

Weekly Report No. 34

May 8, 1983 through May 14, 1983

Personnel on Site

Stone & Webster Michigan, Inc.

S. Lucks	5/11 - 5/13
W. Kilker	5/9 - 5/14
P. Barry	5/12 - 5/14
A. Scott	5/9 - 5/14
B. Holsinger	5/12 - 5/14

Parsons, Brinckerhoff Michigan, Inc.

W. Parish	5/10 - 5/13
L. Silano	5/11

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
5/9 through 5/13	Stone & Webster Bechtel Consumers Power Parsons 5/11 - 5/12	Daily Meetings
5/10	Stone & Webster Bechtel Consumers Power	Discuss Method Of Determining The Extent Of Work Impacted by Issuance Of A Non- Conformance Report
5/11 & 5/12	Stone & Webster Bechtel Consumers Power Parsons NRC	Discussions Of Pier Load Test Data
5/13	Stone & Webster Consumers Power NRC	Discuss Work Package Review Of Grillage Beam Installation And General Concept Of Work Package Overview

Activities

Construction -

Pier E11: Non-routine rejackng was performed in order to replace a driven wedge.

KC11 Drift: There was limited progress on the advancement or completion of this drift. The Contractor is considering eliminating or modifying drift sets and a reshore member since the entire face excavation is in concrete. Work is halted pending the processing of the change request.

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Pier E8: The work was limited to the installation of 3 ring lagging sets between approximate El. 570 & 574. Further work was delayed pending the fabrication of the bell support steel.

Pier E10: The pier excavation and lagging was completed to approximate El. 575. The excavated material was mainly clay fill to approximate El. 586 underlain by the natural clay till. Seepage into the excavation was very minor except during a temporary shut down of the pier E12 access pit sump pump on May 13. Once corrected, the pier seepage was quickly reduced.

KC2 Drift: The finger drift to the pier was excavated approximately 3 ft. The excavated face consisted of unreinforced concrete with an interbedded layer of soil fill. The advance of the drift was halted pending the resolution of the proposed slope layback change.

Pier W8: The pier excavation and lagging advanced from near El. 587 to El. 576 in the natural clay till. Minor groundwater seepage continued to enter the excavation from near the fill clay interface. Work on this pier was halted pending the fabrication of the ring sets and bell bracing steel.

Pier W10: The pier was excavated and lagged to approximate El. 580. During the excavation of the fill material near El. 590 a void developed behind the pier W10 lagging between piers W10 and W11. The distance between piers W10 & W11 is 20 inches. Apparently a local zone of perched groundwater transported some of the granular soil fill into the pier excavation resulting in a void of approximately one cubic yard. The work was halted and the void zone was prepared and grouted. Since the grouting of a substantial number of the lagging spaces, groundwater seepage has been minor.

West Access Pit: A small area of the layback west of pier W10 sloughed probably due to rain water draining from the FIVP temporary shelter slough zone.

SWPS: Two (2) piezometer wells (LS6 & LS12) and two (2) dewatering wells (567 & 576) were completed and two (2) dewatering wells (555 & 561) were started.

Quality Control, Documentation and Records:

1. Reviewed Non-Conformance Reports issued against drift sets in place.
2. Started a review of Non-Conformance Reports for potential trends and what action has been taken by the Contractor to solve any generic problems.

Observations

Construction - Construction activities were limited by a number of factors that affected various segments of the work. At the start of the week the work was halted for nearly one day in order to resolve concerns over Non-Conformance Reports issued on temporary drift supports. Later in the week progress on the KC2 and KC11 drifts was stopped pending resolution of change requests and the slope laybacks. Advancement on piers E/W8 was curtail by the lack of sufficient approved bell bracing to complete the piers. The Contractor demonstrated proper regard that the work be done in a procedurally correct manner. Bell excavations were not started awaiting the release of all bell bracing. This approach limits the exposure of the structure to risks associated with excavating the bell area. However, the Assessment Team's on-going concern over the lack of availability of approved materials and the timely resolution of Non-Conformance Reports and change requests continues. These concerns are currently being addressed by the Owner and the Contractor.

Quality Control, Documentation and Records - In Weekly Report No. 33 the Assessment Team expressed concerns over the issuance of QC hold-tags on parts of the underpinning temporary support system that had already been put in-service. Meetings have been held between the Contractor and MPQAD to resolve this issue. It is imperative that (1) the programmatic requirements for dispositioning any such NCR's be fully understood and agreed upon by all of the groups within the Organization and (2) the NCR disposition cycle be streamlined to minimize delays in the underpinning work.

Design Work Packages - The Assessment Team performed an overview of the design work packages relating to (1) the replacement of an existing fireline near the SWPS, (2) the installation of piers E/W 13/14 and the excavation of soil zones beneath the existing structures and the access shaft to El. 600, (3) the SWPS soldier beam installation and (4) a duct bank exposure near the auxiliary building. Questions raised by the Assessment Team are in the process of being resolved. The Assessment Team discussed the design package overview methodology with the NRC representative. It was agreed the present overview approach fulfills the intent of the NRC request on work package overview.

Non-Conformance Identification Reports

Status of previous issues: (NIR numbers no longer listed have been closed-out.)

