DMB

PRINCIPAL STAFF

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STONE & WEBSTER MICHIGAN, INC.

P.O. Box 2325, Boston, Massachusetts 02107

United States Nuclear Regulatory Commission
Midland Site Resident Office
Route 7,
Midland, Michigan

June 14, 1984

J.O. No. 14358
Ref. MPF 90

Attention: Mr. B. L. Burgess

DOCKET NO. 50-339/330
MIDLAND PLANT UNITS 1 & 2
INDEPENDENT ASSESSMENT OF UNDERPINNING
REPORT NO. 90

A copy of the Independent Assessment of Underpinning Weekly Report No. 90 for the period of June 3, 1984 through June 9, 1984 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.

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

A. Stanley Lucks

A. Stanley Lucks
ASL/pd

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J.O. No. 14358
Midland Plant
Units 1 & 2
Independent Assessment of Underpinning

Weekly Report No. 90

June 3, 1984 through June 9, 1984

Personnel on Site

Stone & Webster Michigan, Inc.

P. Majeski	6/7 - 6/9
D. Bervie	6/4 - 6/9
D. Zito	6/4 - 6/8
W. Kilker	6/3 - 6/5
L. Rouen	6/3 - 6/5

Parsons Brinckerhoff Michigan, Inc.

J. Oliveira	6/6 - 6/9
B. Metros	6/3 - 6/5

Meetings Attended

Date	Represented	Purpose
5/29 - 6/1	Stone & Webster Bechtel Consumers Power Parsons	Daily Assessment Team Meeting

Underpinning and Remedial Soils - Construction

E/W5 Grillages: Installation of the leveling and bearing plate assemblies for the three jack locations at each grillage was completed. Fitup and welding of cross bracing is in progress.

Pier Kc8: Concrete placement for the pier was completed.

Pier E17: Extension of the drift to permit enlargement of the pier is in progress.

Piers CT 3/10: Placement of the pier shaft concrete was completed.

Pier Kc5: Installation of the jacks and jackstands was completed.

Pier W17: No further activity was performed pending fabrication of lagging materials to support the enlarged shaft.

East/West Access Shafts: Excavation of zones Y/Z3 (to El. 591.5) was completed.

SWPS: Installation of the upper level wales continued on the north and west side. Excavation of the east access shaft was completed. The lower wale installation in the east access shaft began.

BWST: Reinforcing steel, formwork installation and concrete placement continued.

Cathodic Protection: Trench excavation and backfilling work continued.

Assessment Team Observations - Construction

Installation of the E/W 5 grillage beams and the associated hardware continued this week. The Assessment Team observed welding of the transfer beams and dry-packing of one of the upper leveling plates for the grillages. Metal surfaces

were prepared and maintained dry prior to start of welding . The required preheat was attained and verified by the Contractor's welding engineer prior to start of welding. The welding technique implemented including weld progression and placement of multiple weld layers conformed with applicable procedures. Upon completion of the weld, the required welder identification was inscribed at the weld location. A visual inspection of the welds was performed by the Contractor's welding engineer. The inspection was thorough verifying that items such as weld length, throat measurement and cross sectional shape were in accordance with procedures. Prior to the start of drypacking for the upper leveling plate, the concrete surface was presoaked for 24 hrs. The wooden forms were adequately sealed and braced to prevent any loss of drypack during installation. Small workable quantities of grout were mixed with the appropriate amount of water ensuring proper bonding of the grout without any evidence of excess water. Each grout lift was rammed with a tamping rod and hammer, ensuring thorough compaction of the leveling plate grout as it was placed.

The Assessment Team observed placement of concrete for piers Kc8 and CT 3/10. Placement technique including lift height, lateral movement, free drop and concrete vibration conformed with good construction practice. A power failure occurred at the batch plant during concrete placement for pier Kc8, resulting in the formation of an unplanned construction joint. The concrete surface for the joint was cleaned of all laitance and loose concrete. The surface was then roughened to achieve a suitable bond with the subsequent concrete lift. Additional reinforcing dowels and couplers were installed in accordance with the design requirements for unplanned construction joints. The Assessment Team concludes that the Contractor's actions associated with concrete placement for these piers was in accordance with good construction practice.

