QUALITY ASSURANCE PROGRAM ELEMENTS

(DATA SHEET 1)

THE FOLLOWING ANSI N45.2-1971 QUALITY ASSURANCE PROGRAM ELEMENTS APPLY TO THIS SPECIFICATION.

APPLICABLE (TO BE COMPLETED BY BECHTEL)		TO BE COMPLETED BY THE SUPPLIER: SUPPLIER DOCUMENT AND PARAGRAPH REFERENCES
[X]	QUALITY ASSURANCE PROGRAM	
[X]	ORGANIZATION	
[X]	DESIGN CONTROL	
[X]	PROCUREMENT DOCUMENT CONTROL	
[X]	INSTRUCTIONS, PROCEDURES AND DRAWINGS	
[X]	DOCUMENT CONTROL	
[X]	CONTROL OF PURCHASED MATL, EQUIP, & SERVICES	
[X]	IDENT. & CONTROL OF MATLS, PARTS, COMPONENTS	
[ ]	CONTROL OF SPECIAL PROCESSES	
[X]	INSPECTION	
[X]	TEST CONTROL	
[X]	CONTROL OF MEASURING AND TEST EQUIPMENT	
[X]	HANDLING, STORAGE AND SHIPPING	
[ ]	INSPECTION, TEST AND OPERATING STATUS	
[X]	NONCONFORMING ITEMS	
[X]	CORRECTIVE ACTION	
[X]	QUALITY ASSURANCE RECORDS	
[X]	AUDITS	
[X]	OTHERS Related ANSI 45.2 subsections as defined in the procurement documents	

NO	DATE	REVISIONS	BY	CHECKED	APPROVED
0	1-11-80	Issued to reflect current QA program	DL	GHH	LMK/MOK

BAPC

CONSUMERS POWER COMPANY
MIDLAND PLANT UNITS 1 AND 2

JOB NO 7220

DOCUMENT NO	REV
C-208	0

Bechtel Associates Professional Corporation
Ann Arbor, Michigan

Appendix Q
Spec C-208(Q)

TECHNICAL SPECIFICATION

FOR

SUBCONTRACT FOR

AREA DEWATERING SYSTEM

FOR THE

CONSUMERS POWER COMPANY

MIDLAND PLANT

MIDLAND MICHIGAN

No.	DATE	REVISIONS	BY	CH'K	APPR
2	11-12-79	Revised as noted on facing sheet: INC SCN 9001			
1	7/11/79	Issued for subcontract-revised as noted on facing sheet			
0	6/12/79	ISSUE FOR BIDS			

ORIGIN			JOB No. 7220	
BAPC	BECHTEL	CONSUMERS POWER COMPANY MIDLAND PLANT UNITS 1&2 MIDLAND MICHIGAN	SPEC DES GUIDE No. C-88-Q	REV 2

SHEET	LATEST REV.	SHEET	LATEST REV.	SHEET	LATEST REV.	SHEET	LATEST REV.	SHEET	LATEST REV.	SHEET	LATEST REV.	SHEET	LATEST REV.
1	2												
11	2												
111	2												
1	2												
2	2												
3	2												
4	2												
5	2												
6	2												
7	2												
8	2												
9	2												
APPENDIX A													
A-1	0												
1	2												
2	0												
3	0												
4	0												
1													

NO.	DATE	REVISIONS	BY	CHK'D	APP'D	NO.	DATE	REVISIONS	BY	CHK'D	APP'D
2	11/12/79	Revised shts. 1,11,111 1-9,App A shr 1 (Revised)									
1	7/11/79	Issued for subcontract rev. sh. 1,11,111,2-9									
0	6/12/79	ISSUE FOR BIDS									

BECHTEL

FACING SHEET

AREA DEWATERING SYSTEM
CONSUMERS POWER COMPANY
MIDLAND POWER PLANT UNITS 1&2
MIDLAND, MICHIGAN

JOB No. 7220

C-88-Q

REV. 2

TECHNICAL SPECIFICATION

FOR

SUBCONTRACT FOR

AREA DEWATERING SYSTEM

CONTENTS

1. SCOPE

A. GENERAL

1) The work to be performed under this Subcontract shall consist of designing a dewatering system capable of lowering the groundwater to a minimum elevation of 580 feet with the pond at el 627'±. The lowering of the groundwater will allow others to excavate portions of the auxiliary building and feedwater isolation valve pit in a dry condition. This specification includes Q-listed work to be performed exclusively by Contractor as noted in Article 7.

B. ITEMS INCLUDED

1) Design, furnish, install, maintain, operate, and remove dewatering system as indicated in the design drawings.

2) Provide and maintain standby equipment and power of sufficient capacity to perform the intended work.

3) Install, maintain, and observe observation wells and/or piezometers and test pits for logging the water table elevations at the locations as required and approved by Contractor.

4) Dispose of the groundwater to the cooling pond by installing a piping system from the dewatering system indicated in the drawings to the site storm drain system. 2

5) Provide protection of the dewatering system in areas designated as construction access as shown in the drawings.

6) Grout placement for all dewatering holes and wells upon completion of the subgrade dewatering.

7) Install 1/4-inch petcocks, bushing, and nipples at each dewatering well for obtaining samples of the return water. 2

8) Provide all reducers, couplings, piping etc necessary to adapt Contractor's flow meters to discharge line, fire hydrant, and recirculation line.

C. RELATED ITEMS NOT INCLUDED

1) Access roads to the area

2) Inspecting the water being pumped to determine the amount of fines being removed. In this specification, fines are defined as any nonorganic materials coarser than 0.005 millimeter. 2

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3) Concrete grout for sealing holes and wells

4) Excavation required (trenching) to provide the areas for installing the dewatering systems

5) Location of all utilities, embedded plant facilities, and other subsurface structures at the location of the dewatering system

6) Drilling holes through the turbine building and auxiliary building concrete floors at elevations 614' and 634' at the locations required by Subcontractor

7) Repairing the holes drilled in the auxiliary building and turbine building concrete floors

8) Electrical power to operate the pumps

9) All lines, grade, survey, excavation, fill, backfill, and protection of dewatering equipment at the road or ramp crossing as necessary

10) Repair and/or replacement of any utilities, embedded plant facilities, and/or other substructure damage encountered at the locations indicated by Contractor for locating eductor wells

2. QUALITY STANDARDS

A. GENERAL

1) Subcontractor shall be responsible for the quality of items and services to meet the requirements of this specification, applicable codes and standards, and other contract documents.

3. SUBMITTALS

A. STANDARD FORMS

1) Engineering document and quality verification document requirements are summarized in Form G-321-D and are augmented by detailed requirements in this specification.

B. PROCEDURES

Subcontractor shall submit the following procedures (in detail) to the satisfaction of Contractor.

1) Dewatering plant area procedure

2) Test pits procedure

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3) Observation wells 2

4) Jetting procedure

5) Grouting procedure

4. SERVICE REQUIREMENTS

A. OPERATIONAL REQUIREMENTS

1) An adequate dewatering system shall be installed to lower and control the groundwater to provide a dry condition during construction, excavation, and placement of fill materials. The dewatering system shall be capable of lowering and continuously maintaining the groundwater level to el 600' initially so construction work can start and then lowering and maintaining the groundwater level as directed by Contractor to a minimum elevation of 580' until a written directive from Contractor to cease dewatering operations has been received.

2) Deleted

3) Contractor shall provide operating electrical power. The drawing will indicate these locations.

B. SUBCONTRACTOR'S RESPONSIBILITY

1) Subcontractor shall be solely responsible for the design, installation, operation, and removal of a dewatering system. This system shall prevent the loss of fines in the soil, seepage, boils, quick conditions, or softening of the foundation strata. The stability of sides and bottom of excavation shall be maintained, thereby resulting in every phase of the excavation and construction being performed in dry conditions.

C. DATA AVAILABLE

1) The subsurface data and preliminary pump test results are available upon request and are for Subcontractor's information only. Subcontractor assumes the responsibility for any deductions, interpretations, or conclusions made on the basis of these data.

2) The test boring report and the Dames and Moore Report for this plant are located at Contractor's offic and are available for review.

3) The estimated elevation of the groundwater table is 627 feet.

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D. APPROVAL OF DEWATERING SYSTEM

1) Approval by Contractor of the dewatering system proposed by Subcontractor will be only with respect to the basic methods Subcontractor intends to use. Approval of the dewatering system will be based on the demonstrated performance of the system to satisfy the requirements for dewatering as specified.

E. CONTROL

1) The observation wells, piezometers, and measurements of fines shall be used as a primary basis of determining compliance with the requirements of this specification. 2

2) Test pits shall be used only as directed by Contractor in writing.

5. FIELD OPERATIONS

A. GENERAL

1) Subcontractor shall furnish, install, operate, and maintain the dewatering system and, upon completion, remove all dewatering equipment except as approved in writing in advance by Contractor. Subcontractor shall perform all associated work required to remove and control the subsurface water so that the excavation, construction, and backfilling operations can be performed completely in dry conditions as approved by Contractor. All associated work required to remove and control localized pockets of trapped groundwater within the excavation will be done by others. 2

B. TRENCHING

1) Contractor shall perform excavation where required to allow for installation of the dewatering system.

C. TESTING DEWATERING SYSTEM

1) Prior to any excavation below the groundwater level, the dewatering system shall be tested and placed in operation to lower the water levels as required and shall function continuously as required to provide a dry construction area. The pumping shall continue until the excavation and backfill operations are completed to the upper limits of the original groundwater level. Subcontractor shall obtain written approval from Contractor before discontinuing the dewatering operation.

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D. DISPOSAL OF WATER

1) Subcontractor shall be responsible for all surface and subsurface water resulting from its operations and shall dispose of all water removed from the dewatering system in a manner that will not endanger public health, property, or any portion of the work under construction by other Subcontractors and associates working in the area. The water shall be conveyed through piping from the dewatering system to the existing site storm drain system only after it has been monitored for fines. 2

E. STANDBY EQUIPMENT

1) Subcontractor shall provide standby equipment installed and available for immediate operation as may be required to maintain the dewatering adequately on a continuous basis in the event that all or any part of the dewatering system may become inadequate or fail.

2) Subcontractor shall provide and maintain, in an operable condition, standby diesel-powered pumps and/or generators of sufficient capacity to start and operate all pumps and other required dewatering equipment for the duration of the dewatering.

F. OBSERVATION WELLS

1) Subcontractor shall supply, install, take measurements, and maintain the required number of observation wells and/or piezometers and such additional observation wells as may be ordered by Contractor. Water levels in the observation wells and/or piezometers and volume of water shall be recorded and submitted to Contractor daily, Monday through Friday, during dewatering.

2) The observation wells shall be of a type that will permit portions of the riser to be removed as the excavation work progresses. The proposed type shall be submitted to Contractor for approval prior to installation.

3) Subcontractor shall, by adding or removing water from all observation well risers, demonstrate that the observation wells are functioning properly prior to commencement of dewatering.

4) Any observation wells and/or piezometers that become inactive, damaged, or destroyed by Subcontractor shall be replaced within 24 hours by Subcontractor at no additional expense to Contractor.

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5) Jetting shall not be used for the installation of the observation wells/dewatering wells under any structure. Controlled jetting may be used for the installation of the observation wells/dewatering wells outside the structures, provided the jet water is brought up through the inside of the jetted casing and does not blow up the outside of the jetted casing. The above is applicable after the casing has been installed 10 feet below the ground surface. Jetting shall be done in accordance with the Subcontractor's approved procedure. 2

G. DEWATERING

1) Subcontractor shall be solely responsible for the arrangement, location, and depths of the dewatering system necessary to accomplish the work described under this section of the specification. Limits of the work are shown in the drawing. The dewatering shall be accomplished in a manner that will reduce the hydrostatic head in water-bearing strata below any excavation to the extent that the water level and piezometric water levels in the construction area are substantially (a minimum of 3 feet) below the prevailing excavation surface; will prevent the loss of fines, seepage, boils, quick conditions, or softening of the foundation strata; will maintain stability of the sides and bottom of the excavation; and will result in all construction operations being performed in a dry condition. For the area outside of the structures where pervious soil strata overlay considerably less pervious soil strata above the subgrade level, the groundwater in the pervious strata shall be lowered to within less than 2 feet of the top of the less pervious strata. As the area is excavated to the top of the less pervious strata, any groundwater remaining perched in the pervious strata above the less pervious strata shall be removed by others. If the water bearing strata are found to be absent, the well location shall be abandoned and the hole shall be sealed in accordance with Paragraph 5.G.7 of this specification. 2

2) The dewatering operation shall be controlled in such a manner that the amount of fines of the soil in the discharge water shall be limited to 5 ppm. This is to be determined by measuring the amount of fines in the return line and discharge line corresponding to the quantity of groundwater measured at the discharge line. 2

a) All dewatering and observation wells located within the turbine building shall be installed using stainless steel well screen and risers. Unless directed otherwise in writing by the onsite geotechnical engineer. 2

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b) Dewatering wells located outside the turbine building area may be installed with a 6-inch diameter well screen, provided there is a sufficient quantity of sand and approval is obtained from the Contractor's onsite field geotechnical engineer.

3) Jetting procedures shall be approved in advance in writing by Contractor and as indicated in Subparagraph 5.F.5 of this specification.

4) If the dewatering requirements are not satisfied because of inadequacy or failure of the dewatering system, loosening of the foundation strata and/or instability of the slopes may occur. The supply of all labor, materials, and the performance of all work necessary to carry out additional work for reinstatement of foundation soil resulting from such inadequacy or failure shall be undertaken by Subcontractor to the full satisfaction of Contractor, and at no additional expense to Contractor.

5) Prior to any excavation below the groundwater level, the dewatering system shall be placed into operation to lower the water levels as required and then shall be operated continuously 24 hours a day, 7 days a week until construction and placement of the subgrade structure and backfill has been satisfactorily completed and no longer requires dewatering, as notified by Contractor in written form.

6) Subcontractor shall obtain written approval from Contractor before discontinuing the operation of the dewatering system.

7) Subcontractor shall seal, with 2,000 psi minimum concrete grout, any dewatering equipment buried or left in place under the structure and all observation wells, test pits, and holes after the dewatering operation is discontinued in accordance with the latest Michigan Wells Act.

6. INSPECTION

A. CONTRACTOR

1) Contractor shall inspect the effluent of the well points to determine the amount of material (fines) being removed by the dewatering operation. This monitoring is Q-listed and shall be in accordance with 10 CFR 50, Appendix B.

2) The dewatering system shall be accepted by Contractor based on the difference in quantity of fines measured in the return line and discharge line and correlated with the quantity of groundwater being discharged

through a water meter calibrated in gallons. The average quantity of fines shall not exceed the ratio of 5 ppm. The average quantity of fines shall be determined by testing a sample of water from the return line and the discharge line every Monday and Thursday that the pumping is in operation using a 1-liter Buchner funnel. The filter paper shall not be coarser than 0.005 millimeters. The corresponding number of gallons of groundwater pumped through an In-Line flowmeter located on the discharge line shall also be recorded by Contractor and the average ppm calculated. Contractor shall also monitor the number of gallons of recirculating water in Subcontractors eductor system. Contractor shall supply the 1-liter Buchner funnel and filter paper (no coarser than 0.005 millimeters) for the testing, and three flowmeters; one on the recirculation water line (10-inch Sparling In-Line with totalizer, Saddle Mount Series FM112) one on the discharge line (6-inch Sparling In-Line with totalizer Saddle Mount Series FM112) and one on the hydrant (3-inch Sparling In-Line with totalizer Series 162). If an individual test indicates the fines are greater than 5 ppm but the average ratio of fines to ground water pumped is less than 5 ppm, Subcontractor shall be alerted. If the quantity of fines exceeds the average ratio of 5 ppm for the total quantity of groundwater pumped, Subcontractor shall be notified that it has 24 hours to correct the condition. If, after 24 hours, Subcontractor has not been able to correct the problem, Contractor shall begin a systematic testing of each individual dewatering well. Any dewatering wells found to produce greater than 5 ppm of fines shall be repaired by Subcontractor or removed from the system. Subcontractor shall notify Contractor whenever it intends to purge any collected fines from the eductor tank. Subcontractor will estimate the quantity of water purged, and Contractor will collect all material from Subcontractor's eductor tank. The discharged bottom material shall be sieved through a Number 325 U.S. standard screen. The collected material shall be retained and stored for inspection by the onsite field geotechnical engineer.

3) Each individual well shall be inspected by Contractor during installation in accordance with the following criteria. After the initial 15 minutes of pumping, the effluent shall be tested for fines using a 1-liter Buchner funnel.
   a) If the fines observed are 10 ppm or less, the well shall be accepted.
   b) If the fines observed exceed 100 ppm, the well shall be rejected and pumping stopped.
   c) If the fines observed are less than 100 ppm, but more than 10 ppm, the pumping shall stop. The well may be retested in accordance with the above

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criteria after a minimum of a 1-hour delay. If the well has not met the acceptance criteria for fines within three retests, the well shall be rejected and pumping stopped.

4) Records shall be maintained for each well and for the entire system, including the amount of fines (ppm) each time readings are taken. 2

B. SUBCONTRACTOR

1) Subcontractor shall perform all inspection and recording of the piezometers/observation wells in accordance with its approved procedure. All other inspection shall be in accordance with Subcontractor's approved procedures.

7. CLEANING AND RESTORATION

A. Subcontractor shall leave the work area in the same condition as prior to the start of operation and to the satisfaction of Contractor.

8. QUALITY ASSURANCE REQUIREMENTS

A. The monitoring of the fines of the soil in the discharge water is Q-listed and shall be performed and controlled by Contractor's quality assurance program.

B. Contractor has the authority to stop or regulate any part of the dewatering operation to prevent damage to any part of Contractor's work.

9. MEASUREMENT FOR PAYMENT

A. BASIS OF MEASUREMENT

1) The measurement of payment shall be in accordance with the terms of the subcontract. 2

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APPENDIX A

DOCUMENTATION REQUIREMENTS

1.0 The Subcontractor shall furnish documentation in accordance with the specification as summarized and directed by form G-321-D. To complete form G-321-D, the Subcontractor shall check in column 8 which documents are being transmitted, and shall sign line 21. The Subcontractor shall fill in lines 13 through 20 as applicable. Entries such as N/A (not applicable) and "See attached sheets" are permissible. The completed G-321-D form is then used for a cover sheet as directed on the back of the form.

Attachments:

1. Form G-321-D, Engineering and Quality Verification Document Requirements

Specification 7220-C-88(Q)
Appendix A

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READ INSTRUCTIONS ON BACK BEFORE FILLING IN FORM

These requirements for Engineering and Quality Verification Documents are to be fulfilled in accordance with the schedule set forth below. Supplier's failure to comply with these requirements may result in order cancellation or withholding of payment until compliance is established.

1. Document Category Number	2. Specification Paragraph Reference	3. Kind of Copies	ENGINEERING DOCUMENTS 4. Quantity Required Initial	4. Quantity Required Final	5. Prior Approval Required Yes	5. Prior Approval Required No	QUALITY VERIFICATION DOCUMENTS 6. Quantity Required for Release	7. Distribution Code	8. Supplier Conform Check	9. Inspection Release	10. Engineering Review	11. Field QCE Check In	12. Remarks
4.2E	3.B.5	Reproducible	1	1	X		N/A						
		Microfilm											
4.2E	3.B.1 3.B.2	Reproducible	1	1			N/A						
		Microfilm			X								
4.2E	3.B.3 3.B.4	Reproducible	1	1			N/A						
		Microfilm			X								
8.0E	4.D.1 5.F.2	Reproducible	1	1			N/A						
		Microfilm			X								
25.0V	4.E.1 5.F.1	Reproducible	N/A				2	B	A				
		Microfilm											
27.0E	4.D.1 5.C.1	Reproducible	1	1			N/A						
		Microfilm			X								
27.0V	4.D.1 5.C.1	Reproducible	N/A				2	B	A				
		Microfilm											
		Reproducible											
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		Reproducible											
		Microfilm											

13. Supplier's Order No.	14. Supplier's Part No.	15. Supplier's Part Name	16. Quantity
17. Buyer's Req. Item No.	18. Buyer's Line/Equip., Tag or Code No.	19. Buyer's Part Name	20. Traceability

21. Supplier's Conformance Statement — We certify that the listed work and required documents meet the requirements of the procuring documents.
Supplier _____ Signature _____ Title _____ Date

22. Inspection Release Statement — Work was released based on satisfactory completion of inspection and review of documentation.
Authorized Deviations ☐ YES, Noted under 12, Remarks ☐ NONE
Bechtel Inspector _____ Signature _____ Date

23. Engineering Review Statement — The Quality Verification Documents submitted to Engineering with this form have been reviewed for conformance to the specified requirements and are acceptable.
Engineer _____ Signature _____ Date

24. QCE Check-in Statement — This form and the Quality Verification Documents referenced hereon have been received and their relationship to the hardware items verified.
CONTROL NO. _____ FILE NO. _____
QCE _____ Signature _____ Date

After QCE Check-in Distribute to: Procurement Manager, Field Office Manager, Material Supervisor

BECHTEL
6-321-0
AA REV 2
5/74

MIDLAND PLANT UNITS 1 AND 2
CONSUMERS POWER COMPANY

ENGINEERING AND QUALITY VERIFICATION DOCUMENT REQUIREMENTS

JOB NO. 7220
P.O./SPEC. NUMBER 7220-C-88(Q)
SHEET 1 OF 4
REV. 2

REPRODUCTION OF THIS FORM IS AUTHORIZED

QUALITY VERIFICATION DOCUMENT TRANSMITTAL—REPRODUCE THIS SIDE ONLY

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INSTRUCTIONS FOR PREPARING G-321-D

A. PURPOSE: This is a multi-purpose form to be used by Buyer/Contractor to specifically identify documents required of the supplier to satisfy specification requirements, and is to be used by the supplier as a cover sheet for Quality Verification Documents when submitting them to the Buyer/Contractor.

