calibration, the entire temperature control and monitoring system will all be incorrect.</p> <p>(Continued on Sheet 2 of 2)</p>			
		<input type="checkbox"/> YES (PAGE NO.'S) <input checked="" type="checkbox"/> NO	
ATTACHMENTS			
DATE RESPONSE REQ'D. Feb. 10, 1984	INITIATOR/DATE <i>Albert A. Smith Feb. 1, 1984</i>	INITIATION APPROVED/DATE <i>J. E. Lan</i>	
RESPONSE <p>Attached correspondence RDDavis to NIREichel dated 2/10/84 and letter Serial No 28346 dated 2/9/84 provide our complete response to this item.</p>			
		<input type="checkbox"/> YES (PAGE NO.'S) <input type="checkbox"/> NO	
ATTACHMENTS			
EST. CORRECTIVE ACTION COMPLETION DATE NA	RESPONDENT <i>[Signature]</i>	TITLE <i>Const. Supt.</i>	DATE <i>2/10/84</i>
RESPONSE ACCEPTED	DATE	RESPONSE VERIFIED/CLOSED	DATE

Since post weld heat treatment is used when there is a transition from stainless steel pipe to carbon steel pipe, as in the case of the steam generator pipe to steam turbine pipe, it is important that these critical welds be heat-treated properly.

For this reason, in meetings with MPQAD, SWEC has requested that the requirements be reinstated into PQCI PW-1.00 and is issuing the following "Hold Point" notification on the use of thermocouples and thermocouple extension wire. Release is contingent upon CIO review and acceptance of the calibration certification.

To NReichel, SMO

FROM 
RDDavis, MPQAD

DATE February 10, 1984

SUBJECT MIDLAND ENERGY CENTER PROJECT -
MPQAD INPUT FOR RESPONSE TO S & W
HOLD POINT 015

CC GEParker
DSPreslar

**Consumers
Power
Company**

INTERNAL
CORRESPONDENCE

Attached for your use is MPQADs input to aid you in responding to Stone & Webster (CIO) Hold Point #015.

Please call me on extension 6051, if I can be of further assistance.

RDD/111

Attachment

MPQADS PLANNED ACTIONS REGARDING THERMOCOUPLES

1. The attached letter of direction to Bechtel explains how we will resolve S&Ws written concerns (we will reinstate the subject inspection characteristics).
2. The attached letter also explains those actions that Bechtel must take to make thermocouples truly traceable to Certificates of Compliance.
3. MPQAD does not plan to require periodic calibration of the new thermocouples at this time. Points of rationale include:
 - A. Our limited testing to resolve a related NCR indicates that of eleven (11) existing thermocouples that were tested, only one (1) was found out of tolerance. The allowed tolerance at the failed checkpoint (1200°F) was 9°F. The thermocouple indicated reading varied 9.5°F. This deviation, compared to the post-weld heat treatment allowable temperature range of 1100-1250°F, is insignificant.
 - B. The PWHT procedure requires that an array of thermocouples be used for most applications. A thermocouple undergoing significant drift would be evidenced by comparison with signals recorded on other channels.



**Consumers
Power
Company**

Midland Project: PO Box 1963, Midland, MI 48640 • (517) 631-8650

February 9, 1984

Mr G A Hierzer
Bechtel Power Corp.
PO Box 2167
Midland, Michigan 48640

MIDLAND ENERGY CENTER - CONTROL OF POST-WELD TREATMENT THERMOCOUPLES
FILE: 16.0 SERIAL: 28346

Reference: MPQAD NCR M01-9-3-286

The referenced NCR raised concerns regarding the traceability and calibration requirements of thermocouples used for Q-listed Post-Weld Heat Treatment (PWHT) temperature measurement. Bechtel Specification G-27 (PHT-501) requires that thermocouples and thermocouple lead wires be purchased with Certificates of Compliance. As implemented at the Midland Energy Center, the items are received with C of C's, but after issuance are not traceable to the C of C's.