Assessment Team Observation QA/QC

The Assessment Team observed offsite concrete batch plant activities associated with batching of concrete for piers CT 3/10. The aggregate storage bins were clean, and the material stored in the bins were properly segregated and identified. Aggregate samples for moisture content tests were retrieved from the appropriate storage bins. Moisture testing of the aggregate was performed in accordance with ASTM procedures. A review of the calculations performed to determine the aggregate moisture content and the compensation moisture required to meet the batch design indicated that all computations were correct.

The Contractor has recently completed implementation of a computerized drawing register for design documents being used on site. Previously, a manual register had been used for control and distribution of design documents. The primary advantage associated with use of the computerized register is that the register is continuously updated, providing the latest correct document status information. In a recent FSO review of their controlled document no register errors were identified. When the manual system was used, updating of documents status was slow and incidence of error was more frequent. An additional advantage associated with the computerized register is that the status information for a design document including revision number, attachment information and distribution data has been consolidated into

one source. Previously, distribution data was maintained separately. Finally, implementation of the computerized register has consolidated most of the Contractor and Vendor document data into one source, alleviating the need for multiple registers. Presently, one additional register is still required for revision and distribution data associated with vendors documents. The Assessment Team believes that implementation of the computerized register will enhance the Contractor's ability to maintain and control the construction documents, ensuring that the appropriate design requirements specified are implemented properly.

Work Activity Packages

The following Work Activity Packages (WAPs) overviews are in the open response stage or have been completed during the past week.

WAP No.	Title	Status (Opened)	(Closed)
46	Yard Area Permanent Dewatering System	6/5/84	
87	Install Upper Dowels at E/W FIVP Slab	6/5/84	6/5/84

Nonconformance Identification Reports

NIR No.	Description	Status (Opened)	(Closed)
26	Closure of Procedural Deficiencies	5/25/84	

Open Items

Items discussed during the meetings are categorized as follows:

OPEN ITEM - An item for which an action is required. The item will remain open yntil the required action has been taken. Tracking is required.

CLOSED ITEM - An item, usually brought forward by the Assessment Team that is discussed and adequately responded to. No tracking is required.

INFORMATION ITEM - An item brought forward to privide general background information regarding work, such as work status or an upcoming design change. No tracking is required.

CLOSES ITEM -XX-XX - This notation identifies an action that closes a previously identified open item. Tracking of the open item stops.

J.O. No. 14358
Midland Plant
Units 1 & 2
Independent Assessment of Underpinning

The following listing of all Open items from the Daily Meeting Notes with Bechtel and the text of the Weekly Reports. Carry-over items from past weeks which have been Closed this week are also listed.

Item No.	Description	Closure
71-17	Computerized Civil Drawing Register	90-18
74-21	US Testing Corrective Action	Open
88-25	Documentation of Buttress Access Shaft Spall Repair	90-31
89-7	Level C Wale Bearing Plate Gap	Open
89-10	Access Shaft Soldier Piles	90-19
89-31	Retirement of "One Time Deviation" FCRs	Open
90-6	SWPS Duct Bank Cracks	Open
90-7	Upper Leveling and Bearing Plate Assembly Welds	Open
90-9	BWST Ring Beam Addition in Valve Pit	Open
90-35	Concrete Aggregate Testing	Open

Project Engineer

Project Manager

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 4, 1984

Present For:

Consumers Power	Bechtel	MPQAD	Stone & Webster
G. Murray	J. Fisher	R. Sevo	W. Kilker
	E. Cvikl	J. McMaster	D. Benvie
	J. Kelleher		D. Zito
			L. Rouen

Parsons Brinckerhoff

B. Metros

PURPOSE

This meeting is held each day to discuss items regarding the Independent Soils Assessment at the Midland Plant, Units 1 & 2.

DISCUSSION

Status Items

Item 90-1 - Auxiliary Building Underpinning Activities.

Placement of the first lift of concrete for the CT 3/10 pier shafts was completed.

Excavation of the Y/Z3 zones (to El. 591.5) in the access shafts was completed.

Installation of the transfer beams at all 3 jack locations was completed for the E/W5 grillages.

