



Consumers  
Power  
Company

Midland Project: P.O. Box 1963, Midland, Michigan 48640 . Area Code 517 631-0951

August 25, 1982

Mr. W. D. Shafer, Chief  
Midland Project Section  
US Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

MIDLAND PROJECT GWO 7020 -  
REMEDIAL SOILS WORK AUTHORIZATION  
File: 0485.16 UFI: 12\*32  
42\*05\*22\*04

Serial: CSC-6266

On August 23, 1982, representatives of Region III (Dr. Ross Landsman and Mr. Ron Gardner) and Consumers Power Company (Mr. R. M. Wheeler and others) met at the Midland Plant site for the purpose of providing additional information prior to securing NRC approval for portions of Phase II underpinning work as requested in my August 18, 1982, letter to you (Serial CSM-0564). Specifically, the topics on the attached agenda were discussed at the meeting.

In order to commence construction work on piers 11 and 12, (Items 155054015, 155053015, 155052027, 165052015, 165053010, 165054010, 165052027, 165053015, 165054015, 155052010, 155053010, 155054010 from the attachment to my August 18, 1982 letter) the following agreements/understandings were developed:

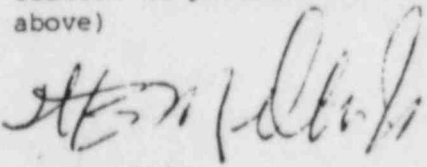
- 1) Piers W11 and W12, will be probed in advance of the excavation to verify that the ground water level in granular soils is being maintained at least 2 feet below excavation. It is understood that some perched water will be encountered at the interface with clay soils and handled in accordance with our procedures.
- 2) NRC Region III and CPCo will review NRR written approvals and attempt to locate a reference in which the NRR has concurred with the concept that the ground water level being maintained at least 2' below the excavation only applies to granular materials.
- 3) The void in the pier steel lagging will be filled with ethafoam. A gap adequate for bolt installation will be left in the ethafoam.
- 4) A limit for the maximum water pressure to be utilized in jetting temporary well points for localized dewatering will be established and implemented.
- 5) A limit for the maximum water pressure to be utilized for advancing pipes and the maximum grouting pressures for soil stabilization operations will be established and implemented.

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PDR FOIA  
RICE84-96 PDR

- 6) NRC agreed that materials for soils stabilization may be procured non-Q. Receipt, storage, and handling of materials will be covered by the QA program.
- 7) Probe holes at the bottom of pier bells will be filled with grout until confirmation from NRR staff can be obtained for use of rebar for filling.
- 8) During the construction of piers 11 & 12 and until FIVP support steel modifications are complete, the FIVP will be monitored to either 50 or 100 mils (to be determined later) vertical movement. If the agreed upon limit is exceeded work will be stopped, an evaluation will be commenced and NRC Region III advised. Prior to continuation of the physical excavation, NRC Region III approval must be obtained.
- 9) Jacking for the turbine building piers will not occur until the delta 4 valves are added to drawing C-1493.
- 10) Delta valves will be available for the control tower, EPA and buttress access shaft prior to pier jacking.
- 11) The WJE procedure OP-41 will be revised as follows:
  - A. Redefine the word shut down to include the words which describe the alarming functions.
  - B. Delete the reference to allowable valves, since C-1493 no longer uses this nomenclature.
  - C. Review the .002" troubleshooting criteria and determine if it is large enough.
  - C. Clean up all previous comments.
- 12) Work will not commence on piers 11 & 12 until NRR approves the QA plan.

It was noted that only resolution of items 8, 11 and 12 above must be completed before authorization to proceed with work on piers 11 & 12. The other items will be resolved, before the specific work activity it affects is started.

Based upon our above described plan to resolve your concerns, we ask for authorization to proceed with construction of piers 11 & 12. (Item numbers delineated above)

  
D. B. Miller  
Site Manager

DBM/RMW/vlp

Attachment

cc: JAMooney, P14115A

JRSchaub, P13305

JKMeisenheimer, Midland

AJBoos, Bechtel Ann Arbor

JFFisher, Bechtel Midland

LEDavis, Bechtel Midland

AGENDA NRC MEETING ON PIER 11 & 12 PREREQUISITES -

- I. WATER ELEVATIONS FOR PIERS 11 & 12
- II. FOAM IN LAGGING
- III. PROCEDURE FOR LOCALIZED DEWATERING. (HANDOUT: SECTION OF MCP-35.00)
- IV. SOIL STABILIZATION - (HAND-OUT: MCP-2.8.00)
- V. STATUS OF INSTRUMENTATION
- VI. PROCEDURE AND MANNING FOR INSTRUMENTATION
  - A. SCANNING REQUIREMENTS
  - B. WJE MANNING
  - C. COPY OF RSG 2.00
- VII. STATUS OF OP-41
- VIII. CRACK MAPPING STATUS FIVP & EPA

RMW  
8/25/82

REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 9/2/83

DIVISION: OSC

Licenses	Notification	Item or Event	Regional Action
Midland 142	Jelison from licensee on 9/2/83	Potential 50.55(e) report. In the event of a fuel pool accident and a LOCA, loss of power to redundant Motor Control Centers (MCC) OB45 and OB46 could occur due to the resultant trip of the load center breaker feeding these MCCs. A written report will be provided by the licensee by 10/2/83.	Follow-up per MC2512
Midland 142	Jelison from licensee on 9/2/83.	Potential 50.55(e) report. During the review of the installation of check valves on the secondary cooling water (SCW) inlet piping to reactor coolant pump inlet canister it was observed that the check valves are installed in a vertical section of pipe having upward inlet flow. Subsequent review of the subject check valves indicated the fact that these valves do not function in the vertical position. If secondary failure occurred the check valves would not function thus allowing a discharge to the containment.	Follow-up per MC2512

(3 pages)

Submitted

atmosphere or the auxiliary building resulting in potentially unacceptable ~~radio~~ radiation levels in those areas. A written report will be provided by the licensee by 10/2/83.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

*Harrison*

JUN 10 1983

NOTICE OF SIGNIFICANT LICENSEE MEETING

Name of Licensee: Consumers Power Company  
Name of Facilities: Midland Nuclear Plant, Units 1 and 2  
Docket Nos.: 50-329; 50-330  
Date and Time of Meeting: Friday, June 24, 1983, at 1:00 p.m. (EDT)  
Location of Meeting: Quality Inn  
Midland, Michigan  
Purpose of Meeting: Management Meeting to review the Systematic Assessment of Licensee Performance (SALP)

June 17, 1983

MEETING POSTPONED -  
TO BE RESCHEDULED  
IN JULY

RIII Attendees:  
James G. Keppler, Regional Administrator  
R. F. Warnick, Director, Office of Special Cases  
Others as appropriate

NRR Attendees:  
D. Hood, Project Manager, Midland Nuclear Plant

Licensee Attendees:  
J. W. Cook, Vice President  
Others as designated by the licensee

NOTE: Attendance by NRC personnel at the meeting should be made known by June 20, 1983, via telephone call to J. J. Harrison, Region III, FTS 384-2635

Distribution:  
R. C. DeYoung, Director, IE  
E. L. Jordan, Director, Division of Emergency Preparedness and Engineering Response, IE  
J. M. Taylor, Director, Division of Quality Assurance, Safeguards, and Inspection Programs, IE  
J. A. Axelrad, Acting Director, Enforcement Staff  
D. G. Eisenhut, Director, Division of Licensing, NRR  
E. G. Adensm, Chief, Licensing Branch No. 4  
R. L. Tedesco, Assistant Director for Licensing, NRR

... of the ... of ... The information is initially received without ... and is basically all that is known by the staff on this date.

Facility: Consumers Power Company  
 Midland Nuclear Power Station  
 Units 1 & 2  
 Midland, MI 48640  
 Docket Nos: 50-329; 50-330

Licensee Emergency Classification:  
 \_\_\_\_\_ Notification of an Unusual Event  
 \_\_\_\_\_ Alert  
 \_\_\_\_\_ Site Area Emergency  
 \_\_\_\_\_ General Emergency  
xx Not Applicable

Subject: STOP WORK ORDERS ISSUED BECAUSE OF DOCUMENT CONTROL PROBLEMS

Consumers Power Company on October 24, 1983, notified Region III (Chicago) that it was issuing nine stop work orders involving extensive safety-related activities at the Midland site. The orders were issued as the result of a quality assurance audit of the design document control system.

The stop work orders included procurement activities, testing, nuclear steam supply system installation, piping and pipe support fabrication, remedial soils work, heating, ventilating and air conditioning system installation, Bechtel quality control hanger reinspections, Bechtel quality control activities, and Bechtel post-turnover activities. Bechtel is the architect-engineer and principal site contractor. The licensee estimates 500 to 600 workers will be laid off as a result of the stop work orders.

The licensee's audit determined that field design changes were not being identified on all applicable construction drawings, that the effects of minor design changes on design criteria were not being recalculated, and that the quality assurance organization was not reviewing design changes for non-safety-related work which might affect safety-related systems.

The licensee's corrective action will involve the review of 30,000 field design change documents. Each document involves an average of 1.7 construction drawings. The licensee has not determined how long the document review will take.

There has been local news media interest in the stop work orders. The licensee has not issued a news announcement. Region III is responding to inquiries.

The State of Michigan will be notified.

Region III was informed of the audit findings on October 22, 1983. This information is current as of 11 a.m. (CDT), October 24, 1983.

