

U. S. NUCLEAR REGULATORY COMMISSION

In the matter of
C. P. Co. Midland Plant
Units 1 and 2

Docket Nos. 50-329 OM, OL
50-330 OM, OL

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

5/6/91 INTERVENOR ANSWER
OPPOSING APPLICANTS MOTION TO DEFER CONSIDERATION
OF SEISMIC ISSUES UNTIL THE OPERATING LICENSE PROCEEDING

This seismic motion begins with the statement that at the second prehearing conference "the NRC Staff renegeing on an agreement previously worked out with applicant, proposed that the scope of this soil settlement hearing be expanded to include seismic issues."

Whether or not the NRC Staff was renegeing on an informal agreement is irrelevant. The scope of this soil settlement proceeding already included seismic issues as set forth in my contentions 1b, 4c, and 4d; in the many references to seismic issues contained in part II of the December 6, 1980 Order (50-54f questions, acceptance criteria, and unresolved safety issues regarding remedial actions); and in Mr. Linenburger's statement at the last prehearing conference that "this board will absolutely not ignore seismic in arriving at its decision about the adequacy of proposed remedial actions."

For these reasons alone, it seems clear that the motion cannot be granted. But an examination of this motion and its supporting arguments is important for many other reasons.

8502090515 840517
PDR FOIA
RICE84-96 PDR

*page 5 - part III
is the most relevant
to issues we
discussed.*

I. EXAMINATION OF APPLICANTS ARGUMENTS AS PRESENTED

Having made irrelevant arguments about the Staff position, the Applicant accuses the Staff of a misreading of the Dairyland cases. The Applicant points out that Midland is not an operating reactor like Dairyland and "thus for Midland unlike Dairyland, deferral of consideration of seismic issues until the O.L. proceeding will not have any adverse effect on the public health and safety." p.4 Applicant draws the conclusion that Midland's seismic deferral does not pose a health and safety threat simply because it is not an operating reactor. In so doing, he concedes that a facility that operates without seismic updates does represent a threat to public health and safety. What he actually is saying then is that because Midland is not presently an operating reactor, it does not presently represent a threat to public health and safety.

Applicants second argument is that "definitive safety findings can be deferred in the NRC licensing process until operation is actually licensed." They can if in so doing public health and safety is not jeopardized. For according to the Atomic Energy Act "public safety (is) a paramount issue at every stage in processing applications for commercial use of nuclear power." (1)

Applicant further differentiates Midland from Dairyland saying, "because a design basis earthquake has been formally established for the Midland site, a change in this design basis would be a 'backfit' decision which pursuant to 10 CFR 50-109 would require that there be a finding that

(1) C. P. Co. Midland Plant Units 1 & 2, ALAB 315, 1975, p. 103

such action will provide 'substantial additional protection which is required for the public health and safety or the common defense and security' p.5 Such a 'backfit' finding seems almost a given. For if at Dairy land the adoption of the most recent and conservative seismic standard was deemed necessary for safety, then the update of seismic standards for Midland would be necessary for the same reasons.

Applicant concludes his arguments by declaring that "uncertainty concerning possible backfits required by a redefined SSE" is a "financial risk" p.6 and he makes numerous legal citations supporting the statement that "the licensee always builds at its own risk." These statements, true in themselves, do not mean that it is a financial risk only. Here and in James Cook's attached affidavit, the Applicant infers that the seismic uncertainty represents a financial risk as opposed to a health and safety risk and does so in the absence of any supporting arguments.

In reality the basis for each of these arguments is the same: that neither public health and safety interests, nor the NRC regulations intended to safeguard these interests will be violated by the granting of this motion to defer seismic issues to the O.L. proceeding. It is this one basic argument that I intend to refute.

II. EXAMINATION OF APPLICANT'S ARGUMENTS IN THEIR FULL IMPLICATIONS

There are certain inconsistencies if not contradictions involved in the statements in this motion which must be examined. By the title of the motion and the statements therein, Applicant says clearly he is willing to

defer prior NRC approval or agreement on final seismic standards to proceed at his own financial risk (the risk being whether or not he will meet NRC seismic standards in the end). But whether he intends to meet NRC standards so deferred is not stated.

Applicant is willing to give up the "reduction in risk" gained from preliminary seismic design reconsideration with the NRC, because "it means lengthy delays in this proceeding and in the start up of the Midland units." p.6,7. So stated, the Applicant is willing to risk the ultimate disapproval of his actions because he cannot afford the concomitant delay ^{to plant start-up} in waiting to be sure of his actions. It must follow then, that neither can he afford disapproval in the end, for that too would mean delay to plant start up.