(INFORMATION ITEM)

Item 90-2 - Computerized Civil Drawing Register.

J. Fisher stated that the computerized civil drawing register has been completely implemented. All Contractor and Subcontractor drawings have been incorporated into the computerized drawing register. As a result, use of the manual register has been discontinued. FSO will provide the Assessment Team access to a copy of the register. (Item 71-17 remains OPEN) (INFORMATION ITEM)

Item 90-3 - Auxiliary Building Access Shaft Soldier Piles.

J. Fisher reported that the FCR describing remedial action for extension of the two short soldier piles in each access shaft to the top of the buttress access shaft footing has been issued. (Item 89-10 remains OPEN) (INFORMATION ITEM)

New Items

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 4, 1984

Item 90-4 - US Testing Requirements for Concrete Testing.

With respect to an NCR written against the testing of sand at the concrete batch plant, L. Rouen asked if Bechtel is responsible for directing the concrete testing activities of US Testing. J. Fisher responded that concrete testing activities of US Testing are governed by the engineering specification for concrete placement and testing. The type, number and timing of the tests are dictated by the specifications, not Bechtel field supervision. Bechtel field supervision may request additional tests as needed, but US Testing must meet testing requirements contained in the appropriate specifications as a minimum. (CLOSED ITEM)

Item 90-5 - Concrete Testing NCR.

With respect to an NCR written because a concrete air entrainment test was taken at the improper location, L. Rouen asked for details on the MPQAD activity at the time. J. McMaster replied that the QC inspector was overviewing the US Testing effort. The inspector did consult the applicable specifications but did not immediately locate the reference to location of testing. Subsequently, it was verified that the test should have been taken at the placement location, not at the truck discharge. (NIR # 26 remains OPEN) (CLOSED ITEM)

Item 90-6 - SWPS Duct Bank Cracks.

E. Cvikl reported that cracks had been found in the most easterly duct bank near the SWPS north wall. The crack consultant, CTL, will be reviewing the cracks. D. Benvie requested that the Assessment Team be provided with a copy of the CTL summary report once it is issued. E. Cvikl will respond. (OPEN ITEM)

Item 90-7 - Upper Leveling and Bearing Plate Assembly Welds.

B. Metros asked why the smaller weld recently approved for use on the upper leveling and bearing plate assemblies is not being used. J. Fisher will respond. (OPEN ITEM)

Item 90-8 - Contingency Jacking.

R. Sevo asked which procedure will be used if contingency jacking is required due to differential movement at the Control Tower/Turbine Building interface. J. Fisher responded that if differential movement between these structures exceeds 0.5 in. the Subcontractor's procedure for pier jacking will be implemented. (CLOSED ITEM)

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland , Michigan
June 4, 1984

Item 90-9 - BWST Ring Beam Additions at the Valve Pit.

D. Zito discussed the portion of the ring beam addition inside both of the BWST valve pits. Mr. Zito asked what construction techniques will be used to allow concrete vibrator access and to assure there are no gaps where the top of the ring beam addition will interface with the extisting valve pit roof slab. J. Fisher will respond. (OPEN ITEM)

Item 90-10 - E5 Grillage Bearing Plate Smoothness NCR.

W. Kilker asked for a clarification on the nonconforming condition and disposition on an NCR written against the surface condition of two bearing plates at a E5 grillage beam jacking location. The NCR appeared to contain less specific information on the non-conforming condition than is normally presented and the disposition was such that the need for a smoothness criteria was left in-doubt. E. Cvikl will verify the details of the resolution of this NCR and respond . (OPEN ITEM)

Response Items

No response items were discussed.

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 5, 1984

Present For:

Consumers Power	Bechtel	MPQAD	Stone & Webster
G. Murray	J. Fisher	R. Sevo	W. Kilker
J. Schaub	E. Cvikl	J. McMaster	D. Benvie
	J. Kelleher		D. Zito
			L. Rouen

Parsons Brinckerhoff

B. Metros

PURPOSE

This meeting is held each day to discuss items regarding the Independent Soils Assessment at the Midland Plant, Units 1 & 2.

DISCUSSION

Status Items

Item 90-11 - Auxiliary Building Underpinning Activities.

Reinforcing steel installation was completed for pier Ke8.