CONTACT: *J. Harrison* J. Harrison FTS 388-5635  
*R. Gardner* R. Gardner FTS 388-5524

DISTRIBUTION:

H. St. _____	MNBB _____	Phillips _____	E/W _____	Willste _____
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Comm. Roberts	MPA _____		AEOD _____	
Comm. Asselstine	ELD _____	Air Rights _____		MAIL: _____
Comm. Bernthal		SP _____	INPO _____	ADM:DMB _____
SECY			NSAC _____	DOT: Trans Only _____
ACRS				
CA		Applicable Resident Site _____		
PDR	Regions I _____, II _____, IV _____, V _____	Licensee (Corporate Office) _____		

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REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 4/12/83

DIVISION: OSC

City/Licensee	Notification	Item or Event	Regional Action
Midland 1 and 2	Telecon from SRI - 4/11/83	Consumers Power Company announced the lay-off of 60 Zack (heating, ventilation and air conditioning contractor) employees due to lack of work. The lack of work is the result of not having RIII approval to resume welding (Zack currently resolving welding problems) and not having material onsite.	Information only
Midland 1 and 2	Telecon from SRI - 4/11/83	Consumers Power Company reported that \$2500 worth of company tools were confiscated from the resident of a Midland site employee. The licensee stated that a warrant had been issued for his arrest.	Information only

Submitted \_\_\_\_\_  
Branch Chief/Division



REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 6/23/83

DIVISION: OSC

City/Licensee	Notification	Item or Event	Regional Action
Midland 142	Telex from licensee on 6/23/83	Potential 50.55(e) report. A Part 21 report issued May 9, 1983 by Brown Boveri indicated that the charging springs on certain type HK breakers <sup>(4.16 kV switchgear)</sup> would remain closed when the breaker opens thus preventing the breaker from reclosing. A written report will be provided by the licensee by 7/23/83	Following per 11C25/2

Submitted \_\_\_\_\_  
Branch Chief/Division

REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 2/1/83

DIVISION: OSC

Licenses/Licensee	Notification	Item or Event	Regional Action
Missouri 1-13	1/1/83	Detailed repair. Numerous electrical wiring installed. Make all systems individually safe to their ability to function. Prepare for all design function. A written report will be prepared by 2/29/83	Following per file

REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 10/7/83

DIVISION: OSC

City/Licensee

Midland 142

Notification

Telex from SRI  
on 10/5/83

Item or Event

Baird and Wilcox (B+W), the nuclear steam system supplier and installation contractor for the Midland plant, placed a stop-work on all class 1 pipe hangers and snubbers activities. The stop-work was the result of identified deficiencies (welding, bolting, etc.) in installed pipe hangers and snubbers. As a result of the stop-work, 132 craft and support personnel were laid-off. Corrective actions required prior to resuming work include the development of an adequate training program and the training of B+W personnel to this program.

Regional Action

Followup per NC 2512  
  
previously all inspected and turned over to CPO

REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

Issue  
6/29  
JTB

DAILY REPORT

DATE: 6/29/00

DIVISION: OSC

City/Licensee	Notification	Item or Event	Regional Action
Midland H2	Jensen from SAI - 6/29/00	(Ref. PNO-III-83-55). Following a review by the Senior Resident Inspector of welding procedures and observation of welding performance Region III has authorized Consumer Power Company (CPC) to resume safety-related welding on the heating, ventilating, and air conditioning (HVAC) systems at the Midland construction site.	Information  demonstration

Submitted \_\_\_\_\_  
Branch Chief/Division

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the staff on this date.

Facility: Consumers Power Company  
Midland Nuclear Plant  
Docket Nos: 50-329, 50-330  
Midland, MI 48640

Emergency Classification:  
         Notification of Unusual Event  
         Alert  
         Site Area Emergency  
         General Emergency  
xxx Not Applicable

Subject: DOW CHEMICAL TERMINATES STEAM CONTRACT WITH MIDLAND NUCLEAR PLANT

Consumers Power Company notified Region III on July 14, 1983, that Dow Chemical Company was terminating its contract with the utility to supply process steam to Dow's Midland facility from the Midland Nuclear Power Station, now under construction. A portion of the Unit 1 capacity was to be dedicated to the Dow steam supply system.

On July 14 Dow announced it was filing suit seeking a court judgment that all Dow's obligations under the contract were cancelled "because of Consumers Power's misrepresentations and non-disclosures...and Consumers Power's inability to complete the Midland Nuclear Plant within any reasonable time and at a reasonable cost."

A portion of Unit 1 capacity was to be dedicated to providing process steam to Dow.

Much of the safety related construction at Midland has been halted since December 1982 as a result of construction and quality assurance problems. The licensee has prepared a Construction Completion Program for resumption of work, and that program is currently being reviewed by the NRC staff.

The effects of the Dow cancellation on the Midland project are not known at this time.

The licensee has issued a news announcement. Region III has responded to inquiries from the news media.

The State of Michigan will be notified of this information.

Region III was notified of this matter by the licensee at 4:30 p.m. (CDT), July 14, 1983. Additional information was obtained on July 15. This information is current as of 11 a.m. (CDT), July 15, 1983.

Contact: J. Harrison  
FTS 384-2635

*RU*  
R. Warnick  
FTS 384-2575

DISTRIBUTION:

St. <u>1203</u>	MNEB <u>1204</u>	Phillips <u>1206</u>	E/W <u>1201</u>	Willste <u>1212</u>
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omm. Gilinsky	PA		OIA	RES
omm. Roberts	MPA		AEOD	
omm. Asselstine	ELD	Air Rights <u>1211</u>		MAIL:
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OR	Regions I <u>1217</u> , II <u>1215</u> , IV <u>1221</u> , V <u>1223</u> Licensee (Corporate Office) <u>1245</u>			

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## DAILY REPORT RIII

DATE 10/29/82

FACILITY/LICENSEE	NOTIFICATION	ITEM OR EVENT	REGIONAL ACTION
OFFICE OF THE REGIONAL ADMINISTRATOR			
GENERAL		MR. JAMES G. KEPPLER AND MEMBERS OF HIS STAFF WILL MEET WITH MANAGEMENT REPRESENTATIVES OF HECHTEL POWER CORPORATION IN ANN ARBOR, MICHIGAN CONCERNING QUALITY ASSURANCE.	INFORMATION.
OFFICE OF SPECIAL CASES			
MIDLAND	TELECON FROM THE LICENSEE-10/28/82	(REF. PNO-III-82-121). AT 11:30 A.M. ON 10/28/82, CONSUMERS POWER COMPANY REPORTED A POTENTIAL 50.55(E) ISSUE REGARDING THE UNAUTHORIZED SUBSTITUTION OF CLASS 1E CABLES. THIS MATTER WAS IDENTIFIED BY THE LICENSEE WHILE PERFORMING REINSPECTIONS OF CLASS 1E CABLES, AS REQUIRED BY THE NRC, TO RESOLVE PREVIOUS CLASS 1E MISINSTALLATIONS. TO DATE, OUT OF APPROXIMATELY 500 CLASS 1E CABLES REINSPECTED, FOUR INSTANCES HAVE BEEN IDENTIFIED IN WHICH SIZE 14 AWG WERE INSTALLED IN LIEU OF THE REQUIRED 10 AWG SIZE CABLES. THESE CABLES FEED TWO DECAY HEAT COOLDOWN AND RETURN ISOLATION VALVES WHICH ARE IMPORTANT TO SAFETY. CPCO IS PREPARING A PRESS RELEASE FOR 10/29/82. DURING THE WEEK OF 10/18/82 A DETROIT TELEVISION STATION HAD BROADCAST A SERIES OF REPORTS CONCERNING CONSTRUCTION DEFICIENCIES AT THE MIDLAND SITE. ONE OF THE IDENTIFIED ALLEGATIONS INVOLVED THE UNAUTHORIZED SUBSTITUTION OF CABLES. AS A RESULT OF THE ALLEGATIONS, CPCO QA INSPECTORS MODIFIED THE REINSPECTION REQUIREMENTS FOR THE CLASS 1E CABLE REINSPECTIONS. THIS MODIFICATION, WHICH INVOLVED DETERMINING THE PROPER CABLE TYPE BY READING THE CABLE JACKET INSCRIPTIONS RATHER THAN THE ATTACHED CABLE TAGS, RESULTED IN THE IDENTIFICATION OF THE UNAUTHORIZED SUBSTITUTIONS.	FOLLOWUP PER MC 2612.

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the staff on this date.

Facility: Consumers Power Company  
 Midland Nuclear Power Station  
 Units 1 & 2  
 Docket Nos: 50-329, 50-330  
 Midland, MI 48640

Licensee Emergency Classification:  
 Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

Subject: RESUMPTION OF SAFETY-RELATED WELDING WORK ON VENTILATING SYSTEM

Following a review by the Senior Resident Inspector of welding procedures and observation of welding, in progress, Region III (Chicago) has authorized Consumers Power Company to resume safety-related welding work on the heating, ventilating, and air conditioning (HVAC) systems at the Midland construction site. The work was stopped November 30, 1983, after a utility audit determined that the quality assurance program for welder qualification and welding procedure qualification was inadequate (See PNO-III-82-130).

The audit findings involved a testing laboratory which performed tests on weld samples used in certifying welders and welding procedures for the Zack Company, Inc., the heating, ventilating and air conditioning contractor.

The stopping of work resulted in 151 welders being laid off. Initially, about 27 welders will be rehired, but it is expected that some 150 welders will eventually be recalled.

Neither the licensee nor Region III plans to issue a news announcement. News media interest may occur, because of the ongoing Operating License proceeding and continuing local news media interest in Midland.