B. GENERAL INFORMATION: Engineering (E) and Quality Verification (V) Documents are identified by Category number and title in section H. below.

C. USE: A copy of the front of this form shall be completed by the supplier and provided to the Buyer's/Contractor's Inspector along with the applicable Quality Verification Documents for his review prior to release of the unit(s).

D. DISTRIBUTION: All Engineering (E) Documents are to be sent to the Project Engineer at the address shown below (Code a).

When inspection release is completed, the Verification (V) Documents are to be distributed to the respective addresses shown below in accordance with the distribution code specified in Column 7. A copy of the completed Form G-321-D must accompany each "package" of Verification Documents to its destination. Also, a copy of completed Form G-321-D is to be included with the hardware shipment and a copy sent separately to the Project Field Quality Control Engineer at the jobsite.

Code a.	Code b. With hardware shipment	Code c.
Bechtel Associates Professional Co. P.O. Box 1000 Ann Arbor, Michigan 48106 Attn: Project Engineer, Job 7220	Bechtel Power Corp. 3500 E. Miller Rd. Midland, Michigan 48640	N/A

E. DEFINITIONS OF TERMS: (See also Document Category Definitions G-321-SUP A)

Supplier – This is a generic term and is synonymous with the terms seller, vendor, contractor, sub-contractor, sub-supplier, etc.
Reproducible – can be legibly duplicated by either microreproduction or electrostatic dry process.
Microfilm – 35mm microfilm conforming to the requirements of the procurement documents. When not specified, supplier shall submit his standard for approval.
Prior Approval Required – Bechtel approval required prior to use of documents in the design, fabrication, installation, or other work process.
Initial – the first submittal of a document in accordance with the schedule mutually agreed to by the Buyer and the supplier.
Final – the submittal that reflects the resolution of review comments, or the complete submittal required. Both are to be accepted prior to rendering final payment. Drawings submitted as final must be full size reproducibles made from original document. Adjacent to the title block, each drawing must be certified and show Buyer's job title, job number, purchase order number, line, equipment, tag or code number, and the manufacturer's serial number(s).
Certified – the dated Signature and Title of an authorized and responsible employee of the supplier.
N/A – Not applicable – can be used for individual entries, columns and lines by Project engineering, and for individual entries by the supplier.

F. BECHTEL ENTRY INSTRUCTIONS

Entry No.	Information Required
1	Enter Document Category Number.
2	Enter Specification paragraph reference.
3	Make no entry. Relates to kind of copies required.
4	Enter the number of each kind of copy for "initial" or "final" submittals of Engineering Documents.
5	Enter approval requirement by X under "Yes" or "No" column.
6	Enter the number of each kind of copy of Quality Verification Documents required for release of the item or installation.
7	Enter Quality Verification Document distribution code letter in accordance with paragraph D above.
8	Make no entry. For supplier use only.
9	Bechtel Inspector to complete upon release. Sign on line 22.
10	Enter Bechtel Engineering review confirmation. Sign on line 23.
11	Bechtel QCE to complete check-in. Sign on line 24.
12	Enter remarks as appropriate.

G. SUPPLIER ENTRY INSTRUCTIONS

Entry No.	Information Required
8	Enter number of pages of each type of Quality Verification Documents being submitted for the unit(s) being released. Sign Statement of Conformance on line 21.
12	Enter remarks as appropriate. When a deviation has occurred, reference the deviation(s) and Buyer/Contractor's authorization in this column, and include the authorization document(s) in the Verification Document Package.
13, 14, 15	Enter information as required.
16	Enter the numbers of units covered by the Quality Verification Documents being submitted. For each requisition item no. being released provide a separate copy of this completed form and the supporting Quality Verification Documents.
17, 18, 19	Enter information as required.
20	Enter identification number(s) traceable to the unit(s) being released, e.g. serial no., heat no. of major component, cable reel no. or other unique designator.

H. DOCUMENT CATEGORY NUMBERS: Engineering (E) and Quality Verification (V) Document Requirements as entered in Column 1, and defined in G-321-SUP A Document Category Definitions. For details, see specification paragraph(s) referenced in Column 2.

1.0 DRAWINGS (E)
- 1.1 Outline Dimensions, Services and Foundation/Mounting Details
- 1.2 Assembly Drawings
- 1.3 Shop Detail Drawings
- 1.4 Wiring Diagrams
- 1.5 Control Logic Diagrams
- 1.6 P & IDs

2.0 PARTS LIST AND COST (E)
3.0 COMPLETED BECHTEL DATA SHEETS (E)
4.0 INSTRUCTIONS (E)
- 4.1 Erection/Installation
- 4.2 Operating
- 4.3 Maintenance
- 4.4 Site Storage and Handling

5.0 SCHEDULES: ENGINEERING AND FABRICATION/ERECTION(E)
6.0 QUALITY ASSURANCE MANUAL/PROCEDURES (E)
7.0 SEISMIC DATA REPORT (E)
8.0 ANALYSIS AND DESIGN REPORT (E)
9.0 ACOUSTIC DATA REPORT (E)
10.0 SAMPLES (E)
- 10.1 Typical Quality Verification Documents
- 10.2 Typical Material Used

11.0 MATERIAL DESCRIPTION (E)
12.0 WELDING PROCEDURES AND QUALIFICATIONS (E), AND VERIFICATION REPORTS (V)
13.0 WELD ROD CONTROL PROCEDURES (E), AND VERIFICATION REPORTS (V)
14.0 REPAIR PROCEDURES (E), AND MAJOR REPAIR VERIFICATION REPORTS (V)
15.0 CLEANING AND COATING PROCEDURES (E), AND VERIFICATION REPORTS (V)
16.0 HEAT TREATMENT PROCEDURES (E), AND VERIFICATION REPORTS (V)
17.0 CERTIFIED MATERIAL PROPERTY REPORTS (V)
- 17.1 MTR (Certified Material Test Reports)
- 17.2 Impact Test Data
- 17.3 Ferrite Data
- 17.4 Material Certificate of Compliance
- 17.5 Electrical Property Reports

18.0 CODE COMPLIANCE (V)
19.0 UT – ULTRASONIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
20.0 RT – RADIOGRAPHIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
21.0 MT – MAGNETIC PARTICLE EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
22.0 PT – LIQUID PENETRANT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
23.0 EDDY CURRENT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V)
24.0 PRESSURE TEST – HYDRO, AIR, LEAK, BUBBLE OR VACUUM TEST PROCEDURE (E), AND VERIFICATION REPORTS (V)
25.0 INSPECTION PROCEDURE (E), AND VERIFICATION REPORTS (V)
26.0 PERFORMANCE TEST PROCEDURES (E), AND VERIFICATION REPORTS (V)
- 26.1 Mechanical Tests
- 26.2 Electrical Tests

27.0 PROTOTYPE TEST REPORT (E & V)
28.0 SUPPLIER SHIPPING PREPARATION PROCEDURE (E)

DOCUMENT CATEGORY DEFINITIONS

(E) – Engineering Documents. This term comprises procedures, drawings, specifications, QA plans, prototype qualification test reports, and other similar documents that require Bechtel approval prior to fabrication, or prior to use of the document in the design, fabrication, installation, or other work process. The term is also applied to price lists, and instructional documents for handling, storage, maintenance, etc., that are of informational interest only to project engineering.

(V) – Quality Verification Documents. This term comprises material test reports, heat treatment charts, welding records, NDE results, performance test reports, etc., which demonstrate or certify conformance to the technical or inspection requirements of the procurement documents.

1.0 DRAWINGS (E)

1.1 Outline Dimensions, Services and Foundation/Mounting Details – Drawings providing external envelope, including lugs, center line(s), location and size for electrical cable, conduit, fluid, and other service connections, isometrics, and details related to foundations and mountings.

1.2 Assembly Drawings – Detailed drawings indicating sufficient information to facilitate assembly of the component parts of an equipment item.

1.3 Shop Detail Drawings – Drawings which provide sufficient detail to facilitate the fabrication or manufacture of the equipment item. This includes but is not limited to, spool drawings, heat exchanger internal details, internal piping and wiring, cross-section details and architectural details.

1.4 Wiring Diagrams – Drawings which show the schematic wiring and connection information for electrical items.

1.5 Control Logic Diagrams – Drawings which show the paths which input signals must follow to accomplish the required responses.

1.6 P & IDs – Piping and Instrumentation Diagrams which show piping system details and the basic control elements.

2.0 PARTS LIST AND COST (E) – Exploded view with identified parts and recommended spare parts for one year's operation with unit cost.

3.0 COMPLETED BECHTEL DATA SHEETS (E) – Information provided by a supplier on data sheets furnished by Bechtel which states serial numbers, operating ranges, etc., of equipment that the supplier intends to deliver to satisfy the specification requirements.

4.0 INSTRUCTIONS (E)

4.1 Erection/Installation – Detailed written procedures, instructions, and drawings required to erect or install material or equipment.

4.2 Operating – Detailed written instructions describing how an item or system should be operated.

4.3 Maintenance – Detailed written instructions required to disassemble, reassemble and maintain items or systems in an operating condition.

4.4 Site Storage and Handling – Detailed written instructions which define the requirements and time period, for lubrication, rotation, heating, lifting or other handling requirements to prevent damage or deterioration during storage and handling at jobsits. This includes return shipping instructions.

5.0 SCHEDULES: ENGINEERING AND FABRICATION/ERECTION (E) – Bar charts, critical path methods, etc., which chronologically detail the sequence of activities.

6.0 QUALITY ASSURANCE MANUAL/PROCEDURES (E) – The document(s) which describe(s) the planned and systematic measures that are used to assure that structures, systems, and components will meet the requirements of the procurement documents.

7.0 SEISMIC DATA REPORT (E) – The analytical or test data which provides physical response information on an item, material, component or system in relation to the conditions imposed by the stated seismic criteria.

8.0 ANALYSIS AND DESIGN REPORT (E) – The analytical data, (stress, electrical loading, fluid dynamics, etc.), which assures that an item satisfies specified requirements.

9.0 ACOUSTIC DATA REPORT (E) – The noise, sound and other vibration data required by specification which is in the audible range and above the seismic frequency.

10.0 SAMPLES (E)

10.1 A representative data package which will be submitted for the items purchased as required in the specification.

10.2 A representative example of the material to be used.

11.0 MATERIAL DESCRIPTION (E) – The technical data describing a material which a supplier proposes to use for a specific order. This usually applies to architectural items, e.g., metal siding, decking, doors, paints, coatings.

12.0 WELDING PROCEDURES AND QUALIFICATIONS (E), AND VERIFICATION REPORTS (V) – The welding procedure specification and supporting welding procedure qualification test records required for welding, hard facing, overlay, brazing and soldering. A verification report of welds performed includes the identification of the qualified welder(s), and the procedure(s) used, and certification that the welder(s) were qualified.

13.0 WELD ROD CONTORL PROCEDURES (E), AND VERIFICATION REPORTS (V) – The procedures for controlling issuance, handling, storage and traceability. Verification report(s) for weld rod are defined as certified material test reports which include the requirements defined by the code and material specification imposed by the procurement documents.

14.0 REPAIR PROCEDURES (E), AND MAJOR REPAIR VERIFICATION REPORTS (V) – The procedures for controlling material removal and replacement by welding, brazing, etc., subsequent thermal treatments, and final acceptance inspection. Verification reports may include weld repair locations (maps), material test reports for filler metal, pre-and-post-weld heat treatment records, NDE records, etc. The resolution of whether a repair is major or not is a Bechtel responsibility.

15.0 CLEANING AND COATING PROCEDURES (E), AND VERIFICATION REPORTS (V) — The procedures for removal of dirt, grease or other surface contamination and includes application of protective coatings. Verification reports include certification of visual examination for surface preparation, surface profile, materials, etc., humidity data, temperature data and coating thickness data as required by the procurement documents.

16.0 HEAT TREATMENT PROCEDURES (E), AND VERIFICATION REPORTS (V) – The procedures for controlling temperature, time at temperature as a function of thickness, furnace atmosphere, cooling rate and method, etc. Verification reports normally include furnace charts or similar records which identify and certify the item(s) treated, the procedure used, furnace atmosphere, time at temperature, cooling rate, etc. Verification data may be in either narrative or tabular form.

17.0 CERTIFIED MATERIAL PROPERTY REPORTS (V)

17.1 MTR (Certified Material Test Reports) – These reports include all chemical, physical, mechanical and electrical property test data required by the material specification and applicable codes. This is applicable to cement, concrete, metals, cable jacket materials, rebar, rebar splices, etc. The certified MTR shall include a statement of conformance that the material meets the specification requirements.

17.2 Impact Test Data – Results of all Charpy or drop weight tests including specimen configuration, test temperature and fracture data.

17.3 Ferrite Data – Report of the ferrite percentage for stainless steel materials used, including castings & welding filler metals as deposited.

17.4 Material Certificate of Compliance – Verification document which certifies conformance to the requirements of the applicable material specification.

17.5 Electrical Property Reports – Report of electrical characteristics, e.g., dielectric, impedance, resistance, flame test, corona, etc.

18.0 CODE COMPLIANCE (V) – Verifying documents (such as data Forms U-1, N-2, State, etc.), which are prepared by the manufacturer or installer and certified by the Authorized Code Inspector.

19.0 UT – ULTRASONIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V) – Method of detection and examination results of presence and certain characteristics of discontinuities and inclusions in materials by the use of high frequency acoustic energy.

20.0 RT – RADIOGRAPHIC EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V) – Method of detection and examination results of presence and certain characteristics of discontinuities and inclusions in materials by x-ray or gamma-ray exposure of photographic film.

21.0 MT – MAGNETIC PARTICLE EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V) – Method of detection and examination results of surface (or near surface) discontinuities in magnetic materials by distortion of an applied magnetic field.

22.0 PT – LIQUID PENETRANT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V) – Method of detection and examination results of surface discontinuities in materials by application of a penetrating liquid in conjunction with suitable developing techniques.

23.0 EDDY CURRENT EXAMINATION PROCEDURES (E), AND VERIFICATION REPORTS (V) – Method for detection and examination results of discontinuities in material by distortion of an applied electromagnetic field.

24.0 PRESSURE TEST – HYDRO, AIR, LEAK, BUBBLE OR VACUUM TEST PROCEDURE (E), AND VERIFICATION REPORTS (V) – Method for evaluating the structural and mechanical adequacy or integrity by application of differential pressures, and report of the test results.

25.0 INSPECTION PROCEDURE (E), AND VERIFICATION REPOBTS (V) – Organized process followed for the purpose of determining that specified requirements (dimensions, properties, performance results, etc.) are met. Documented findings resulting from an inspection are included in the verification report.

26.0 PERFORMANCE TEST PROCEDURES (E), AND VERIFICATION REPORTS (V) – Tests performed to demonstrate that functional design and operational parameters are met and the report of the test results.

26.1 Mechanical Tests, e.g., pump curves, valve stroking, load, temperature rise, calibration, environmental, etc.

26.2 Electrical Tests, e.g., load, impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.

27.0 PROTOTYPE TEST REPORT (E & V) – Report of a test which is performed on a standard or typical example of equipment, material or item, and is not required for each item produced in order to substantiate the acceptability of equal items. This normally includes tests which may, or could be expected to, result in damage to the item(s) tested.

28.0 SUPPLIER SHIPPING PREPARATION PROCEDURE (E) – The procedure used by a supplier to prepare finished materials or equipment for shipment from his facility to the jobsite.

316 & 316L

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

February 1, 1978

U. S. Testing Company, Inc.
1415 Park Avenue
Hoboken, New Jersey 07030

Attention: Mr. D. Edley

Job 7220 Midland Project
Subcontract 7220-C-208
Failure of Fill Supporting the
Administration Building Grade
Beam at Column Line 0.4
C-208-B-286

Reference: Telex Number C-208-B-283 Dated December 30, 1977 From J. F. Newgen

Dear Mr. Edley:

Pursuant to the referenced Telex, we have conducted an evaluation of the subject failure condition. Our engineering analysis has determined that the failure was caused by insufficient compaction of the fill which was placed in May and June of 1977. A careful review of the test data provided by U. S. Testing Company indicates that this fill was erroneously reported to be in conformance with Bechtel Specification requirements by U. S. Testing Company. This conclusion is supported by the following facts.

1. A summary of fifteen (15) compacted fill density tests taken by U. S. Testing to evaluate the subject fill as it was compacted is provided in Table #1. The location of each test is plotted in Figure #1. Although several initial tests indicate test failure due to insufficient compaction, each failure is properly cleared by a passing test at or near the location of the failure.

2. Maximum laboratory dry density values (from Bechtel Modified Proctor Tests) used as the standards for evaluating acceptability of fill compaction were selected by U. S. Testing Lab Technicians. In a Jobsite meeting with F. Teague and B. Check of Bechtel, J. Speltz of U. S. Testing stated that the testing technician uses a visual comparison between soil characteristics (primarily color) of the in-place sample and bottled samples of material with known maximum laboratory dry density, to select the appropriate standard. Visual examination by Bechtel soils engineers of the subject fill during the subsequent grade beam removal indicated the material was uniform in appearance with minimal variation in soil characteristics (color and plasticity) over the full extent of the fill placement.

SB 13770

Address reply to:

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

October 4, 1976

U. S. Testing Company, Inc.
Midland Jobsite

Attention: Mr. Skrede

Job 7220 Midland Project
Subcontract 7220-C-203
Mr. David Paige
B-203-143

Dear Mr. Skrede:

Due to Mr. David Paige's continued improper testing procedures it has become necessary to request Mr. Paige be removed from the Project, effective Monday, October 4, 1976, 3:30 PM.

Very truly yours,

J. F. Newgen

JFN/JCC/TRL/djm

cc: B. T. Cheek
J. C. Church
J. P. Connolly
D. Edley
G. L. Richardson
Q. C. Files

.4976

M. Skrede 10/4/76 @ 2:00 PM

SB 13818

Jim Betts:
Here is the memo I told you about. As far as I'm concerned corrective action has been taken. You may want to discuss with Kiker / Lee to their input

Consumers Power Company

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

May 25, 1979

Mr L A Dreisbach
Bechtel Power Corp
PO Box 2167
Midland, MI 48640

MIDLAND PROJECT - FURTHER CORRECTIVE ACTION REQUIRED PRIOR TO Q-LISTED BACKFILL PLACEMENT
File: 16.0 Serial: 181FQA79

It has come to our attention that on April 18, 1979 field density/moisture test 3432 in the Oily Waste Area had results of in-place dry density 133.3 and moisture content of 12%. Plotting these results on the Compaction Test (Proctor Curve) shows the results fall to the right of the zero air voids curve. The importance of understanding this anomaly cannot be too strongly stated based on the past settlement problems for which no clear cut base cause has ever been ascertained.

This problem must be understood and resolved prior to Q-listed backfill placement beginning in addition to the 13 action items attached to letter BCCC-3995 to TCCooke from JFNewgen dated May 4, 1979. Please consider this problem as action item 14.

for D E Horn
W R Bird
Section Head - QA Engineering, Midland

WRB/DEH

CC SAfifi
TCCooke
JLCorley
GSKeeley
BWMarguglio
PAMartinez
JMilandin
DBMiller
JFNewgen
GLRichardson
JWanzeck
KWiedner

Test 3432
Reverse spec for M.C. after compacti
Previous work to BM # or 1557 for retest
(1)
(2)

SB 1-1016

COMPACTED FILL DENSITY TEST REPORT

QC ACCEPTANCE

CONTROL NO.