By his own account of financial inflexibility, he can't afford to fall short of the final seismic standards, yet he "strongly urges this board to defer until the O.L. proceeding the issue of whether the seismic design basis established at the c.p. stage for the Midland plant (by which he seeks to proceed) is adequate." p.9. Applicant has incorporated what he deems "a reasonable" margin over FS&R seismic criteria, but only to remedial work, excluding the structures affected by such work, (p.7 Thiruvengadam affidavit). Nevertheless he believes that " all outstanding seismic questions can be successfully resolved." p.3,4

If ultimate NRC seismic standards are not incorporated now, they never can be, for the applicant can't afford correction to completed structures at the O.L. stage any more than he can afford delay now. Then the effect of this motion becomes one not merely of deferral of seismic considerations, but one of compromise to NRC seismic standards, particularly if compromise is the only way to save what by then will be a completed

\$3 to \$4 billion dollar facility.

In financial straits as difficult as these (and portrayed in James Cook's attached affidavit) it would seem that Consumers Power Company would have begun pushing the NRC to get some agreement on seismic standards in 1978 when they first "learned that the NRC Staff had any concern about the magnitude of the design basis earthquake approved at the c.p. stage." p. 7 For Consumers has certainly not been reluctant to criticize NRC slowness or resource allocation decisions in the past* when they did not meet their own ends..

Despite numerous ^{NRC} attempts to obtain adequate resolution of seismic issues (in FSAR questions 361.2,.4,.7,.9; in 50-54f requests regarding acceptance criteria for soil settlement remediation; and in many meetings involving these issues since 1978), acceptable seismic input parameters still have not been established. The October 14, 1980 Tedesco letter went so far as to suggest two acceptable seismic approaches to C.P.Co. But now, when progress was just beginning with the site-specific approach, Consumers says that this analysis is too late and too time consuming. Furthermore, Consumers says although they are pursuing this site-specific approach with the NRC, they "have not conceded that the design basis of the Midland plant approved at the c.p. stage is inappropriate, or that the Michigan basin is not a separate tectonic province." (p.4, Thiruvengadam affidavit)

I believe that Applicant's arguments 'as examined in their full implications' are very revealing if not self defeating. Yet more important issues must be explored regarding the 'proceed at own risk' request in this motion.

* Selby letters of 12/10/80, 1/16/81 to NRC ; 6/13/80 & 8/25/80 meetings C.P.-NRC

III. PROCEED AT OWN FINANCIAL RISK BECOMES A PUBLIC HEALTH & SAFETY RISK

I will now return to my original intention to refute the Applicant's basic argument that he should be allowed to defer seismic considerations because this represents a financial risk to the Applicant as opposed to a health and safety risk to the public. Applicant by this motion seeks to proceed at his own financial risk in seismic matters just as he did in soil settlement matters in 1978. I do not deny Applicant's claims that allowing the licensee to build at its own financial risk is the established NRC policy, but I will hereby show how this accepted practice is at variance with the ultimate and overriding responsibility of the NRC as mandated by the Atomic Energy Act " that public safety is the first, last, and a permanent consideration in any decision on the issuance of a construction permit or a license to operate a nuclear facility." (2)

Both construction permit and operators license decisions are involved in this motion. The original c.p. decision is questioned because of significant design changes which led to the Order Modifying Construction Permits (according to 10 CFR 50-100), and O.L. decisions are involved because this is a consolidated proceeding.

NRC practice allows 'proceed at own risk' arrangements, yet NRC regulations mandate prevention of health and safety risks. I submit that this paradoxical situation amounts to what is almost an impossible charge to the NRC. Financial considerations effect safety, just as safety considerations effect finances. The two cannot for all practical purposes be separated. But if such separation is attempted as in the case of 'proceed at own risk'

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agreements, the ultimate risk of disapproval undertaken by the applicant at one point, cannot later be denied, no matter what the consequences. For ultimate compromise negates the element of risk involved, and regulation gives way to license.

Yet weighing of practical financial considerations against safety considerations becomes almost unavoidable as a result of these 'own risk' policies. The costly and difficult consequences of such policies can be illustrated by the case in point of the Diesel Generator Building (DGB) at Midland. I will briefly review the history of this one aspect of the soil settlement matters to show how public health and safety is at stake in any 'at own risk' arrangement like the one sought in this motion.

The settlement of the DGB was first noted when the building was in its initial stages in 1978. Since then its construction has proceeded 'at C.P.Co. own risk' concurrent with its remediation. The adoption of the Preload Option and the resumption of work on the DGB took place within only a few months of its initial settlement discovery, before root causes had been thoroughly analyzed, and before the full implications of soil settlement problems and their effects were understood by either C.P.Co. or the NRC (the potential for liquefaction for example).

When asked by the NRC in 1979 to defend their choice of the Preload Option over the Removal and Replacement Option for fill (10CFR 50-54f q.21) Consumers replied, (part d(5)) "Preloading was the least costly feasible alternative for corrective action. Also, construction of the structure can continue while the surcharge load is being applied. Thus, this alternative will minimize the impact on the construction schedule."