Region III issued a letter to the licensee on June 29, 1983, authorizing resumption of fabrication and welding of the HVAC system. This information is current as of 12 noon, June 29, 1983.

Contact: *R. Gardner* R. Gardner 384-2524 J. Harrison 384-2635

DISTRIBUTION:

H. St. _____	MNBB _____	Phillips _____	E/W _____	Willste _____
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PDR Regions I _____, II _____, IV _____, V _____			Licensee (Corporate Office) _____	

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REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 6/2/82

DIVISION: OSC

City/Licensee	Notification	Item or Event	Regional Action
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Submitted Branch Chief/Division



REGION III, OFFICE OF INSPECTION AND ENFORCEMENT

DAILY REPORT

DATE: 6/22/83

DIVISION: OSC

City/Licensee	Notification	Item or Event	Regional Action
Midland 142	Tel. from SRI on 6/20/83	Employees of the Mergentime Corporation, the subcontractor performing remedial soils work on site, were implicated in the theft of remedial soils safety related material. Apparently Mergentime employees were allowed to contract become gills on site using company equipment and safety related materials.	information

SRI  
REI

with Eric at ~~5:00~~ 5:00 EDT 10/05/83  
 " " 4:00 EDT 10/06/83

Midland Units 1 and 2

October 5, 1983 at 3:30 EDT

Babcock and Wilcox (B&W), the Nuclear Steam System Supplier, and installation contractor, placed a stop-work on all class 1 pipe hanger and

snubber activities. This stop-work applies to both small bore and large bore piping. This stop-work caused the lay-off of 132 craft and support personnel. In order for work to resume B&W develop an adequate training program and train ~~the~~ employees to this program as necessary corrective action.

This stop-work was caused by various problems (welding, bolting, etc) <sup>and</sup> not following procedures. Most of the problem instances were QC inspected and worked over to CRCs.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

FEB 14 1983

MEMORANDUM FOR: James G. Keppler, Regional Administrator  
FROM: R. F. Warnick, Director, Office of Special Cases  
SUBJECT: MIDLAND MONTHLY STATUS REPORT

Enclosed is the status report for the Midland project for the period of January 1, 1983 through January 31, 1983.

Should you have any questions regarding this report please contact W. D. Shafer 932-2656.

*RF Warnick*

R. F. Warnick, Director  
Office of Special Cases

Enclosure: As stated

cc w/encl:  
D. G. Eisenhut, NRR  
J. H. Sniezek, IE

*Dupe*  
*8408130320*

*bander*



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

February 10, 1983

MEMORANDUM FOR: W. D. Shafer, Chief, Office of Special Cases, Section 2  
FROM: R. J. Cook, Senior Resident Inspector, Midland Site  
SUBJECT: MONTHLY STATUS REPORT

Attached is the status report for the Midland Nuclear Construction Site covering the period of January 1, 1983, through January 31, 1983.

The status report contains the input from each member of the Midland Inspection Site Team of the Office of Special Cases.

R. J. Cook  
Senior Resident Inspector  
Midland Site Resident Office

cc/attachments  
R. F. Warnick  
R. B. Landsman  
R. N. Gardner  
B. L. Burgess

~~DURE~~ 8408130323

FEB 14 1983

## SUMMARY OF SIGNIFICANT MIDLAND ISSUES

### 1. Heating, Ventilation and Air Conditioning (HVAC)

Members of Consumers Power Company, Bechtel Power Company, and Zack Company conducted a meeting on January 27, 1983, to finalize comments to resolve the issue of requalification of Zack Company welders and to justify prior welding. Final comments concerning the requalification of welders will be implemented into welding procedures. Requalification of welders is expected after final approval and qualification of welding procedures and the completion of welder retraining.

The NRC RIII has established a hold point prior to restart of welding to review welder requalification procedures and to observe procedure and welder requalification.

### 2. Electrical

Installed cable reinspection continued with no additional improperly substituted cables found. Currently six substituted cables of approximately 6,000 cables inspected have been identified. Approximately 2,600 cables remain to be reinspected. All cables were installed in Class 1E electrical systems.

The licensee is evaluating the safety significance through the use of a nonconformance report.

### 3. Remedial Soils Work Authorization

Work continued on underpinning piers 12 East and 12 West. The excavation for the piers is down to the bell area (the base area of both piers), and reinforcing bars are being placed in pier 12 West in preparation to pour pier concrete.

The NRC authorized four point jacking of the feedwater isolation valve pits (FIVPs) in preparation for starting excavation of pier 9. In addition, probing for electrical duct banks around the borated water storage tanks' (BWSTs) foundations was authorized and is a prerequisite for foundation rework.

### 4. Consumers Power Company Construction Completion Program

On January 10, 1983, Consumers Power Company submitted a letter to the NRC detailing the Construction Completion Plan (CCP) which was initially presented on December 2, 1982. After NRC review of the letter, an onsite meeting was held on January 20, 1983, between NRC inspectors and site management to clarify and answer questions.

A meeting will be held on February 8, 1983, at 9:00 AM for Consumers Power Company to present the CCP to the NRC in more detail. After the formal meeting between Consumers Power Company and the NRC, the public will have the opportunity to ask questions of the NRC.

5. Enforcement Conference

An enforcement conference was held on January 18, 1983, in the NRC Region III office to discuss the results of the diesel generator building inspection. As a result of the discussion, further inspection was performed January 19-21, 1983, to obtain additional information regarding IPINs and closeout inspections.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

*6271215*

JAN 11 1983

MEMORANDUM FOR: James G. Keppler, Regional Administrator  
FROM: R. F. Warnick, Acting Director, Office of Special Cases  
SUBJECT: MIDLAND MONTHLY STATUS REPORT

Enclosed is the monthly status report for the Midland Project.  
The report is for the period of December 1, 1982 through December 31,  
1982.

*RFWarnick*

R. F. Warnick, Acting Director  
Office of Special Cases

Enclosure: As stated

cc w/encl:  
D. G. Eisenhut, NRR  
J. H. Sniezek, IE

~~8312140056~~

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

MIDLAND MONTHLY STATUS REPORT

DECEMBER 1 - DECEMBER 31, 1982



## SUMMARY OF SIGNIFICANT MIDLAND ISSUES

### 1. Heating, Ventilation and Air Conditioning (HVAC)

The licensee, as a result of audits of HVAC work activities, determined that welder certifications and welding procedure qualifications were inadequate. All safety-related welding on HVAC was stopped by the licensee on November 30, 1982, and 151 craft workers were laid off. PNO-III-82-130 was issued.

During this reporting period the licensee has begun developing a new set of welding procedures.

### 2. Electrical

The licensee continued electrical cable reinspections. Two (2) additional improperly substituted cables have been identified. A total of six (6) substituted cables, of approximately 4000 cables reinspected, have been identified. Approximately 5000 cables remain to be reinspected.

### 3. Remedial Soils Work Authorization

On December 9, 1982, the NRC authorized the licensee to commence construction work on piers 12 East and 12 West under the Turbine Building. On December 13, 1982, Consumers Power Company began work on the piers. During excavation for pier 12 the licensee ran into concrete fill. The chipping and removal of the concrete has caused the work to proceed slower than the licensee had previously expected.

### 4. Consumers Power Company Construction Completion Program

On December 2, 1982, Consumers Power Company presented to the Region III staff a plan to establish confidence in the adequacy of safety-related work at the Midland Site. The licensee's initial Construction Completion Program (CCP) required a substantial reduction in most of the safety-related work activities and a subsequent reduction in the workforce involving approximately 1100 people. Implementation of the CCP required removal of construction equipment from the work spaces and building cleanup in preparation for a complete QC inspection of every safety-related system in every area. PNO-III-82-131 was issued.

Region III has prepared a draft report of the October-November team inspection. Escalated enforcement action is being considered. An enforcement conference with the licensee is scheduled for January 18, 1983 in RIII.

A meeting was held on December 7, 1982 with IE, NRR, and ELD to discuss the findings of the RIII October-November team inspection and the licensee's proposed construction completion program. A meeting with the licensee to discuss the CCP is scheduled for February 3, 1983 in Midland. It will be open to public attendance.

*Caram*



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

DEC 20 1982

MEMORANDUM FOR: James G. Keppler, Regional Administrator  
FROM: R. F. Warnick, Acting Director, Office of Special Cases  
SUBJECT: MIDLAND MONTHLY STATUS REPORT

Enclosed are two monthly status reports for the Midland project. The first report is for the period August 1, 1982 through October 31, 1982. The second report is for the month of November. The Midland Section of the Office of Special Cases is preparing these monthly reports to enable us to keep track of the important chronological happenings at Midland and to provide a mechanism for keeping IE and NRR informed.

The first report proved to be repetitious of information contained in monthly inspection reports and too time consuming to prepare and read. The second report is one page and contains all the salient information. Future reports will follow the format of the November report.

*RFWarnick*

R. F. Warnick, Acting Director  
Office of Special Cases

Enclosures: As stated

cc w/encl:  
D. G. Eisenhut, NRR  
J. H. Sniezak, IE

*dupe of*

*8408130327*

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

MIDLAND MONTHLY STATUS REPORT

AUGUST 1 - SEPTEMBER 30, 1982

A. SUMMARY OF THE MONTH

Midland Inspection Site Team efforts at the Midland Construction Site during the month of October were concentrated on inspection of the Diesel Generator Building. The Diesel Generator Building was chosen to be representative of the adequacy of construction on site. The inspection had not been completed as of the end of the status report period and will be addressed in a subsequent status report.

