

# STONE & WEBSTER ENGINEERING CORPORATION

245 SUMMER STREET, BOSTON, MASSACHUSETTS

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

November 23, 1985<sup>2</sup>

J.O. No. 14358  
Ref. MPF 9

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330  
MIDLAND PLANT - UNITS 1 AND 2  
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING UNDERPINNING  
REPORT NO. 9

A copy of the Independent Assessment of the Auxiliary Building Underpinning; Weekly Report No. 9 for the period November 14 through November 20, 1982, is enclosed with this letter. Included, as an attachment, are the minutes of the daily meetings held between members of the Assessment Team and Site Engineering, Construction and Quality Assurance personnel during the week.

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

*A. Stanley Lucks*  
A. Stanley Lucks  
Project Manager

Enclosures

ASL/nb

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J.O. No. 14358  
Midland Plant  
Units 1 and 2  
Independent Assessment  
Auxiliary Building Underpinning

Weekly Report No. 9

November 14 through November 20, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

A.B. Scott	11/15 - 11/19
W.E. Kilker	11/15 - 11/19
L. Rouen	11/15 - 11/19

Parsons Brinckerhoff Quade & Douglas

J. Ratner	11/15 - 11/17
V. Madill	11/15 - 11/19

Activities

Team members continued monitoring the results of test mix designs for mudmat concrete. A surveillance was made of the performance of the slump testing, fabrication and testing of the concrete cylinders. The review was conducted of the implementation of the MPQAD Procedure on Qualification and Certification of Inspection Test Personnel.

A QC training session for general welding was attended.

A CPCo Quality Assurance performed an audit of SWEC compliance with the CPCo Specification CC-100.

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
11/15 through 11/19	Stone & Webster Parsons, Brinckerhoff Quade & Douglas Consumers Power Bechtel	Daily Meeting
11/16	Stone & Webster Consumers Power Bechtel	Update on Quality Control Recertification
11/17	Parsons, Brinckerhoff Quade & Douglas	ASLB Soils Hearings (Midland Co. Court House)
11/19	Stone & Webster Consumers Power Bechtel Mergentime	Weekly Soils Review Meeting

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Observations

The surveillance of the concrete testing indicated that testing was being performed in accordance with the respective ASTM procedures. The review of certification activity indicated the procedure was being properly implemented.

The CPCo audit of SWEC implementation of the CPCo specification for an independent assessment resulted in one finding on cataloging of project documents. The Project Procedure 7-2 will be revised based upon this finding.

Non-Conformance Identification Reports

No New Issues.

Status of previous issues:

<u>NIR No.</u>	<u>Date</u>	<u>Status</u>
1	10/21/82	Open
2	10/29/82	Open

W.E. Kilmer  
Project Engineer

A.S. Lucks  
Project Manager

J.O. No.. 14358  
Midland Plant  
Units 1 and 2  
Independent Assessment  
Auxiliary Building Underpinning

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 15, 1982

Attendees:

<u>SWEC</u>	<u>Bechtel</u>	<u>CPCo</u>	<u>MPQAD</u>
A.B. Scott	C. Cvikl	G. Murray	B. Sevo
W. Kilker	J. Fisher		
	D. Lavelle		
	R. Weight		

1. J. Fisher introduced D. Lovelle, Field Soils Manager, and R. Weight, direct hire supervisor on soils remedial work.
2. J. Fisher described to new personnel the role of Assessment Team to date.
3. Meeting today at 10 A.M. on QC re-certification, being chaired by A. Boos.
4. J. Fisher gave E. Cvikl copies of Assessment Team questions on Soil Stabilization. J. Fisher will provide answers to be forwarded to P. Parish, originator of discussion items on soil stabilization.
5. Bob Sevo said CPCo feels welding will have to be qualified by the 1980 AWS D 1.3 standard for the soils remedial work. This requirement will apply to the 12 gage lagging. Discussion with Bechtel Engineering will ensue.
6. Question by A. Scott on receiving materials without certified QC inspectors. B. Sevo and J. Fisher replied that Bechtel QC people not associated with Soils Remedial presently receive the materials but that no material can be turned-over to subcontractor until re-certification is accepted.
7. Testing of concrete mixes for mudmats continues. Goal is to obtain a 300 psi strength in 3-4 hours. Engineering and field to resolve the issue if this requirement is not workable.
8. Assessment team comment items still open (exclusive of the soil stabilization comments) are those that will produce a procedure (3 items) or specification (4 items) change.
9. G. Murray said CPCo feels re-certification is the only restraint on work release. Issues of QA records and EPA settlement appear near resolution.

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INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 16, 1982

Attendees:

<u>SWEC</u>	<u>PBQD</u>	<u>Bechtel</u>	<u>CPCo</u>	<u>MPQAD</u>
A. Scott	J. Ratner	J. Fisher	G. Murray	R. Sevo
W. Kilker	V. Madill	E. Cvikl		
L. Rouen		D. Levelle		
		R. Weight		

1. J. Fisher stated the intent is to start the Auxiliary Building Underpinning with one 10 hour shift on 11/22/82. No work would be done 11/25 through 11/28. One shift schedule will continue until QC can support 2 shifts, probably the first part of December.
2. N. Swanberg is pursuing effect implementation of 1980 AWS code on lagging welding.
3. Some lagging materials are presently on hold that need release prior to use. B. Sevo will resolve.
4. Daily meeting time will change once the actual underpinning work commences.