Drypacking of the upper leveling plate for the X jack location was completed at the E5 grillage.

Placement of the last lift of concrete for the CT 3/10 piers is scheduled for tomorrow.

(INFORMATION ITEM)

Item 90-12 - SWPS Underpinning Activities.

J. Fisher reported that installation of the lower level wale in the vicinity of the SWPS northeast corner is scheduled to begin tomorrow. (INFORMATION ITEM)

Item 90-13 - Incorporation of "One Time Deviation FCRs".

J. Kelleher discussed incorporation of "one time deviation" FCRs onto the drawings. Incorporation of previous "one time deviation " FCRs is in process. This work is being accomplished in accordance with administrative guidelines. Field and project engineering documents control procedures are presently being updated to provide guidelines for incorporating this type of FCR in the future. These updated procedures will contain the criteria for determining whether an FCR will be incorporated directly onto the drawing or incorporated by reference with a brief description . (Item 89-31 remains OPEN) (INFORMATION ITEM)

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 5, 1984

Item 90-14 - Ring Beam Addition in Valve Pit.

J. Fisher discussed the original planned method of concrete placement for the portion of the ring beam addition inside the valve pit at each BWST. After placing concrete in the bottom portion of the beam addition, the Contractor planned to grout the remaining portion through holes drilled in the valve pit roof slab, but Engineering did not approve the use of the grout. As a result, the Contractor is evaluating alternate placement methods. (Item 90-9 remains OPEN) (INFORMATION ITEM)

Item 90-15 - SWPS Duct Bank Cracks.

E. Cvikl reported that the crack consultant, CTL,will begin their evaluation of the duct bank crack at the SWPS north wall. Their preliminary investigation does not indicate that the crack resulted from differential settlement between the SWPS and the duct bank . The actual cause is still under investigation. (Item 90-6 remains OPEN) (INFORMAITON ITEM)

New Items

Item 90-16 - UAT Lateral Wellpoints.

J. Fisher reported that water level readings taken at piezometer BB-2 indicate that the perched groundwater level beneath the control tower is remaining stable at El. 584 '±. As a result, use of the UAT lateral wellpoints has been discontinued. (INFORMATION ITEM)

Response Item

Item 90-17 - E5 Grillage Bearing Plate Smoothness NCR.

E. Cvikl responded to the Assessment Team question concerning clarification of an NCR written against the surface condition of two bearing plates at the E5 grillages. Mr. Cvikl stated that Resident Engineering had performed a visual inspection of the plates prior to dispositioning the NCR. The visual inspection determined that although the smoothness criteria for the bearing surfaces had not been met, the actual surface condition was capable of satisfying the loading requirements. The NCR disposition will be revised to reflect results of the visual inspection performed by Resident Engineering. (CLOSES ITEM 90-10)

Item 90-18 - Computerized Civil Drawing Register.

The Assessment Team has completed a review of the computerized drawing register which is being implemented for control and maintenance of Contractor and Subcontractor drawings. The register information for Contractor drawings includes drawing number, title, revision number, attachment information and distribution schedules. This same information for vendor drawings with the exception of

distribution data is contained on the register. Central Document Control updates the register on a daily basis ensuring that the latest document data is available. The Assessment Team believes that implementation of the computerized register will serve as a useful tool for control and maintenance of the controlled documents on site. Implementation of this system site wide will ensure a more uniform approach for controlling distribution and maintaining construction drawings. (CLOSES ITEM 71-17)

Item 90-19 - Auxiliary Building Access Shaft Soldier Piles.

The Assessment Team has reviewed the FCR which contains the redesign for extension of the two short soldier piles in each access shaft. The piles will be extended to the top of the buttress access shaft footing by welding a wide flange section to the front of the existing soldier piles as required. Once the wide flange sections have been added, lagging and backpacking will be installed in accordance with the design requirements. The Assessment Team concurs with the remedial action taken to extend the soldier piles. (CLOSES ITEM 89-10)

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 6, 1984

Present For:

Consumers Power	Bechtel	MPQAD	Stone & Webster
G. Murray	J. Fisher	R. Sevo	D. Benvie
	E. Cvikl	J. McMaster	D. Zito
	J. Kelleher		
			Parsons Brinckerhoff
			J. Oliveira

PURPOSE

This meeting is held each day to discuss items regarding the Independent Soils Assessment at the Midland Plant, Units 1 & 2.