<u>NIR No.</u>	<u>Description</u>	(Opened) <u>Date</u> (Closed)
5	Concrete Mix Qualification	2/10/83
6	Lagging Spacers	3/21/83
7	Backpacking Material in Wet areas-Pier W11	4/5/83
8	Load Transfer Methodology - Pier E12	4/5/83
9	Release of Pier W9 for Load Transfer	4/13/83
10	Verification of Vibrator Frequency	4/21/83

W.E. Kilker
Project Engineer

G.S. Lucks
Project Manager

DAILY INDEPENDENT ASSESSMENT TEAM MEETING

Date May 9, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	E. Cvikl	W. Kilker	-----	G. Murray
	J. Gaydos			
	J. Fisher			
	D. Lavelle			
	M. Blendy			

1. J. Fisher explained that the field work will likely be terminated until there is a clarification or understanding on the status of the effect of issuing NCRs on a particular item and the impact on subsequent work. At the present time, there are numerous hold-tags in the drift and pier excavations that have not been dispositioned. MPQAD, Field Engineering and Resident Engineering will convene to resolve the issue.
2. J. Fisher reported the approval for the drawing restraining the fabrication of piers E/W8 ring beams and bell bracing has been obtained and fabrication began on May 8.
3. W. Kilker stated the Assessment Team continues to have concerns over the time required to disposition of NCRs - particularly those associated the temporary support system details. The various project organizations must streamline the NCR issuance/disposition cycle in order to avoid the repeated delays that continue to plague the work. In addition, the Team feels there are areas, again relating in particular to the temporary support system, where Engineering clarification or definition of allowable tolerances could provide an improved framework within which MPQAD can perform their inspections.
4. W. Kilker reported that to-date the backpacking quality on pier W8 lagging is good and that the inspection has been facilitated by the increased lagging spacer size.
5. J. Gaydos said that FSO is withdrawing the proposed concrete vibrator frequency verification procedure. QC will perform this verification by incorporating the requirement in the proper procedure.
6. E. Cvikl reported that in order to evaluate the Team question on the thickness of the lower bearing plate unit, during the rejack of pier W11 special attention was given to the jack #4 and lower bearing installation. Engineering concluded that the greater thickness is the result of the original condition and not related to the application of the load.

DAILY INDEPENDENT ASSESSMENT TEAM MEETING

Date: May 10, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	J. Gaydos	A. Scott	R. Sevo	G. Murray

1. J. Gaydos and R. Sevo stated that resolution of QAR on vibrator frequency verification will be closed.
2. J. Gaydos advised that J. Fisher is addressing problem of time required to process NCRs.

DAILY INDEPENDENT ASSESSMENT TEAM MEETING

May 11, 1983

Attendees:

Bechtel

J. Gaydos

Stone/Webster

A. Scott

A. Lucks

MPQAD

R. Sevo

CPCo

Parsons

P. Parish

1. The Administrative Guideline on Construction Aid Procedure is in the process of final sign-out.
2. The QAR on the concrete vibrator frequency verification has been completed.

DAILY INDEPENDENT ASSESSMENT TEAM MEETING

Date: May 12, 1983

Attendees:

Bechtel

J. Gaydos
M. Blendy
J. Fisher
D. Lavelle
E. Cvikl

Stone/Webster

A. Scott
S. Lucks
W. Kilker

MPQAD

R. Sevo

CPCo

Parsons

P. Parish

1. D. Lavelle reported that the guideline on Construction Aids was signed out by FSO.
2. J. Fisher reported that FSO and Engineering have assigned individuals to process NCRs to expedite the disposition process.
3. A. Scott questioned why the work was stopped on pier E10 near the end of the night shift when concrete was encountered near El. 590. J. Fisher explained that the issue should have been resolved by contacting FSO to investigate the nature of the concrete and then issue a drill permit.
4. W. Kilker questioned if the elimination of drift sets has been considered in areas where the drift sets are entirely in concrete. J. Fisher replied that on KC11 the final sets will likely be eliminated after a change request is processed.
5. J. Gaydos reported that the concrete testing on the mud-mat pours will be streamlined once a change request is approved.
6. J. Fisher reported that on pier W10 a void had developed overnight behind the lagging between 6 ft. and 12 ft. below the surface. Granular fill moved into the excavation along with perched groundwater. The size of the void was limited by the relatively small extent of granular fill. The Subcontractor is in the process of pumping the water out and preparing the pier for grouting the void space.

DAILY INDEPENDENT ASSESSMENT TEAM MEETING

Date May 13, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	J. Gaydos	A. Scott	R. Sevo	G. Murray
	J. Fisher	W. Kilker		
	D. Lavelle			
	E. Cvikl			

1. J. Fisher and D. Lavelle said the organization is continuing the effects to expedite the conditional release process where applicable.
2. J. Fisher advised that the void that developed at pier W10 has been grouted.
3. There was a general discussion of how the implementation of the proposed change to eliminate the slope lay-backs will be initiated.
4. J. Fisher reported that the pier KC2 drift has been shut down pending the resolution of the slope lay-back issue. KC drift is awaiting the resolution of an FCR on re-shoring.
5. Pier W8 will not advance until ring sets are ready. Projected date is May 16.



STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, BOSTON, MASSACHUSETTS 02107

United States Nuclear Regulatory Commission
Midland Site Resident Inspection Office
Route 7
Midland, MI 48640

May 18, 1983

J.O. No. 14358
Ref. MPF 34

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330
MIDLAND PLANT - UNITS 1 and 2
INDEPENDENT ASSESSMENT OF UNDERPINNING
REPORT NO. 34

A copy of the Independent Assessment of the Underpinning Weekly Report No. 34 for the period May 8, 1983 through May 14, 1983, is enclosed with this letter. Included as attachments, are the minutes of the daily meetings held during the week between members of the Assessment Team and Site Engineering, Construction, and Quality Assurance personnel. In the Meetings attended portion of Weekly Report No. 32 the reference to a meeting with an NRC consultant is in error. The reference should have been to a meeting with the Contractor's Consultant.

If you have any questions with respect to this report, please contact me at (617) 589-2067).

Very truly yours,

A. Stanley Lucks
Project Manager

Enclosures

ASL/ka