By taking the actions that they did, when they did, C.P.Co. chose not to thoroughly consider the most conservative Removal and Replacement Option. But now as a result of their choice to proceed, full and fair consideration of the removal and replacement of fill ^{by the NRC} has been progressively negated. Few individuals within the NRC, or C.P.Co. I dare to say, would frankly deny that statement. In fact NRC personnel have themselves expressed concern over the realities of these policies at Midland. (see attached Chilk memo on possible ex-parte contact)

Yet the fact remains that the DGB now stands virtually complete, despite serious questions regarding its subsolls and its settlement effects. Removal and replacement of its faulty fill is no longer a viable option for C.P.Co. in light of financial statements made in this motion. (Ironically, the Removal and Replacement Option was rejected in 1978 on the basis of cost, despite the fact that it afforded the most conservative solution, and now it appears that 'removal and replacement' in 1978 might have been the most viable financial option precisely because it was the most conservative. ")

Full and fair evaluation of safety questions by the NRC at the end of 'own risk' proceedings becomes extremely difficult if not impossible when structures or actions are completed. Yet that is precisely what the Applicant seeks once again in this seismic motion to proceed.

As a result of 'at own risk' policies, NRC safety decisions are elevated to 'make-us-or-break-us' financial decisions and held up as such to the NRC and now to this very Atomic Safety and Licensing Board, as in James Cook's attached affidavit to this motion.

The Applicant almost challenges the NRC and the ASLB on their literal interpretation of 'at own risk' agreements. Can the NRC carry through on its implicit power to demand removal and replacement of subsoils, or seismic update, or any other safety decision if it carries with it the certain doom of the whole plant? The tremendous burden of such weighty and unsavory decisions makes them almost impossible, and in looking for ways to help a utility out of such predicaments, public health and safety is compromised.

It must be remembered that C.P.Co. not only could have been more careful and less hurried about proceeding in soil settlement matters, they should have been more careful and less hurried in soil settlement matters, for "a construction permit carries with it no concomitant right to operate the completed facility. Rather, to obtain an operating license, the (Atomic Energy) Act requires the utility to shoulder once again the burden of proving to the Commission (at a public hearing if need be) that it has, inter alia, constructed the plant in conformity with its application, the Act, and the Commissions rules and regulations. And even at this late stage the Act permits the Commission to withhold the license for good cause.

It was not happenstance that Congress structured Atomic Energy Act procedures in this manner. Rather, it was intentionally done to make certain that public safety was a paramount issue. at every stage in processing applications for commercial use of nuclear power.* (3)

(3) ALAB 315, p. 103

Therefore, when I ask this Board, by denying this motion, to begin to change what has become accepted NRC practice of allowing 'proceed at own risk' policies, I am not seeking to change the rules of the game as it may at first appear. What I do seek is the change of what has become accepted practice, in order that the rules of the game are upheld.

Proceed at own risk policies force all parties involved into an unrealistic world of extremes. The NRC, committed "to conduct independent analysis and reach independent conclusions on whether reasonable assurance of plant safety exist(s)" (4) must make such independent safety decisions totally aside from financial realities that may spell certain doom to the Applicant. The Applicant is forced to challenge that ultimate authority if in the end it is his only hope of saving his plant. So in response, I too must challenge the NRC and this Board on their ultimate authority.

Since the Applicant has said in effect 'you can't make your decisions apart from these financial realities' , I am forced to say, 'you must make your decisions apart from these financial realities.' All safety questions in this soil settlement, ^{proceeding} including seismic ones, must be based on purely scientific and technical grounds, rather than based even in part on practical financial considerations.

I ask you to presume, for instance, that the DGE were still in its initial stages, as when its settlement was first discovered in 1978.

(4) NRC STAFF'S ANSWER TO INTERROGATORIES FILED BY C.F.CO.; 50-329 OM-OL, 50-330 OM-OL; In the matter of Midland Plant, Units 1 & 2; Interrogatory Answer 1, p. 2, 3 referring to S.R.F. sections 2.5.4 and 2.5.5; F b. 25, 1981

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Knowing what is known now, and for the greatest part could have been known prior to its remediation, would the safety related decisions for the DGB be any easier? Even more importantly would the decisions themselves be any different under these circumstances? These rhetorical questions are relevant to the present motion. For this is a motion that compels the seismic updates either now or never, just as the removal and replacement of faulty fill was a now or never decision in 1978.

The salient question must finally be asked, Who is really taking the risk in a 'proceed at your own risk' arrangement? The answer is the public 'first, last, and always'. For whether speaking of financial costs or safety costs, it is not the Applicant who bears the ultimate risk, it is we the public who will pay the price for the Midland nuclear plant.

This motion cannot be granted without seriously endangering the health and safety of a public totally dependent not only on the basic tenants of the NRC regulations, but also on the actual practices and policies as carried out by the NRC.