① PROJECT NO. 7220 ② DATE 4-25-79 ③ PAGE 1 OF 1

④ SPEC. NO. 7220-C-208 ⑤ ~~DRAWING NO.~~ Plant ⑥ TESTED WEEK OF 4-14-79 to 4

~~TE~~ KEN	② TEST NO.	③ TEST MADE BY	④ LOCATION	⑪ ELEV.	⑫ DEPTH BELOW FINAL GRADE	⑬ IN PLACE WET DEN. (LB/CF)	⑭ MOISTURE CONTENT (%)	⑮ IN PLACE DRY DEN. (LB/CF)	⑯ SOIL CLASS. UST/omc/sand	⑰ MAX LAB DRY DEN. (LB/CF)	⑱ % COMPT.	⑲ REMARKS
4/19/79	3430	KS	E 450 S-4650	615.0	--	149.3	12.0	133.3	99/7.7/1	133.3	100.0	Failure
			stockpile placed		moisture test not previously.			not applicable - fill 4/26/79		Soils	tested	was

TEST FAILURE

Q.C. Rep. Notified Stew Kirker + Mult Peterson

Time & Date of Notification 4-25-79 @ 1300

Reporting Person Karol Sugar

3432

SB 1-1017

M. 12/1/79

Boring No. —
Source E 450 - S 4450 @ 615.0
Hammer Weight 10 lbs.
Drop distance 18"
No. Layers 5
No. Blows 56

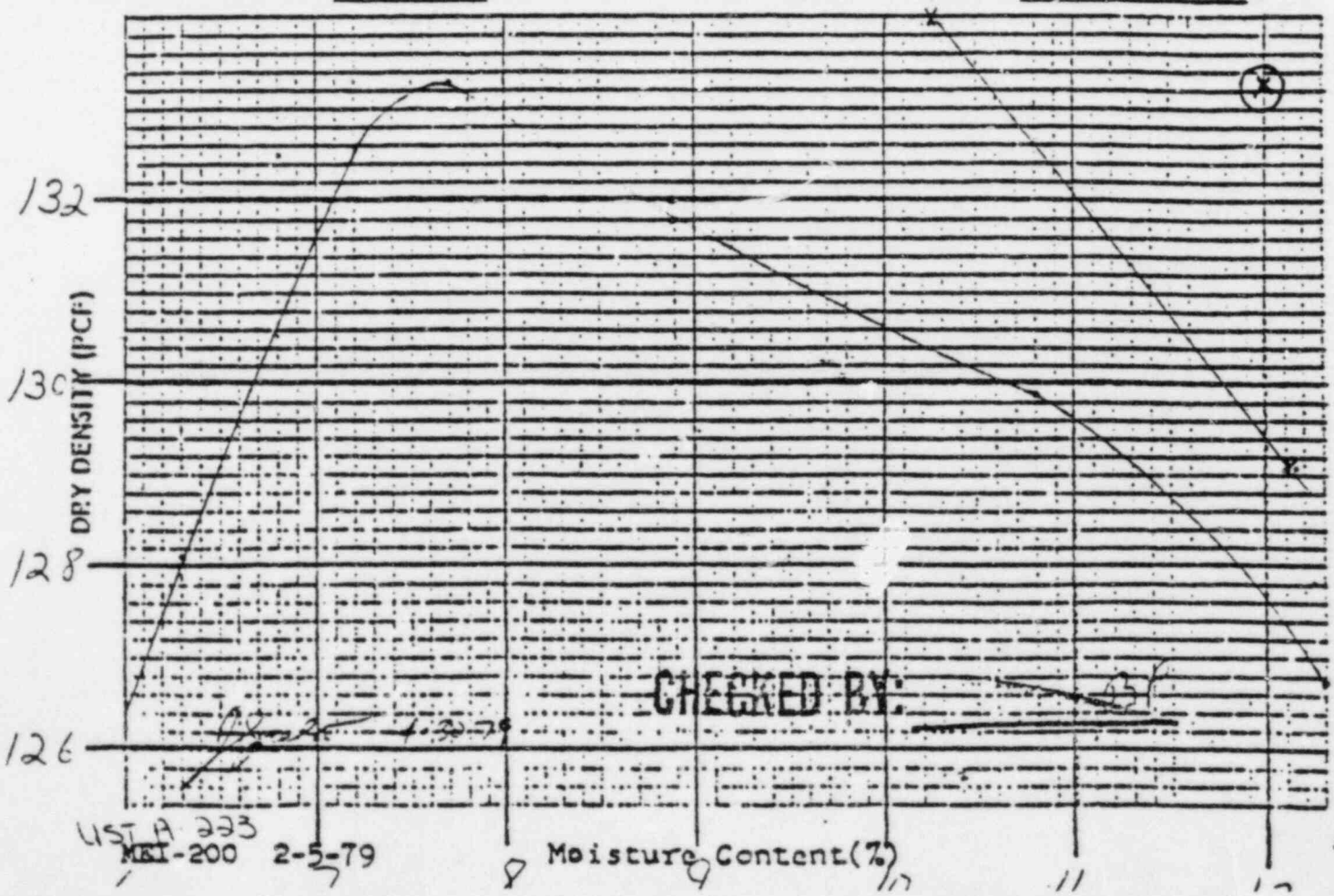
ASTM D 1557-70

Date 4-18-74
Initials KS & RS
Type of test 1557-D
Mold size 6"

SB 14018

TEST DATA					
Rammer No.	170	170	170	170	170
Mold No.	167.1	167	480	167	167.1
Wt. wet sample + Mold (gm.)	11234	11454	11499	11493	11445
Wt. of Mold (gm.)	6615	6615	6624	6615	6615
Wt. of wet sample (gm.)	4619.0	4869	4875	4878	4830
Vol. of sample (cc)	2116	2116	2120	2116	2116
Wet Unit weight (lb./cu.ft.)	136.2	143.6	143.5	143.9	142.4
Can No.	—	—	—	—	—
Wt. wet sample + Can (gm.)	625.3	615.2	616.9	606.0	608.1
Wt. Dry sample + Can (gm.)	—	—	—	—	—
Wt. water (gm.)	36.9	43.9	50.3	59.2	67.3
Wt. can (gm.)	—	—	—	—	—
Wt. dry sample (gm.)	588.4	571.3	566.6	546.8	540.8
Moisture Content %	6.3	7.7	8.9	10.8	12.4
Average Moisture Content %	—	—	—	—	—
Dry Unit Weight (lb./cu.ft.)	128.1	133.3	131.8	129.9	126.7

MAXIMUM DENSITY 133.3 PCF OPTIMUM MOISTURE 7.7 %



LST A 223
MRI-200 2-5-79

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

December 9, 1977

Consumers Power Company
P.O. Box 1963
Midland, MI 48640

Attention: T. C. Cooke

Job 7220 Midland Project
Disposition of Failing
Non-Q Tests
R

Dear Mr. Cooke:

This letter is written in response to your letter CCBC-1201 (Serial 2638) dated November 2, 1977. Your letter deals primarily with "failing" soil reports on non-Q dirtwork. Consumers position (as stated in the letter) is that only Project Engineering as apposed to Field Engineering has the authority to evaluate and accept or reject failing non-Q soil tests. The letter further states that all failing non-Q soil tests for the dike turnover package must be reviewed and accepted or otherwise dispositioned by Project Engineering prior to acceptance of the turnover package by Consumers.

Discussions with representatives of Consumers subsequent to receipt of your letter have identified that Consumers position on dispositioning failing non-Q tests is not restricted to just soil and concrete tests but rather to all tests on non-Q items and that a formal or documented approval by Project Engineering is required. While Bechtel respects Consumers present position on this matter, we are not in full agreement with it, and will attempt in this letter to demonstrate why we feel the existing program on non-Q testing should be continued. Since the turnover of dike soil tests is foremost in everyone's mind it seems logical to start our discussion with those tests as well as tests on non-Q plantfill.

The first point which we would like to make is that field engineers have never been given specific approval to accept failing non-Q soil tests without closure. In the past, the U.S. Testing technician notified the grade foreman (or Canonie) of failing non-Q tests on the day the test was taken. The grade foreman (or Canonie) then reworked the failing soil and called for a retest. Since several days may have been required to rework the soil, the testing technician was not always aware he was performing a "retest" and, hence, did not always indicate so on his test report. This would obviously indicate that some failing tests were never resolved when, in fact, the soil was reworked until passing tests were obtained. The situation is somewhat complicated by the fact that we had noted ~~some~~ A FEW cases where the testing technician had incorrectly identified the location of tests. The upshot of all this is that while the failing tests were being resolved by reworking and retesting the soil, some apparent documentation discrepancies resulted. To put an end to future documentation problems, the following actions were taken in October of this year:

1) The U.S. Testing technician was directed to notify both the grade foreman (or Canonie) and the cognizant field engineer of all failing non-Q tests on the day of the failure.
2) The cognizant field engineer was directed to monitor the testing technician's test location information and to make sure the technician noted all retests and test closures on the record sheets.
3) U.S. TESTING WAS DIRECTED TO ASSURE THAT ACCURATE TEST LOCATION INFORMATION IS GIVEN AND TO BACKCHECK AS NECESSARY TO DETERMINE AND INDICATE WHEN A FAILING TEST IS CLOSED.

In brief summary, a soil reconditioning program has always been used to correct areas of failing non-Q soil tests while, admittedly, there are some documentation anomalies which exist in records prior to October 1977. The program has never been to deliberately accept non-Q soils which do not meet specification requirements. To this end we suggest that Consumers accept the dike section turnover

records in their present state. An analysis by Project Engineering is not warranted since the soil represented by what appears to be failing tests ~~does not~~ WAS COMPACTED exist. IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.

A second area of non-Q tests over which Consumers has expressed concern and which should be discussed are concrete tests. Field Engineering acceptance of non-Q concrete tests which fail to meet specification requirements has fallen into the following categories to date:

1) Occasional low or high air content in the 2% TO 7% range.

2) Low air content for concrete not exposed to freeze thaw cycles, PORTIONS OF OCCASIONAL SLUMP OR AIR CONTENT TESTS OR BELOW 2%;

3) Occasional loads with an air content in excess of 7%. Because record air tests are taken at the end of the pump line, instances have occurred where several yards of a load with high air have been placed before test results are available. The remainder of the truck load is, of course, rejected.

* FCRs HAVE BEEN APPROVED BY PROJECT ENGINEERING TO ACCEPT THESE CONDITIONS FOR BOTH Q & NON-Q CONCRETE

The key point to note here is that the field engineer's acceptance of these conditions is based on the dispositions which Project Engineering has provided to similar nonconformances on Q-listed placements. This certainly seems logical from a quality as well as commercial point of view. It should also be pointed out that Field Engineering conducts a complete test by test review of concrete cylinder strengths for all non-Q placements for compliance to specification requirements. No conditions of non-compliance have been noted in these reviews to date.

The point which we are trying to make is that Field Engineering is not dispositioning failing non-Q tests without Project Engineering approval. The approval may take one of the following forms:

1) Extrapolation from the disposition to an NCR on a similar but Q-listed item.

2) A discussion between the Field and Project Engineering

3) An approved Field Change Request

4) A letter or TWX from Project Engineering

It is acknowledged that this program is not as formal as the nonconformance program for Q-listed work, however, the essential element-approval-remains unchanged. We have proceeded with non-Q work to date on the premise that Consumers did not want to apply a formal nonconformance program to this class of work. We do not feel that such a formal program is justified from a cost effectiveness viewpoint and, therefore, suggest that the existing program continue unchanged. We await your reply on this important matter.

Very truly yours,

J. F. Newgen

JFN/AJB/jae

SB 1-1045

NRC STOP WORK AFFECTS

I. DEWATERING SYSTEMS
ACTIVITIES AFFECTED

* A) REPAIR OF SERVICE WATER DUCTBANK
* B) INSTALLATION OF SERVICE WATER METER PITS
THIS AFFECTS INSTALLATION OF SECURITY
DUCT BANKS AND POSSIBLY FIRELINES
C) UNDERPINNING CANNOT START

II. UNDERPINNING OF SERVICE WATER BLDG.
NO CONTRACT LET AS OF 12/10/79. THIS
IS TO BE ADDED TO C-95 CONTRACT

III. REMOVAL & REPLACEMENT OF FILL UNDER ISO-VALVE CHAMBERS.
SUPPORT ASSEMBLIES - ACTIVITIES AFFECTED

* A.) GROUTING OF ROCK BOLTS
* B.) INSTALLATION OF COLUMN INSIDE CHAMBER
C.) INSTALLATION OF LEVELING JACKS ON TOP OF
CHAMBERS

IV. CAISSONS UNDER AUX BLDG.
WAITING SUBCONTRACT C-95 TO BE ISSUED
Installation Grade on Tank farm

V. DIESEL GENERATOR ACTIVITIES AFFECTED

* A) GROUTING UNDER FOOTINGS IN BAYS 3 & 4
* B) REPAIR OF DIESEL - GENERATOR PEDESTALS
* C) COMPLETION OF BACKFILL INSICE BLDG.
* D) COMPLETION OF DUCTBANK INSIDE BLDG.
* E) COMPLETION OF SAAB ON GRADE
* F.) STAIRWELL FOOTINGS NORTH OF BLDG.
* G.) ACCESS TO THE BLDG IS CUTOFF UNLESS
AREA DIRECTLY SOUTH OF BLDG IS BACKFILLED
* H.) COMPLETING SECURITY SYSTEM DUCTBANK & FUEL LIN
* I.) CONTINUING INSTALLATION OF CONDUIT, HVAC
SUPPORTS, PIPING ETC.
* J.) MONORAIL SYSTEMS IN ALL FOUR BAYS - APPRO
1 MONTH TO COMPLETE

SB 14207

VI. TANKFARM ACTIVITIES AFFECTED
- A.) BACKFILL AND ASSOCIATED UTILITIES IN FILL
- B.) CONCRETE SLAB AND FENCE
- C.) RAMP.
- * D.) COMPLETION OF TANKS BY GRAVER-HYDRO IS ESTIMATED BY 1/15/80.

NOT AFFECTED BY STOP WORK

VII. RAYMOND - BORINGS
- * A.) 10 ADDITIONAL EXPLORITORY BORINGS
- * B.) INSTALLATION OF 7 BORIS ANCHORS

VIII. BACKFILL IN Q-LISTED ~~AREAS~~ - AREAS AFFECTED
- A.) TANKFARM
  - REMAINING BACK FILL TO GRADE - APPROX - 16"
- * B.), AROUND DIESEL GENERATOR BLDG.
  1.) NORTH SIDE BETWEEN T.B. & D.G. BLDG.
  2.) EAST SIDE - SERVICE WATER PIPE EXPOSED
  3.) SOUTH TO SOUTH EAST - FUEL OIL LINES & DUCT BANK EXPOSED

- THE INSTALLATIONS IN THE ABOVE EXCAVATIONS ARE COMPLETE EXCEPT FOR TESTING
- THE EXCAVATIONS HAVE BEEN OPEN SINCE OCTOBER AND WITH FEW EXCEPTIONS, MOST ARE NOT OVER 5' DEEP.

- * C.) NEED APPROVAL TO EXCAVATE AND BACKFILL UNDER EMERGENCY CONDITION. (I.E. BROKEN WATER OR FIRELINE, CONST. POWER, etc)

D.) ALL NEW EXCAVATIONS ON HOLD. IN Q-AREAS ONLY.

SB 14208

IX. EMPTY POND - REPAIR RIPRAP

* X. BACKFILL & EXCAVATION IN NON-Q AREAS WILL CONTINUE.

* XI. ELECT CABLE, TRAY, CONDUITS, PIPING, HVAC, PLATFORMS, ETC INSIDE AUX BLDG CONTROL TOWER AND PENET. RMS, SERVICE H_2O BLDG, DIESEL GEN. BLDG. AND CRANE BAY ARE CONTINUING TO BE INSTALLED

* INDICATES AREAS CONSTRUCTION WANTS TO CONTINUE.

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-14-80 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	A VISUAL INSPECTION OF THE EAST INTERIOR FOOTING OF BAY #2 WAS PERFORMED, TO SEE IF A GAP EXISTED BETWEEN THE BOTTOM OF THE FOOTING AND THE MUDMAT. THE LOCATION WAS RANDOMLY SELECTED HOWEVER, IT WAS WITHIN THE BOUNDARIES SET FORTH ON DRAWING C-1147 AND THE INSPECTION WAS PERFORMED IN ACCORDANCE WITH DRAWING C-1147.	NO GAP WAS FOUND THEREFORE, NO ACTION REQUIRED

SB 15007

REMARKS:

ROUTE

Tim Betts

AL Boos

Stew Kirker

Jim Waszylewski

SIGNATURE

FILE J. WASYLEWSKI

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-30-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG NOTES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 200 CY OF SAND WERE REMOVED FROM THE FOLLOWING AREAS: INSIDE BAYS #1 AND #2 TO EL. 633-6 (AREA COMPLETED) NORTH HALF OF TRANSFORMER AREA #1 COMPLETED.	ALL MATERIAL REMOVAL WITHIN THE BUILDING AND SURROUNDING AREA IS COMPLETE AS OF AUGUST 30, 1979

REMARKS: SB 15008

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8/30/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	LIFT-OFF READINGS.	
	THE LIFT OFF READINGS WERE PERFORMED AS PER SPECIFICATION. SEVERAL RODS HAD 0 TENSION AS NOTED ON ATTACHED SHEET. THE TENSION WAS NOT PUT BACK ON THE RODS SINCE THEY ARE TO BE REMOVED WITHIN A FEW DAYS AND THE SAND HAS BEEN REMOVED.	

SB 15009

REMARKS:

ROUTE

BETTS
BOS
MORRIS
WASYLEWSKI

SIGNATURE

FILE

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 8/30/79

TIME: 7:30 A.M.

A t ion	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
#1			9K 10K		
#7			7K 6K 6K		
#13			OK OK OK		
#15			OK OK OK		
#22			9K 8K 7K		
26			10 0 5		

usion readings shall be in pounds.

By: [signature]

Checked by: _____

SB 15010

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-29-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG. ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 430 CY OF YELLOW SAND WERE REMOVED FROM THE FOLLOWING AREAS:	
	UNIT #1 TRANSFORMER AREA DOWN TO EXPOSING STONE @ EL 634'±.	
	INSIDE BAY # 1 TO EL. 637'.	
	INSIDE BAY # 2 TO EL. 636'.	
	COMPLETED BAYS 3 & 4	

REMARKS:

SB 15011

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-29-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 320 CY OF SAND WERE REMOVED FROM THE FOLLOWING AREAS:	
	BAY #1 FROM EL 638' TO 633'.	
	BAY #2 FROM EL. 638' TO 634'.	
	BAY #3 FROM EL. 638' TO 633'-6".	
	BAY #4 FROM EL. 638' TO 633'-6".	

REMARKS:

SB 15012

Jim Wasylenki
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-23-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	SURCHARGE MATERIAL IS BEING REMOVED. APPROXIMATELY 1470 C.Y. OF SAND WERE REMOVED FROM INSIDE THE BLDG. THE ELEVATIONS AFTER EXCAVATION VARIED FROM EL. 645' TO EL. 642'.	

REMARKS:

SB 15013

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-27-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 370 CY OF SAND WERE REMOVED IN THE FOLLOWING AREAS:	
	BAY #1 FROM EL 639' TO 633'	
	BAY # 2 FROM EL. 638' TO 633'	
	BAY # 3 FROM EL. 639' TO 633'	
	BAY # 4 FROM EL. 639' TO 633'	

REMARKS:

SB 15014

Jim Wasylewski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-25-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 1090 CY OF SAND WERE REMOVED FROM THE FOLLOWING AREAS:	WEEKLY SUBMITTAL OF SURCHARGE REMOVED GIVEN TO RESIDENT ENGINEERING
	IN ALL BAYS FROM EL. 632' TO 634'	

REMARKS:

SB 15015

Jim Wasylewski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-24-79 PAGE 1 OF 1

ITEM NO	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 1310 CY OF SAND WERE REMOVED FROM THE FOLLOWING AREAS: INSIDE ALL BAYS FROM EL 640' TO EL 635'	

REMARKS:

SB 15016

Jim Wawrzewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-22-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. 1050 CY OF YELLOW SAND WERE REMOVED FROM THE FOLLOWING AREAS:	NO ACTION REQUIRED
	NORTH OF THE BLDG. FROM EL. 636' TO EL 633'.	
	BAY #1 FROM EL 647 TO 645'.	
	BAY #2 ~~FROM~~ EL. 645'.	
	BAY #3 TO EL 644.	
	BAY #4 FROM EL 649' TO 644.	

REMARKS:

SB 15017

Jim Davis
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-21-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING.	NO ACTION TAKEN
	APPROXIMATELY 2360 CY OF YELLOW SAND WERE REMOVED FROM THE FOLLOWING AREAS:	
	NORTH OF THE BLDG FROM EL. 637' TO 635'±.	
	IN ALL BAYS FROM EL. 649' TO 645'.	

REMARKS:

SB 15018

Jim Wasylewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-20-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 2200 CY OF YELLOW SAND HAS BEEN REMOVED FROM THE FOLLOWING AREAS:	NO ACTION REQUIRED.
	NORTH OF THE BLDG TO EL 644' ±.	
	ALL BAYS FROM EL 654 TO 649' ±.	

REMARKS:

SB 15019

Jim Daughtry
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-18-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 4280 CY OF YELLOW SAND WERE REMOVED FROM THE FOLLOWING AREAS:	NO ACTION TAKEN WEEKLY SUBMITTAL OF QUANTITY OF SAND REMOVED GIVEN TO PROJECT ENGINEERING.
	PORTIONS OF TRANSFORMER #1 TO EL. 634'. NORTH OF THE BLDG TO EL. 649'. SOUTHERN HALVES OF ALL BAYS FROM 649' TO 634'.	