DISCUSSION

Status Items

Item 90-20 - Auxiliary Building Underpinning Activities.

Extension of the two short soldier piles in the west access shaft to the top of the buttress access shaft footing has begun.

Regrouting of the Kc5 upper leveling plate was completed.

Placement of the pier Kc8 concrete is scheduled for today.

(INFORMATION ITEM)

Item 90-21 - BWST Ring Beam Addition in Valve Pit.

J. Fisher discussed proposed methods which are being evaluated to place concrete for the portion of the ring beam addition within the valve pit at each BWST. The Contractor has proposed that a pea gravel concrete mix be used to ease placement in this confined area of the ring beam addition. Another modification being considered includes drilling additional holes in the valve pit roof slab to increase access for the concrete vibrators into the placement area. (Item 90-9 remains OPEN) (INFORMATION ITEM)

New Items

Item 90-22 - Diesel Generator Building Crack Evaluation.

G. Murray reported that a supplemental engineering survey requested by the NRC staff to evaluate cracking in the diesel generator building will begin in the near future. (INFORMATION ITEM)

Item 90-23 - Excavation Slopes for the Unit 2 HVAC Foundation Pad.

D. Benvie discussed the excavation for the Unit 2 HVAC foundation pad. One of the excavation slopes had been excavated at or near vertical for its entire height of 8 to 10 ft. It was noted that the underpinning subcontractors crane operating within 5 ft. of the top of the vertical slope may be adding surcharge loading to the soil which could cause soil sloughing and possibly

damage the installed duct line and concrete formwork. Additionally, partial undermining of the vertical soil slope and the proximity of the duct bank to the slope will prevent proper compaction of the backfill during placement. Mr. Benvie asked the Contractor to evaluate these conditions. J. Fisher will respond. (OPEN ITEM)

Item 90-24 - MPQAD Staffing for Underpinning.

J. Oliveira noted that the Assessment Team had learned from Bechtel and MPQAD that the attrition rate for Remedial Soils QA/QC staff has increased. Mr. Oliveira asked if consideration is being given to consolidating QC hold points in response to the decreased staffing levels. It was stated that there are no plans to consolidate QC hold points. MPQAD is in the process of reassigning and training MPQAD Balance of Plant personnel to replace Remedial Soils QA/QC inspectors who have left. Additionally, Bechtel is evaluating the schedule for underpinning work activities in order to minimize possible impact. (CLOSED ITEM)

Item 90-25 - Installation of Contingency Jacks.

J. Fisher reported that installation of contingency jacks at the interface of the turbine building and control tower is scheduled to begin within the next week. Then jacks will only be used if differential settlement between the control tower and turbine building exceeds 0.5 in. (INFORMATION ITEM)

Response Items

No response items were addressed.

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 7, 1984

Present For:

Consumers Power	Bechtel	MPQAD	Stone & Webster
G. Murray	J. Fisher	R. Sevo	D. Benvie
	E. Cvikl	J. McMaster	D. Zito
	J. Kelleher		

Parsons Brinckerhoff

None

PURPOSE

This meeting is held each day to discuss items regarding the Independent Soils Assessment at the Midland Plant, Units 1 & 2.

DISCUSSION

Status Items

Item 90-26 - Auxiliary Building Underpinning Activities.

Placement of concrete for pier Kc8 began yesterday. Due to a power outage, concrete placement was only completed to El. 592.75. As a result a cold-joint was formed for the pier shaft. The remaining concrete will be placed tomorrow.

Grouting of all 3 upper leveling plates at each of the E/W5 grillages was completed.

Load transfer for Kc5 is scheduled for tomorrow.

(INFORMATION ITEM)

Item 90-27 - SWPS Underpinning Activities.

J. Fisher reported that installation of the lower level bracing at the northeast corner of the SWPS has begun. (INFORMATION ITEM)

Item 90-28 - SWPS Duct Bank Cracks.