For this reason, a thorough and complete analysis of ultimate seismic standards must occur now, as an integral part of remedial soil settlement fixes and the structures affected by them. If such analysis entails delay to this soil settlement proceeding, then that is unfortunate, but not nearly so unfortunate as the implications of not doing such an analysis. For nuclear safety transgressions pose "at least as serious a threat to public health and safety" as the Federal Safety Acts in which "Congress (has) deemed the safety considerations at stake more important than any financial detriment to the party involved." (5)

(5) ALAB 315, p. 109

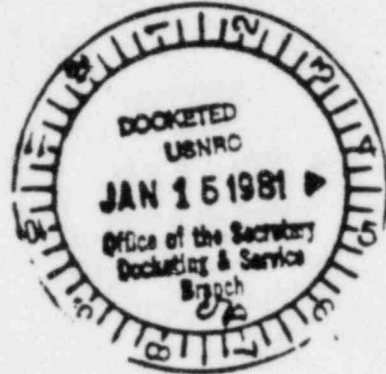
Respectfully Submitted,

Barbara Stamiris



December 29, 1980

OFFICE OF THE
COMMISSIONER



MEMO TO: Samuel J. Chilk
Secretary

FROM: Thomas R. Gibbon *TRG*
Legal Assistant
to Commissioner Bradford

SUBJECT: POSSIBLE EX PARTE CONTACT IN MIDLAND PROCEEDING, DOCKET #
50-3290M AND # 50-3300M

On July 30, 1980, I had extensive discussions with James G. Keppler, Director of Region III, and other Region III personnel on general NRC enforcement issues. During the course of these general discussions, we touched briefly upon the Midland case. I have recently reviewed my notes of these conversations and have now realized that the Midland conversation could be considered an ex parte contact. Accordingly, I request that pursuant to 10 CFR 2.780, you serve a copy of this memo and the attached summary of discussion upon all the parties in the Midland proceeding and also place these documents in the PDR. With regard to the summary of the discussion, Mr. Keppler notes that while there are some technical inaccuracies, the substance of the discussion is portrayed correctly.

Attachment:
As stated

cc: James G. Keppler

Keppler also stated that the Commissioners needed to express in one form or another the philosophy that once something is found wrong at the construction site, construction will stop in that area until the item was resolved. He gave the example of Midland where I&E found that the diesel generator building had settled excessively. They also found that there was no Q/A program of any substance related to the basic foundation of the site. He said there really wasn't a Q/A program in this area. In response to this, the NRC issued an order which said that this should be remedied or work would be stopped in 30 days. The company requested a hearing and, therefore, stayed the order. Midland is continuing work today which will make resolution of the settlement problem much more difficult. Keppler said that the staff had not yet made up their minds on whether the fix proposed by Midland is acceptable. Therefore, the project continues to be built and the problem gets worse. He wanted the work stopped until the problem is solved.

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Soils problems still going on.



Company

AUDIT FINDING REPORT

PROJECTS ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

PQCI SC-1.05, Rev 9, Activity Task 2.2a9 states, "Field density tests resulting in 105I and over of maximum laboratory density of proctors and/or relative densities, retested". This is a "Witness" point.

SC-1.05-1B was scoped for the period 6/9/80 - 6/13/80 and activity 2.2a9 was signed off "RA". However, on 6/11/80 a QC Engineer signed off Test Reports 6182 and 6184, which reflected relative densities of 108.1I and 106.6I, respectively. That is, for these two cases, retesting was not done as required by the PQCI. Specification C-208 does not impose a requirement for retesting. QC personnel had evaluated and concluded retesting was not necessary. While this approach may be technically appropriate, it is an option not now permitted by the PQCI.

In summary, the finding is that some tests resulting in over 105I relative density have not been retested as required.

| |
|----------------------|
| APP NO. 01 |
| M-01-11-0-01 |
| PROJ. NO. |
| Bechtel QC & GeoTech |
| DATE OF OBSERVATION |
| 7-9-80 |
| FILE NUMBER |
| 18.4.3.6 |
| REVISIONS |
| WRBird |
| JWCook |
| TCCooke |
| JLCorley |
| LEDavis |
| LADraisbach |
| DEHorn |
| GSKaeley |
| HPLeopard |
| BWMargaglio |
| JMlandin |
| DBMiller |
| EDNewman |
| JARutgers |

1. Prior to completion of this audit, Bechtel QC issued NCR 3041 to address the discrepancies noted above. This NCR must be dispositioned.
2. Project Engineering should determine if evaluation by the GeoTech Engineer, rather than automatically retesting, is an appropriate means of dispositioning the "suspect test" indicator, which the 105I criterion is supposed to be. If appropriate, (Contd on Back)

DATE OF C/A OBSERVATION: _____

DATE OF C/A EFFECTIVENESS: _____

NAME OF FIELD OFFICER: _____

NAME AND TITLE OF C/A OBSERVER: **Bechtel QC & Project Engineering**

PERSONS INVOLVED C/A OBSERVATION: _____

DATE OF REPORTABLE PERIOD: _____

TYPE OF REPORT TO BE MADE: YES NO

IF "YES", DATE OF REPORT TO BE MADE: _____

IF "NO", DATE OF THE OFFICIAL TO BE MADE REPORTED: _____

DATE OF FIELD OFFICER'S REPORT: _____

DATE OF THE OFFICIAL TO BE MADE REPORTED: _____

APPROVED BY: **Donald E. Horn**

APPROVED BY: _____

AUDIT FINDING REPORT

Product: **CONCRETE**
Project: **CONCRETE**
Company: **CONCRETE**

Product: **CONCRETE**
Quality Assurance

Product: **CONCRETE**
Project: **CONCRETE**
Company: **CONCRETE**

Specification C-211 Revision 10, Section 9.10 states in part, "All density test locations shall be within + 3 feet in plan and + 3 inches in elevation". Also, PCI C-1.02 Revision 4, Section 3.1 states in part, "Review and sign the Laboratory Test Reports verifying...s. Correct location and elevation of tests".