Remedial soils work is stopped until Quality Control Personnel are recertified per an upgraded qualification program discussed in Section B.1.b.

Heating, ventilation and air conditioning (HVAC) work has been continuing under the Consumers Quality Control and Quality Assurance organization formed to control HVAC construction. Items identified as relevant to the Part 21 of August, 1981 are reviewed, evaluated and dispositioned. (Section B.2)

Pertaining to misinstalled electrical cables, the licensee informed the NRC that 100% reinspection of class 1E cables installed or partially installed by March 15, 1982, was required. Also, during this status report period, the licensee reported a potential 10 CFR 50.55(e) regarding unauthorized substitution of underrated cables. This unauthorized substitution was detected as a result of Consumers Power Company modifying the reinspection requirements for class 1E cables in response to allegations received through a local television station.

The licensee has agreed to a 100% reinspection of all hangers installed in CY 1980 and a sample reinspection of hangers installed after January 1, 1982. Ongoing inspections during October 1982 have found additional discrepancies pertaining to classification, installation and inspection of hangers in the Diesel Generator Building.

B. SIGNIFICANT MIDLAND ISSUES

1. Soils

- a. During an inspection, the inspectors determined that the licensee had apparently violated the ASLB Order of April 30, 1982. The licensee excavated below the deep "Q" soils, without prior NRC approval. The licensee stated that prior approval was granted by NRR. Subsequently, RIII issued a CAL on August 12, 1982. The licensee commitments identified by the CAL included:

- (1) Stop all remedial soils work.
- (2) Prior to lifting this Stop Work, the licensee will obtain prior written approval of work activities.

RIII has requested the OI to conduct an investigation into the matter.

RIII and CPCo have established a Work Authorization Procedure to ensure further compliance to the ASLB Order.

b. During the initiation of the CPCo recertification program for all Bechtel QC inspectors integrated into the soils QA/QC organization, the RIII inspectors determined the following while observing several oral exams:

- (1) The examiner would excessively repeat questions allowing the examinee several attempts to answer correctly.
- (2) The examiner would mark questions NA when the examinee failed to answer correctly even though the question was relevant.
- (3) The technical portion of the exam lacked technical content necessary to establish the examinee's comprehension of the activity.
- (4) The examiner used a controlled copy of a PQCI to make up the exam questions which was different from another controlled copy obtained from the QC records vault.

Subsequentl , RIII issued a CAL on September 24, 1982.

The licensee commitments identified by the CAL included:

- (1) Stop all remedial soils work except for freezewall, dewatering wells and auxiliary building instrumentation readings.
- (2) Suspend all requalifications.
- (3) Decertify all QC personnel previously certified.
- (4) Establish a retraining program for all QC personnel who fail recertification.
- (5) Develop written exams for recertification.

The NRC has reviewed the recertification program and authorized CPCo to commence remedial soils QC requalification activities on October 28, 1982. All remedial work will remain stopped until such time as previously decertified QC personnel are requalified.

## 2. HVAC (Zack)

In January, 1981, the NRC levied a \$38,000 Civil Penalty against Consumers Power Company for QA deficiencies in the installation of heating, ventilating, and air conditioning (HVAC) systems. These QA deficiencies were noted during an investigation which transpired from March through July, 1980. As a result of this enforcement action,

the licensee removed responsibility for QA and QC functions for HVAC system work from the subcontractor (Zack Co.) and performs these functions using utility personnel. Removing QA/QC responsibility from the Zack Company has resulted in apparent improvement in performance at the site.

In August, 1982, the NRC received allegations pertaining to QA/QC irregularities at the Zack Company, Chicago, Illinois factory. Also, a potential 10 CFR Part 21 notification was made by the Zack Company to RIII pertaining to discrepancies between the welder of record and the welder actually performing the weld. RIV, through the Vendor Inspection Program, performed an inspection of the Zack Company, Chicago, Illinois operation. RIV had not issued the report on this matter at the time this report was prepared.

It was established that the Midland Site did receive fabricated HVAC items from Chicago, Illinois. However, Consumers Power Company performs a complete receipt inspection, including visual weld inspections. The tracking system that Consumers Power Company has established for HVAC items, allows the licensee the ability to locate any nonconforming item. Consumers Power Company also has established controls such that any of the suspect HVAC system components would not be covered by ongoing work until it can be established whether rework will be necessary. Many of the HVAC system components are fabricated on site.

### 3. Electrical

During the special team inspection conducted in May, 1982, the NRC identified concerns in regards to the adequacy of inspections performed by electrical Quality Control inspectors. These concerns were the result of the NRC's review of numerous Nonconformance Reports (NCR) issued by MPQAD personnel during reinspections of items previously inspected and accepted by Bechtel QC inspectors. The NRC required the licensee to perform reinspections of the items previously inspected by the QC inspectors associated with the MPQAD NCR's. The licensee, in reports submitted to the NRC in May and June, 1982, reported that of the 1084 electrical cables reinspected, 55 had been determined to be misrouted in one or more vias. This concern was upgraded to an item of noncompliance and is documented in Inspection Report No. 50-329/82-06; 50-330/82-06.

On September 2, 1982, the licensee was informed by the NRC that a 100% reinspection of class 1E cables installed or partially installed before March 15, 1982, was required. In addition, the licensee was required to develop a sample overinspection program for those cables installed after March 15, 1982. The licensee, on October 15, 1982, agreed to perform these overinspections.

On October 28, 1982, Consumers Power Company reported a potential 50.55(e) issue regarding the unauthorized substitution of class 1E cables. This issue was identified by the licensee while performing the aforementioned reinspections. During the week of October 11, 1982, a Detroit television station had broadcast a series of reports concerning construction deficiencies at the Midland site. One of the alleged deficiencies involved the unauthorized substitution of cables. As a result of the alleged deficiency, Consumers Power Company QA inspectors modified the reinspection requirements for the class 1E cable reinspections. This modification, which involved determining the proper cable type by reading the cable jacket inscriptions rather than the attached cable tags, resulted in the identification of the unauthorized substitutions.

4. Mechanical

During the NRC-Region III team inspection conducted in May, 1981, a Region III inspector observed that piping suspension system components were not constructed and installed in accordance with drawing and specification requirements. In addition, the inspector determined that QC inspectors had failed to identify the installation deficiencies. (Inspection Report No. 50-329/81-12; 50-330/81-12)

In response to the inspector's finding, the licensee performed an overinspection and determined that a large percentage of rejectable hangers were not identified during Bechtel QC inspections.

A request was made to the licensee for a 100% reinspection of all hangers installed in CY 1980, and a sample reinspection of hangers installed after CY 1980. In a letter dated September 30, 1982, Consumers Power Company agreed to reinspect 100% of hangers installed before January 1, 1981, and a sample inspection of hangers installed after January 1, 1981.

Inspection conducted during the month of October, 1982 has found additional problems related to the installation and inspection of hangers in the Diesel Generator Building. The concern involves hangers that are built to seismic category one standards, but are considered "non-Q" by system designation. Consumers has taken exception to Reg. Guide 1.29 titled "Seismic Design Classification," which delineates requirements for non-Q systems which could impact safety related systems during a seismic event. A letter from NRC Region III has been sent to NRR requesting resolution.

C. CONSTRUCTION STATUS

1. Soils

Remedial soils activities performed by the licensee thus far in 1982 involve:



- a. Permanent dewatering wells.
- b. Temporary auxiliary building dewatering wells.
- c. Freezwall around auxiliary building.
- d. Auxiliary building underpinning access shafts to EL 609.
- e. Modification work of overhead temporary FIVP support structure.
- f. Auxiliary building underpinning monitoring instrumentation.

2. HVAC (Zack)

The licensee QA group has performed an audit of the on-site Zack Company Training and Documentation functions during October, 1982. The audit report is not finalized, but the licensee indicated there were some "minor" findings. The Zack Company has retained a mechanical engineer (P.E.) as a Project Field Engineer on site and upgraded other staff positions.

The specifications for inspecting HVAC duct work has been modified to include a provision for rigorously testing with differential air pressure those isolated portions of duct work that have either rejectable or uninspectable welds that cannot be repaired without extensive rework. If the questionable welds maintain integrity throughout the pressure testing, it is planned to make an acceptable engineer disposition based on the test.

Consumers Power Company QA is performing a 100% overinspection on all ongoing welder qualification in accordance with an established and approved inspection plan. The individual performing the inspection must be certified by AWS as a qualified welding inspector.

Approximately 25% of all HVAC quality items have been accepted by the licensee.

3. Electrical

As of the date of this report, a significant amount of electrical cable installations, cable terminations, raceway installations, and equipment installations has been completed at the Midland Site. The bulk of present ongoing work activities continues to reflect these activities. Overall electrical construction status is estimated to be as follows:

a. Conduit installations	91%
b. Wire and cable installations	91%
c. Cable terminations	79%
d. Cable tray installations	100%
e. Equipment installations	98%

4. Mechanical

As of the date of this report, a significant amount of small and large bore piping has been completed at the Midland Site. The bulk of present ongoing work activities involve hanger and instrument impulse line installation. Mechanical construction status is estimated to be as follows:

a. Large pipe installations	98%
b. Large pipe hanger installation	95%
c. Small pipe installation	95%
d. Small pipe hanger	81%
e. Mechanical equipment	99%

5. Miscellaneous

a. Formation of Office of Special Cases

In July, 1982, the Regional Administrator formed the Office of Special Cases (OSC) and assigned Mr. R. F. Warnick as the Acting Director. This office has full responsibility for inspection activities at the Midland and Zimmer nuclear facilities.