J. Fisher reported that a conditional release had been issued to allow chipping of the duct bank concrete in the area of the cracks. The chipping is being done to allow an evaluation of the cracks.
It is also planned to excavate in a localized area beneath the duct bank/SWPS north wall interface to provide additional information. (Item 90-6 remains OPEN) (INFORMATION ITEM)

New Items

Item 90-29 - Weekly Report # 89.

The text of Weekly Report # 89 was reviewed . It was determined that all open items had been previously identified. (INFORMATION ITEM)

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 7, 1984

Response Items

Item 90-30 - Excavation Slopes for the Unit 2 HVAC Foundation Pad.

J. Fisher responded to the Assessment Team question concerning vertical soil-slopes for the HVAC foundation pad excavation. Access of the underpinning subcontractors' crane to the excavation slopes has been restricted in order to prevent surcharge loading of the soil. The slope will be layed back and braced as needed to ensure its' stability. Undermined areas will be removed during layback of the slope to provide access for compaction equipment during backfilling. The Assessment Team concurs with this course of action. (CLOSES ITEM 90-23)

Item 90-31 - Documenetation of Buttress Access Shaft Spall Repair.

E. Cvikl responded to the Assessment Team question concerning documentation of the Safety Concern Evaluation Report (SCER) content associated with concrete spalling on the Buttress Access Shaft wall. The SCER required that the torque of the rockbolts for the Level C bearing plate closest to the spall area be verified and the concrete within the spalled area be removed. Since this structure is non Q, MPQAD documentation is not required. However, a field engineers report was prepared to document the results of the rock bolt load verification. In addition, a concrete drill permit was prepared to allow removal of the concrete in the spalled area. The field engineer's report and the concrete drill permit have been attached to the SCER as permanent documentation of the work. The Assessment Team believes that the SCER content and recommendations have been adequately documented. (CLOSES ITEM 88-25)

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 8, 1984

Present For:

Consumers Power	Bechtel	MPQAD	Stone & Webster
G. Murray	J. Fisher	R. Sevo	D. Benvie
R. Wheeler	E. Cvikl	J. McMaster	D. Zito
	J. Kelleher		P. Majeski

Parsons Brinckerhoff
J. Oliveira

PURPOSE

This meeting is held each day to discuss items regarding the Independent Soils Assessment at the Midland Plant, Units 1 & 2.

DISCUSSION

Status Items

Item 90-32 - Auxiliary Building Underpinning Activities.

Concrete placement was completed for piers CT 3/10.

Installation of jacks and jackstands was completed for pier Kc5.

(INFORMATION ITEM)

New Items

Item 90-33 - SWPS Phase II Cofferdam Subgrade.

D. Benvie discussed excavation of the SWPS Phase II cofferdam. It was noted that if over-excavation is required below design subgrade for the pipe bedding, additional bracing and/or layback of the excavation slopes will be required. Mr. Benvie asked if a visual inspection of the soldier pile sheeted pit excavations is planned in order to make a preliminary evaluation as to the acceptability of the subgrade at this elevation. E. Cvikl responded that there is no formal requirements to inspect the sheeted pit excavations. However, visual examination of the sheeted pits will be performed to assist Resident Engineering in their evaluation of the pipe bedding subgrade for acceptability. (CLOSED ITEM)

Item 90-34 - MPQAD Organization Chart.

J. Oliveira requested a copy of the MPQAD organization chart showing a schedule breakdown with staffing level for the work shifts. J. McMaster will respond. (OPEN ITEM)

Notes of Daily Meeting
Independent Assessment of Underpinning
Midland Plant, Units 1 & 2
Consumers Power Company

Held at Midland Site
Midland, Michigan
June 8, 1984

Item 90-35 - Concrete Aggregate Testing.

P. Majeski asked what concrete aggregate testing data is required prior to batching of concrete. J. Kelleher responded that the aggregate mositure content data is required to determine proportions of the concrete batch mix. It was noted that the mositure content data sheet for concrete batched on 5/28/84 which was placed for the CT 3/10 pier bells had not been signed off prior to concrete batching. Mr. Majeski asked MPQAD to determine if the moisture test results had been adequately reviewed prior to concrete batching. J. McMaster will respond. (OPEN ITEM)

Response Items

No response items were addressed.