Contrary to this requirement, QCIR No C-1.02-140 dated 1/2/80 for the first shift, Area "B" indicates test 6083 was taken at elevation 626.3. Contrary to this, Completed Fill Density Test Report for 6083 indicates elevation 637.3.

2) Correct

Specification C-200 should be revised to specify that tests resulting in a 103% relative density for cohesive materials or 103% of maximum dry density for cohesive materials shall be evaluated and dispositioned by Geotech. Forcing is, in fact, always required. Specification C-200 should be revised to reflect this. Geotech is appropriate. Quality Control Inspection Records should show disposition by the Geotech Engineer's signature for test results at 103%.

Investigate which elevation is in error, and correct the documents according to initial procedures.

| | |
|---------------|----------------------|
| QCIR No | M-01-11-0-07 |
| Project | Bechtel QC & Geotech |
| Date of Issue | 7-9-80 |
| QCIR No | 10-3-1-6 |
| Author | WRBIRD |
| Reviewer | JNCOOK |
| QCIR No | 10-3-1-6 |
| Author | JLCOLEY |
| Reviewer | LDRAVIA |
| QCIR No | 10-3-1-6 |
| Author | LDREIBACH |
| Reviewer | DEKORA |
| QCIR No | 10-3-1-6 |
| Author | CSKAOLEY |
| Reviewer | WFLAMMARD |
| QCIR No | 10-3-1-6 |
| Author | JHILLANDIA |
| Reviewer | DMILLER |
| QCIR No | 10-3-1-6 |
| Author | EDMANN |
| Reviewer | LABAGERT |

Bechtel QC

AFB, Hayward
Ford
Supervisor
Coley
8410



Parsons
Power
Company

AUDIT FINDING REPORT

PROJECTS ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

Instruction No 8 for the preparation of the "Daily Soil Placement Report" states in part, "Check the method used to compact soil—hand operated and/or motorized roller equipment...and number of passes required as indicated by the onsite Geotechnical Engineer, actual no. of passes used".

Contrary to this, Daily Soil Placement Report dated 12/31/79 (first shift), QCIR No C-1.02-140 for area "A" indicates two lifts were placed and only one series of 8 passes observed. Area "D" indicates two lifts were placed and only one series of 8 passes was observed for two pieces of equipment. Area "E" same as area "D" above.

Daily Placement Soil Report dated 1/4/80 (first shift) for QCIR No's C-1.02-140, area "C" indicates four lifts placed and only one observed for 8 passes. Area "D" same as area "C" above.

In summary, it appears the number of passes being recorded is the number used, rather than the total number observed.

APP. NO. 11-0-03

Bechtel QC & GeoTech

7-9-80

12.4.3.6

WRBird
JWCook
TCCooks
JLCorley
LEDavis
LADreishach
DEBora
GSKeeley
HPLouard
BWMarguglio
JMilandin
DEMiller
EDNewman
JARutgers

DATaggart

It is recommended that on the Daily Soil Placement Report the QC Engineer indicate that the number of passes observed, Block 8, correlates with the lifts indicated in Block 9, "Lift Thickness Checks," and, if lift thicknesses were not observed, state the elevation of the material being compacted.

Bechtel QC

DATE OF REVIEW: YES NO

IF "YES", DATE OF REPORT TO BE: NA

IF "YES", NAME OF REPORT: NA

APPROVED BY: *Donald E. Horn*

IF "NO", DATE OF REVIEW TO BE: NA

IF "NO", NAME OF REVIEW TO BE: NA

DATE OF REVIEW: *8/4/80*

AUDIT FINDING REPORT



CH2M
HILL
Company

AUDIT FINDING REPORT

PROJECTS ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

A. The Field Engineer Report prepared by the Onsite GeoTech Soils Engineer dated 5/14/80 states in part:

- 1. Backfill in Progress (Day)
(Backfilling done in accordance with C-211 established procedures for both equipment and materials used.)...
- b) Pipe excavation south of oily waste bldg and tank from S4665 E405 to S4665 E500. Bottom of current excavation is at el 631.25 sloping downward and westward to 629.75. Work done was mainly done to prepare for placement of drain pipe and two stainless lines...

REMARKS:

Edge of backfilling area south of oily waste bldg extends into Q area. QC informed and on site also saw excavation entirely with Q area QC informed.

Drawing C-45 Rev 4 requires material south of S4668 to be "Q" and north of S4668 to be "non-Q".

The Daily Soil Placement Report prepared by Bechtel QC for 5/14/80 indicated on line 13 "No 'Q' Backfill Placed Today".

