

STONE & WEBSTER ENGINEERING CORPORATION



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

January 11, 1983

J.O. NO. 14358
Ref. MFP 16

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330
Midland Plant - UNITS 1 and 2
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING UNDERPINNING
REPORT NO. 16

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 16 for the period January 2, 1983 through January 8, 1983, is enclosed with this letter. Included, as an attachment, 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.

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

JAN 17 1983

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Midland Plant
Units 1 and 2
Independent Assessment
Auxiliary Building Underpinning

Weekly Report No. 16

January 2, 1983 through January 8, 1983

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W. Kilker	1/5 - 1/8
L. Rouen	1/4 - 1/8
A. Scott	1/3 - 1/8

Parsons, Brinckerhoff, Quade and Douglas (PBQD)

J. Ratner	1/3 - 1/8
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Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
1/4 through 1/8	Stone & Webster Bechtel Consumers Power Parsons	Daily Meetings

Activities

Construction - Excavation and lagging of the 3 ft. x 6 ft. pier W12 was advanced approximately 5 ft. to El 595. The excavated material consisted of a mixture of sandy clay and fine sand fill. No groundwater was encountered. Five sets of metal lagging were installed including 2 sets of spreader lagging.

The pier E12 access drift was advanced to an average distance of 5 ft. under the turbine building. The face excavation was mainly in lean concrete with a wedge of soil in the lower right quadrant. The second steel set location was modified slightly to avoid interference between a tank sump foundation wall reinforcement bar and an anchor bolt. Very minor perched groundwater seepage continued to enter the access pit sump area.

Quality Control, Documentation and Records-

1. Witnessed the performance of the QC welding inspection for the bracing channel in the pier W12 drift. Reviewed the associated documentation.
2. Conferred with CPCo on the purpose and use of the computerized Soils Commitment Punchlist. The list is a tool used to assure all commitments to the NRC are tabulated, responsibility assigned, and items closed out as accomplished.
3. Tracked the progress of an observation by MPQAD of an inadequacy noted in the subcontractors procedure on welding.
4. Verified the issuing and use of concrete drill permits for pier E12 lean concrete removal and anchor bolting.
5. Verified the QC inspection of torquing the bolts on a spreader set of lagging.

Observations

Construction - The Team found the construction practice employed to advance the respective pier and drift excavation to be satisfactory with the exception of backpacking a portion of the lagging on the west side of the E12 access drift between the first and second steel set. In this area void spaces of $\frac{1}{2}$ "-1" were encountered behind the lagging. However, the lagging was subsequently removed in order to reset the second steel set. After replacement, the backpacking was judged to be satisfactory. In general, the methods of excavating and lagging installation have been acceptable and in accordance with good industry practice.

Quality Control, Documentation and Records - The Quality Control methods surveyed were in accordance with the project procedures as were the issuance and use of the drill permits.

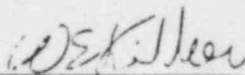
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Non-Conformance Identification Reports

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

<u>NIR No.</u>	<u>Description</u>	<u>Date</u>	
		(Opened)	(Closed)
3	Coupler Testing Temperature	12/2/82	
4	Welding Qualifi- cation Procedure	12/29/82	


Project Engineer


Project Manager

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: January 3, 1983

No meeting was held on this date.

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: January 4, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	J. Fisher	A. Scott	None	None
	E. Cvikl			

Parsons

J. Ratner

1. List of shop drawings requiring Project Engineering approval as outlined in Item 1 of the December 30, 1982 Assessment Teams Meeting Notes. The forecast date was moved from January 3, 1983 to January 5, 1983.
2. Requested by J. Fisher to ask P. Parish if the comments on "Soil Stabilization" are still valid.
3. A. Scott asked if a concrete "mud-mat" for Pier W12 access shaft would be placed where lean concrete fill had been removed.

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: January 5, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	J. Fisher	A. Scott	L. Kettren	G. Murray
	E. Cvikl	L. Rouen		
		<u>Parsons</u>		
		J. Ratner		

1. A. Scott requested that Bechtel review the Coordination of "Hold" on the drawings regarding the access to piers 13 and 14 (East and West), from pier 12 access (East and West.) Drawing 1430 Rev. 3, shows a "Hold" in this area. Drawing 1427-4 does not indicate a "Hold" in the same area. J. Fisher stated he would look into this matter.
2. A. Scott requested that the Team be on the Uncontrolled Distribution List of design drawings. J. Fisher stated that he would put them on the Distribution List. J. Fisher requested that the Team update the list by use of the Bechtel Control Drawing.
3. J. Ratner stated he talked with P. Parish. The comments on MCP 28.000 are still valid.

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: January 6, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	R. Bradford	A. Scott L. Rouen W. Kilker	L. Kettren	G. Murray

1. General discussion on aspects of pier W12 construction that have caused delays or problems (permits, drawing modification, inspection, etc.)
2. MPQAD will present update on QC training schedule at weekly soils meeting.

INDEPENDENT ASSESSMENT TEAM MEETING WITH BECHTEL

Date: January 7, 1983

Attendees:	<u>Bechtel</u>	<u>Stone/Webster</u>	<u>MPQAD</u>	<u>CPCo</u>
	F. Cvikl	W. Kilker	L. Kettren	G. Murray
	J. Fisher	A. Scott		
		J. Ratner		
		L. Rouen		

1. W. Kilker asked for verification of independent survey in W12 drift prior to initiating excavation of the pier. J. Fisher confirmed the survey had been completed.
2. J. Fisher requested that the subcontractor and Quality groups submit any comments as a result of work performed to date for incorporation into future revisions.
3. J. Fisher presented answers to Assessment Team questions on "Soil Stabilization, "MCP 28.000. J. Ratner will forward to P. Parish for verification of adequacy of responses.