REMARKS:

SB 15020

Jim Wasylewski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-17-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 5200 CY OF SAND WERE REMOVED FROM THE FOLLOWING AREAS:	NO ACTION TAKEN
	NORTH OF THE BLDG FROM EL 654' TO 649'.	
	TRANSFORMER #1 AREA TO EL. 639'.	
	SOUTHSIDE OF ALL BAYS - STARTED OPENING THEM	
	SE OF THE BLDG TO EL. 634'-0"	

REMARKS:

SB 15021

Jim Daszewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-16-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 4690 CY OF YELLOW SAND WERE REMOVED IN THE FOLLOWING AREAS:	NO ACTION REQUIRED
	PORTIONS ON THE UNIT #1 TRANSFORMER AREA.	
	SW OF THE BLDG TO EL 634'-0"	
	SOUTH OF BAYS 1 & 2 FROM EL 654' TO 645'	
	SOUTH OF BAYS 3 & 4 TO EL 634'.	
	SE OF THE BUILDING TO EL 634'.	

REMARKS:

SB 15022

Jim Waszkowski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8-15-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING ACTIVITIES	
	REMOVAL OF SURCHARGE MATERIAL COMMENCED TODAY. 3000 CY OF YELLOW SAND WERE REMOVED FROM THE FOLLOWING AREAS:	MATERIAL IS BEING REMOVED BASED TWX 6315.
	SW OF THE BLDG TO EL 634' ±.	
	SOUTH OF BAYS 3 & 4 TO EL 644' ±.	
	SE OF THE BLDG TO EL 634' ±.	
	PORTIONS EAST OF THE BLDG TO EL. 644' ±	

REMARKS:

SB 15023

Jim Wawrzewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 8/14/79 PAGE 1 OF 2

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	LIFT-OFF READINGS	
	THE LIFT-OFF READINGS WERE DONE ACCORDING TO SPECIFICATION. SEE ATTACHED ~~(SKETCH)~~ SHEET FOR READINGS.	REMOVAL OF SURCHARGE MATERIAL IN D/G WILL COMMENCE ON 8/15 BASED ON TWX #5315
	THE READINGS ON JACK NO. 13 ~~(WAS)~~ ARE ~~NOT~~ (~~NEVER~~) CORRECT. IT LOOKS LIKE THAT THE JACK MAY HAVE BEEN TAMPERED WITH. THE NUT ON THE BACK SIDE OF THE JACK WAS NOT SHIMMED TIGHT AGAINST THE JACK. BECAUSE OF RUST ON THE ROD THE NUT COULD NOT BE TURNED DOWN SNUG.	

REMARKS:

SB 15024

James J. Kelleher
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 8/14/79

TIME: 1:00 P.M

A Location	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
#15			~~1500~~ 15 13 14		
#13			11 10 10		
#7			15.5 14.5 13.0		
#1			23 24 19		
#26			21 19 16		
#22			205 19 18		

sion readings shall be in pounds.

By: J Kelleher

Checked by: _____

SB 15025

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 5-29-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	UNIT #1 TRANSFORMER AREA PRELOADING.	
	PRELOADING OF THE UNIT #1 TRANSFORMER AREA COMMENCED MAY 23RD AND COMPLETED ON MAY 25TH. APPROXIMATELY 810 CY OF YELLOW SAND WERE PLACED TO ELEVATION 639'-0".	MATERIAL WAS PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15026

ROUTE

Jim Betts

Al Boos

Jim Wawrzewski

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4/11/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	LIFT OFF TEST READINGS THE LIFT OFF READINGS WERE DONE PER SPEC. AND THE READINGS ARE AS SHOWN ON ATTACHED SHEET.	

REMARKS:

SB 15027

ROUTE

Jim Betts
Al Boos

James J. Kelley
SIGNATURE

FILE

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 4/11/79

TIME: 7:30

on	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
#1 ROD #1			21 21 21	17 16.5 16.5	+ 3 + 3.5 + 3.5
#2 ROD #7			15 15 15	12 11.5 11.5	+ 3 + 3.5 + 3.5
#3 ROD #5			14 15 15	13 13 13	+ 1 + 2 + 2
#4 ROD (22)			16 15 15	11 12 11.5	+ 5 + 3 + 3.5
#5 ROD #26			17 17 17	13.5 14 13	+3.5 +3 +3

sion readings shall be in pounds.

By: James J. Kelleher

Checked by: _____

SB 15028

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-7-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES PLACEMENT OF SURCHARGE MATERIAL COMPLETED TODAY. 1170 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: SOUTH OF BAY #1 TO EL. 654'-0". WEST OF THE BLDG TO EL. 654'-0".	SAND WAS PLACED IN ACCORDANCE WITH SPEC. 7220-C-81. THE WEEKLY SUBMITTAL OF SURCHARGE QUANTITIES WAS GIVEN TO RESIDENT ENGINEERING FOR THEIR INFORMATION.
	ALL CONSTRUCTION ACTIVITIES RELATED TO SURCHARGE WILL STOP TODAY BECAUSE STEP VII, [redacted] OF DWG. C-1141, HAS BEEN REACHED	

REMARKS:

SB 15029

ROUTE
Jim Betts
Al Boos

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-6-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 360 CY OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	SOUTH OF THE BLDG. FROM 649'-0" TO 654'-0".	
	WEST OF THE BLDG. FROM 649'-0" TO 654'-0".	

REMARKS:

SB 15030

Jim Wasylewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-5-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 450 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: THE REMAINING PORTIONS BEHIND THE BLDG. TO EL. 654'-0". THE REMAINDER OF BAY #1 TO EL. 654'0". SOUTH OF THE BLDG. FROM EL. 649'-0" TO 654'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15031

Jim Wozniewski
SIGNATURE

ROUTE
Jim Betts
AL Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-4-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES	
	PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 780 CY OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	NORTH OF THE BLDG TO EL. 654'-0"	
	SOUTH OF THE BLDG FROM EL. 649'-0" TO 654'-0" GOING FROM WEST TO EAST.	
	PORTIONS OF THE SOUTH 1/2 OF BAY #1 TO EL. 654'-0".	

REMARKS:

SB 15032

Jim Warfield
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-3-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 840 CY OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: BAY #1 TO EL. 654'-0". SOUTH TO BLDG FROM EL. 645'-0" TO 654'-0" NE OF THE BLDG TO EL. 654'-0". EAST OF THE BLDG TO EL. 654'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15033

Jim Warfelewski
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4-2-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES PLACING OF SURCHARGE MATERIAL IS CONTINUING. 440 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: SOUTH OF THE BLDG FROM 645'-0" TO 650'-0". BAY #1 FROM EL. 650'-0" TO 654'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15034

Jim Wasylewski
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-31-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 510 CY, OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING INSTALLED IN ACCORDANCE WITH SPEC. 7220-C-81.
	SURCHARGE IS COMPLETE TO EL 654'-0" IN BAYS #2, 3, & #4.	SURCHARGE QUANTITIES FOR THIS WEEK WILL BE SUBMITTED TO RESIDENT
	IN BAY #1 FROM EL 648'-0" TO 654'-0".	ENGINEERING ON 4-2-79

REMARKS:

SB 15035

ROUTE

JIM BETTS
AL BOOS.

FILE

Jim Daugherski
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-30-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	PLACING OF SURCHARGE MATERIAL IS CONTINUING. 580 CY OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	IN BAY #1 FROM EL. 648'-0" TO 654'-0".	
	IN BAY #2 FROM EL. 651'-0" TO 654'-0".	
	IN BAY #3 FROM EL. 652'-0" TO 654'-0".	
	IN BAY #4 TO EL. 654'-0".	
	AREAS SOUTH OF THE BLDG TO EL. 649'-0".	

REMARKS:

SB 15036

Jim Wasylewski
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-29-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	PLACEMENT OF SURCHARGE MATERIAL, IN AND AROUND THE BLDG, IS CONTINUING. 680 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	NORTH ½'S OF BAYS 2, 3, & 4 FROM EL. 649'-0" TO 654'-0".	
	NORTH ½ OF BAY #1 FROM EL. 649'-0" TO 653'-0".	
	WEST SIDE OF THE BLDG FROM EL. 649'-0" TO 650'-0".	
	EAST SIDE OF THE BLDG FROM EL. 648'-0" TO 654'-0".	

REMARKS:

SB 15037

ROUTE

JIM BETTS
AL BOOS

Jim Doyle
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-28-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 510 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	NORTH 1/2's OF BAYS 2, 3, & 1 FROM EL. 649'-0" TO EL. 654'-0".	
	NORTH OF THE BLDG FROM EL. 649'-0" TO EL. 653'-0".	
	IN BAY #1 FROM EL. 647'-0" TO 649'-0".	
	WEST OF THE BLDG. FROM EL. 647'-0" TO 649'-0".	
	EAST OF THE BLDG FROM EL. 649'-0" TO 654'-0".	
	AREAS SOUTH OF THE BLDG TO EL. 649'-0".	

REMARKS:

SB 15038

ROUTE

JIM BETTS

AL BOOS

FILE

Jim Daugherty

SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-27-79 PAGE 1 OF 1

ITEM NO	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 620 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING LOCATIONS: NORTH OF THE BLDG FROM EL. 649'-0" TO 653'-0". EAST OF THE BLDG TO EL. 654'-0". IN BAY #4 FROM EL. 652'-0" TO 654'-0". IN BAY # 3 FROM EL. 649'-0" TO 654'-0". IN BAY # 2 FROM EL. 649'-0" TO 649'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15039

ROUTE

JIM BETTS
AL BOOS

Jim Dougherty
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3/28/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	LIFT-OFF TENSION READINGS.	
	PERFORMED LIFT-OFF TENSION TEST ON DESIGNATED TIE-RODS IN THE TURBINE BLDG. AT ALL LOCATIONS THE TESTS MET SPEC. REQUIREMENTS AND THE RESULTS WERE (F. ~~TONED~~) TO GIVEN TO PROJECT ENGINEERING.	

REMARKS:

SB 15040

ROUTE

Re Tim Betts
Ac Bows

SIGNATURE

FILE

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 3/26/79

TIME: 12:15 P.M.

A ion	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
#15			13 13 13		
#7			12 11.5 11.5		
#1			17 16.5 16.5		
#26			13.5 14 13		
#22			11 12 11.5		

ision readings shall be in pounds.

By: J. Kelleher

Checked by: _____

SB 15011

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-26-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 1020 CY OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	NORTH OF THE BLDG TO EL. 649'-0".	SURCHARGE QUANTITIES
	NW OF THE BLDG TO EL. 651'-0".	FOR LAST WEEK WERE
	WEST OF THE BLDG TO EL. 649'-0".	GIVEN TO RES. ENGR.
	NE OF THE BLDG TO EL. 649'-0".	TODAY.
	PORTIONS OF BAY #3 FROM EL. 649'-0" TO 654'-0".	
	PORTIONS OF BAY #4 FROM EL. 649'-0" TO 654'-0".	

REMARKS:

SB 13042

Jim Waszewski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-24-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES PLACEMENT OF SURCHARGE SAND IS CONTINUING. 600 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: NORTH OF BAYS 3 & 4 TO EL. 649'-0". NE OF THE BLDG TO EL. 649'-0". BAY #3 FROM EL. 646'-0" TO 647'-0". BAY #4 FROM EL. 649'-0" TO 654'-0". SE OF THE BLDG TO EL. 649'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15043

Jim Wasylewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-23-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES INSTALLATION OF SURCHARGE MATERIAL IS CONTINUING. 570 CY, OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS: SE OF THE BLDG TO EL. 649'-0". IN BAY #4 FROM EL 646'-0" TO 649'-0". SOUTH OF THE BLDG BETWEEN BAYS 3 & 4 TO EL 649'-0". IN BAY #3 TO EL 645'-0"	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.

REMARKS:

SB 15044

SIGNATURE

ROUTE

JIM BETTS

AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-22-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES OBTAINED VERBAL APPROVAL FROM PROJECT ENGINEERING TODAY, TO RESUME THE PLACEMENT OF SURCHARGE SAND IN ACCORDANCE WITH STEP V OF DWG. C-1141. RECEIVED CONFIRMING TWX THIS AFTERNOON. THEREFORE, PLACEMENT OF SURCHARGE RESUMED TODAY. 730 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS. WEST OF THE D/G BLDG TO EL. 649'-0". EAST OF THE BLDG FROM EL 646'-0" TO 649'-0". NE OF THE BLDG TO EL. 647'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.

REMARKS: ATTACHMENT: CC OF TWX 4523
BEBC-28006

SB 15045

Jim Doyle Jr
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

BECHTEL MIDL

BECHTEL ARB
810-223-6032 CLG 810-266-9497
TWX 4523 3/22/79 14:19

ATTN: A. BOOS/J. BETTS/J.F. NEWGEN

BEBC-2806
SUBJECT: CPCO/MIDLAND PLANT/JOB 7220
DIESEL GENERATOR BUILDING SURCHARGING
CORBEL, MINIMUM CONCRETE STRENGHT
FUEK: 0274, C-2645

PROJECT ENGINEERING ALLOWS THE FIELD TO PROCEED WITH STEP V AND VII OF THE SURCHARGE SEQUENCE (DRAWING C-1141) WITH A MINIMUM CONCRETE STRENGTH FOR THE CORBEL OF 4750 PSI IN LIEU OF 5,000 PSI AS STATED ON DRAWING C-1040. THE CONCRETE STRENGTH FOR THE COUNTERFORTS REMAINS AT 5,000 PSI.
AFTER COMPLETING STEP V PROCEED DIRECTLY TO STEP VII WITHOUT HOLDING AT STEP VI. MAINTAIN A MAXIMUM OF 5 FOOT HEIGHT DIFFERTIAL BETWEEN ALL ZONES.

M ROTHWELL FOR
RL CASTLEBERRY
ANN ARBOR/7PE2118/7220-001/ER

Telex/TWX

SB 15046

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-21-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG. C-1191	

REMARKS:

SB 15047

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-20-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG. C-1141.	

REMARKS:

SB 15048

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-19-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	Diesel Generator Bldg. Activities Settlement data is being obtained in accordance with Step IV of Dwg. C-1161.	

REMARKS:

SB 15049

ROUTE

Jim Betts
Al Boos

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-17-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG C-1141	

REMARKS:

SB 15050

Jim Daniewski
SIGNATURE

ROUTE

JM Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-16-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES	
	SETTLEMENT DATA IS BEING OBTAINED IN	
	ACCORDANCE WITH STEP IV OF DWG C-1141.	

REMARKS: SB 15051

ROUTE

JIM BETTS
AL BOOS

Jim Wayland
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3/15/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	LIFT-OFF TEST MONITORING AFTER A PORTABLE JACKING FRAME WAS CONSTRUCTED ON 3/14 RETEST WERE PREFORMED ON RODS #7 & #15 TO SATISFY C-83 REQUIREMENTS. THERE WERE NO PROBLEMS RETESTING ROD #7. AT ROD #15 THE TWO RODS TO THE EAST, 13 & 14, WERE THE ONLY ONES CHECKED. FROM THE DATA SHEETS IT CAN BE SEEN THAT RODS 13 & 12 WERE NOT AT THE PROPER TENSION, AND THE SAME PROCEDURE WAS FOLLOWED AS WAS DONE FOR THE RETEST FOR ROD #7.	

REMARKS:

SB 15052

ROUTE

Jim Botts
Al Boos

James J. Kelley
SIGNATURE

FILE

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 3/15/79

TIME: 12:15

A :et tion	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
#5			12 K 11 K 11.5 K	12	
#6			16.5 K 17.5 K 16.5 K		
#7 RETEST			12 K 11 K 11 K	10.5 10.0 10.0	
#8			20 K 19 K 19.5 K		
#10			13 K 12.5 K 13 K		

nsion readings shall be in pounds.

By: J Kelleher

Checked by: _____

#7 was retested as per specs.

Rod #10 was used instead of #9 because #9 was inaccessable.

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 3/15/79

TIME: 1:30 P.M.

A est ation	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
10			130 125 130		
11			18 19 19		
12 RETEST			12 * 11 * 12 *		
13			15.5 * 16 * 15 *		--
14			12.5 13 12.5		

nsion readings shall be in pounds.

By: J. Kelleher

Checked by: _____

Both 12 & 13 had to be tightened.

* The lift off tension shown is that after both were tightened.

SB 17054

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 11/5/79

TIME: 1:00 P.M.

A :st ıtion	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
#13			6K 7K 7K		
#14			12.5K 13K 12.5K		
#15 LOWEST			13K 13K 13K	6K 5K 5.5K	

nsion readings shall be in pounds.

By: J Kelleher

Checked by: _____

6 retest will have to be done at rod 13 per specs.

SB 15055

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 3/15/79

TIME: 1:00 P.M.

A st tion	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
11			18 19 19		
12			6 5 6		
13 RETEST			COULDN'T GET RETEST OF 13 UNTIL RETEST OF 12 IS DONE		
14			12.5 13.0 12.5		
15			13.0 13.0 13.0	13.0 13.0 13.0	

nsion readings shall be in pounds.

By: J. Kelleher

Checked by: _____

A retest will have to be performed on rod #12.

SB 15056

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 3/15/79

TIME: 1:30 P.M.

A st tion	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
11			18 19 19	18 19 19	
12			12 11 12	6 5 6	
13 Retest			15.5 16.0 15.0	6 7 7	
14			12.5 13. 12.5	12.5 13. 12.5	--
15			13 13 13	13 13 13	

nsion readings shall be in pounds.

By: J Kelleher

Checked by: _____

After getting proper tension on rod #13 back and checked tension in rods 13 14, 15 to see if any change occured. None did.

SB 15057

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-15-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	SETTLEMENT DATA IS BEING OBTAINED	
	IN ACCORDANCE WITH STEP IV OF DWG.	
	C-1141	

REMARKS:

SB 15058

Jim Marshall
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-14-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES: SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG. C-1141.	

REMARKS: SB 15059

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3/13/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	LIFT-OFF TEST MONITORING.	
	THE LIFT-OFF TEST WERE PERFORMED IN ACCORDANCE WITH SPECIFICATION G-83 SECT 4.2.4. AT JACK #3 (ROD #15) A RETEST WAS DONE BECAUSE OF THE LARGE VARIATION IN READINGS. THE RESULTS OF THE RETEST WERE MORE CONSISTENT, HOWEVER THE READINGS WERE LESS THAN 10,000 POUNDS AND WILL BE RETENSIONED PER (SPEC.) SECT. 4.2.1 OF G-83. JACK #2 (ROD #7) WILL ALSO BE RETESTED BECAUSE OF SPEC REQUIREMENTS (SECT. 4.2.3 f)	

REMARKS:

SB 15060

ROUTE

Jim Betts
Al Boos

James J. Keller
SIGNATURE

FILE

Specification 7220-C-83
Attachment 2
Rev. 0

TURBINE BUILDING WALL TIEROD MONITORING

DATE: 3/13/79

TIME: 7:25

A Test Location	B Test Elevation	C Jack Number	D Tierod Lift-Off Tension Reading	E Previous Lift-Off Tension Reading	F Change in Tension (D-E)
ROD #1		1	16 K 14.5 K 14 K		
ROD #7		2	10.5 K 10 K 10 K		
ROD #15		3	9 K 6 K 7 K 5 K 4 K 5.5 K	RETEST @ 9:00 A.M.	
ROD #22		4	11 K 11 K 11 K		
ROD #26		5	14 K 14 K 14 K		

tension readings shall be in pounds.

By: J. Kelleher

Checked by: _____

SB 15061

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-13-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	Diesel Generator Bldg. Activities Settlement data is being obtained in accordance with Step IV of Dwg. C-1141.	

REMARKS:

SB 15062

ROUTE

Jim Betts
Al Boos

FILE

Jim Daugherty
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-12-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG. C-1161.	

REMARKS: SB 15063

ROUTE

JIM BETTS
AL BOOS

Jim Daverdis
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-10-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES. SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG. C-1141.	

REMARKS:

SB 15064

ROUTE

JIM BETTS
AL BOOS

Jim Dewyewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-9-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG C-1141.	

REMARKS:

SB 15065

ROUTE

JIM BETTS
AL BOOS

Jim Daughenbaugh
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-8-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SETTLEMENT DATA IS BEING OBTAINED IN ACCORDANCE WITH STEP IV OF DWG C-1141. NO SURCHARGE MAT'L. IS BEING PLACED.	

REMARKS:

SB 15066

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-7-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
(1)	DIESEL GENERATOR BLDG. ACTIVITIES NO SURCHARGE ACTIVITIES, OUTSIDE OF SETTLEMENT MONITORING, WERE PERFORMED TODAY. ALL ACTIVITIES ARE ON HOLD UNTIL STEP IV HAS BEEN COMPLETED.	

REMARKS:

SB 15067

ROUTE

JIM BETTS
AL BOOS

Jim Daniszewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-6-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1.	DIESEL GENERATOR BLDG. ACTIVITIES.	
(A)	SINCE STEP 4 OF THE SURCHARGE SEQUENCE HAS BEEN REACHED, ACTIVITIES RELATING TO SURCHARGING HAVE STOPPED.	STEP 4 OF THE SURCHARGE SEQUENCE REQUIRES THAT PLACEMENT OF SURCHARGE MATERIAL BE STOPPED FOR A PERIOD OF 2 WEEKS IN ORDER TO OBTAIN SETTLEMENT DATA

REMARKS: REF. DWG C-1141 FOR SURCHARGING SEQUENCE

SB 15068

SIGNATURE

ROUTE

JIM BETTS

AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-5-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES	
A	ALL SURCHARGE RELATED ACTIVITIES, THROUGH STEP III OF TABLE I DWG C-1141, HAVE NOW BEEN COMPLETED. STEP IV OF TABLE II WILL START TODAY.	