To resolve the concerns of the NCR, MPQAD intends to reinstate the following inspection characteristics in PQCI PW-1.00:

1. Verify that only Chromel-Alumel thermocouples and thermocouple wires are used.
2. Verify that thermocouples/wires are traceable to a Certificate of Compliance, that the C of C certifies the items to be Chromel-Alumel and accurate within ± 0.75 percent through the range of 530°F to 2300°F. Record identification numbers on the IR.

These inspection characteristics will not be implementable with the controls now in place for existing thermocouples and thermocouple lead wires.

MPQAD therefore directs that within the Bechtel scope of work at the Midland Energy Center, the use of all existing PWHT thermocouples and thermocouple lead wires shall be limited to non-Q activities (effective upon receipt of this letter).

Prior to any future Q-listed PWHT activity, the following steps shall be completed:

1. Purchase new thermocouples and thermocouple lead wires, uniquely serialized (by manufacturer or upon receipt) to allow traceability to the accompanying Certificates of Compliance.
2. Provide a mechanism for QC Engineers to review C of C's during future PWHT inspection activities
3. Revise applicable Field Procedures/Specifications, if necessary.

Please contact R D Davis at extension 839-6051 with any questions regarding this letter.

Thank you for your cooperation. Your acknowledgement, with estimated action completion dates, is requested by February 23, 1984.

RDDavis

RDDavis, NDE Supervisor
Welding Assurance Engineering Group
Midland Project QA Department

RDDavis FOR

DSPreslar, Section Head
Assurance Engineering Services
Midland Project QA Department

GEP/RDD/kjb

CC JABauer, Midland
WRBird, P-14-418A
JEBrunner, M-1079
RBCameron, Midland
JWCok, P-26-336B
BTFoote, Bechtel-Midland
MMHanbury, Midland
LJessmore, Midland
ODLanham, Midland
HPLeonard

BWMarguglio/DJones, JSC-220A
BMPalmer, Midland
GEParker, Midland
DTPerry, Midland
DLQuamme/BHPeck, Midland
RCSember, Midland
DATaggert, Midland
JEWarmouth, Midland
RAWells, Midland
JLWood, Midland

DATE 2-2-84
J. O. NO. 14509
P. O. NO. N/A
LTR. NO. SWOC-84-022
REF. N/A

CC HP
Have someone brief me on this before Thursday 2/9.
TKS
FEB 03 1984

Loy 7/3

DEAR SIR:

THE FOLLOWING ARE ☒ ATTACHED: ☐ SENT SEPARATELY:

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

TO D. L. QUAMME, CPCo Midland (site)

STATUS		PLEASE NOTE	SENT FOR YOUR
<input type="checkbox"/> FINAL	<input type="checkbox"/> APPROVED	<input type="checkbox"/> REVISIONS	<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"/> USE <input type="checkbox"/> INFORMATION
<input type="checkbox"/> NO COMMENT	<input type="checkbox"/> UNACCEPTABLE	<input type="checkbox"/> COMMENTS	<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: ☐ FABRICATION ☐ PURCHASE OF NECESSARY MATERIALS

☐ PLEASE REVISE AND SUBMIT _____ PRINTS _____ REPRODUCIBLES _____ MICROFILM APERTURE CARDS.

☐ PLEASE SUBMIT _____ PRINTS _____ REPRODUCIBLES _____ MICROFILM APERTURE CARDS OF ☐ DOCUMENTS ☐ DRAWINGS ☐ SHOP DATA

☐ PLEASE RETURN ONE COPY EACH OF THIS MATERIAL, BEARING YOUR APPROVAL OR COMMENTS.

☐ PLEASE ACKNOWLEDGE RECEIPT OF THIS MATERIAL BY SIGNING AND RETURNING THE ENCLOSED COPY OF THIS FORM.

☐ 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 AND 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:

HOLD POINT 015

cc: JGKeppler, US NRC
JJHarrison, US NRC
RJCook, US NRC
RAWells, CPCo
CIO Site File

CONSUMERS POWER COMPANY

RECEIVED
FEB 07 1984

HP LEONARD

J. E. Karr
CIO Program Manager