

J. Kove  
Rec'd 6/11/81

The following is a "retype" of a letter from Barbara Staminis to James G. Keppler, RIII. Retyping was necessary for Telefax transmission due to light copy.

May 26, 1981

Dear Mr. Keppler,

I want to thank you again for meeting with me last Thursday in Midland. Your directness and openness encourage me to communicate with you once more.

I am including my recent notions which we briefly discussed. I am also including some 1980 audit reports as it is my understanding from Consumers and some NRC personnel that they may not have been presented to the NRC.

I also wish to have this final input into your upcoming QA decision. You considered Consumers QA acceptable in 1979 because they identify their own deficiencies. Although I consider such identification a basic obligation, even this is questionable in 1980 considering 1) their denial of a QA breakdown in soils in their Answer to Notice of Hearing, 2) their handling of the Zack matter, and 3) Bechtel's withholding of information related to the Pipe Whip Restraint problem (which dates back to SALF report 78-10).

Even more important than the identification of problems, is the resolution of problems once identified. It is apparent in almost every major problem area Consumers has encountered over the years, that the weeding out of problem sources, and ultimate resolution of the problems has not occurred in a timely manner, on their own initiative, as you are well aware.

Perhaps the best example of this is Consumers acceptance of poor quality performance by Bechtel, which has been the underlying cause of so many problems. Even when the problem has been identified, as in their 1975 lawsuit against Bechtel for negligence in construction and design of Fallender, or as in their response to 50-54f q.23 as to root causes of the soil settlement problem, these Bechtel deficiencies are condoned and destined to repeat themselves.

Your Nov. 24, 1980 SALF report and the post SALF assessment of their QA reform certainly indicated need for improvement. And although I am not in a position to obtain hard information about this most recent period of QA performance, I understand that Gary Sinclair has a tape in which workers discuss their reluctance to report QA matters, which may confirm what has heretofore been only hearsay.

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Most recently, I read in today's paper that Consumers disagrees with the NRC on the necessity of halting work on the small bore pipes while audit reports on the problem are completed. Once again they seek to proceed at their own risk, without examining the full extent or root cause of the problem. To me, this says more about Consumers managerial attitude concerning QA problems, and how it remains the same, than any statements of intent or impressive improvements as demonstrated in the inspection last week.

I do not criticize the inspection itself as it took place last week. But I am terribly concerned with what I understand the NRC intends to do with that report in terms of ignoring five years of past QA deficiencies because of it. At the Nov. 24, 1980 SALP meeting, you said that you intended to lay out the broad overview of Consumers QA performance as you did at that meeting, and let the Board decide "Is their QA still defensible?" Do you now intend to present a conclusion instead?

I have no choice but to raise these questions and concerns, for I am deeply distressed with what I see developing and being finalized so quickly. My concern goes beyond the effect of this pending stipulation on my case or contentions, to its profound implications for basic health and safety questions, in the rest of the proceeding and for NRC regulation as a whole.

Sincerely,

Barbara Steinric

June 1, 1981

~~XXXXXXXXXX~~  
**J. Kane**  
Rec'd 6/15/81

The Honorable Charles Bechhoefer  
Chairman of the Atomic Safety and Licensing Board  
Nuclear Regulatory Commission  
Washington, DC 20555

Dear Judge Bechhoefer:

In relation to the Consumer's Power Company, Midland Nuclear Plant Docket Number 50-329 and 50-330, serious questions continually arise with respect to the improper siting of the Midland Nuclear Plant. As an example, recent data shows that the risks of low level radiation is greater than what was believed to be the case only one year ago. Science Magazine for 22 May, 1981 also indicates that radiation is even more toxic to human beings than was believed when the Midland Plant was sited within the city of Midland.

Furthermore, the plant was sited in the flood plain of the Tittabawassee River, which increases the potential hazard to public health and safety over and above the new radiation hazard by this improperly sited nuclear plant.

The Marleton Interveners sincerely believe that the Atomic Safety Licensing Board should take immediate action to stop construction of the Midland Nuclear Plant for the following reasons:

1. Siting of plant within the city of Midland in violation of NRC siting rules and regulations.
2. Disregard of the hundred year flooding potential of the river in building the plant on the unstable flood plain.
3. Sinking of buildings and instability of underground piping as pointed out in NRC inspections of the plant.
4. Questionable quality control procedures in building the plant, as pointed out by NRC inspections.
5. A probable potential for liquification and/or decomposition and de-stabilization of the type of foundation composition in construction at this site.
6. Questionable stability of soils, sand and rock in which foundation footings are sited.
7. The necessity to eliminate liquification potential due to the general water conditions in the applicant's suggestion of a permanent dewatering system for the plant's site.
8. The potential crustal uplift resulting from cavern salt and brine extraction and other man-made underground activities.

~~81-612-2-3~~ 2pp.