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Midland Plant  
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Independent Assessment  
Auxiliary Building Underpinning

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 17, 1982

Attendees:

<u>SWEC</u>	<u>PBQD</u>	<u>CPCo</u>	<u>Bechtel</u>	<u>MPQAD</u>
A. Scott	J. Ratner	R. Wieland	J. Fisher	R. Sevo
W. Kilker	V. Medill		E. Cvikl	
L. Rouen			D. Lavelle	

1. J. Fisher stated that Field Engineering is still planning on a 11/22/82 start. Materials will be brought to the access shaft locations this week so actual work can start Monday-pending receipt of written MRC approval.
2. B. Sevo said MPQAD is completing close-out on release of lagging that had previously been tagged. Coupons and welding have been tested and approved.
3. Once construction commences the new daily meeting time will be 9:30 AM.
4. Any construction procedure modifications being made now will not offset the start of construction according to J. Fisher.
5. E. Cvikl is checking with consultants as to:
  - A. Which ones and
  - B. How they want to review Field Change Requests (FCR) to specification.

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Midland Plant  
Units 1 and 2  
Independent Assessment  
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INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 18, 1982

Attendees:

<u>SWEC</u>	<u>FBQD</u>	<u>Bechtel</u>	<u>CPCo</u>	<u>MPQAD</u>
A. Scott	V. Madill	J. Fisher	R. Wieland	R. Sevo
W. Kilker		E. Cvikl		
L. Rouen				

1. Lagging hold issue should be closed out by the end of this week.
2. Welding issue still pending. Lagging and drift sets can apparently be welded by 1972 or 1974 code. Project Engineering is presently holding these drawings but will likely release them now that they have been checked out.
3. Tuesday, November 23, a mock-up of a bell pier will be constructed and concreted to assess flow of concrete into corners through rebar without vibration.

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 19, 1982

Attendees:

SWEC

SWEC

FBQD

CPCo

Bechtel

MPQAD

A. Scott

V. Madill

R. Weiland

E. Cvikl

R. Sevo

W. Kilker

L. Rouen

1. E. Cvikl confirmed that consultants receive copies of the specification documents once they are revised and signed-out.
2. The underpinning work will not start on Monday 11/22/82.
3. Discussion on status of settlement monitoring.
4. Mock-up of bell still scheduled to be completed on 11/23/82. Assessment Team will observe placement of concrete.



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

November 29, 1982

J.O. No. 14358  
Ref. MPF 10

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330  
MIDLAND PLANT - UNITS 1 AND 2  
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING UNDERPINNING  
REPORT NO. 10

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A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 10 for the period November 21 through November 27, 1982, is enclosed with this letter. Included, as an attachment, are the minutes of the daily meetings held between members of the Assessment Team and Site Engineering, Construction and Quality Assurance personnel during the week.

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

*A. Stanley Lucks*

A. Stanley Lucks  
Project Manager

Enclosures

ASL/nb

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J.O. No. 14358  
Midland Plant  
Units 1 and 2  
Independent Assessment  
Auxiliary Building Underpinning

Weekly Report No. 10

November 21 through November 27, 1982

Personnel on Site

A.B. Scott

11/22 - 11/23

Activities

Observed the performance of concrete placement at the mock-up pier bell simulation within the Poseyville Storage Yard. The intent of the concrete placement in the pier bell mock-up was to demonstrate the effectiveness of flow of the concrete to all portions of the bell and the consolidation of the concrete without use of vibration.

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
11/22 and 11/23	Stone & Webster Bechtel Consumers Power	Daily Meeting
11/22	Bechtel Consumers Power Stone & Webster	Update on items requiring resolution to start of construction - Specifications Procedures, PQCI's, QC training

Observations

Our observations indicated that the flow of concrete in the pier bell was not hindered by the presents of reinforcing steel. On November 27, 1982, the forms will be removed in order to assess the degree of consolidation.

Non-Conformance Identification Report

No new issues.

Status of previous issues:

<u>NIR NO.</u>	<u>Date</u>	<u>Status</u>
1	10/21/82	Open
2	10/29/82	Open

*W.E. Kilbuck* Project Engineer  
*A.S. Jucks Jr.* Project Manager

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 22, 1982

Attendees:

<u>SWEC</u>	<u>Bechtel</u>	<u>CPCo</u>	<u>MPQAD</u>
A.B. Scott	J. Fisher E. Cvikl R. Weight	R. Weiland	R. Sevo

1. J. Fisher directed E. Cvikl to have a meeting with J. Meisenheimer of QA to discuss the impact on the QC program if there were any minor changes to design documents.
2. R. Sevo was to provide answer on the hold now on lagging due to the Photon Lab issue. Hold tags were to be removed this date per R. Sevo.
3. RE: Weld code year. E. Cvikl was to contact Project Engineering to issue a SCN to limit the welding to fillet welds on the steel lagging.
4. A concrete placement was scheduled for November 23, 1982, to demonstrate the pouring of a pier bell without vibration.
5. A meeting was scheduled at 10:00 AM today to review all items that were outstanding and required per directives given to CPCo by the NRC prior to start of work for piers E/W 12, (and to schedule completion dates).

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: November 23, 1982

Attendees:

SWEC

BECHTEL

CPCO

MPQAD

A.B. Scott

E. Cvikl

R. Weiland

R. Sevo

1. E. Cvikl reported that the meeting with J. Meisenheimer of QA concerning minor changes to design documents had not taken place.
2. R. Sevo reported all hold tags (due to Phantom issue) had been removed from steel lagging.
3. Mock-up of pier bell concrete placement was to be made at 12 noon.
4. It was reported that all outstanding items required for pier E/W 12 construction were listed and responsible parties were to provide completion dates by November 24, 1982.