(Cont'd on Back)

| | |
|----------------------|--------------|
| REV AND NO. | M-01-11-0-04 |
| DATE/REV | |
| Bechtel QC & GeoTech | |
| NAME OF ENGINEER | |
| 7-9-80 | |
| PROJ NUMBER | 18.4.3.6 |
| REV. NUMBER | |
| WRBird | DATAGART |
| JWCook | |
| TCCooks | |
| JLCorley | |
| LEDavis | |
| LADraisbach | |
| DEBORN | |
| CSKeeley | |
| WPLeonard | |
| BMFarguglio | |
| JMilandin | |
| DEMiller | |
| KIMMANN | |
| JARutgers | |

It is recommended that the records be reviewed and determine why the Field Engineering Reports indicate "Q" fill placed and QC records indicate no "Q" fill placed. Make corrections to records per Bechtel procedures. Also, any "Q" placements not covered by QC inspection, Project Engineering to disposition.

COMMENTS AND DISCUSSION:

DATE OF C/A EMPLOYED:
DATE OF C/A DISCONTINUED:
NAME OF FIELD ENGINEER:

REV. AND NO. C/A: Bechtel QC & GeoTech

IF RESPONSIBLE FOR THIS REPORT: YES NO

IF THIS IS THE TYPE OF REPORT TO BE MADE: MA HA

IF THIS IS THE TYPE OF REPORT TO BE MADE: MA HA

IF THIS IS THE TYPE OF REPORT TO BE MADE: MA HA

IF THIS IS THE TYPE OF REPORT TO BE MADE: MA HA

RECORDS & SIGNATURE:
Donald E. Horn

DATE OF REPORT: *8/9/80*

AUDIT FINDING REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

Field Engineer Report prepared by the Onsite GeoTech Soils Engineer dated 5/21/80

Backfilling in Progress (Day)
(Backfilling done in accordance with C-211 established specifications and procedures for both equipment and materials used.)
East of oily waste blag at 54673 E510 to 54673 E530. Current height of backfill E429.0...

Areas in part:
Area is listed in 1(R) above QC rep on site.
Drawing C-43 Rev 4 requires material south of 54668 to be "Q" and north of 54668 to be "Non-Q".
(Cont'd on next sheet)

CONTINUED ON SHEET:

AFE SER NO: W-01-11-0-04
PROJ/DEPT AUDITED: Bechtel QC
DATE OF ORIGINATION: 7-9-80
FILE NUMBER: 18.4.3.6

"AS IS" CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES (CONT'D):

B. (Cont'd)

The Daily Soil Placement Report prepared by Bechtel QC for 5/21/80 indicated soil placement South 4465 ± to 4480 ±, East 515 ± to 540 ±, Length 25' ±, Width 12' ±.

C. The Field Engineer Report prepared by the Onsite GeoTech Soils Engineer dated 5/6/80 states in part:

- 1. Backfilling in Progress
(Backfilling done in accordance with C-211 established procedures for both equipment and materials used.)
- a) South of Turb Bldg bounded by E5035 to E5042 and E320 to E379. Finished today."

Drawing C-43 Rev 4 requires material south of the Turbine Building in this area to be "Q".

The Daily Soil Placement Report prepared by Bechtel QC for 5/6/80 indicated on line 13 "No 'Q' Backfill Placed Today".

The above discrepancies between the Field Engineer Reports prepared by the Onsite GeoTech Soils Engineer and the Daily Soil Placement Reports prepared by Bechtel QC indicate that soil was placed in "Q" areas without Bechtel QC inspection.

How



CHESAPEAKE
POWER
COMPANY

PROJECTS ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

Specification C-211 Rev 10, Section 8.6 states:
"8.6 COMPACTION EFFORT

The onsite geotechnical soils engineer shall verify that the equipment used for compacting the backfill material is capable of obtaining the desired results and obtaining the same acceptable compaction effort achieved in the test pad area. This verification shall include, but not be limited to, the following:

- 8.6.1 Number of passes
- 8.6.2 Speed
- 8.6.3 Revolutions per minute (frequency)
- 8.6.4 Overlap per pass
- 8.6.5 Lift thickness requirements and uniformity"

Contrary to this requirement, there is no evidence that the onsite geotechnical soils engineer has verified speed or revolutions per minute (frequency) for the equipment used.

| | |
|---------------------|-------------------|
| APP NO | M-01-11-0-05 |
| REV | |
| DATE OF OBSERVATION | 7-9-80 |
| PROJECT NO | 18.4.3.6 |
| LOCATION | WRBird BA Taggart |
| INSPECTOR | JWCook |
| TESTER | TCCooke |
| REVIEWER | JLCorley |
| APPROVER | LEDavis |
| TESTER | LADraisbach |
| TESTER | DEHorn |
| TESTER | GSKeeley |
| TESTER | MPLeonard |
| TESTER | BMargaglio |
| TESTER | JMILandin |
| TESTER | DWMiller |
| TESTER | EDNewman |
| TESTER | JARutgers |

Provide Project Engineering clarification of the intent of this section and revise the specification accordingly.