The Honorable Charles Bucher  
June 1, 1981  
Page Two

9. The probable continual structure settlement in the compacted fill zone.
10. A recent study as published in Science, 8th of May, 1981, indicates that in the 1990's, electricity from new nuclear plants will be at least 25% more expensive than electricity from new coal plants.
11. "Electromagnetic Pulses - Potential Crippler" appearing in IEEE Spectrum, May 1981, pp. 41-46 and ENR's "Nuclear Fever Spectrum" June, 1981, pp. 48-49 points up the serious EMP problem which has not been addressed by the NRC in the shielding of nuclear plants to protect from EMPs. Demetrios L. Baedekos, a nuclear safety engineer with NRC, contends that if an enemy detonates a nuclear weapon in space over the United States, EMPs could initiate melt-downs in every nuclear reactor in the country. He contends the vulnerability must be overcome by shielding, as is presently done with important electronics, communications, and other facilities sensitive to EMPs. As is well known, coal plants are not susceptible to EMPs or core melt-downs.
12. Finally, as a result of the Science article cited above, this new information will necessitate the rewriting of the many basic documents on the hazards of radiation including the definitive work - "The 1980 HAS Study on the Effects of Low Level Radiation". In view of this, your board should seriously consider the health and safety of the Midland population who will be exposed to radiation discharges from the plant.

In view of the above twelve reasons, the Mapleton Interveners, on behalf of the health and safety of the Midland population, respectfully request that plant construction be stopped until the twelve items listed above are completely resolved.

Please make copies of this letter available to Mr. Ralph S. Decker and Mr. Frederick P. Cowan, members of your board, and to other people who should have copies.

Sincerely,

  
Steve J. Coiler  
Technical Consultant  
Mapleton Interveners

cc: Wendell H. Marshall  
President  
Mapleton Interveners

STG/nm

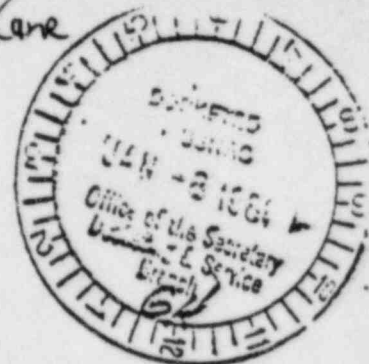
# CPG Response to initial NRC Interrogatories J. Kane

(COE letter of Mar. 27, 1981 attached which responds to CPG Response to Inter. 3)

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of )	
CONSUMERS POWER COMPANY )	Docket Nos. 50-329-OM
(Midland Plant, Units 1 and 2) )	50-330-OM
	50-329-OL
	50-330-OL

## CONSUMER POWER COMPANY'S ANSWER TO NRC STAFF INTERROGATORIES

Pursuant to 10 C.F.R. §2.740b, Consumers Power Company hereby responds to NRC Staff Interrogatories 1-3.

### Interrogatory 1

Have any laboratory consolidation tests been conducted on samples of plant fill that were recovered in the diesel generator building foundation area since the removal of the surcharge load in August of 1979?

#### Answer

No laboratory consolidation tests have been conducted on samples of plant fill from the diesel generator building area since removal of the surcharge load.

### Interrogatory 2

If the answer to Interrogatory one is yes, please provide results and conclusion with regard to future settlement of the diesel generator building.

#### Answer

Since the answer to Interrogatory Number 1 is no, this is not applicable.

### Interrogatory 3

What is the reason for the discrepancy in the magnitude of the loading stress indicated on Figure 2 (September 14, 1980 Report, "Discussions of the Applicant's Position on the Need for Additional Borings") with information previously provided in response to NRC Question No. 4, Table No. 4-1A (Volume 1) and on Table 2.5-14 of the FSAR (Volume 4)? This concern involves both dead and live loads at foundation elevation 628 feet at the time of surcharge and for long term plant operation conditions.

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Answer

Data concerning the diesel generator building in the three Tables and Figures referenced in the interrogatory (i.e. Figure 2 of the report, "Discussion of the Applicant's Position on the Need for Additional Borings," Table 4-1A of the response to 10CFR 50.54, Question 4 regarding plant fill, and FSAR Table 2.5-14) were prepared for different purposes and with different assumptions. Hence, the different loads presented in these tables and figures do not constitute a discrepancy.

The value given for the stress under the diesel generator building in FSAR Table 2.5-14 was used to demonstrate the factor of safety for bearing capacity. For the diesel generator building this information is contained in the Response to 10CFR 50.54, Question 35 regarding plant fill. Table 4-1A of the Response to Question 4 was prepared to show a settlement history and prediction of future settlement, which were based on measured settlement data taken during the surcharge and not on the approximate load data presented in the table. Figure 2 of the report "Discussion of the Applicant's Position on the Need for Additional Borings" was submitted to show with particularity the stress distribution below the building at various elevations along a vertical line during the preload, and to compare those stresses with stresses which would be felt during normal operations.

