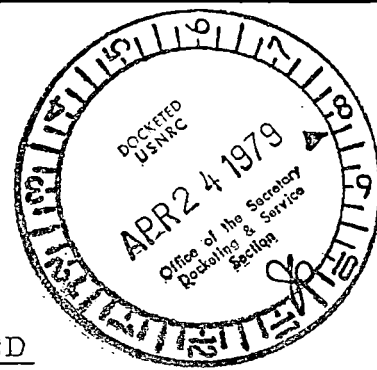


4/20/79



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
CONSUMERS POWER COMPANY) Docket No. 50-255SP
(Palisades Nuclear Plant))

GREAT LAKES ENERGY ALLIANCE RESPONSE
TO CONSUMERS POWER CO., NRC STAFF AND
NRC LICENSING BOARD

We wish to respond to the questions raised by the NRC Staff, Consumers Power Company and the NRC Licensing Board as to the validity of our position in petitioning to intervene in the hearing dealing with steam generator replacement at the Palisades Nuclear Plant.

The whole purpose of a hearing is to make sure that all of the facts of a particular action involving a nuclear facility are made known to the Licensing Board and ultimately the Nuclear Regulatory Commission.

We will provide documentary proof that the Licensing Board cannot depend on either the NRC Staff or Consumers Power Company to provide them with all the facts they need to have to make a determination.

This proof is the result of a number of licensing actions in the past in which the NRC Staff and Consumers Power Company have been involved in which only the citizen intervenors brought into the record very important facts about which the NRC Licensing Board and the public needed to be informed.

The following is a chronicle of a series of these kinds of events that we are able to document:

1) In the suspension hearings of the Midland Case in 1976-77, Consumers Power Company attorneys deliberately attempted to conceal important facts and new developments in the Midland Case that were essential for the Board to consider.

As a consequence, the NRC Appeals Board has reopened the construction license proceedings of the Midland Case to consider the reprehensible conduct of Consumers attorneys in that action which should, in fact, call for their disbarment. (Notice of Pre-Hearing Conference, April 9, 1979 - Remand Proceeding - Docket Nos. 50-329 CP; 50-330)

In preparation for the suspension hearings in 1977, Consumers Power Company attempted to conceal the fact that the management of the Dow Chemical Company had serious misgivings about linking the operation of the Midland Division of Dow to the Midland n-plants which were being built by that utility. The threat of a \$600 million law suit by Consumers Power Company against Dow Chemical Company was the major reason why Dow Chemical has stayed with the contract, according to the sworn testimony of Paul Orefice, President of the Dow Chemical Company. The attorneys for Consumers Power Company also asked to manipulate and edit the testimony of Joseph Temple, manager of the Michigan Division of Dow, to make it appear that he still favored the n-plant connection. The Applicant's attorneys also asked Dow to send witnesses to the hearings who did not know the changed attitude of Dow's top management toward the Midland n-plants. This Dow Chemical refused to do. They sent in their key management people, Joseph Temple and Paul Orefice, to provide sworn testimony for Dow.

Furthermore, Consumers Power Company assumed that the Intervenor's attorney would not appear because of lack of funds, and that without cross-examination and discovery, Consumers Power would be able to "finesse" the Dow-Consumers dispute and prevent the Licensing Board from finding out about it. (These facts are described in attached Exhibit I.)

Joseph Temple had, as a matter of fact, decided that the n-plants would be "disadvantageous" not only to the Midland Division of Dow, but to their employees and the community. (See Exhibit II.) The Company had secured a consultant's report indicating that for \$350,000,000, Dow could build their own coal-fired plants that would supply all their needs for steam and power and meet all air pollution controls.

It should be made clear that the NRC Staff was privy to all these developments prior to the suspension hearings through discovery, but made no effort to get the information to the Licensing Board. Those attorneys should also be disbarred for failing in their primary professional duty, to get all the important facts before the Board and on the public record.