REMARKS:

SB 15069

ROUTE

JIM BETTS
AL BOOS

FILE

Jim Daugherty
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-3-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. 1040 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: ALL AREAS WITHIN 20' OF THE PERIMETER OF THE BLDG. TO EL. 644'-0'. ALL AREAS INSIDE THE BLDG TO EL. 644'-0".	SAND WAS PLACED IN ACCORDANCE WITH SPEC. 7220-C-[redacted]81.

REMARKS:

SB 15070

Jim Dwyer
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-2-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	PLACEMENT OF SURCHARGE SAND IS CONTINUING. 1130 CY, OF YELLOW SAND. WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81. THE WEEKL
	NW OF THE BLDG TO EL. 641'-0".	SUBMITTAL OF SURCHARG
	WEST OF THE BLDG TO EL. 644'-0".	QUANTITY SHEETS WERE
	PORTIONS OF BAY #1 TO EL. 644'-0".	GIVEN TO RESIDENT
	SOUTHERN EXTREMITIES OF BAY #2 TO EL. 644'-0".	ENGINEERING TODAY.
	SOUTH OF BAY #4 TO EL. 644'-0".	
	EAST OF THE BLDG TO EL. 644'-0".	
	NE OF THE BLDG TO EL. 644'-0".	

REMARKS:

SB 15071

Jim Wasylewski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3-1-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES	
(A)	PLACEMENT OF SURCHARGE SAND IS CONTINUING. 810 CY, OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	NORTH ½ OF BAY #1 FROM EL. 641' TO 642'6".	
	THE REMAINDER OF BAY #2 TO EL. 644'-0".	
	PORTIONS OF BAY #3 TO EL. 644'-0".	
	SOUTH & EAST OF BAY #4 TO EL. 644'-0".	
	NE OF THE BLDG TO EL. 636'-0".	

REMARKS:

SB 15072

SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 3/1/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE BEAM AT COL. LINE R-S99 IS DONE EXCEPT FOR ONE OVER-HEAD WELD WHICH SHOULD BE COMPLETED TOMORROW (3/2/79).	

REMARKS:

SB 15073

ROUTE

Jeff
Tom Botts
Al Boos

James J. Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/28/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	ALL ERECTION AND WELDING AT COL. LINE 8 WAS COMPLETED. THE BASE PLATES WERE ALSO FORMED AND GROUTED.	
	THE BEAM AT EL. 5.89 WAS SET IN PLACE AND WELDING HAD BEGUN.	

REMARKS:

SB 15074

ROUTE

Jim Betts
AL Boos

James J. Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-28-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	PLACEMENT OF SURCHARGE SAND IS CONTINUING. 640 CY. OF YELLOW SAND WERE PLACED IN THE FOLLOWING AREAS. WEST OF THE D/G BLDG TO EL. 639'-0". BAY #1 TO EL. 639'-6". BAY #2 NORTH ½ TO EL. 644'-0". THE REMAINDER OF BAY #4 TO EL. 644'-0". SOUTH OF BAY #4 TO EL. 643'-0".	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
(B)	TIE BACK CABLES, FOR THE SURCHARGE RETAINING FORMS ON THE EAST AND WEST ENDS OF THE BLDG., WERE STRUNG FROM THE FORMS TO THE DEADMEN TODAY. ALSO, INSTALLATION OF TIE RODS BETWEEN THE RETAINING FORMS IS CONTINUING.	
2	TURBINE BLDG ACTIVITIES	
(A)	ALL STEEL BRACING FOR "Q" LINE WALL HAS COMPLETED WITH THE EXCEPTION OF THE BEAM @ COL LINE Pc-589.	STEP III ON DWG. C-1141(Q) IS NOW COMPLETE. BACKFILL OPERATIONS WILL RESUME IN ALL AREAS NOW.

REMARKS:

SB 15075

ROUTE

Jim Betts

Al Book

Jim Daszkowski

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/27/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	AT COLUMN LINE 9 THE 1½"Ø BOLTS WERE INSTALLED AND TORQUED. THIS COMPLETES WORK AT ~~COL.~~ THIS COL. LINE.	
	AT COL LINE 8 ALL THE STEEL WAS ERECTED AND WELDING CONTINUED.	
	FABRICATION CONTINUED ON THE BEAM & STIFFENERS AT COL. LINE P$_c$-5.89. THE BEAM AT COL. LINE P$_c$-6 IS COMPLETE.	

REMARKS:

SB 15076

ROUTE

Jim Betts
AL Boos

James J. Kellaher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-27-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG. ACTIVITIES	
(A)	PLACEMENT OF SURCHARGE MATERIAL IS CONTINUING. APPROXIMATELY 360 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: EAST OF THE D/G BLDG TO EL. 641'-0". SOUTH OF THE D/G BLDG TO EL. 642'-0". NORTH 1/2 OF BAY #4 TO EL. 644'-0". NORTH 1/2's OF BAYS 3 & 4 FROM EL. 642'-0" TO 644'-0".	THE SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
(B)	THE DEADMEN FOR THE SURCHARGE RETAINING FORMS, WERE PLACED, ON THE EAST AND WEST ENDS OF THE BLDG, TODAY. ERECTION OF THE SURCHARGE RETAINING FORMS RESUMED TODAY.	

REMARKS:

SB 15077

Jim Daszkewski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/26/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE STEEL AT ELEV. 630'-10" WAS PUT IN PLACE AND FINAL FIT-UP AND WELDING WAS STARTED AT COL. LINE 8.	
	THE BOLTS AT COL. LINE 9 WERE PUT IN AT ELEV. 620'.	
	AT COL LINES P2-6 & 5.89 FABRICATION CONTINUED. THE W14 AT P2-6 WAS WELDED UP. AT P2-5.89 WELDING OF STIFFENER PLATES CONTINUED ON THE GROUND BEFORE THE BEAM WAS PUT IN LOCATION.	

REMARKS:

SB 15078

ROUTE

Jim Betts
Al Boos

James J. Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-26-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES.	
(A)	PLACING OF THE SURCHARGE MATERIAL IS CONTINUING. A TOTAL OF 420 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: NORTH OF THE D/G BLDG TO EL 644'-0". NORTH 1/4 OF BAY #2 TO EL. 643'-0". BAY #3 TO EL. 641'-0". BAY #4 FROM ELEV 643'-0" TO 644'-0".	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
(B)	EXCAVATION, FOR THE RETAINING FORM TIE BACKS & DEADMEN, IN ZONE "E", NORTHEAST OF THE D/G BLDG. STARTED TODAY.	
2	TURBINE BLDG ACTIVITIES	
(A)	THE STRIPPING OF FORMWORK FOR THE 3.5 & 8.5 LINE COUNTERFORTS COMPLETED TODAY. ALSO A 3 DAY BREAK OF A CONCRETE COMPRESSION CYLINDER, FROM THE CONCRETE BATCHED FOR THE COUNTERFORTS, WAS PERFORMED TODAY. THE RESULTS FROM THE BREAK WERE 4160 PSI.	AS SOON AS STR. STEEL BRACING @ 8.0 LINE IS COMPLETED STEP III WILL BE COMPLETE AND SURCHARGE LOADING CAN RESUME IN ALL AREAS.

REMARKS: ATTACHMENT: SPEEDIMEMO FROM R. KOWALSKI DATED 2-26-79 GIVING RESULTS FROM CONCRETE CYLINDER BRAKES.

ROUTE
JIM BETTS
AL BOOS
FILE

SB 150:9

Jim Wasylewski
SIGNATURE

speedimemo®

635299 TRIP

TO Jim Wasylewski | AT Midland

SUBJECT Compressive Strength Corbel & Counterfort Walls | DATE 2/26/79

Placement	Date	Average Compressive Strength (psi)		Age
T/B 1st Lift Corbel	1/31/79	4270	@	21 days
T/B 2nd Lift Corbel	2/5/79	4145	@	14 days
T/B 3rd Lift Corbel	2/8/79	4105	@	14 days
T/B Counterfort Walls	2/23/79	4160	@	3 days

PLEASE REPLY TO | SIGNED B D Kowalski 2/26/79

No reply

DATE | SIGNED

Rediform® 45 469

POLY PAK (50 SETS) 45 469

SEND PARTS 1 AND 3 WITH CARBON INTACT. - PART 3 WILL BE RETURNED WITH REPLY.

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/29/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	AT COL. LINE 8 ~~THE~~ FABRICATION CONTINUED. ONE BEAM WAS SET IN PLACE AT ELEV. 630'-0" AND PREPERATION WORK FOR WELDING CONTINUED.	
	AT COL. LINES Pc-6 & 5.89 THE BEAM AND STIFFENER PLATES WERE SET IN PLACE AT Pc-6. THE BEAM AT Pc-5.89 WAS FABRICATED AND READY TO GO INTO PLACE.	

REMARKS:

SB 15080

ROUTE

Tim Botts
Al Boos

James J. Kelliher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-24-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 1190 CY, OF YELLOW SAND, WERE INSTALLED IN THE FOLLOWING LOCATIONS:	SAND IS BEING PLACED PER SPEC. 7220-C-81.
	NORTH OF THE D/G BLDG TO EL. 644'.	
	EAST OF THE D/G BLDG TO EL. 641'-0".	
	SW OF THE D/G BLDG TO EL. 641'-0".	
	BAY #4 TO EL. 641'-0".	
	NORTH 1/2 OF BAY #3 TO EL. 641'-0".	
	NE OF D/G BLDG TO EL. 640'-0"	

REMARKS:

SB 15081

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/23/77 PAGE 1 OF 1

ITEM NO	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE FULL PENETRATION WELDS WERE COMPLETED ON THE STEEL AT 615 AND THE DIAGONAL KICKER ON COL. LINE 8. FABRICATION CONTINUED ON STEEL AT ELEV. 630'-10".	
	FABRICATION OF BEAMS AND STIFFENER PLATES AT COL. LINES P2-6 & 5.89 CONTINUED.	

REMARKS:

SB 15082

ROUTE

Tim Betts

Al Boos

James J. Kellner

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-23-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 1060 CY, OF YELLOW SAND, WERE PLACED AT THE FOLLOWING LOCATIONS: NORTH OF THE D/G BLDG TO EL 641'-0". SW OF THE D/G BLDG TO EL 641'-0". SE OF THE D/G BLDG TO EL 641'-0"	YELLOW SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-83. THE DAILY QUANTITY SHEETS, FOR 1 WEEK'S SURCHARGE, WERE SUBMITTED TO RES. ENGG. FOR THEIR INFO.
(B)	ERECTION OF THE SURCHARGE RETAINING FORM, BETWEEN THE D/G AND TURBINE BUILDINGS, IS CONTINUING.	
2	TURBINE BUILDING ACTIVITIES	
(A)	INSTALLATION OF THE STRAIN GAGE MONITORS, FOR "Q" LINE WALL, COMPLETED TODAY.	GAGES WERE INSTALLED PER SPEC. 7220-C-83
(B)	FORM ERECTION ON THE 8.5 LINE COUNTERFORT COMPLETED THIS MORNING. CONCRETE PLACEMENT FOR 3.5 & 8.5 LINE COUNTERFORTS TOOK PLACE THIS AFTERNOON, USING A PG-D CONCRETE MIX.	CONCRETE WAS PLACED IN ACCORDANCE WITH SPEC. 7220-C-231. EXTRA TEST CYLINDERS WERE CAST FOR 3 DAY AND 14 DAY CYLINDER BREAKS.

REMARKS:

SB 15083

Jim Waryleuski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/22/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC STRUCTURAL STEEL FOR TEMPORARY	SURCHARGE REQUIREMENTS
	AT COL LINE 9 FABRICATION OF BEAMS CONTINUED. ~~READ~~ THE BEAM AT ELEV. 615' WAS SET IN PLACE AND THE DIAGONAL KICKER WAS SET IN PLACE TOO.	
	FABRICATION OF BEAMS AND STIFFENER PLATES CONTINUED. AT COL LINES R2-6 & 5.89	

REMARKS:

SB 15084

ROUTE

Tim Betts
AL Boos

James J. Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-22-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 1240 CY, OF YELLOW SAND, WERE PLACED AT THE FOLLOWING LOCATIONS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	WESTSIDE OF D/G BLDG TO EL. 641'-0".	
	SW OF D/G BLDG TO EL. 641'-0".	
	SE OF D/G BLDG FROM EL. 637'-6" TO 641'-0".	
	EAST SIDE OF D/G BLDG TO EL. 641'-0".	
	NORTH OF BAYS 2, 3, & 4 TO EL. 641'-0".	
(B)	ERECTION OF THE SURCHARGE RETAINING FORM, BETWEEN THE D/G AND TURBINE BLDGS, IS CONTINUING.	
2	TURBINE BUILDING ACTIVITIES	
(A)	INSTALLATION OF THE STRAIN GAGES, FOR MONITORING "Q" LINE WALL, IS CONTINUING.	GAGES INSTALLED PER SPEC. 7220-C-83.
(B)	FORMWORK ERECTION ON 3.5 LINE COUNTERFORT COMPLETED TODAY AND FORM ERECTION ON 8.5 LINE IS CONTINUING.	

REMARKS:

SD 15085

Jim Waszkowski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/20/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE W14X136 BEAMS AT COL. LINE 9 WERE FABRICATED AND WELDING PREP WORK WAS PERFORMED.	
	AT COL LINES P.C-6 & 5.85 LINES PREP WORK WAS DONE ON COLS. AND BEAMS AND STIFFENER PLATES WERE FABRICATED.	

REMARKS:

SB 15086

ROUTE

Jim Betts
Al Boos

James J. Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-21-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING RESUMED TODAY. A TOTAL OF 880 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING LOCATIONS:	YELLOW SAND IS BEING INSTALLED PER SPEC. 7220-C-81.
	BETWEEN THE D/G & TURB BLDGS TO EL 638'-0". WEST SIDE OF D/G BLDG TO EL 638'-6". SW OF D/G BLDG TO EL 640'-0", EAST SIDE OF D/G BLDG TO EL. 638'-0". SE OF D/G BLDG TO EL. 641'-0".	
(B)	ERECTION OF THE SURCHARGE RETAINING FORM ~~RESUMED TODAY~~ BETWEEN THE D/G & TURBINE BLDGS RESUMED TODAY.	
2	TURBINE BLDG ACTIVITIES	
(A)	INSTALLATION OF STRAINGAGES FOR 'Q' LINE WALL MONITORING IS CONTINUING.	GAGES ARE BEING INSTALLED PER SPEC. 7220-C-83.
(B)	INSTALLATION OF REINFORCING STEEL FOR THE 3.5 & 8.5 LINE COUNTERFORTS COMPLETED TODAY. FORMWORK INSTALLATION FOR THE COUNTERFORTS STARTED TODAY ON BOTH COUNTERFORTS.	REBAR IS BEING INSTALLED PER DETAILS 2 & 3 OF DWG. 7220-C-1141 AND DWG. 7220-FSK-CY-203 SH 7 & SH 8.

REMARKS:

SB 15087

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-20-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	NO ACTIVITIES RELATING TO SURCHARGE LOADING OCCURRED TODAY.	
2	TURBINE BLDG ACTIVITIES	
(A)	INSTALLATION OF STRAIN GAGES FOR "Q" LINE WALL MONITORING IS CONTINUING.	GAGES INSTALLATION IS PER SPEC 7220-C-83.
(B)	GROUTING OF REBAR DOWELS FOR 3.5 & 8.5 LINE COUNTERFORTS COMPLETED TODAY. INSTALLATION OF REINFORCING STEEL STARTED TODAY AT BOTH LOCATIONS.	DOWELS WERE GROUT IN ACCORDANCE WITH SPEC 7220-C-231. INSTALLATION OF THE REBAR IS PER DETAILS.
	THE VARIOUS PIPES THAT INTERFERED WITH THE COUNTERFORT CONSTRUCTION @ 3.5 LINE WERE REMOVED.	2 & 3 OF DWG C-1141. AND AS PER DWG. 7220 FSK-CY-203 SH 7 & SH 8.

REMARKS:

SB 15088

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/19/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SUPPORTS REQUIREMENT	
	PLATES FOR STIFFENERS AND GUSSETS WERE CUT AND WELDED IN PLACE. NO OTHER ACTIVITIES OCCURED.	

REMARKS:

SB 15089

ROUTE

Cliff Tim Betts
AC Boos

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

BECHTEL

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/20/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	WELDING CONTINUED ON PLATES AND W14X136 WAS BROUGHT INTO THE BLDG.	

REMARKS:

SB 15000

ROUTE

Tim Betts
Al Boos

James J. Kelliher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-19-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES NO ACTIVITIES RELATING TO SURCHARGE LOADING OCCURRED TODAY.	
2	TURBINE BUILDING ACTIVITIES	
(A)	INSTALLATION OF STRAIN GAGES FOR "Q" LINE WALL MONITORING IS CONTINUING.	STRAIN GAGES ARE BEING INSTALLED PER SPEC 7220 C-83.
(B)	DRILLING AND GROUTING OF THE REBAR DOWELS FOR THE 3.5 & 8.5 LINE COUNTERFORTS IS CONTINUING.	DOWELS ARE BEING GROUTED IN ACCORDANCE WITH SPEC. 7220-C-231.
(C)	TENSIONING OF THE TURBINE WALL TIE RODS COMPLETED TODAY. HOWEVER, BECAUSE OF SOME ACCESS INTERFERENCES, 8 OF THE TIE RODS HAD TO BE TENSIONED BY HAND INSTEAD OF USING THE JACKS. LISTED BELOW ARE THE RODS WHICH WERE TIGHTENED BY HAND: #8 - JACK INTERFERENCE W/ COL QA-7.5 #9 JACK INTERFERENCE W/ PERMANENT PIPING #12 - JACK INTERFERENCE W/ STR. "X" BRACING #13 - " " " " " " #14 - " " " " " " #16 - JACK INTERFERENCE W/ EL 634'6" FLOOR BEAM #25 - JACK INTERFERENCE W/ COL QA-4.5 #29 - JACK INTERFERENCE W/ STR. 'X' BRACING.	RODS TENSIONED IN ACCORDANCE WITH SPEC 7220-C-83. COPY OF F.E.R. GIVEN TO RESIDENT ENGINEERING FOR INFORMATION

REMARKS:

SB 15091

Jim Wasylowski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-19-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING - SURCHARGE REQUIREMENTS	
	THE WESTERNMOST TIE ROD LOCATION OF THE EASTERN SET OF TIE RODS IS NOT ACCESSIBLE FOR ROD INSTALLATION IN THE TURBINE WALL. THIS INACCESSIBILITY IS DUE TO AN INTERFERENCE WITH THE EASTERN EXTREMITIES OF THE CONCRETE PARAPET WALL AND SLAB OF THE TURBINE LUBE OIL ROOM. HOWEVER, THE DISTANCE BETWEEN THE NEXT ROD, TO THE EAST AND THE EXTREMITIES OF THE LUBE OIL ROOM FLOOR SLAB & PARAPET WALL, IS LESS THAN THE 3'-1" MAX BETWEEN RODS SPECIFIED ON DWG. C-1040. THEREFORE, THE ROD WILL NOT BE INSTALLED.	COPY OF F.E.R. SUBMITTED TO RESIDENT ENGINEERING FOR THEIR [redacted] INFORMATION.

REMARKS:

SB 15092

Jim Wasylewski
SIGNATURE

ROUTE

JB Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-17-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES NO ACTIVITIES RELATING TO SURCHARGE OCCURRED TODAY.	
2	TURBINE BLDG ACTIVITIES. GROUTING OF THE FLOOR DOWELS FOR THE 3.5 LINE COUNTERFORT AND WALL DOWELS FOR THE 8.5 LINE COUNTERFORT OCCURRED TODAY.	DOWELS WERE GROUTED IN ACCORDANCE WITH SPEC 7220-C-231.

REMARKS:

SB 15093

ROUTE

JIM BETTS
AL BOOS

Jim Daniewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/16/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	Misc. Structural Steel for Temporary Supports	Discharge Requirements
	Continued cutting ~~SRB~~ stiffener plates for col. line B. Still waiting delivery of W14x136.	