Project Engineering

DATE OF C/A COMPLETED: _____

DATE OF C/A EFFECTIVE: _____

REVISIONS: _____

APPROVED BY: *Donald E. Horn* (Signature) *J. Corley* (Signature) 8/4/80

DATE: _____



CONCESSION
POWER
COMPANY

AUDIT FINDING REPORT

PROJECTS ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

Specification C-211 Rev 10, paragraph 8.11 states in part, "The onsite geotechnical soils engineer shall review and approve each soils test report. This shall include, but not be limited to, gradation, moisture, and density tests".

Contrary to the above, there was evidence that the onsite geotechnical soils engineer reviews the "Compacted Fill Density Test Report," but no objective evidence of reviewing structural sand gradations or approving any of these reports.

APR 08 08
M-01-11-0-06
Bechtel QC & GeoTech
DATE OF OBSERVATION
7-9-80
FINDINGS:
1.1 & 1.4
WRBird DATaggart
JWCook
TCCooke
JLCorley
LEDavis
LADreisbach
DEBora
GSKesley
EPLeonard
BWMarguglio
JMilandin
DEMiller
EDNewman
JARutgers

Provide Project Engineering clarification of specification to define the actions required of, and the objectives to be satisfied by, the GeoTech engineer intended by "approve".

| | | | |
|--|--|---|--|
| NAME OF CA DEPARTMENT | | NAME OF CA DEPARTMENT | |
| NAME OF CA DEPARTMENT | | Project Engineering | |
| NAME OF FIELD OFFICE | | NAME OF FIELD OFFICE | |
| IS IT RESPONSIBLE TO THE PROJECT? <input type="checkbox"/> | | IS IT THE RESPONSIBILITY OF THE PROJECT? NA | |
| IF YES, TYPE OF ISSUE TO BE | | IF YES, TYPE OF ISSUE TO BE NA | |
| IF YES, HOW WAS IT | | IF YES, HOW WAS IT NA | |
| APPROVED BY: <i>Donald E. Horn</i> | | APPROVED BY: <i>[Signature]</i> | |
| DATE OF REPORT | | DATE OF REPORT | |



**Consumers
Power
Company**

James W Cook
*Vice President - Projects, Engineering
and Construction*

General Offices: 1945 West Parnell Road, Jackson, MI 49201 • (517) 788-0453

December 10, 1980

Harold R Denton, Director
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

This letter is in response to the June 13 and August 25, 1980, meetings between CP Co and NRC management concerning timely resumption of formal docket review of the Midland Plant. As noted in the NRC minutes of these meetings issued September 16, 1980, there is reasonable agreement between the CP Co scheduled fuel load dates of 7/83 and 12/83 for Unit 2 and Unit 1, respectively, and the corresponding NRC Caseload Forecast Panel projections of 10/83 and 4/84. However, I note with some dismay the statement in the meeting minutes that the staff's still to be announced licensing schedule "may not necessarily coincide with the construction completion date." If this should occur, it would create severe adverse consequences for Consumers Power and would be a direct reversal of the NRC's stated objectives of completing the licensing process coincident with the completion of the construction process. Recognizing the staff's resource constraints, it is imperative that we take steps now to allow timely resumption and efficient completion of Midland docket review.

At our August meeting, you made certain suggestions on how we might assist in moving the Midland Licensing process forward. We have pursued these ideas and others and the balance of this letter is a status report on these activities.

In the Post-TMI time frame most nuclear plant projects have been reassessed and the majority have already determined significant impacts on completion dates based on current requirements. Consumers Power Company was among the first to publicly recognize the current realities and has taken significant steps to focus all the Company's technical and financial resources towards the expeditious completion of the plant. The reorganization of the Midland Project in early 1980 was but one facet of this effort. Even prior to the project reorganization the Consumers Power Midland Nuclear Safety Task Force utilized a formal task description and recommendation process to coordinate the resolution of major pre-TMI open items identified by the NRC staff and to determine the Midland specific response to post-TMI issues and events. These efforts were formally documented in Revision 30 to the Midland FSAR submitted in October 1980. An updated Security Plan and associated documents along with Revision 11 to the Midland Environmental Report have also been submitted recently. In addition the revised Site Emergency Plan is scheduled for submittal this month. In summary, the application is ready for post-TMI review.

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We continue to monitor the evolution of requirements for more explicit documentation of compliance with regulations. In particular we have undertaken a review to assure that Midland positions on the General Design Criteria and applicable Division 1 Regulatory Guides are sufficient to meet our understanding of the staff's needs, and we stand ready to expand this effort as specific requirements are established. As mentioned above, we have presented Midland positions on pre-TMI open items and post-TMI issues and events in Revision 30. We have also undertaken a probabilistic risk assessment of the Midland Plant to support overall safety decision making and, where appropriate, to assist in the justification of acceptable alternative approaches to NRC staff interpretive documents.