2) In the Palisades construction hearing, the grave quality control defects in the construction of that plant were brought out only by Myron Cherry, ^{Attorney for Intervenor,} who introduced the log of Combustion Engineering, one of the contractors at the n-plant. In that log, Combustion Engineering detailed the short-cuts and sloppy work of Bechtel Corporation in the construction of that plant. They did this to protect themselves. Palisades has had serious operational difficulties and has operated at only 44% capacity since it began in 1972. All the contractors were subsequently sued for a huge sum (\$300 million). Consumers Power Company charged them with negligence and installing defective equipment. Consumers recently settled for a fraction of that amount. This is a fact that citizen ratepayers do not view as in their best interests since this money should have been remitted to ratepayers who are bearing the costs of poor quality control in the construction of Palisades and a substantial share of the costs of power that must be purchased.

3) In the Midland Case, neither the NRC Staff nor Consumers Power Company told the Licensing Board of the failure of the six pilot ECCS tests in Idaho in the winter of 1970-71. The record shows that Myron Cherry, Attorney for the Intervenor, made that fact known to the Board in his efforts to pursue the safety questions of the Midland n-plants.

4) In 1972, when the Palisades n-plant first went on line, Consumers Power Company could not make their rad waste holding tanks to work at all. They released the rad waste to the biosphere and continued operation. They not only did not disclose this to the NRC Regulatory Staff, but lied about it to them and claimed that they had always been able to stay within their licensing requirements. (Exhibit III.)

These facts show that the Licensing Board cannot rely on either Consumers Power Company or the NRC Staff to disclose the important facts that will be develop-

ing in the steam generator replacement at Palisades.

The NRC has called steam generator degradation a serious, unresolved nuclear safety problem requiring the highest priority effort for resolution. (Letter of March 2, 1979, to S. Howell from D. G. Eisenhower.)

The people in the vicinity who are bearing the risks and who belong to groups that are a part of the coalition of the Great Lakes Energy Alliance and are deeply concerned about the safety problems at the Palisades n-plant include:

Catherine Benner
2800 S. Lake Shore Drive
St. Joseph, Michigan 49085

Sharon Wilson
1221 Lane Drive
St. Joseph, Michigan 49085

Paul Gillespie
407 North St.
St. Joseph, Michigan 49085


Frank Lahr
Dunham Ave.
Stevensville, Michigan 49127

Joe & Marge Hartwig
1226 Riverwood Terrace
St. Joseph, Michigan 49085

Elinor Morloch
700 Rosehill Rd.
Berrien Springs, Michigan 49103

We are deeply distressed that citizens whose lives and property are at risk have no funds to pursue issues of the magnitude that are clearly a part of nuclear power development. Our lack of funds for attorneys and expert witnesses will make it difficult to provide the kind of record that the Licensing Board should have. But without citizen intervention, we have proved that the Licensing Board may not secure any of the pertinent facts that they should have, but may, in fact, be provided with deliberately false information, as the previous actions of Consumers Power Company and the NRC Staff indicate in the instances we have described.

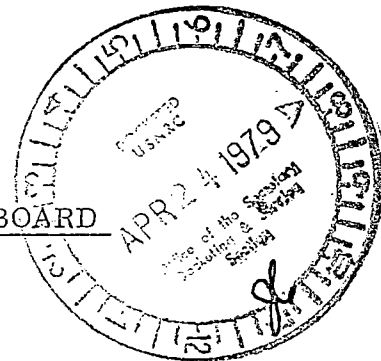
Respectfully submitted,


Mary Sinclair, Vice President
Great Lakes Energy Alliance

Dated at Midland, Michigan
April 20, 1979

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)

CONSUMERS POWER COMPANY)

(Palisades Nuclear Plant))