REMARKS:

SB 15094

ROUTE

JP Hebb
A Boos

J Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-16-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 410 CY OF YELLOW SAND WERE PLACED IN THE FOLLOWING LOCATIONS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81. THE WEEKLY QUANTITY REPORTS WERE SUBMITTED TO PROJECT ENGG. TODAY.
	WEST OF THE BLDG TO EL 640'-0"	
	NE OF THE BLDG TO EL 637'-0"	
*	EAST OF THE BLDG TO EL 638'-0"	* THE AREA DIRECTLY EAST OF THE BLDG (15'-20' WIDE STRIP) WAS VISUALLY INSPECTED TO VERIFY THAT THE AREA WAS THAWED OUT PRIOR TO SURCHARGING AND IT WAS.
	SE OF THE BLDG TO EL 638'-6"	
(B)	ERECTION OF THE SURCHARGE RETAINING FORM, NORTH OF THE D G BLDG, IS CONTINUING.	
2	TURBINE BLDG ACTIVITIES.	
(A)	TENSIONING OF THE TURBINE WALL TIE RODS IS CONTINUING, ON THE UNIT #2 SIDE.	RODS ARE BEING TENSIONED IN ACCORDANCE WITH SPEC 7220-C-83.
(B)	DRILLING FOR THE COUNTERFORT REBAR DOWELS ON 3.5 & 8.5 LINES IS CONTINUING.	
(C)	PREPATORY WORK, FOR INSTALLATION OF STRAIN GAGE MONITORS, IN THE TURBINE WALL, IS CONTINUING.	STRAIN GAGES ARE BEING INSTALLED AT THE LOCATIONS PROJECT ENGINEERING REQUESTED AND IN ACCORDANCE WITH SPEC. 7220-C-83.

REMARKS:

SB 15095

ROUTE

Jim Betts
Al Boos

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/15/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE 6X6 ANGLE SUPPORT AT COL LINE 9 WAS COMPLETED AND PLATES WERE CUT FOR THE SUPPORT AT COL. LINE 8.	
	GROUTING WAS STARTED AT AT COL LINES 3 & 4 ON 2/14 AND CONTINUED TODAY.	

REMARKS:

SB 15036

ROUTE

JIM BETTS
AC BOOS.

FILE

SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-15-79 PAGE 1 OF 2

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 875 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING LOCATIONS: NORTH OF BAYS 2, 3, & 4 TO EL 637' SOUTH & EAST OF BAY #4 TO EL 639'	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
(B)	ERECTION OF THE SURCHARGE RETAINING FORM, NORTH OF THE D/G BUILDING, IS CONTINUING.	
2	TURBINE BUILDING ACTIVITIES	
(A)	TENSIONING OF THE TURBINE WALL TIE RODS IS CONTINUING, ON THE UNIT #2 SIDE.	RODS ARE BEING TENSIONED IN ACCORDANCE WITH SPEC 7220-C-83.
(B)	DRILLING FOR THE COUNTERFORT REBAR DOWELS ON 3.5 & 8.5 LINES IS CONTINUING.	
(C)	PREPATORY WORK, FOR INSTALLATION OF STRAIN GAGE MONITORS IN THE TURBINE WALL, STARTED TODAY.	STRAIN GAGES ARE BEING INSTALLED AS PER PROJECT ENGINEERING'S DIRECTIVES AND IN ACCORDANCE WITH SPEC 7220-C-83.

REMARKS: ATTACHMENT: 1 CC OF STRAIN GAGE LOCATIONS AS PER C.B. McCONNEL [redacted]

SB 15097

SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

WASYLEWSKI

BECHTEL

MEMORANDUM

STRAIN GUAGE LOCATION

LOCATION

FROM _____ DATE _____ 19 _____

SUBJECT _____ JOB NO.

FILE

NUMBER	LOCATION	DIRECTION	ELEV.	REMARKS
S-1	9' W. OF 3.0 LINE	HORIZ.	632'-0	
S-2	3.0 LINE	HORIZ.	633'-2½	TOP OF LEDGE SOUTH FACE TURB. WALL 2" TO NORTH
S-3	10'-W. OF 4.0	HORIZ	632'-0	
S-4	4.0 LINE	HORIZ	633'-2½	TOP OF LEDGE SOUTH FACE TURB. WALL 2" TO NORTH
S-5	3' E OF 4.0 LINE	VERT	625'-6	
S-6	3'-8" W. OF 5.0 LINE	HORIZ.	632'-0	
S-7	3' E. OF 5.0 LINE	VERT.	625'-6	
S-8	3' E. OF 6.0 LINE	VERT.	625'-6	
S-9	3' E. OF 7.0 LINE	VERT.	626'-6	
S-10	6' E. OF 7.0 LINE	HORIZ.	632'-0	
S-11	8.0 LINE	HORIZ.	633'-2½	TOP OF LEDGE SOUTH FACE TURB. WALL 2" TO NORTH
S-12	10' E. OF 8.0 LINE	HORIZ.	635'-0	
S-13	10' E. OF 8.0 LINE	HORIZ.	632'-0	
S-14	15-2" E. OF 8.0 LINE	HORIZ.	632'-0	
S-15	8.5 COL. LINE	HORIZ	633'-2½"	TOP OF LEDGE SOUTH FACE TURB. WALL 2" TO NORTH
S-16	9.0 LINE	HORIZ.	633'-2½	TOP OF LEDGE SOUTH FACE TURB. WALL 2" TO NORTH
S-17	9' E. OF 9.0 LINE	HORIZ.	632'-0	
S-18	14' E. OF 9.0 LINE	HORIZ.	632'-0	
S-19	19' E. OF 9.0 LINE	HORIZ.	632'-0	SB 15098

243 (6-75)

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/19/75 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE BOTTOM SUPPORT FOR THE BRACING AT COL LINE 9 WAS COMPLETED AND ONE 6X6 DOUBLE ANGLE WAS INSTALLED. LAYOUT WAS COMPLETED AT COL. LINE 8	

REMARKS:

SB 15099

ROUTE

Jim Botts
Al Boos

James J. Kellberg
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-14-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 805 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING LOCATIONS: SOUTH OF BAY #2 TO EL. 643'-0" ± EAST OF THE BUILDING TO EL. 635'-0" ± NORTH OF BAYS #3 & #4 TO EL. 636'-0" ±	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.
(B)	ERECTION OF THE SURCHARGE RETAINING FORMS, FOR SURCHARGE NORTH OF THE D/G BUILDING, IS CONTINUING.	
2	TURBINE BUILDING ACTIVITIES	
(A)	TENSIONING OF THE TURBINE WALL TIE RODS IS CONTINUING, ON THE UNIT #2 SIDE. THE MONITORING JACKS ON TIE RODS #1 & #15 ARE ENCOUNTERING INTERFERENCES WITH STRUCTURAL BRACING AND ACCESSIBILITY TO THEIR RESPECTIVE LOCATIONS.	RODS ARE BEING TENSIONED IN ACCORDANCE WITH SPEC. 7220-C-83. MONITORING JACK WAS INSTALLED ON TIE ROD #15 BECAUSE #16 WAS INACCESSIBLE. AN FCN REQUIRED
(B)	DRILLING FOR THE REBAR DOWELS FOR THE 3.5 LINE COUNTERFORT IS CONTINUING. DRILLING FOR THE 8.5 LINE COUNTERFORT COMMENCED TODAY.	

REMARKS:

SB 15100

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2/13/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQMTS	
	WORK WAS STARTED ON THE VERTICAL SUPPORTS FOR THE BRACE SYSTEM AT COL LINE 9. ALSO WELDING OF STIFFENER PLATES CONTINUED AT COL. LINE 8.	

REMARKS:

SB 15101

ROUTE

A. T. Boos

T. P. Betts.

James J. Keller

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-13-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGING IS CONTINUING. A TOTAL OF 780 C.Y. OF YELLOW SAND, WERE PLACED AT THE FOLLOWING AREA:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	SOUTH OF THE D/G BLDG FROM EL. 636' @ THE EAST SIDE TO EL. 643' ON THE WEST SIDE.	
(B)	ERECTION OF THE SURCHARGE RETAINING FORMS FOR SURCHARGE NORTH OF THE D/G BLDG IS CONTINUING.	
(C)	INSTALLATION OF THE TIE ROD BRACKET ON THE NW CORNER OF THE D/G BLDG WAS COMPLETED TODAY.	SEE DCN #2 TO DWG C-1141 FOR DETAILS ON BRACKET
2	TURBINE BUILDING ACTIVITIES	
(A)	TENSIONING OF THE TURBINE WALL TIE RODS IS CONTINUING ON THE UNIT #2 SIDE	RODS ARE BEING TENSIONED IN ACCORDANCE WITH SPEC 7220-C-83.
(B)	DRILLING FOR THE REBAR DOWELS FOR THE 3.5 LINE COUNTERFORT IS CONTINUING.	SEE PERMITS #3483 & #3484 FOR SPECIFIC LOCATIONS & INSTRUCTIONS

REMARKS:

SB 15102

ROUTE

Jim Betts

Al Boos

Jim Warfowski

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-12-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING RESUMED TODAY. A TOTAL OF 370 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS:	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
	(1) SE OF THE BLDG TO EL 636'-638'-6"	
	(2) WEST OF THE BLDG TO ELEV. 638'-0"	
(B)	ERECTION OF THE RETAINING FORMS, FOR SURCHARGING BETWEEN THE D/G BUILDING AND TURBINE BUILDING, IS CONTINUING.	
2	TURBINE BUILDING ACTIVITIES	
(A)	TENSIONING OF THE TIE RODS THAT TIE THE TURBINE WALL TO THE D/G BUILDING COMPLETED ON THE UNIT #1 TODAY.	RODS WERE TENSIONED IN ACCORDANCE WITH SPEC 7220-C-83.
(B)	DRILLING FOR THE REBAR DOWELS IN THE 3.5 LINE COUNTERFORT STARTED TODAY.	SEE DRILLING PERMITS #3483 & #3484 FOR SPECIFIC INSTRUCTIONS AND LOCATIONS

REMARKS:

SB 15103

ROUTE

JIM BETTS
AL BOOS

FILE

Jim Dougherty
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-10-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	ERECTION OF THE RETAINING FORMS, FOR SURCHARGING BETWEEN THE D/G & TURBINE BLDGS, IS CONTINUING.	
2	TURBINE BLDG ACTIVITIES	
(A)	TENSIONING OF THE TIE RODS, THAT TIE THE TURBINE WALL TO THE D/G COMMENCED TODAY.	THE RODS WERE TENSIONED TO APPROXIMATELY 12 KIPS.

REMARKS:

SB 15104

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-9-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 510 CY, OF YELLOW SAND, WERE PLACED IN THE FOLLOWING AREAS: NORTH OF BAY #1 TO EL 633' SOUTH OF THE BLDG TO EL 638'-6"	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81. WEEKLY QUANTITY REPORTS GIVEN TO RESIDENT ENGINEERING.
(B)	ERECTION OF THE RETAINING FORMS, FOR SURCHARGE BETWEEN THE D/G BLDG AND TURBINE BLDG, IS CONTINUING.	
	NO ACTIVITIES, RELATING TO PRELOAD, OCCURRED IN THE TURBINE BLDG TODAY	

REMARKS:

SB 15105

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-8-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 580 CY WERE INSTALLED IN THE FOLLOWING AREAS: SOUTH SIDE OF BLDG - WEST END TO EL 688'-6" - EAST END TO EL 635'-6" THE SOUTH EAST CORNERS OF BAYS 2 & 3 TO EL 640'-0"	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.
(B)	ERECTION OF THE RETAINING FORMS, FOR SURCHARGE BETWEEN THE D/G BLDG AND TURBINE BLDG, IS CONTINUING.	
2	TURBINE BLDG ACTIVITIES	
(A)	THE FINAL LIFT OF CONCRETE, ON THE "Q" LINE WALL CORBEL, WAS PLACED TODAY.	
(B)	DRILLING PERMITS, FOR REBAR DOWELS FOR THE COUNTERFORTS @ 3.5 LINE AND 8.5 LINE WERE PREPARED TODAY. THE PERMITS ARE CURRENTLY GOING THROUGH DISCIPLINE SIGNOFF.	SEE DCN #8 TO DWG C-1040 AND DCN # 3 TO DWG C-1141.

REMARKS:

SB 15106

ROUTE

Jim Betts
Al Boos

Jim Daugherty
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-7-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	SURCHARGE LOADING IS CONTINUING. A TOTAL OF 560 CY WERE INSTALLED IN THE FOLLOWING AREAS: NORTH OF BAY #1 TO EL. 633' INSIDE BAYS #2, #3, & #4 TO EL 639' OUTSIDE SE CORNER OF BLDG TO EL. 638' OUTSIDE SW CORNER OF BLDG TO EL 638'-6"	SAND IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.
(B)	ERECTION OF THE RETAINING FORMS, FOR SURCHARGE BETWEEN THE D/G BLDG AND TURBINE BUILDING, IS CONTINUING.	
2	TURBINE BUILDING ACTIVITIES	
(A)	W6X15.5 COLUMNS WERE INSTALLED IN THE Q LINE WALL CORBEL AT COLUMN LINES 4.5, 5.5, 6.5, AND 7.5. THESE COLUMNS WERE INSTALLED AS MOUNTING POST, FOR STRAIN GAGES TO MONITOR TURBINE WALL MOVEMENTS.	

REMARKS:

SB 15107

ROUTE

~~[illegible]~~

JIM BETTS

AL BOOS

Jim Daszkiewicz

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-6-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	SURCHARGING IS CONTINUING. APPROX. 45 CY OF YELLOW SAND WERE INSTALLED IN BAYS 3 & 4 OF THE BUILDING	SAND WAS PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
(B)	ERECTION OF THE FORMS, FOR RETAINING SURCHARGE SAND, BETWEEN THE D G BUILDING AND TURBINE BUILDING, STARTED TODAY.	

REMARKS:

SB 15108

ROUTE

JIM BETTS
AL BOOS

Jim Wawrzewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-5-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES SURCHARGE LOADING IS CONTINUING, YELLOW SAND WAS PLACED IN BAY #1 AND NORTH OF BAY 1 BETWEEN THE D/G BUILDING AND TURBINE BLDG. APPROX. 43 CY WERE PLACED.	MATERIAL BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.

REMARKS:

SB 15109

ROUTE

JIM BETTS
AL BOOS

Linda Kaufman
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-3-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES SURCHARGE LOADING ON THE EAST SIDE AND NORTH OF THE BUILDING IS CONTINUING. APPROXIMATELY 172 CY OF YELLOW SAND WERE INSTALLED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.

REMARKS:

SB 15110

Jim Waszkewski
SIGNATURE

ROUTE
Jim BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-2-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES SURCHARGE LOADING IN ALL 4 BAYS AND NORTH OF THE BUILDING IS CONTINUING. APPROXIMATELY 294 CY OF YELLOW SAND WERE PLACED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.

REMARKS:

SB 15111

ROUTE

JIM BETTS
AL BOOS

Jim Doorlowski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 2-1-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	BACKFILLING IN BAYS #1 & #4, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 16 CY WERE INSTALLED IN BAY #1 AND 20 CY IN BAY #4.	BACKFILLING IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-211.
(B)	SURCHARGE LOADING, WITH YELLOW SAND, IS CONTINUING IN BAY # 2. APPROXIMATELY 16 CY OF SAND WERE PLACED	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-81.
(C)	THE REMAINING CONDENSATE LINE (2 HCD-169) WAS CUT LOOSE AT THE TURBINE WALL TODAY. NO APPRECIABLE HORIZONTAL OR VERTICAL MOVEMENTS WERE OBSERVED.	
2	TURBINE BLDG ACTIVITIES	
(A)	CONSTRUCTION JOINT PREPARATION, FOR THE SECOND LIFT ON THE Q LINE WALL CORBEL, COMPLETED TODAY.	

REMARKS:

SB 15112

Jim Wasylewski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-31-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
(A)	BACKFILLING IN BAY #1, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 63 CY WERE PLACED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
(B)	SURCHARGE LOADING IN BAY #3, WITH YELLOW SAND, IS CONTINUING. APPROXIMATELY 180 CY WERE PLACED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-81.
(C)	CONDENSATE LINES 1HCD-169, 1HCD-513, AND 2HCD-513 WERE CUT LOOSE, ON THE SOUTH SIDE OF THE TURBINE BLDG, TODAY. ALL 3 LINES EXPERIENCED A HORIZONAL MOVEMENT AT THE CUT. THE AMOUNT OF MOVEMENT WAS 3"-4" TO THE WEST.	RESIDENT ENGINEERING WAS NOTIFIED.
2	TURBINE BLDG ACTIVITIES	
(A)	FIRST LIFT OF CONCRETE, FOR THE "Q" LINE WALL CORBEL, WAS PLACED TODAY. THE 1ST LIFT WAS APPROXIMATELY 2'-6" HIGH AND THE FULL LENGTH OF THE CORBEL	

REMARKS:

SB 15113

ROUTE

JIM BETTS
AL BOOS

Jim Woszlewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-30-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES.	
A)	BACKFILLING IN BAY # 1, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 18 CY OF MATERIAL WAS PLACED. STRUCTURAL BACKFILL COMPLETED IN BAY # 2 ON 1-26-79.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-211.
B)	SURCHARGE LOADING RESUMED TODAY. APPROXIMATELY 170 CY OF YELLOW SAND WERE PLACED IN BAY # 2 AND 78 CY IN BAY # 3.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-81.
C)	FORMWORK FOR THE CONDENSATE LINE ACCESSES, NEXT TO THE TURBINE WALL, [redacted] COMPLETED TODAY.	
D)	FABRICATION OF THE TIEBACK BRACKET (DETAIL 1 DWG C-1040), THAT BOLTS TO THE WEST WALL OF THE D/G BLDG, STARTED TODAY.	
2	TURBINE BLDG ACTIVITIES	
A)	REBAR INSTALLATION, FOR THE "Q" LINE WALL CORBEL, COMPLETED TODAY. VISUAL INSPECTION SHOWED THAT THE REINFORCING COMPLIED WITH DETAIL # 2 ON DWG C-1040.	

REMARKS:

SB 15114

Jim Wozniewski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-29-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) BACKFILLING IN BAY #1 IS CONTINUING. APPROXIMATELY 18 CY, OF STRUCTURAL SAND, WERE INSTALLED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
	B) FORMWORK FOR THE CONDENSATE LINE ACCESSES, NEXT TO THE TURBINE WALL, IS CONTINUING. THE ACCESS TO THE UNIT #1 LINES HAS COMPLETED AND THE ACCESS TO UNIT #2 LINES IS APPROXIMATELY 80% COMPLETE.	
2	TURBINE BLDG. ACTIVITIES	
	A) INSTALLATION OF REBAR, FOR THE "Q" LINE WALL CORBEL, IS CONTINUING. WORK HAS COMPLETED BETWEEN 5 & 6 LINES AND HAS STARTED BETWEEN 4 & 5 LINES	

REMARKS:

SB 15115

Jim Dougherty
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-26-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) BACKFILLING IN BAYS #1 & #2 IS CONTINUING. APPROXIMATELY 18 CY, OF STRUCTURAL SAND, WAS INSTALLED IN BAY #1 AND 6 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
	B) FORMWORK FOR THE CONDENSATE LINE ACCESSES, NEXT TO THE TURBINE WALL, IS CONTINUING, AS IS THE ACCESS EXCAVATIONS [redacted].	
2	TURBINE BLDG ACTIVITIES	
	A) INSTALLATION OF REBAR, FOR THE Q LINE WALL CORBEL, IS CONTINUING BETWEEN 5+6 LINES.	

REMARKS:

SB 15116

Jim Wasylewski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 11/26/76 PAGE _____ OF _____

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	ALL STRUCTURAL STEEL IS NOW ERECTED AT ALL COL. LINES. WELDING OF PLATES IS STILL GOING ON AT 3, 4, & 9 LINES. ALSO, BOLTS FOR COL. LINE 9 ARE ON ORDER BUT HAVE NOT BEEN RECIEVED YET.	

REMARKS:

SB 15117

ROUTE

J. Betts
A. Bos

FILE

Thomas J. Kelly
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 11/25/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	AT COL. LINES 3 & 4 ALL STEEL HAS BEEN ERECTED AND ALL THAT REMAINS TO BE DONE IS WELDING. AT COL. LINE 9 THE BEAM AT ELEV. 632'-10" HAS BEEN ERECTED. COMPLETION OF STEEL AT COL. LINE 9 IS PENDING DELIVERY OF 1½" ϕ BOLTS	

REMARKS:

SB 15118

James J. McCloy
SIGNATURE

ROUTE

A. Bert
J. Gitt

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-25-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) BACKFILLING IN BAYS 1 & 2, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 18 CY WERE INSTALLED IN BAY #1 AND 8 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
	B) EXCAVATION & FORMWORK FOR CONDENSATE LINE ACCESSES, IS CONTINUING. IN ORDER TO CUT THE PIPES AT THE LOCATIONS SHOWN ON THE DWG., THE WIDTHS OF THE ACCESSES HAD TO BE INCREASED FROM 4 TO 7 FEET, MEASURED FROM THE TURBINE WALL.	
2	TURBINE BLDG ACTIVITIES	
	A) INSTALLATION OF REBAR FOR "Q" LINE WALL CORBEL IS CONTINUING ON THE UNIT #1 SIDE.	
	B) INSTALLATION OF THE WALL'S TIE BACK ASSEMBLIES IS CONTINUING.	

REMARKS:

SB 15119

ROUTE

Jim Bets
Al Boos

Jim Warfield
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1/24/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS. AT COL. LINE 3 ALL BUT ONE BENT HAS BEEN ERECTED. AT COL. LINE 4 ALL STEEL HAS BEEN ERECTED AND ALL THAT REMAINS TO BE DONE IS WELDING. AT COL. LINE 5 ALL THE STEEL HAS BEEN FABRICATED AT THE BENT AT ELEV. 614 HAS BEEN ERECTED.	