In conjunction with the above efforts and in view of your stated willingness to provide NRC staff participation in final design review meetings on critical issues, we will contact our NRC Project Manager to arrange with the staff for such participation on a trial basis. Such meetings are a logical conclusion to ongoing design review meetings and provide an opportunity to review critical design aspects and compliance with applicable design, availability, safety, and licensing requirements. These meetings will now have the added benefit of NRC participation with a resulting increase in the NRC staff's understanding of critical design issues. Meeting minutes are utilized to document major points of discussion and action items. Action items are resolved within the context of our existing design change control program. Our staffs should work to establish the protocol for NRC participation. In order to assure proper utilization of our limited resources, we should personally monitor the progress of this effort to ensure that it is achieving the desired results.

We continue to believe that a relatively higher review priority is justified for Midland based on the realism of our current scope and schedule, the OL application docket date of 11/77 and approximately 16 months of NRC staff review prior to TMI, and the unique cogeneration aspect of the facility. We encourage more NRC staff participation in appropriate forums for the review of the Midland docket. We also encourage the use of NRC contractors if lack of staff resources leads to projection of an OL issuance date which is not consistent with construction completion dates. In particular, based on what we believe is a reasonable projected licensing schedule (See Enclosure 2 of the staff's September 16, 1980 meeting minutes), an SER issuance date in 1981 seems essential to be consistent with the schedule analysis of both our organizations.

In conclusion, the effort outlined above hopefully conveys Consumers Power Company's commitment to facilitate resumption of the Midland docket review. Cooperation in these efforts is essential to timely completion of the NRC staff review. I would appreciate receiving your comments on our proposal

and would also like the opportunity to meet with you periodically to review the progress of our licensing review. In the meantime we will pursue this approach in detail with your staff.

James W. Cook

CC JDSelby
RJCook, Resident Inspector
GSKeeley
MMiller, IL&B
TJSullivan
FPCowan, Hearing Board Member
GLinenberger, Hearing Board Member
CBechhoefer, Hearing Board Chairman



UNITED STATES NUCLEAR REGULATORY COMMISSION

OFFICE OF PUBLIC AFFAIRS, REGION III
799 Roosevelt Road, Glen Ellyn, Illinois 60137

NEWS ANNOUNCEMENT: 81-2
Contact: Jan Strasma
312/932-2674

NRC STAFF PROPOSES \$38,000 FINE AGAINST CONSUMERS POWER COMPANY FOR ALLEGED QUALITY ASSURANCE VIOLATIONS AT MIDLAND CONSTRUCTION SITE

The Nuclear Regulatory Commission's Office of Inspection and Enforcement has proposed a \$38,000 fine against Consumers Power Company for alleged violations of NRC regulations in the installation of safety-related ventilation systems at the Midland Nuclear Power Station, under construction at Midland, Michigan.

The alleged violations were identified during an investigation in March through July 1980 at the Midland construction site after allegations of deficiencies were received by the NRC from several individuals. The allegations concerned work being performed by the Zack Company, the heating, ventilating and air conditioning contractor at the Midland site.

The NRC investigation identified major deficiencies in both the Consumers Power Company and Zack quality assurance programs for the Zack Company's fabrication and installation work.

All safety-related work by the Zack Company was stopped by Consumers Power Company on March 21, 1980 as a result of the initial NRC investigation findings and the utility's own quality assurance program findings. The NRC issued a letter confirming that work was stopped and would not resume without NRC authorization. Work was permitted to resume on August 14, 1980.

During the period when work was stopped, there was extensive revision to the Zack and Consumers Power quality assurance programs for the ventilation system work, as well as development of a program to identify and correct any deficiencies in work already fabricated and installed.

NRC inspectors reviewed the corrective action before permitting the Zack work to resume. The NRC inspection program will continue to monitor the Zack work closely.

The NRC investigation team -- composed of seven inspectors and investigators -- identified alleged violations of 10 of the NRC's 18 quality assurance criteria, with multiple examples of some violations.

The alleged violations include:

- inadequate material procurement practices
- use of materials without adequate quality certification
- components were fabricated without required design documents
- inadequate documentation and material identification to assure that proper materials were being used
- use of different welding procedures than specified
- inadequate welding material control procedures
- completed welds not identified by the welder's identifying stamp

- two welders issued the same identification stamp
- material not meeting specifications was not properly identified to prevent its use
- inadequate quality assurance inspection procedures
- quality control inspection reports (nonconformance reports) not promptly resolved
- quality deficiencies not identified in inspections of materials when received
- inadequate quality control records
- a Zack quality assurance audit was performed by an employee responsible for the work being audited rather than by an independent Zack employee

Consumers Power Company has until February 2, 1981 to pay the fine or protest it. If the fine is protested and subsequently imposed formally by the NRC, the utility may request a hearing.

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January 7, 1981

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION & ENFORCEMENT
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

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PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
UNITED STATES NUCLEAR
REGULATORY COMMISSION



Ronald Cook
U.S. Nuclear Regulatory Com.
Route 7
Midland, MI 48640

PUBLIC ANNOUNCEMENT

from

U. S. Nuclear Regulatory Commission