Under the direction of the Acting Director, OSC, the Midland Section was formed consisting of a Section Chief, two Regional-based inspectors, a Senior Resident Inspector, a Resident Inspector, and a full-time Resident Secretary.

The majority of inspection effort conducted by the Midland Section was related to the soils remedial work. This work is described in Sections B.1.a. and b. of this report.

b. Stone and Webster Assessment of the Soils Remedial Work

The third party independent assessment team reported to the site on September 20, 1982. Since that time, reports have been sent to the Resident Inspector office. A review of these reports reveal no significant issues have been identified. These reports and Nonconformance Identification Reports are enclosed as attachment A to this report.

D. COMMUNICATIONS

1. Enforcement Meetings

None

2. Management Meetings

- August 11, 1982 Meeting with CPCo Management regarding soils remedial work taking place without prior staff authorization. Considered a potential violation of a Board Order.
- August 26, 1982 & September 2, 1982 Meeting between CPCo Senior Management, D. Eisenhut, and J. G. Keppler to discuss NRC's concerns with Midland and possible recommended solutions.
- September 8, 1982 Meeting with CPCo management, NRR, and Region III to discuss Consumer's draft proposal for a third party independent assessment. No conclusions reached. Licensee was advised to submit their proposal formally.
- September 15, 1982 Meeting between Region III and CPCo lawyers to establish when NRC investigation of GAP allegations would be completed.
- September 28, 1982 Meeting between the Midland Inspection Site Team and members of Stone & Webster and Consumers Power Company to introduce the Third Party Independent Assessment Team for the remedial soils work.
- October 29, 1982 Meeting in Ann Arbor, Michigan between Region III, Region IV, and Bechtel management to discuss NRC concerns with Bechtel performance and recommended solutions.

3. Public Meetings

- August 5, 1982 Meeting in Midland, Michigan between Region III and CPCo Management to discuss disagreements regarding the Systematic Assessment of Licensee Performance (SALP) report and CPCo's May 17, 1982, response to this report.
- September 29, 1982 Meeting in Midland, Michigan between Region III and CPCo Management regarding the requalification and certification of all Bechtel QC personnel at Midland.

October 25, 1982

Meeting in Bethesda, Maryland between NRR, Region III, CPCo Management, and CPCo contract personnel to discuss third party independent assessment.

4. Other Significant Meetings

None

# STONE & WEBSTER ENGINEERING CORPORATION



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

September 29, 1982

J.C.No. 14358.06  
Ref. MPR-1

Attention Mr. R. Cook

Dear Sir:

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

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 1 for the period September 19 through 26, 1982, is enclosed with this letter.

If you have any questions with respect to this report, please contact me at (617) 552-2067.

Very truly yours,

A. Stanley Lucks  
Project Manager

Enclosure

ASL:ch

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OCT 5 1982

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

Weekly Report No. 1

September 19 through 26, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W. E. Kilker	9/20/82-9/26/82
P. Barry	9/20/82-9/23/82
L. T. Rouen	9/20/82-9/24/82
E. Holsinger	9/20/82-9/26/82
A. Scott	9/20/82-9/26/82
A. S. Lucks	9/21/82-9/23/82

Parsons, Brinkerhoff, Quade, & Douglas (PBQD)

P. Parish	9/21/82-9/24/82
J. Ratner	9/22/82-9/24/82

Activities

This report summarizes the first week of activities and observations of the SWEC independent assessment team (including the PBQD personnel). The team, which at the present time consists of seven engineers representing Geotechnical, Structural, Construction, and Quality Assurance disciplines, arrived at the site between September 20 and September 22.

The assessment team has established separate on-site office space and has contracted for clerical assistance.

Introductions of all team members were made to on-site personnel representing Bechtel Engineering and Construction; Consumers Power Company Quality Assurance and Quality Control; Wiss, Janney & Elstner (WJ&E) Instrumentation Monitoring; and Mergentime Construction. Tours and briefings of the various areas and activities related to the underpinning were given throughout the week at the request of the assessment team. Included in these tours and briefings were the in-place access shafts and FIVF superstructure supports, the deep-seated benchmarks and relative motion measurement stations, the extensometer and strain gage instrumentation installations, the crack mapping, the WJ&E instrumentation monitoring and data recording station, the lagging and reinforcing bar fabrication shops, and the material testing laboratory.

Also, the assessment team periodically observed the work on the mock-up pier (located near the Outage Building) and the jacking stand mock-up (located adjacent to the lagging fabrication shop). All lagging and shoring were in place on the mock-up prior to the team's arrival on site, but observations

were made of the reinforcement installation and the placement of concrete in the lower half of the pier. Three members of the assessment team entered the pier for firsthand observations of the installation. The Quality Control activities and documentation prepared prior to release for concrete placement were described and/or provided as requested by the team members.

Daily meetings were held starting September 21 between personnel representing the assessment team, Bechtel Engineering and Construction, and Consumers Power Company Engineering and Quality Assurance. These meetings provided a format for the assessment team to request information and clarification as well as to discuss observations.

Members of the team have read the Summary of Soils-Related Issues Report and are reviewing applicable specifications, drawings, construction, and Quality Control procedures, instrument monitoring procedures, and plant Quality Assurance documents.

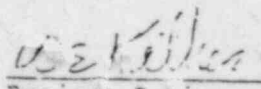
An assessment team Project Manual has been prepared that includes the Project Organization Quality Assurance Plan and reporting and documentation procedures.

#### Meetings

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
9/20/82	Stone & Webster Consumers Power Co. Bechtel Mergentime	Introduction to Site Personnel
9/21/82 through 9/25/82	Stone & Webster Parsons Consumers Power Co. Bechtel	Daily Meeting

#### Observations

The assessment team received full cooperation of on-site personnel. Independent office space and telephone communication have been provided. Consumers Power Company and Bechtel personnel have complied with team requests for access to existing installations, briefings, documents, and records.

  
Project Engineer

  
Project Manager

# STONE & WEBSTER ENGINEERING CORPORATION



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

October 12, 1982

J.O.No. 14358  
Ref. MPR-2

Attention Mr. R. Cook

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

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 2 for the period September 27 through October 3, 1982, is enclosed with this letter.

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

*for* A. Stanley Lucks  
Project Manager

Enclosure

ASL:pus

~~6312140101~~

BX214358-2



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

Weekly Report No. 2

September 27 through October 3, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W. E. Kilker	9/27/82-10/1/82
P. Barry	9/27/82-10/1/82
L. T. Rouen	9/27/82-10/1/82
B. Holsinger	9/27/82-10/1/82
A. Scott	9/27/82-10/1/82
A. S. Lucks	9/27/82-9/29/82

Parsons, Brinkeroff, Quade, & Douglas (PBQD)

P. Parish	9/27/82-10/1/82
J. Ratner	9/29/82-10/1/82

Activities

The assessment team continued their review of the reports, specifications, drawings and procedures in order to gain familiarity with the initial phases of the pending underpinning work. The review concentrated on issued excavation, lagging, ground stabilization and concrete placement procedures. Discussions to resolve any questions concerning these procedures were held with Bechtel and Consumers Power site personnel. The plant QA program and Quality Control procedures on concrete and reinforcement were reviewed by QA team members.

The Assessment team and representatives of Consumers Power Company met with NRC representatives. The role of the assessment team and the interaction with the various site groups, and the methods of reporting the team findings were discussed in this meeting.

Two of the team members attended a public meeting of the NRC and Consumers Power Company. The discussion focused on the establishment of the Midland Plant QA program under Consumers Power Company administration and control and the certification of QC inspectors under the Consumers Power Company program.

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
9/28/82	Stone & Webster Consumers Power Co. U.S. Nuclear Regulatory Commission	Introduction of USNRC and Assessment Team. Discus- sion of Assessment Team's role.
9/29/82	Stone & Webster Bechtel USNRC Public	Public Meeting - Discussion of QA Administration and QC Certification.
9/30/82	Stone & Webster Consumers Power Co. Bechtel	Presentation of Underpinning model.
10/1/82	Stone & Webster Consumers Power Co. Bechtel Mergentime	Weekly Soils Review Meeting
9/27/82 through 10/1/82	Stone & Webster Consumers Power Co. Bechtel	Daily Meeting.

Observations

The Assessment Team has continued to receive cooperation of on-site personnel. Team members observations, questions or suggestions have been given prompt and complete attention by the appropriate site personnel.

Wayne Kilker  
Project Engineer

Norm T. Georgan  
for Project Manager

# STONE & WEBSTER ENGINEERING CORPORATION



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

October 13, 1982

J.O.No. 14358  
Ref. MPR-3

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330  
MIDLAND PLANT - UNITS 1 AND 2  
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING UNDERPINNING-  
REPORT NO. 3

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 3 for the period October 3 through October 9, 1982, is enclosed with this letter.

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

*A. Stanley Lucks*

*for*  
A. Stanley Lucks  
Project Manager

Enclosure

ASL:mmm

*9312140104*

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

Weekly Report No. 3

October 3 through October 9, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W. E. Kilker	10/5/82-10/8/82
P. Barry	10/4/82-10/8/82
L. T. Rouen	10/4/82-10/8/82
B. Holsinger	10/5/82-10/8/82
A. Scott	10/4/82-10/8/82

Parsons, Brinkerhoff, Quade, & Douglas (PBQD)

P. Parish	10/4/82-10/8/82
J. Ratner	10/4/82-10/8/82

Activities

The start of the underpinning work has been delayed pending the recertification of the Soils Remedial Quality Control Inspectors. In the interim, the Assessment team members have completed the review of several of the construction specifications and procedures associated with the initial phases of the underpinning work. Team member questions or observations have been presented to site personnel for resolution.