REMARKS

SB 15120

ROUTE

A. Boos

W. J. Bett

James J. Kelliher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-24-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) BACKFILLING IN BAYS 1 & 2, WITH STRUCTURAL BAND, IS CONTINUING. APPROXIMATELY 12 CY WERE INSTALLED IN BAY #1 AND 18 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-211.
	B) EXCAVATION & FORMWORK FOR CONDENSATE LINE ACCESSES AT TURBINE STARTED.	SEE DWG. C-1040 FOR LOCATIONS.
2	TURBINE BLDG ACTIVITIES	
	A) INSTALLATION OF REBAR, FOR "Q" LINE WALL CORBEL, IS CONTINUING. WORK HAS STARTED ON UNIT #1 SIDE OF THE CORBEL.	
	B) INSTALLATION OF THE WALL TIEBACK ASSEMBLIES IS CONTINUING IN BOTH UNITS 1 & 2. THE VERTICAL BRACING FOR STRUCTURAL STEEL BETWEEN 4 & 5 LINES AND 7 & 8 LINES HAS TEMPORARILY BEEN REMOVED TO FACILITATE INSTALLATION OF THE TIERODS.	THE VERTICAL BRACING WILL BE REPLACED AFTER THE RODS ARE TENSIONED.

REMARKS:

SB 15121

Jim Daughenbaugh
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1/23/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS AT COL. LINES 3 & 4 FABRICATION IS ABOUT 90% COMPLETE AND ERECTION IS APPROX 75% COMPLETE. AT COL. LINE ~~(LINE)~~ 9 FABRICATION IS ALSO ABOUT 90% COMPLETE WITH ERECTION ABOUT 30% COMPLETE.	

REMARKS:

SB 15122

ROUTE

Ai Boggs
Tim Botts

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-23-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	(A) BACKFILLING IN BAYS 1 & 2, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 24 CY WERE PLACED IN BAY #1 AND 12 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-211.
	(B) INSTALLATION OF THE BEARING PLATE ASSEMBLES IS CONTINUING. THE ASSEMBLIES ARE INSTALLED ON ALL THE TIE-BACKS IN BAY #1 AND ON ALL BUT 2 TIEBACKS IN BAY #4.	
2	TURBINE BLDG ACTIVITIES	
	(A) CONSTRUCTION OF THE CONCRETE BLOCK FORM, FOR THE "Q" LINE WALL CORBEL, COMPLETED TODAY. INSTALLATION OF REINFORCING STEEL, ON THE UNIT #2 SIDE, OF THE CORBEL COMPLETED TODAY.	

REMARKS:

SB 15123

ROUTE
JIM BETTS
AL BOOS

FILE

SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1/22/75 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	Misc. Structural Steel for Temporary Surcharge Requirements	
	Erection & Fabrication continued. Welding has begun @ EE col. lines 3 & 4 on the beams & Nickers at elev. 614.	

REMARKS:

SB 15124

ROUTE

Betts
Boos

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-22-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES	
	(A) BACKFILLING IN BAYS 1 & 2, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 12 CY WERE INSTALLED IN IN BAY #1 AND 32 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC. 7220-C-211.
2	TURBINE BUILDING ACTIVITIES	
	(A) CONSTRUCTION OF THE CONCRETE BLOCK FORM, FOR THE "Q" LINE WALL CORBEL, IS CONTINUING. WORK HAS COMPLETED BETWEEN 4 & 5 LINES AND IS APPROX. 50% COMPLETE BETWEEN 5 & 6 LINES.	
	INSTALLATION OF REINFORCING STEEL IS CONTINUING, ON THE UNIT #2 SIDE OF THE CORBEL. GROUTING OF THE REBAR DOWELS IS APPROXIMATELY 80% COMPLETE.	REBAR DOWELS ARE BEING GROUTED IN ACCORDANCE WITH SPEC 7220-C-231.

REMARKS:

SB 15125

Jim Waszkowski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1/20/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENT	
	WORK CONTINUED ON THE MISC. STEEL IN THE TURBINE BLDG. THE HORIZONTAL BEAM AND DIAGONAL KICKER AT COL LINE 3 ARE SET IN PLACE BUT NOT WELDED UP. AT COL. LINE 4 THE HORIZONTAL BEAM AT ELEV. 614 IS IN PLACE AND THE BEAM AT ELEV. 632 BETWEEN THE W36 AND THE TURBINE PEDESTAL IS TACKED IN PLACE. THE BEAM AT ELEV. 614 IS IN PLACE AT COL. LINE 9. HOLES ARE BEING DRILLED IN THE BEAMS THAT GO AT ELEV. 620 AND 632.	

REMARKS:

ROUTE

J. P. Bell
A. J. Boos

SB 15126

James J. Kellicker
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-20-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BUILDING ACTIVITIES.	
	(A) BACKFILLING BAY #2, WITH STRUCTURAL SAND, RESUMED TODAY APPROXIMATELY 42 CY OF SAND WERE INSTALLED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
	(B) INSTALLATION OF TIERODS, FOR THE TURBINE WALL TIEBACK SYSTEM, IS CONTINUING. TIERODS WERE INSTALLED IN ALL AVAILABLE LOCATIONS WITH THE EXCEPTION OF THE HOLES CORED THROUGH THE MISSLE SHIELD WALLS. HERE THE RODS WERE TOO LONG TO FACILITATE INSTALLATION.	(SEE DWG FSK-CY-203 SH 1 FOR LOCATIONS) THE RODS WILL BE SHORTENED AND RETHREADED.
	(C) CORE DRILLING OF A 4"Ø HOLE, LOCATED IN THE NE CORNER OF THE NORTH WALL OF BAY #3, WAS COMPLETED TODAY. THIS HOLE HAD BEEN MISSED DURING THE PREVIOUS CORE DRILLING OPERATION. AN INSIDE FACE #8 HORZ HAS BEEN CUT.	DWG 7220-FSK-CY-203 SH 1 WILL BE REVISED TO SNOW THE CUT BAR.
2	TURBINE BLDG ACTIVITIES	
	(A) GROUTING OF THE REBAR DOWELS FOR "Q" LINE CORBEL IS CONTINUING. HORIZONTAL REINFORCING WAS INSTALLED, IN THE WALL, BETWEEN "7" & "8" LINES	GROUTING IS BEING DONE IN ACCORDANCE WITH SPEC 7220-C-231.

REMARKS:

SB 15127

SIGNATURE

ROUTE

JIM BETTS

AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1/19/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS	
	THE CORE DRILLING FOR THE GROUTED ANCHORS STOPPED. BECAUSE OF THE REBAR CONFLICTION IN THE THE BASE SLAB AT ELEV. 614 ANN ARBOR DELETED ALL GROUTED ANCHORS ON DRWG C-1142 REV. 0. IN THEIR PLACE HILTI - DROP IN ANCHORS WILL BE USED. THIS APPROVAL CAME VIA TELECON BETWEEN C. MCCONNELL OF ANO AND J. HARTMAN OF RE. ENG. (ATTACHED). AN FCR WILL BE WRITTEN AGAINST C-1142 TO REFLECT THIS CHANGE.	
	THE HOLES THAT WERE STARTED ON 1/18/79 WERE GROUTED AND AFTER A 3 DAY CURING PERIOD. DROP ANCHORS WILL BE INSTALLED.	
	ERECTION AND FABRICATION OF STRUCTURAL STEEL CONTINUED WITHOUT ANY MAJOR PROBLEMS.	

REMARKS:

SB 15128

ROUTE

J.P. Betts
A.J. Boos

James J. Kelleher
SIGNATURE

FILE

Telephone call

BECHTEL

C.C. ROUTE: CIVIL FILE, C. McCONNELL, R. SHULMAN, J. BETTS, J. KELLEHER

BY J. HARTMANN, JR. OF MIDLAND

TO CHUCK McCONNELL OF AAO

DATE JAN. 19 19 79 TIME 9:00

SUBJECT MISC. STEEL, DWG. C-1142 JOB NO 7220

CHUCK McCONNELL APPROVED THE USE OF 3/4" ϕ HILTI DROP IN ANCHORS IN LIEU OF THE 1 3/4" ϕ GROUTED ANCHOR BOLTS IN DETAILS 6, 11, & 13 ON DWG. C-1142. REBAR CONGESTION IN TURBINE PEDESTAL AND TURBINE FLOOR PROHIBITED THE USE OF THE GROUTED ANCHORS TO MEET THE REQUIREMENTS OF CUT REBAR IN SPEC. C-306.

THE RESULTANT EAST-WEST FORCE AT THE CONNECTION TO THE TURBINE PEDESTAL WILL BE TAKEN IN FRICTION BETWEEN THE BEARING PLATE AND GROUT (REF. DETAIL 6 & 11). THE RESULTANT FORCE FROM THE DIAGONAL MEMBER IN DETAIL 13 WILL BE TRANSFERED TO THE HORISONTAL MEMBER.

J. H.

SB 15129

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-19-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	INSTALLATION OF THE TIE RODS, FOR RESTRAINING THE TURBINE WALL, IS CONTINUING IN BAYS 1 & 4.	REFERENCE DWGS C-1040 & FSK-2Y-203 SH 1 FOR LOCATIONS
2	TURBINE BLDG ACTIVITIES	
	A) CONSTRUCTION OF THE CONCRETE BLOCK FORM, FOR Q LINE WALL CORBEL, IS CONTINUING. WORK IS CONTINUING BETWEEN "4" & "6" LINES.	
	B) GROUTING OF THE REBAR DOWELS FOR THE CORBEL IS CONTINUING BETWEEN 6 & 7" LINES	

REMARKS:

SB 15130

ROUTE

JIM BETTS
AL BOOS

Jim Wozniewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1/18/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	D/G BLDG PRELOAD RELATED ACTIVITIES	
	FABRICATION AND FIT UP OF STRUCTURAL STEEL CONTINUED.	
	STARTED DRILLING 4"Ø HOLES FOR 1 3/4"Ø GROUTED ANCHORS ON 64'-0" AT COL. LINE 4. HOWEVER, REBAR WAS ENCOUNTED 4" DOWN, MOVED HOLE LOCATION TO THE EAST AND MORE REBAR WAS HIT 6" DOWN. REBAR WAS NOT CUT AND DRILLING OPERATIONS WERE STOPPED UNTIL A SOLUTION COULD BE FOUND. THIS REBAR PROBLEM WAS BROUGHT TO THE ATTENTION OF J. HARTMAN OF RESIDENT ENG. AND C. McCONNELL OF ANN ARBOR.	
	ALSO, GOT WORD FROM ANN ARBOR THAT 1 3/4"Ø GROUTED ANCHOR BOLTS WERE NOT REQ'D IN TURBINE PEDESTAL @ COL. LINE 9 (TELECON w/ CHUCK McCONNELL OF AAO AND J. HARTMAN OF RES. ENG.) AND THAT HILTI DROP IN ANCHORS COULD BE USED	

REMARKS:

SB 15131

ROUTE

J.P. Betts

A.J. Boos

James J. Kelley

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-18-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) INSTALLATION OF THE TURBINE WALL TIE BACK RODS STARTED IN BAY #1.	SINCE THE ONLY OPERATION BEING CARRIED OUT IS FIT UP, NO ACTION IS REQUIRED.
	B) 1-#8 VERTICAL BAR, APPROXIMATELY 3' IN FROM THE NORTH EXTERIOR FACE OF PLASTER LOCATED ON THE NW CORNER OF THE BUILDING, WAS CUT.	THIS REBAR WAS A FIELD ADDED BAR THAT SERVED NO OTHER PURPOSE THAN TO ACT AS A FRAMING BAR. THEREFORE, NO ACTION IS REQUIRED.
2	TURBINE BLDG ACTIVITIES	
	A) CONSTRUCTION OF CONCRETE BLOCK FORM FOR THE THE "Q" LINE CORBEL IS CONTINUING. BLOCKWORK IS COMPLETE ON TURBINE #2 SIDE AND IS PROGRESSING ON TURBINE #1 SIDE.	
	B) GROUTING OF THE VERTICAL REBAR DOWELS, FOR THE CORBEL, STARTED TODAY. BARS WERE GROUTED NEXT TO THE CONCRETE BLOCK FORM BETWEEN "7" & "8" LINES.	THE GROUTING OF THE BARS IS BEING DONE IN ACCORDANCE WITH SPECIFICATION 7220-C-231.

REMARKS:

SB 15132

ROUTE

JIM BETTS
AL BOOS

Linda Jaszkowski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-17-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) NO ACTIVITIES RELATING TO BLDG PRELOAD WERE PERFORMED TODAY.	
2	TURBINE BUILDING ACTIVITIES	
	A) CONSTRUCTION OF THE CONCRETE BLOCK FORMWORK, FOR THE Q LINE WALL CORBEL IS CONTINUING. THE BLOCKWALL FORM STARTED ON UNIT #1 SIDE TODAY AND THE FORM WAS COMPLETED BETWEEN 6.5 + 7 LINES. TODAY.	

REMARKS:

SB 15133

ROUTE

JIM BETTS
AL BOOS

Jim Daniewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 4/12/79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	TURBINE BLDG ACTIVITIES MISC. STRUCTURAL STEEL FOR TEMPORARY SURCHARGE REQUIREMENTS BEGAN. WORK STARTED ON COL. LINES 3, 4, & 9 BETWEEN Q & P9 LINES 4 PER DWG C-1142 REV. 0. THE WORK PERFORMED FOR THE DAY WAS FABRICATION OF BEAMS, LAYOUT & FABRICATION OF STIFFENER AND BASE PLATES.	

REMARKS:

SB 15134

ROUTE

J. Betts
A. Boos

James J. Kelleher
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-16-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) NO ACTIVITIES RELATING TO BUILDING PRELOAD OCCURRED TODAY.	
2	TURBINE BLDG ACTIVITIES	
	A) CONSTRUCTION OF THE CONCRETE BLOCK FORMWORK, FOR THE "Q" LINE WALL CORBEL, HAS COMPLETED BETWEEN "7" & "8" LINES. WORK IS CONTINUING ON CONCRETE BLOCK FORM BETWEEN "6" AND "7" LINES.	
	B) DRILLING FOR THE "Q" LINE CORBEL'S REBAR DOWELS HAS COMPLETED TODAY, 1-16-79.	

REMARKS:

SB 15135

Jim Wawrzewski
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-15-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) NO BACKFILLING TOOK PLACE TODAY BECAUSE OF BAD WEATHER CONDITIONS.	
	B) CORE DRILLING, FOR THE TURBINE WALL TIE BACK SYSTEM, COMPLETED TODAY. REINFORCING STEEL WAS CUT IN THE FOLLOWING HOLES: (1) 1-O.F. #8 HORZ, IN THE WESTERNMOST WALL, LOCATED 1' SOUTH OF THE INTERIOR NW CORNER OF BAY #1 @ EL 631'-0" ±. (2) 1-O.F. #8 HORZ AT SAME LOCATION AS (1) EXCEPT @ EL 632'-0" ±	DRAWING 7220-FSK-CY-203-SH 1 WILL BE REVISED TO SHOW LOCATIONS OF CUT REBARS
2	TURBINE BLDG ACTIVITIES	
	A) CONCRETE BLOCKWALL FORM, FOR THE "Q" LINE WALL CORBEL, IS CONTINUING.	
	B) DRILLING FOR THE "Q" LINE CORBEL REBAR DOWELS IS CONTINUING.	

REMARKS:

SB 15136

ROUTE

JIM BETTS
AL BOOS

FILE

Jim Wasylewski
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-13-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) BACKFILLING, WITH STRUCTURAL SAND, IN BAYS #1 & #2 IS CONTINUING. APPROXIMATELY 22 CY WERE INSTALLED IN BAY #1 AND 20 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
	B) CORE DRILLING IN THE NORTH WALL OF BAY #1, FOR THE TURBINE WALL TIEBACK SYSTEM, IS CONTINUING. ONE (1) INSIDE FACE #8 VERTICAL IN THE WESTERNMOST HOLE OF THE NORTHWALL IN BAY #1 WAS CUT.	DRAWING 7220-FSK-CY-203 SH. 1 WILL BE REVISED TO SHOW LOCATION
2	TURBINE BLDG ACTIVITIES	
	A) CONSTRUCTION OF THE CONCRETE BLOCK-WALL FORM, FOR THE "Q" LINE WALL CORBEL, IS CONTINUING.	
	B) DRILLING FOR THE "Q" LINE CORBEL REBAR DOWELS IS CONTINUING.	

REMARKS:

SB 15137

ROUTE

Jim Betts
Al Boos

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-12-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) BACKFILLING BAYS 1 & 2, WITH STRUCTURAL SAND, IS CONTINUING. APPROXIMATELY 16 CY WERE INSTALLED IN BAY #1 AND 96 CY IN BAY #2.	BACKFILL IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-211.
	B) CORE DRILLING IN THE NORTH WALL, FOR THE TURBINE WALL TIEBACKS IS CONTINUING. VISUAL INSPECTION OF THE CORED HOLES SHOWED REINFORCING STEEL CUT IN THE FOLLOWING LOCATIONS: 1) 1-O.F. #8 HORZ IN THE EXTERIOR MISSLE SHIELD WALL OF BAY #4. 2) 1-O.F. #8 VERT IN THE EXTERIOR MISSLE SHIELD WALL OF BAY #3. 3) 1-I.F. #8 VERT & 1 I.F. #6 HORZ IN THE EXTERIOR MISSLE SHIELD WALL OF BAY #1	DRAWING 7220-FSK-CY-203 SH. 1 WILL BE REVISED TO SHOW SPECIFIC LOCATIONS OF CUT REBARS
2)	TURBINE BLDG ACTIVITIES	
	A) THE CONCRETE BLACKWALL FORM, FOR THE "Q" LINE WALL CORBEL, IS CONTINUING.	
	B) CORE DRILLING FOR THE REBAR DOWELS, IN THE "Q" LINE WALL CORBEL, IS CONTINUING.	

REMARKS:

SB 15138

ROUTE

Jim Betts
Al Boos

FILE

Jim Daugherty
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-11-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR ACTIVITIES	
	A) CORE DRILLING ON THE NORTH WALL OF THE EASTERNMOST BAY COMPLETED TODAY. ONE #8 VERTICAL REBAR WAS CUT ON THE OUTSIDE FACE OF THE MISSLE SHIELD WALL AT THE ENTRANCE TO BAY #3. CORE DRILLING ON THE NORTH WALL OF THE WESTERN-MOST BAY START TODAY.	DRAWING 7220-FSK-CY-203 SH. 1 WILL BE REVISED TO SHOW THE CUT REBAR'S LOCATION.
	B) BACKFILLING OF BAY #1 WITH STRUCTURAL SAND IS CONTINUING. APPROXIMATELY 21 CY OF SAND WAS INSTALLED.	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-211.
2	TURBINE BLDG ACTIVITIES	
	A) THE GROUT FORMS, FOR THE LUBE OIL ROOM PARAPET WALL - TURBINE BLDG WALL, WERE STRIPPED TODAY.	THE GAP BETWEEN THE 2 WALLS WAS INSPECTED FOR VOIDS IN THE GROUT AND NONE WERE FOUND.
	B) DRILLING FOR CORBEL #2 REBAR DOWELS IS CONTINUING.	
	C) BLOCKWALL FORM, FOR THE CORBEL STARTED TODAY.	

REMARKS:

SB 15139

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-10-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) CORE DRILLING ON THE NORTH WALL OF THE EASTERNMOST BAY, FOR THE T/B WALL TIEBACKS, IS CONTINUING. ONE 6"Ø HOLE WAS DRILLED.	HOLE WAS INSPECTED FOR CUT REBAR. NONE [redacted] WERE CUT.
	B) STRUCTURAL BACKFILLING OF [redacted] BAYS 1 & 2, WITH SAND, IS CONTINUING. APPROXIMATELY 12 CY WERE INSTALLED IN BAY #1 AND 22 CY IN BAY #2.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
2	TURBINE BLDG ACTIVITIES	
	A) DRILLING IN THE WALL & FLOOR, FOR THE "Q" LINE CORBEL, REBAR DOWELS IS CONTINUING.	

REMARKS:

SB 15140

ROUTE

JIM BETTS
AL BOOS

Jim Wozniewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-8-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) COREDRILLING FOR ADDITIONAL TIERODS STARTED ON THE NORTH WALL OF THE EAST BAY TODAY. (SEE FSK-CY-203 SH 1 REV 3 FOR LOCATION)	SEE PERMIT # 3320 FOR SPECIFIC INSTRUCTIONS AND TOLERANCES
2	TURBINE BLDG ACTIVITIES	
	A) THE LUBE OIL ROOM PARAPET / TURBINE WALL GAP WAS GROUTED TODAY.	AT PRESENT TIME, COULD NOT INSPECT AREA FOR GROUT VOID, AS FORMS HAVE NOT BEEN STRIPPED.
	B) DRILLING IN TURBINE BLDG FLOOR, FOR "Q" LINE CORBEL REBAR DOWELS STARTED TODAY. DRILLING COMPLETED BETWEEN "6" & "8" LINES.	
	C) DRILLING IN TURBINE BLDG WALL, FOR "Q" LINE CORBEL REBAR DOWELS IS CONTINUING. COMPLETED DRILLING BETWEEN "5" & "6" LINES.	