With regard to FSAR Table 2.5-14, the stress level indicated for the diesel generator building (4.5 kps) was taken at the point along the building foundation having the largest contact stress. This stress consists of the dead load of the structure (excluding the grade slab) and the full design live load for structural purposes of the intermediate floor and roof. This design live load is larger than the load expected to be transferred to the foundation soil because calculations of live loads for structural purposes must be based on the full design live loads

whereas the soil will experience some reduced value of live load based on actual building occupancy. The live load expected to be transferred to the foundation soil has been conservatively estimated to be 25% of the full design live load.

The latest bearing capacity calculations which were made and presented in the September 14, 1980 Report ("Discussion of Applicant's Position on the Need for Additional Borings") and in the answer to 10 CFR 50.54f, Question 40, regarding plant fill, did not use 4500 psf as the applicable load. Instead, a value of 3400 psf, which represents the net maximum dead load, was utilized. The Applicant intends to modify its latest bearing capacity calculations to account for live loads in its next Amendment.

Data presented in Table 4-1A of the Response to Question 4 shows the average approximate pressure (averaged over the building area rather than taken at any particular point as in Figure 2 and in FSAR Table 2.5-14) at the foundation level at various times. Exact data at any particular point or time were not presented in Table 4-1A, which was included to give the reader some indication of the approximate stresses applicable during the various stages of the construction process. The load data in Table 4-1A were not used to predict future settlement nor to verify the adequacy of the preload. The dead load portion of the loading pressures for Table 4-1A consists of the approximate weight of the structure. The live load portion (.8 kps in stages V and VI) consists of the approximate full design live load of the roof, intermediate floor and grade slab. Piping and equipment were included in the live load increment.

Figure 2 of the report "Discussion of the Applicant's Position on the Need for Additional Borings" was presented to show the stress distribution below the building during and after surcharge. For this presentation the foundation footing pressure at the building's southwest corner was used. The dead load shown includes the superstructure weight, and the live load is the actual expected live load during the life of the building. This is estimated to be 25% of the full design live load. Also included in the live load increment of this figure are piping and equipment loads. The Applicant intends to make a slight modification of Figure 2 in the near future to account for construction after removal of the surcharge.



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of )  
CONSUMERS POWER COMPANY )  
(Midland, Units 1 and 2) )  
\_\_\_\_\_ )

DOCKET NOS. 50-329-0  
50-330-0H  
50-329-0L  
50-329-0L

COUNTY OF WASHTENAW )  
  )ss  
STATE OF MICHIGAN )

AFFIDAVIT OF NEAL SWANBERG

Neal Swanberg, being duly sworn, deposes and says that he is employed by Bechtel Associates Professional Corporation, as an Assistant Project Engineer; that he is jointly responsible with Sherif Afifi for providing answers to NRC Staff Interrogatories to Consumers Power Company Numbers 1-3, and that to the best of his knowledge and belief the above information and the answers to the above interrogatories are true and correct.

Neal Swanberg  
Neal Swanberg

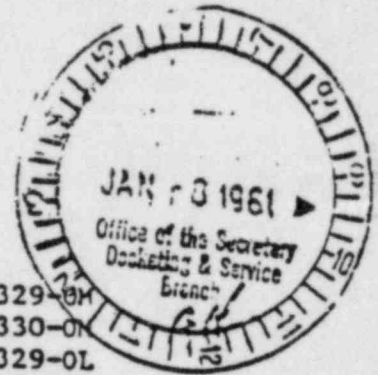
Subscribed and sworn to before me this 16 day of December 1980.

Bernice A. Bliss  
Notary Public, Washtenaw County, Michigan

My Commission Expires: November 30, 1982

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of )  
CONSUMERS POWER COMPANY )  
(Midland, Units 1 and 2) )  
\_\_\_\_\_ )

DOCKET NOS. 50-329-0M  
50-330-01  
50-329-0L  
50-329-0L

COUNTY OF WASHTENAW )  
STATE OF MICHIGAN )

AFFIDAVIT OF SHERIF AFIFI

Sherif Afifi, being duly sworn, deposes and says that he is employed by Bechtel Associates Professional Corporation, as an Engineering Supervisor; that he is jointly responsible with Neal Swanberg for providing answers to NRC Staff Interrogatories to Consumers Power Company Numbers 1-3, and that to the best of his knowledge and belief the above information and the answers to the above interrogatories are true and correct.

Sherif Afifi  
Sherif Afifi

Subscribed and sworn to before me this 16 day of December  
1980.

Samuel A. Lewis  
Notary Public, Washtenaw County, Michigan

My Commission Expires: December 30, 1982

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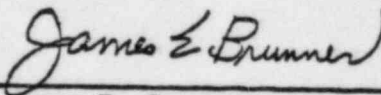
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