Several of the team members toured the off-site concrete batch plant and received a briefing on the plant lay-out and production procedures. A general interest tour of the Auxiliary Building and Reactor Containment Structure was given to all of the team members by site engineers.

Observations were made of the underpinning contractor performing routine back-packing maintenance with sand and excelsior on the access shafts' lagging.

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
10/8/82	Stone & Webster Consumers Power Co. Bechtel Mergentime	Weekly Soils Review Meeting
10/4/82 through 10/8/82	Stone & Webster Consumers Power Co. Bechtel	Daily Meeting

Observations

Familiarization with the specifications, drawings, and construction procedures associated with the initial phase of construction is generally complete. Observations and questions from the team members on the construction documents have been discussed with site personnel.

Wayne Kilker  
Project Engineer

Nuri T. Genger  
for Project Manager

# STONE & WEBSTER ENGINEERING CORPORATION



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Midland Site Resident Inspection Office  
Route 7  
Midland, MI 48640

October 18, 1982

J.O.No. 14358  
Ref. MPR-4

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330  
MIDLAND PLANT - UNITS 1 AND 2  
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING UNDERPINNING  
REPORT NO. 4

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 4 for the period October 10 through October 16, 1982, is enclosed with this letter.

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

A. Stanley Lucks  
Project Manager

Enclosure

ASL:ck

~~8312140106~~  
BX214358-2

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

Weekly Report No. 4

October 10 through October 16, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W. E. Kilker	10/12/82-10/15/82
P. Barry	10/12/82-10/15/82
L. T. Rouen	10/11/82-10/15-82
B. Holsinger	10/11/82-10/15/82
A. Scott	10/11/82-10/15/82

Parsons, Brinckerhoff, Quade, & Douglas (PBQD)

J. Ratner	10/11/82-10/15/72
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Activities

The Assessment Team completed the review of all construction specifications and procedures associated with the initial phases of the underpinning. Familiarization with the drawings and Quality Assurance/Quality Control procedures continued. Discussions with site personnel were held to resolve questions and observations on the various construction documents.

Team members read the portions of the NRC's Supplemental Safety Evaluation Report No. 2 applicable to the Auxiliary Building Underpinning.

The team members attended the site Soils Training Classes on quality plans, soils work permits and coordination forms.

<u>Meetings Attended</u>	<u>Represented</u>	<u>Purpose</u>
10/11/82 through 10/15/82	Stone & Webster Consumers Power Bechtel	Daily Meetings
10/14/82 and 10/15/82	Stone & Webster Consumers Power Bechtel Mergentime	Soils Remedial Training Program Courses
10/15/82	Stone & Webster Consumers Power Bechtel Mergentime	Weekly Soils Review Meeting

Observations - None

*W E Kilker*  
Project Engineer

*Alb...*  
Project Manager

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

STONE AND WEBSTER ENGINEERING CORPORATION

NONCONFORMANCE IDENTIFICATION REPORT

DATE OF NONCONFORMANCE: 10/21/82 NIR Number 1

IDENTIFICATION/LOCATION OF ITEMS: Procedure for Mechanical Splicing of Reinforcement (MCP 16.000; Rev. 3.)

DESCRIPTION OF NONCONFORMANCE: Technical Specification for Underpinning of Auxiliary Building and Feedwater Isolation Valve Pits (para 11.5.3-g) requires subcontractor's procedure for Mechanical Splicing of Reinforcement to provide a method of mechanically locking the position splices.

The Mergentime Procedure does not provide for mechanically locking splices.

INITIATOR:

*L.T. Green*

DATE:

10/21/82

PROJECT MANAGEMENT CONCURRENCE:

*A. S. Luchs, Sr.*

CORRECTIVE ACTION BY:

(IDENTIFY ORGANIZATION TAKING CORRECTIVE ACTION)

INITIATOR CONCURRENCE:

PROJECT MANAGEMENT CONCURRENCE:

DATE:



STONE AND WEBSTER ENGINEERING CORPORATION

NONCONFORMANCE IDENTIFICATION REPORT

DATE OF NONCONFORMANCE: October 28, 1982 NIR Number 2

IDENTIFICATION/LOCATION OF ITEMS: Technical Specification for Underpinning of Auxiliary Building and Feedwater Isolation Valve Pits, and associated C1400 Series Drawings, located at MPQAD and QC.

DESCRIPTION OF NONCONFORMANCE: The MPQAD and QC controlled copies of the above Specification and Drawing are missing the following change documents:

- |              |  |
|--------------|--|
| QC's -       | 1) Specification - Specification Change Notice (SCN) No. 12002, 12003, and 12004.                        |
| QC and MPQAD | 2) Drawing C1424-2 - Drawing Change Notice (DCN) No. 7 Field Change Request (FCR) - No. C4743 and C4485. |

INITIATOR: *Barry P. Holsinger*  
Barry P. Holsinger

DATE: October 28, 1982

PROJECT MANAGEMENT CONCURRENCE: *Wesley Fisher for K.S. Luke*

CORRECTIVE ACTION BY: \_\_\_\_\_  
(IDENTIFY ORGANIZATION TAKING CORRECTIVE ACTION)

INITIATOR CONCURRENCE:

PROJECT MANAGEMENT CONCURRENCE:

DATE:

# STONE & WEBSTER ENGINEERING CORPORATION



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

October 27, 1982

J.O.No. 14358  
Ref. MPR-5

Attention Mr. R. Cook

RE: DOCKET NO. 50-329/330  
MIDLAND PLANT - UNITS 1 AND 2  
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING UNDERPINNING  
REPORT NO. 5

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 5 for the period October 17 through October 23 1982, is enclosed with this letter.

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

A. Stanley Lucks  
Project Manager

Enclosure

ASL:nb

~~83/2140109~~

Weekly Report No. 5

October 17 through October 23, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W.E. Kilker	10/18 - 10/20
P. Barry	10/18 - 10/22
L.T. Rouen	10/18 - 10/22
B. Holsinger	10/20 - 10/22
A. Scott	10/20 - 10/22

Activities

The focus of the Assessment Team effort was the disposition of numerous questions that had been raised over the past 3 weeks with respect to the pending underpinning construction specifications, drawings and procedures. To this end, the team members had meetings and discussions with site engineering and construction personnel and resolved the majority of the items. Pending items will be resolved within the next two weeks.

Team Members attended a critique meeting on the placement of reinforcing and concrete in the mock-up pier. The team was also represented at discussions of recently recorded settlement date.

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
10/18 through 10/22	Stone & Webster Consumers Power Bechtel	Daily Meeting
10/19	Stone & Webster Consumers Power Bechtel Mergentime	Settlement Monitoring Records
10/19	Stone & Webster Consumers Power Bechtel Mergentime	Critique of Mock-Up Pier- Reinforcing Steel and Concrete Placement
10/20	Stone & Webster Bechtel Mergentime	Discussion of Excavation and Lagging Procedure
10/20	Stone & Webster Bechtel Mergentime	Training Sessions on Excavation and Lagging, Jacking, and Soil Stabilization

Meetings Attended

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
10/22	Stone & Webster Bechtel	Resolution of Observations and Questions on Con- struction Specifications and Procedures

Observations

The Assessment Team has completed the review of the reports and construction documents applicable to the initial phase of the underpinning work. Most questions have been resolved by discussion with site personnel.

The team will, commencing October 25, scale down it's presence on the site until actual start of construction.

Nonconformance Identification Reports

NIR No. 1 - Issued 10/21/82 - The Mergentime Procedure for splicing reinforcing bars did not address a specification requirement.

Wayne Killian  
Project Engineer

W. K. L. S. Perkins  
Project Manager

## MIDLAND MONTHLY STATUS REPORT

Midland Site Inspection Team efforts at the Midland Construction Site during the month of November were concentrated on the completion of the Diesel Generator Building inspection. The inspection was completed on November 25 and the inspection report is currently being written. Significant inspection findings are being evaluated by the Region III staff.

Remedial soils work continues based on a work agreement between the NRC and Consumers Power Company. Auxiliary building underpinning remains halted pending resolution of the independent third party assessment effort.

The licensee continued the reinspection of 100% of Class 1E cables installed or partially installed. No further underrated or undersized cables have been found as of the end of the status report period.

A 100% reinspection of all hangers installed in CY 1980 and a sample reinspection of hangers installed after January 1, 1982 is continuing by the licensee.

All safety related welding on the heating, ventilating and air conditioning (HVAC) was stopped November 30, 1982 after the licensee determined that the Quality Assurance Program for welder certification and procedure qualification was inadequate. Zack Company, the HVAC contractor, discontinued all welding on safety related HVAC systems, laying off 151 craft workers.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

August 13, 1982

MEMORANDUM FOR: All Midland Section Personnel  
FROM: W. D. Shafer, Chief, Midland Section  
SUBJECT: REMEDIAL SOILS ACTIVITIES

Effective immediately, we will authorize remedial soil work activities, including work affecting remedial soils activities as defined in the "Q" boundary in licensee drawing C-45, in accordance with the NRC/CPCo Work Authorization Procedure, effective August 12, 1982. All work in this area is "Q" and must be accomplished in accordance with a staff approved QA plan.

Dr. Ross Landsman has the lead responsibility for recommending authorization of this work. Each of us are responsible for keeping Dr. Landsman informed about authorizations for non-civil work activities.