REMARKS:

SB 15142

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-6-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	NO ACTIVITIES RELATING TO BLDG PRELOAD WERE PERFORMED TODAY.	
2	DRILLING ON THE TURBINE BLDG'S Q LINE WALL CORBEL IS CONTINUING. BETWEEN 6 & 8 LINES WERE COMPLETED TODAY	

REMARKS:

SB 15143

ROUTE

JIM BETTS
AL BOOS

Jim Daughenbaugh
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-5-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	NO ACTIVITIES RELATING TO PRELOAD OCCURRED IN THE BLDG TODAY.	
2	CORE DRILLING FOR THE TURBINE BLDG'S Q LINE WALL [redacted] CORBEL STARTED TODAY.	

REMARKS:

SB 15144

ROUTE

AL BOOS
JIM BETTS

Jim Wagstaffe
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-4-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
1	DIESEL GENERATOR BLDG ACTIVITIES	
	A) NO ACTIVITIES RELATING TO BUILDING PRELOAD WERE PERFORMED TODAY, 1-4-79.	
2	TURBINE BLDG. ACTIVITIES	
	A) FORMWORK FOR GROUTING SHUT THE GAP, BETWEEN THE LUBE OIL ROOM'S SOUTH PARAPET WALL AND THE TURBINE BLDG'S "Q" LINE WALL, WAS COMPLETED, BETWEEN 6 & 7 LINES, TODAY 1-4-79	
	B) THE CONCRETE DRILLING PERMITS FOR THE REINFORCING STEEL, IN THE CORBEL WERE ISSUED TODAY, 1-4-79.	SEE PERMIT # S 3312 THRU 3316 FOR LOCATIONS AND SPECIFIC INSTRUCTIONS
	C) BUSH HAMMERING, FOR CONSTRUCTION JOINT PREP, OF THE CORBEL-T/B WALL INTERFACE WAS COMPLETED TODAY, 1-4-79.	~~[illegible]~~ INSPECTED THE CORBEL AREA AND CONCUR THAT THE AREA DOES CONFORM TO THE REQUIREMENTS OF SECTION 7.3 OF SPEC. 7220-C-231.

REMARKS:

SB 15145

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-3-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING.	
1.	NO ACTIVITIES RELATING TO BUILDING PRELOAD WERE PERFORMED IN THE D/G BLDG TODAY.	
2.	BUSH HAMMERING ON "Q" LINE WALL BETWEEN 4" & "6" LINES (TURBINE BLDG) IS CONTINUING.	

REMARKS:

SB 15146

ROUTE

JIM BETTS
AL BOOS

Jim Daughenbaugh
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-29-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING	
1	NO ACTIVITIES RELATING TO PRELOAD WERE PERFORMED TODAY IN D/G BLDG	
2	SURFACE PREP ALONG "Q" LINE WALL IN TURBINE BUILDING IS CONTINUING. BUSH HAMMERING, FOR THE CORBEL, BETWEEN "6" AND "8" LINES COMPLETED TODAY.	WILL HAVE PROJECT ENGG'S REPRESENTATIVE INSPECT AREA FOR ACCEPTANCE UPON COMPLETION OF BUSH HAMMERING BETWEEN "4" AND "6" LINES.

REMARKS:

SB 15147

ROUTE

AL BOOS
JIM BETTS

Jim Wojewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 1-2-79 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING	
1	NO ACTIVITIES RELATING TO PRELOAD WERE PERFORMED TODAY IN D/G BLDG.	
2.	BUSH HAMMERING BETWEEN "4" AND "6" LINES, ON "Q" LINE WALL OF TURBINE BLDG., STARTED TODAY	

REMARKS:

SB 15148

ROUTE

JIM BETTS
AL BOOS

Jim Wozniewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-28-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING	
1	BACKFILLING IN BAYS 1 AND 2 IS CONTINUING. APPROXIMATELY 40 CY WERE INSTALLED IN BAY 1 AND 65 CY WERE INSTALLED IN BAY 2.	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-211.

REMARKS:

SB 15149

Jim Davidson
SIGNATURE

ROUTE

Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-27-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING	
1	NO ACTIVITIES, RELATING TO BUILDING PRELOAD, WERE CONDUCTED ON 12-27-78.	

REMARKS:

SB 15190

ROUTE

JIM BETTS
AL BOOS

Jim Dwojeroski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220

DATE 12-26-78

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING	
1.	BACKFILL IN BAY #2 IS CONTINUING. APPROXIMATELY 4 CY WERE INSTALLED.	MATERIAL IS BEING PLACED IN ACCORDANCE WITH SPEC 7220-C-211.
2.	BACKFILL IN BAY #1 STARTED 12-26-78. APPROXIMATELY 8 CY WERE INSTALLED. HOWEVER BAY #1 HAD NOT BEEN INSPECTED FOR CLEAN UP PRIOR TO BACKFILLING. [redacted]	CLEAN UP INSPECTION FOUND THE AREA ACCEPTA BACKFILLING STARTED AGAIN IN ACCORDANCE WITH SPEC 7220-C-211

REMARKS:

SB 15151

Jim Warfowski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-23-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	NO ACTIVITIES, RELATING TO BUILDING PRELOADS WERE DONE TODAY.	

REMARKS:

SB 15152

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-21-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING.	
1	NO ACTIVITIES, RELATED TO BUILDING PRELOADING, WERE PERFORMED ON 12-21-78	

REMARKS:

SB 15153

ROUTE

JIM BETTS
AL BOOS

FILE

Jim Cranford
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-20-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG	
1	THE REMAINDER OF THE DUCTBANK EXCAVATION UNDER THE EXTERIOR SIDE OF THE EASTERNMOST BUILDING FOOTING WAS POURED TODAY, USING 4000 PSI GROUT FROM THE JOBSITE BATCH PLANT.	AREA WAS INSPECTED TO VERIFY THAT THE EXCAVATION WAS POURED BACK COMPLETELY. NO REMAINING VOIDS WERE FOUND.
2.	NO BACKFILLING ACTIVITIES WERE PERFORMED TODAY	

REMARKS:

SB 15154

ROUTE

JIM BETTS
AL BOOS

FILE

Jim LeDoux
SIGNATURE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-19-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	BACKFILLING OF BAYS 2 & 3 IS CONTINUING. APPROXIMATELY 16 CY OF STRUCTURAL SAND WAS INSTALLED IN BAY #2 AND 6 CY IN BAY #3	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC. 7220-C-211.
2.	SURCHARGE LOADING IN BAY #4 STARTED 12-19-78. APPROXIMATELY 100 CY WERE INSTALLED. HOWEVER DRAWING C-1040 HAS NOT BEEN REVISED TO APPROVE PLACEMENT OF THE SURCHARGE LOADING.	SURCHARGE PLACEMENT HAS BEEN STOPPED UNTIL DRAWING C-1040 HAS BEEN REVISED.

REMARKS:

SB 15155

Jim Waszkewski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-16-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	BACKFILLING IN BAYS #3 AND #4 IS CONTINUING. APPROXIMATELY 110 CY OF MATERIAL WAS PLACED IN BAY #3 AND 68 CY IN BAY #4.	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-211.

REMARKS:

SB 15156

Jim Wasfowski
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-15-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG	
1	BACKFILLING IS CONTINUING IN BAYS 3 & 4. APPROXIMATELY 104 CY WERE PLACED IN BAY 3 AND 167 CY WERE PLACED IN BAY 4.	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC 7220-C-211
2	SEALING OF THE DUCTBANK EXCAVATION IN BAY #4 COMPLETED 12-15-78. A LEAN CONCRETE MIX, WITH HIGH SLUMP AND 1½" AGGREGATE, WAS PUMPED TO THE EAST SIDE OF THE EXCAVATION, SEALING THE DUCTBANK. A SMALL PORTION OF THE EXCAVATION, ON THE VERY EASTERN EDGE, REMAINS TO BE CONCRETED.	

REMARKS:

SB 15157

Jim Waszkewski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-14-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	BACKFILLING IS CONTINUING IN BAYS 3 & 4. APPROXIMATELY 66 CY OF STRUCTURAL SAND WERE INSTALLED IN BAY 3 AND 76 CY IN BAY #4 ON 12-14-78	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPECS [redacted] & 7220-C-211.
2	LINE DRILLING OF MUDMAT ON THE NORTH AND EAST WALLS OF BAY #1 COMPLETED 12-14-78	
3	LINE DRILLING OF THE MUDMAT ALONG THE EXTERIOR SIDE OF THE NORTH WALL OF BAY 1 COMPLETED 12-14-78	

REMARKS:

SB 15158

Jim Wasfewski
SIGNATURE

ROUTE

JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-18-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	BACKFILLING IN BAYS #3 AND #4 IS CONTINUING. APPROXIMATELY 60 CY WERE PLACED IN BAY #3 AND 38 CY WERE PLACED IN BAY #4	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPEC. 7220-C-211.
2	BACKFILLING IN BAY #2 STARTED 12-18-78. THE AREA WAS INSPECTED FOR CLEANLINESS, PRIOR TO BACKFILLING, AND FOUND ACCEPTABLE. APPROXIMATELY 15 CY WERE INSTALLED IN BAY #2.	SEE ACTION TAKEN IN ITEM #1.
3.	CORE DRILLING, OF ADDITIONAL HOLES, IN THE NORTH WALL OF BAYS 1 AND 4 WAS COMPLETED 12-16-78. VISUAL INSPECTION, FOR DAMAGED REINFORCING STEEL, WAS PERFORMED 12-18-78. NO DAMAGED REINFORCING STEEL WAS FOUND IN THE ADDITIONAL HOLES. (REF. DWG. 7220-FSK-CY-203 SH1 REV 2 FOR LOCATION)	SINCE NO ADDITIONAL REINFORCING WAS DAMAGED, NO ACTION IS REQUIRED
4.	CORE DRILLING OF THE ADDITIONAL TIE BACK HOLES IN THE TURBINE WALL WAS COMPLETED 12-16-78.	NO ACTION TAKEN

REMARKS:

SB 15159

Jim Dorgowski
SIGNATURE

ROUTE
JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-13-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	BACKFILLING IN BAY # 4 STARTED 12-13-28. APPROXIMATELY 36 CY OF STRUCTURAL BACKFILL SAND WAS INSTALLED. AREA WAS VISUALLY INSPECTED FOR ACCEPTANCE AND WAS FOUND ACCEPTABLE.	MATERIAL IS BEING INSTALLED IN ACCORDANCE WITH SPECIFICATIONS [redacted] 7220-C-211.
2	BACKFILLING IN BAY # 3 IS CONTINUING. APPROXIMATELY 27 CY OF STRUCTURAL BACKFILL SAND WAS INSTALLED	SEE ITEM 1 FOR ACTION TAKEN
3.	DUCTBANK EXCAVATIONS IN BAYS 1, 2, & 3 WERE BACKFILLED, WITH A HIGH SLUMP PEA GRAVEL CONCRETE MIX, ON 12-13-78 PORTIONS OF THE SLICK LINES, USED TO PUMP THE CONCRETE, WERE ABANDONED IN THE PLACEMENTS AS THE CONCRETE FILL BURIED THEM.	VISUAL INSPECTION OF THE BACKFILLING INDICATED THAT THE EXCAVATIONS WERE FILLED AND THE AREAS AROUND THE DUCT-BANKS APPEAR TO HAVE SEALED.
4.	LIVE DRILLING, OF THE MUDMAT, ALONG THE NORTH AND EAST WALLS OF BAY #1 IS CONTINUING.	

REMARKS:

SB 15160

Jim Wasylewski
SIGNATURE

ROUTE
Jim Betts
Al Boos

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-12-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING	
1	BACKFILLING INSIDE OF BAY #3 IS CONTINUING. MATERIAL IS BEING PLACED FROM SOUTH TO NORTH. APPROXIMATELY 14 CY WERE INSTALLED TODAY. A DAILY RECORD WAS STARTED TODAY, TO MONITOR MATERIAL INSTALLED AND DAILY CROSS SECTIONS TO MONITOR PROGRESS	STRUCTURAL BACKFILL IS BEING INSTALLED IN ACCORDANCE WITH SPECIFICATION [redacted] AND 7220-C-211.
2.	LINE DRILLING OF THE MUDMAT AROUND THE SUMPS STARTED TODAY. HOLES WERE DRILLED INSIDE OF BAY #1, ALONG THE NORTH AND EAST WALLS	
3.	BACKFILLING THE DUCTBANK EXCAVATIONS WITH LEAN FILL CONCRETE TODAY. ONLY THE EASTERNMOST EXCAVATION WAS POURED TODAY. A CONCRETE MIX WITH A 6 TO 7 INCH SLUMP WAS PUMP INTO THE EXCAVATION THEN FLOWED OR PUSHED WITH VIBRATORS. HOWEVER, THIS METHOD DID NOT WORK BECAUSE THEY COULD NOT DEVELOPE A LARGE ENOUGH LIQUID HEAD TO FLOW THE CONCRETE, AROUND THE DUCTBANK, AND FILL THE EXCAVATION.	A DIFFEREND METHOD WILL BE TRIED. THE SIDE THAT THEY PUMP FROM DID SEAL.

REMARKS:

SB 15161

ROUTE

JIM BETTS
AL BOOS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-12-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BUILDING – BACKFILLING INSIDE THE BUILDING	
1	IN ACCORDANCE WITH SECTION 5.2.2 OF SPECIFICATION 7220-C-211, THE AREA INSIDE BAY #3 OF THE D/G BLDG, BASED ON CLEANLINESS AND FREE FROM ICE, WAS INSPECTED FOR ACCEPTANCE OF SUBGRADE. THE CLEAN UP IS WORKING DIRECTLY IN FRONT OF BACKFILLING AND HEATERS HAVE BEEN INSTALLED, RAISING THE TEMPERATURE SUFFICIENTLY TO MELT THE ICE.	BASED ON THE WORK BEING DONE PRIOR TO BACKFILLING, HEATERS & CLEAN UP, THE SUBGRADE IS ACCEPTABLE IN BAY #3

REMARKS: CC: BEN CHEEK L.C.Q.E.

SB 15162

Jim Wasfewski
SIGNATURE

ROUTE

JB JIM BETTS
AL BOOS

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-11-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	THE WRAPPING OF THE MAIN DUCTBANKS WITH ETHAFOAM STARTED AND COMPLETED 12-11-78. REFERENCE BECHTEL CORRESPONDENCES BCBE 2100R BEBC 2584 FIELD ENGINEER'S REPORT WRITTEN BY JIM WASYLEWSKI DATED 11-24-78	VISUAL INSPECTION OF DUCTBANKS FOUND THEM TO BE ACCEPTABLE BASED ON LETTERS BCBE 2100R AND BEBC 2584
2.	BACKFILLING IN BAY #3 COMMENCED 12-11-78. CLEAN UP AND WINTER HEAT IS CONTINUING IN ALL FOUR BAYS.	BACKFILLING IS BEING DONE IN ACCORDANCE WITH BECHTEL SPECIFICATIONS ~~7220-C-210~~ & 7220-C-211

REMARKS:

SB 15163

ROUTE

JIM BETTS
AL BOOS

Jim Wasylewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-9-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG.	
1	EXCAVATION FOR THE TURBINE WALL TIEBACK SYSTEM WAS COMPLETED, ON THE NORTH SIDE OF BAY #4 OF THE D/G BLDG, [redacted] 12-9-78.	
2.	CORE DRILLING FOR THE TIE BACKS IN BAY #4 OF THE D/G BLDG WAS COMPLETED 12-9-78. A HORIZONTAL REBAR, ON THE INSIDE FACE, IN THE WESTERN MOST HOLE WAS CUT.	DRAWING 7220-FSK-CY-203 SH. 1 WILL BE REVISED TO SHOW THE CUT REBAR.
3.	CORE DRILLING IN THE TURBINE BLDG WALL WAS COMPLETED 12-9-78	
	NOTE: OTHER BARS IN THE D/G BUILDING WALLS (BAYS #1 & #4) WERE NICKED BUT NOT CONSIDERED CUT.	

REMARKS:

SB 15164

ROUTE

AL BOOS

JIM BETTS

SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-8-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG	
1	CORE DRILLING OF D/G BUILDING'S BAY # 1 NORTH WALL STARTED & COMPLETED TODAY. IN THE FOLLOWING HOLES REBARS WERE ENCOUNTERED: 1) IN THE WESTERN MOST HOLE A VERTICAL BAR WAS NICKED. THIS BAR IS ON THE INSIDE FACE REBAR CURTAIN FOR THE WALL. ACTUAL DIMENSION MEASURED ACROSS THE FACE OF BAR WAS 5/8". AS DEFINED BY SECTION 2.5 OF APPENDIX "E" OF SPEC 7220-C-231 THIS BAR IS CONSIDERED CUT. 2) IN THE 3RD HOLE FROM THE WEST, AN INSIDE FACE WALL CURTAIN, HORIZONTAL REBAR WAS CUT COMPLETELY THROUGH.	DRAWING 7220-FSK-CY-203 SH. 1 WILL BE REVISED TO SHOW THESE CUT REBARS.
2.	THE CORE DRILLING IN THE TURBINE BLDG WALL, DIRECTLY OPPOSITE THE D/G BUILDING'S BAY # 1, WAS COMPLETED 12-8-78	
3.	EXCAVATION FOR THE TIEBACKS AT THE EAST BAY (BAY #4) OF D G BLDG STARTED TODAY	

REMARKS:

SB 15165

ROUTE

AL BOOS
JIM BETTS

Jim Daszewski
SIGNATURE

FILE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220 DATE 12-7-78 PAGE 1 OF 1

ITEM NO.	INSPECTION DESCRIPTION	ACTION REQUIRED/TAKEN
	DIESEL GENERATOR BLDG - PRELIMINARY INSPECTION FOR PRELOADING	
1	CORROSION PROTECTION OF EXPOSED REBAR STUBS, ON THE MAIN DUCTBANKS AND THE UNDERSIDES OF BUILDING FOOTINGS, WAS COMPLETED 12-6-78 REFERENCE CORRESPONDENCES: BCBE-2100R BEBC-2549	DRYPACKING & PNEUMATIC GUN APPLICATIONS WERE DONE IN ACCORDANCE WITH BECHTEL SPECIFICATION 7220-C-231 AND MANUFACTURER'S INSTRUCTION
2.	CONCRETE DRILLING PERMIT FOR CORE DRILLING THROUGH TURBINE BUILDING & DIESEL GEN. BUILDING WALLS WAS ISSUED 12-7-78 REFERENCE: DRILLING PERMIT # 3162 DWG FSK-CY-203 SH. 1 (LOCATION)	DRILLING WILL COMMENCE 12-8-78
3	EXCAVATION BETWEEN DIESEL GENERATOR BLDG WALL & TURBINE BLDG WALL @ WESTERN SETS OF TIEBACKS BETWEEN THE BUILDINGS WAS COMPLETED 12-7-78	

REMARKS:

SB 15106

ROUTE

AL BOOS
JIM BETTS

Jim Wasfewski
SIGNATURE

FILE

Bechtel Power Corporation

Interoffice Memorandum 002265

To J. Rutgers

File No

Subject Job 7220 Midland Project
Subcontract 7220-C-208
U. S. Testing Comments of Bechtel
Geo-Technical "Review of U. S. Testing
Field and Laboratory Tests on Soils"
BCBM-521-R

Date October 29, 1979

From L. E. Davis

Of Construction

At Midland, MI Ext

Copies to

Attached is a report submitted by U. S. Testing commenting on Bechtel Geo-Tech's review of test procedures dated July, 1979.

If we can be of further assistance, please contact us.

for L. E. Davis

LED/JWL/km

This responds to Chron 6017, 9

SB 15842

File 9035

Job 7220-QA-Received 11/6/79
Log No. ____ File No. ____
Response Req'd ____ Date ____
QA Action Item No. ____

Route	Info	Act	Comment
QAE			
Resp. Engr.			
Elect. (1)			
Secy			

United States Testing Company, Inc.
Power Generation Services Division

1415 PARK AVENUE
HOBOKEN, NEW JERSEY 07030 (201) 792-2400 (212) 943-6488

8012050 001434

File: C-208-222/1015.900
October 1, 1979

Bechtel Power Corporation
P. O. Box 2167
Midland, Michigan 48640

Attention: Mr. J. F. Newgen

Subject: Midland Project Job 7220
Subcontract 7220-C-208
U.S. Testing's Response to "Geotech Review of U.S. Testing Field and Laboratory Tests on Soils

Dear Mr. Newgen:

Please find attached United States Testing's response to the Bechtel report "Review of U. S. Testing Field and Laboratory Tests on Soils" dated July 1979.

You requested that we respond solely to the summary contained in Section 8, however, we feel it is necessary to respond to all the sections, which in itself details Section 8.

Our response appendices the Bechtel report in so far that it closely follows its logic, answering questions or making statements on each particular point. This U. S. Testing report is not meant to point fingers in any direction but only to indicate, to Bechtel, some of the problems and concerns we faced.

If you have any questions, do not hesitate to contact me.

Very truly yours,

UNITED STATES TESTING COMPANY, INC.

M. Anselmo
Project Engineer

MA:hg
Attachments

SB 15843