Should anyone question whether the actual implementing work meets the licensee's commitment to NRR, please notify me immediately so that we may expedite an acceptable resolution.

Anyone identifying unauthorized work in progress will notify me immediately. Unauthorized work will be considered a direct violation of the board order.

*W.D. Shafer*  
W. D. Shafer  
Chief, Midland Section

- cc: P. F. Warnick
- R. C. Cook
- E. L. Burgess
- R. N. Gardner
- R. B. Landsman

*8406120012*

NRC AND CPCO  
WORK AUTHORIZATION PROCEDURE

Effective Date August 12, 1982

APPROVED *J. Mooney*  
Midland Project Office

APPROVED *W. D. Hayes*  
Chief, Midland Section OSC

~~8208240309~~

## NRC AND CPCO WORK AUTHORIZATION PROCEDURE

### SCOPE

To review all construction work covered by the ASLB Order of April 30, 1982.

### PURPOSE

To provide a mechanism for NRC Region 3 review and authorization of activities to be implemented at the Midland site as described in the ASLB Order.

To designate appropriate NRC and CPCO responsible individuals.

### REFERENCES

- 1) ASLB Memorandum and Order dated April 30, 1982.
- 2) ASLB Memorandum and Order dated May 7, 1982.
- 3) Letter to J W Cook from D G Eisenhut dated May 25, 1982, "Completion of Soils Remedial Activities Review".

### PROCEDURE

- 1.0 CPCo Project Management Organization will provide, at the beginning of the month a detailed list of all work activities to be implemented. This list will cover the construction activities anticipated to be in progress for the next 60-day period.
- 2.0 Upon receipt of the list the NRC will review the list and designate those activities as critical or non critical and advise CPCo Construction in writing of this designation.
  - 2.1 For those activities designated non critical, CPCo is authorized to proceed with the work. This work shall be accomplished in accordance with the staff approved Quality Assurance Plan.
  - 2.2 For those activities designated critical, the NRC will advise CPCo Construction of the required details essential for further staff review to determine the specifics of the work. CPCo is not authorized to proceed with work prior to receiving written authorization from the NRC.



- 2.2.1 CCo Construction will provide the work details as requested by the Region.
  - 2.2.2 After review by the Region, CCo will be provided with specific written authorization to conduct the identified work activities.
  - 2.3 Should these authorized activities not start within 90 days, these activities will be resubmitted for authorization.
- 3.0 Changes may be required for authorized critical and non critical activities. These changes shall be processed as follows:
- 3.1 Changes that alter the description of a previously submitted activity, in 1.0 above, shall be submitted to the Region for review. The review and authorization process will be as in 2.0 above.
  - 3.2 Changes which do not alter the description of a previously submitted activity, in 1.0 above, are not required to be submitted to the NRC but, shall be accomplished in accordance with the staff approved Quality Assurance Plan.
- 4.0 Work activities not previously identified on the work list, in 1.0 above, shall be identified and authorized as in 1.0 and 2.0 above. Approval of these work activities may be given verbally by the NRC responsible individual to the NRC Senior or Resident Inspector, who will then issue written authorization.
- 5.0 Emergency work activities may be performed to mitigate conditions which could affect personnel safety or could result in damage to facilities and equipment.

These activities shall require immediate notification of the Senior Resident Inspector.

6.0 Responsible individuals

6.1 The NRC representative shall be the Chief, Midland Section Office of Special Cases or his designee.

6. The CCo designated representative shall be the Site Manager or his designee.

7.0 Changes to this procedure shall be approved the the Chief, Midland Section Office of Special Cases and the Site Manager.

WORK ACTIVITY LIST  
FOR SEVEN DAYS FROM LIFTING OF STOP WORK ORDER

- Aux Bldg
1. Operate all instruments in seven day "baseline"
  2. Test all instrumentation systems per C-1493
  3. Adjust set and finalize covers on all instruments
  4. Verify post tension systems on control tower
  5. Maintain instrument system
- Freeze Wall
6. Continue monitoring utility protection pits (4)
  7. Install clay to below duct bank (pit 4) (details attached)
  8. Add additional wells (up to 5) on west perimeter (outside C-45)
  9. Continue operation of systems and wells
- FIVP
10. Install and grout bolts and plates
  11. Lift off test on bolts (and hardness tests)
  12. Tension bolts
- Crack Mapping
13. Clean FIVP to crack map
  14. Crack map FIVP's
  15. Crack map EPA's
  16. Crack map remainder Aux Bldg
- Underpinning
17. Drift to piers 12 E/W
  18. Dig piers 12 E/W
  19. Install piers
  20. Drift to piers 9 E/W
  21. Implement C-200 if needed
  22. Install bumpers, handrails, stairs, etc in access shaft
- SWPS
23. Complete fireline relocation
  24. Install 6 deep seated benchmarks
  25. Install ejector wells
  26. Install soldier piles
  27. Excavate 36" service water pipe (train A)
- BWST
28. Construct new ring beams
- Other
29. Finish 72" line repair
  30. Approval of Quality Assurance Plans

*Gardner Landsman*  
GARDNER AG  
LANDSMAN LS  
SHAFFER LS  
WARDILL AW

# STONE & WEBSTER ENGINEERING CORPORATION

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

September 29, 1982  
I.C.No. 1-358.06  
Ref. NRE-1

Attention Mr. R. Cook

Dear Sir:

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

A copy of the Independent Assessment of the Auxiliary Building Underpinning Weekly Report No. 1 for the period September 19 through 26, 1982, is enclosed with this letter.

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

Very truly yours,

*A Stanley Luck*  
A. Stanley Luck  
Project Manager

Enclosure

ASL:ch

~~8712140097~~

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

Weekly Report No. 1

September 19 through 26, 1982

Personnel on Site

Stone & Webster Engineering Corporation (SWEC)

W. E. Kilker	9/20/82-9/26/82
P. Barry	9/20/82-9/23/82
L. T. Rouen	9/20/82-9/24/82
E. Holsinger	9/20/82-9/26/82
A. Scott	9/20/82-9/26/82
A. S. Lucks	9/21/82-9/23/82

Parsons, Brinkerhoff, Quade, & Douglas (PBQD)

P. Parish	9/21/82-9/24/82
J. Ratner	9/22/82-9/24/82

Activities

This report summarizes the first week of activities and observations of the SWEC independent assessment team (including the PBQD personnel). The team, which at the present time consists of seven engineers representing Geotechnical, Structural, Construction, and Quality Assurance disciplines, arrived at the site between September 20 and September 22.

The assessment team has established separate on-site office space and has contracted for clerical assistance.

Introductions of all team members were made to on-site personnel representing Bechtel Engineering and Construction; Consumers Power Company Quality Assurance and Quality Control; Wiss, Janney & Elstner (WJ&E) Instrumentation Monitoring; and Mergentime Construction. Tours and briefings of the various areas and activities related to the underpinning were given throughout the week at the request of the assessment team. Included in these tours and briefings were the in-place access shafts and FIVP superstructure supports, the deep-seated benchmarks and relative motion measurement stations, the extensometer and strain gage instrumentation installations, the crack mapping, the WJ&E instrumentation monitoring and data recording station, the lagging and reinforcing bar fabrication shops, and the material testing laboratory.

Also, the assessment team periodically observed the work on the mock-up pier (located near the Outage Building) and the jacking stand mock-up (located adjacent to the lagging fabrication shop). All lagging and shoring were in place on the mock-up prior to the team's arrival on site, but observations

... was made of the reinforcement installation and the placement of concrete in the lower half of the pier. Three members of the assessment team entered the pier for firsthand observations of the installation. The Quality Control activities and documentation prepared prior to release for concrete placement were described and/or provided as requested by the team members.

Daily meetings were held starting September 21 between personnel representing the assessment team, Bechtel Engineering and Construction, and Consumers Power Company Engineering and Quality Assurance. These meetings provided a format for the assessment team to request information and clarification as well as to discuss observations.

Members of the team have read the Summary of Soils-Related Issues Report and are reviewing applicable specifications, drawings, construction, and Quality Control procedures, instrument monitoring procedures, and plant Quality Assurance documents.

An assessment team Project Manual has been prepared that includes the Project Organization Quality Assurance Plan and reporting and documentation procedures.

Meetings

<u>Date</u>	<u>Represented</u>	<u>Purpose</u>
9/20/82	Stone & Webster Consumers Power Co. Bechtel Mergentime	Introduction to Site Personnel
9/21/82 through 9/25/82	Stone & Webster Parsons Consumers Power Co. Bechtel	Daily Meeting

Observations

The assessment team received full cooperation of on-site personnel. Independent office space and telephone communication have been provided. Consumers Power Company and Bechtel personnel have complied with team requests for access to existing installations, briefings, documents, and records.

W. E. Keller  
Project Engineer

ASL  
Project Manager

STONE & WEBSTER MICHIGAN, INC.  
MIDLAND NUCLEAR COGENERATION PLANT  
C10 OBSERVATIONS

Observation Number	Observations	Originating Document/Date	CPCo Response Document/Date	Status Open/Closed	Close-Out Document/Date
001	MRC Meeting 5/18/83 SUBTITLE AND OBJECTIVES OF CCP Provide details: (a) to improve project information status (b) to improve implementation of the QA program	Letter-minutes of meeting of 5/18/83	Letter 7/1/83	Closed	Report No. 4 7/12/83
002	MRC Meeting 5/18/83 Status of BHO PILOT TEAM (a) are procedures for statusing approved (b) provide results of preliminary hanger walkdowns	Letter-minutes of meeting of 5/18/83	Letter 7/1/83	Closed	Report No. 4 7/12/83
003	MRC Meeting 5/18/83 HANGER TEAM ENGINEERS (a) how are NCR's processed and evaluated	Letter-minutes of meeting of 5/18/83	Letter 7/1/83	Closed	Report No. 4 7/12/83
004	MRC Meeting 5/18/83 HANGER TEAM QUALITY REPRESENTATIVE (a) clarification on Q-Non Q interface	Letter-minutes of meeting of 5/18/83	Letter 7/1/83	Closed	Report No. 4 7/12/83
005	MRC Meeting 5/18/83 PROCEDURES/INSPECTIONS (a) provide objective evidence that listing of procedures, specifications and drawings are complete	Letter-minutes of meeting of 5/18/83	Letter 7/1/83	Closed	Report No. 4 7/12/83

STONE & WEBSTER MICHIGAN, INC.  
MIDLAND NUCLEAR COGENERATION PLANT  
C10 OBSERVATIONS

Observation Number	Observations	Originating Document/Date	CPCo Response Document/Date	Status Open/Closed	Close-Out Document/Date
006	MRC Meeting 5/5/83 Program (Training) requires revision to address how "Trainers" are trained	Report No. 1 6/3/83	Letter 7/1/83	Closed	Report No. 5 7/18/83
007	Method of communication/notification with MPQAD when PQCI's are found to be ambiguous or do not meet code requirements	Report No. 1 6/3/83	Letter 7/1/83	Closed	Report No. 4 7/12/83
008	MRC Meeting 6/1/83 Adequacy of drawings (A8) - large bore pipe hangers Hold Point Released 8/15/83	Report No. 2 6/14/83	Letters 7/1/83 8/9/83	Closed	Report No. 9 8/15/83
009	MRC Meeting 6/1/83 Additional verification of equipment received and installed (E-2)	Report No. 2 6/14/83	Letters 7/1/83 8/9/83	Closed	Report No. 9 8/15/83
010	MRC Meeting 6/1/83 Material traceability of installed hangers (E3) Hold Point Released 8/15/83	Report No. 2 6/14/83	Letters 7/1/83 8/9/83	Closed	Report No. 9 8/15/83
011	MRC Meeting 6/1/83 (a) discussion of nonconforming items with Project Engineering  (b) has a program been developed and responsibilities established of personnel assigned to process nonconformances?  NOTE: Hold Point Released 8/15/83	Report No. 2 6/14/83		Open pending receipt of Nutech Program	



STONE & WEBSTER MICHIGAN, INC.  
MIDLAND NUCLEAR COGENERATION PLANT  
CIO OBSERVATIONS

Observation Number	Observations	Originating Document/Date	CPCo Response Document/Date	Status Open/Closed	Close-Out Document/Date
012	MRC Meeting 6/1/83 Identification of QVP related commitments	Report No. 2 6/14/83	Letter 7/1/83	Closed	Report No. 9 8/15/83
013	MRC Meeting 6/1/83 Would a critical path Level II network be issued?	Report No. 2 6/14/83	Response given at meeting	Closed	Report No. 2 6/14/83
014	MRC Meeting 6/1/83 Are job descriptions and responsibilities of CPCo personnel engaged to implement the QVP available?	Report No. 2 6/14/83	Letter 7/1/83	Closed	Report No. 5
015	Inspection attributes do not lend themselves to the title of the PQCI "In-Process"-----	Report No. 2 6/14/83	PQCI P-1.60 Rev 7 8/9/83	Closed	Report No. 8 8/8/83
016	Clarification of paragraph 1 under "Special Instructions," PQCI P-1.60	Report No. 2 6/14/83	PQCI P-1.60 Rev 7 8/9/83	Closed	Report No. 8 8/8/83
017	System Interaction Walkdown Program not reviewed by Region III NRC nor the NRR	Report No. 2 6/14/83	Response by D. Miller during meeting 6/14/83	Closed	Report No. 2 6/14/83
018	MRC Meeting 6/17/83 Matrix of CPCo commitments to the NRC should be complete	Letter 6/17/83	Letter 7/1/83	Closed	Report No. 6 7/25/83

STONE & WEBSTER MICHIGAN, INC.  
MIDLAND NUCLEAR COGENERATION PLANT  
CIO OBSERVATIONS

Observation Number	Observations	Originating Document/Date	CPCo Response Document/Date	Status Open/Closed	Close-Out Document/Date
019	MRC Meeting 6/17/83 The 14 required to resolve Management Review Team Observations should be reviewed and approved	Letter 6/17/83	Letter 7/1/83	Closed	Report No. 6 7/18/83
020	MRC Meeting 6/23/83 Audit responses should not be readdressed	Letter 6/28/83	Letter 8/9/83	Closed	Report No. 12 9/6/83
021	MRC Meeting 6/23/83 Observations by Review Team should be submitted in advance of meetings	Letter 6/30/83	Letter 8/9/83	Closed	Report No. 12 9/6/83
022	MRC Meeting 6/23/83 Restrains require expeditious resolutions	Letter 6/30/83	Letter 8/9/83	Closed	Report No. 12 9/6/83
023	Concerns regarding methods of evaluating construction training courses	Report No. 3 6/28/83	Letter 7/1/83	Closed	Report No. 5 7/18/83
024	MRC to convene to confirm or modify recommendations of R. A. Wells memo of 6/7/83 Serial 2284B	Report No. 5 7/18/83	Letter-J. Cook to J. Rutgers 7/13/83	Closed	Report No. 9 8/15/83

STONE & WEBSTER MICHIGAN, INC.  
MIDLAND NUCLEAR COGENERATION PLANT  
C10 OBSERVATIONS

Observation Number	Observations	Originating Document/Date	CPCo Response Document/Date	Status Open/Closed	Close-Out Document/Date
025	Ten course rosters unsatisfactory due to transcription errors and improperly filled out.	Report No. 7 8/1/83	Telecon on 8/25/83 that corrections have been made	Closed	Report No. 11 8/29/83 Reverified Daily Inspection Report 8/25/83
026	14 discrepancies-Construction Training matrix vs. Computer Printout	Report No. 8 8/8/83	Telecon 8/22/83 Reverified- one deficiency NIR 001 Issued	Closed	Report No. 9 8/15/83 Daily Inspection Reports 8/22/83
027	NIR 001 dispositioned and Issued as closed by C10	Report No. 9 8/15/83	N/A	Closed	C10 Closeout 8/15/83
028	13 discrepancies-Construction Training matrix vs. Computer Printout	Report No. 9 8/15/83	Memo from Training Coordinator 8/18/83	Closed	Report No. 10 Daily Inspection Report 8/18/83
029	Duplication of welding criteria in various PQCI's	Report No. 9 8/15/83	Telecon with R. Davis MPQAD 8/26/83	Closed	Report No. 11 8/29/83
030	Need to review Vendor Equipment Verification Program-MPQAD/SMO	Report No. 5 7/18/83		Open	

# S+W CIO Issues

## 1. Report #1

- a. FPG-2.000, Rev. 1 requires revision to address how training is trained. (Construction Training Process)  
closed - Report # 5

## 2. Report #2

### a. Items requiring resolution:

- (1) Adequacy of drawings (large bore pipe hangers)  
QVP H.P. (#4) closed - Report # 9, 12
- (2) additional verification of equipment received and installed  
closed - Report # 5
- (3) Material traceability of installed hangers  
QVP H.P. (#6) closed - Report # 9
- (4) Discussion of nonconforming items with Project Engineer  
closed - Report # 5 (\* - Resopen if sampling is initiated)
- (5) Clarification of QVP related commitments

### b. CIO questions concerning the method of schedule of work:

- (1) Would a critical path level II network be issued

### c. Other questions raised by CIO:

- (1) are job descriptions and responsibilities of CIO personnel to implement the QVP available?  
closed - report # 5

(2) Has a program been developed and responsibilities established of personnel assigned to process nonconformances?

QVP H.P. (#6) Report #9 (then open)  
H.P. closed

d. CIO concerns with the application of PQCI 1.60

(1) The QCIR attributes do not lend themselves to the title of inspection  
closed - Report # 8

(2) CIO requested clarification of this paragraph (paragraph 1.60)  
closed - Report # 8

e. CIO concern that no review by NRE or Region II had occurred prior to start of the official walk down.

3. Report # 3

a. CIO concerns with the use of evaluation sheets during training.  
closed - Report # 5

4. Report # 4

5. Report # 5 - commitment to develop a vendor eqpt. verification program

6. Report # 6

7. Report # 7

a. 10 training course rosters were unsatisfactory due to transcription errors and being improperly filled out.

closed - Report # 11

## 8. Report # 8

a. 14 areas of discrepancies were observed where the required code training identification did not agree with the computer printout. closed - Report # 10  
NIR # 001 - individual trained to wrong code (<sup>NIR</sup>closed - Report # 10)

## 9. Report # 9

a. 13 areas of discrepancies were observed where the required training identification as noted in the training matrix did not agree with the computer printout.  
closed - Report # 10

b. Welding criteria are duplicated in PQCT'S.  
closed - Report # 11

## 10. Report # 10

## 11. Report # 11

## 12. Report # 12

## 13. Report # 13

## 14. Report # 14

## 15. Report # 15

## 16. Report # 16

## Significant CIO Issues -

1. Reinspection of hangers using voided red line tags.
2. Material traceability

# 1

# 2

20703

sum

12

42051

sum

9

90704

sum

20

total  
102 hours

of which  
22 Hrs