Docket No. 50-255SP

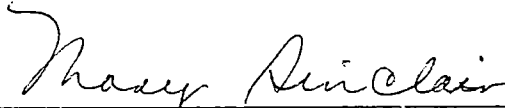
CERTIFICATE OF SERVICE

I hereby certify that copies of "GREAT LAKES ENERGY ALLIANCE RESPONSE TO CONSUMERS POWER CO., NRC STAFF AND NRC LICENSING BOARD" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, this 20th day of April, 1979:

Charles Bechhoefer, Esq., Chairman
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Michael I. Miller, Esq.
Martha E. Gibbs, Esq.
Isham, Lincoln and Beale
One First National Plaza
Suite 4200
Chicago, Illinois 60603

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



MARY SINCLAIR, Vice President,
Great Lakes Energy Alliance

Exhibit 25

NOTE NOTE

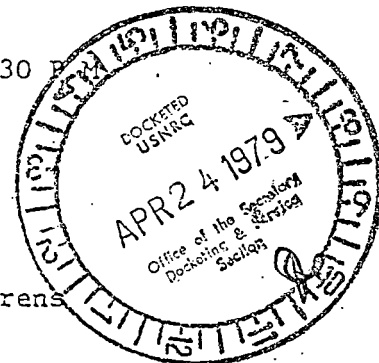
Exhibit ①

MEETING WITH CONSUMERS POWER, SEPTEMBER 21, 1976 AT 1:30 P

Present

Consumers: 1. Judd Bacon
2. Rex Renfro
3. James Falahee

Dow: 1. Lee Nute
2. Jim Hanes
3. Al Klomprens



Hearings called by Licensing Board.

- I. A. Brief to be filed September 29. Brief shall be on the issue of suspension of the construction permit while all the remanded Midland issues are being considered in an evidentiary hearing. Parties shall include comments on the timing of the hearing on the merits, discovery and the length of time estimated for the hearing.
- B. Hearing on issue of suspension pending hearing on merits - October 6, 7 and 8 - issue being heard will be suspension of permit pending resolution of substantive issues. Written direct testimony shall be filed prior to the hearing and witnesses shall be made available for cross-examination. Similar to MPSC proceedings.
- Consumers said that the best way to explain the importance of the suspension hearing and the issues to be covered there was to talk first about the hearing on the substantive issues or "big" hearing.
- II. A. Issues to be covered at the substantive hearing (5).
1. ACRS issues - primarily safety issues - some have been resolved since 1972, others must be proved up in hearing - there are 16 "other" matters to be considered, some of which will require expert testimony - no "lightening rod" issues here that are currently being hotly contested in other hearings.
 2. Energy conservation - not a big issue - see Diablo Canyon and Niagra Mohawk (AEC-NRC cases) - Consumers not overly concerned about this particular issue - claim they are loaded for bear - may need some Dow input on electric conservation by Dow since 1972, which, although showing lessened demand, will still show need for electricity by Dow - (current contract 300 megawatts).
 3. Changed circumstances in contract with Dow - won't be an inquiry limited just to the contract change (1974) allowing Dow to continue to run its power houses after the nuclear plant comes on - this issue goes back to the original cost/benefit analysis which included shutting down Dow's power houses as one of the factors in cost/benefit - have to talk about conditions between Dow and Consumers as they are today - Consumers claims this can't be covered by a Consumers witness - has to be covered by a Dow witness - Dow (Hanes) asked if that meant Dow's intent

or the current factual situation - Consumers replied "both" - Consumers asked what Dow planned to use for back-up (1,000,000 lbs./hr.) - Dow really didn't answer - Consumers said this too will be a part of the cost/ benefit analysis, particularly if different than package boilers included in original cost/benefit analysis - Consumers said main issue is "Does Dow really need the steam."

4. Cost/benefit analysis - mostly covered above - Consumers said question is "What is Dow's position on steam? On electricity?" "What is Dow's current position?" Consumers said a Dow witness will be needed to testify on this - Dow referred Consumers to the contract negotiations, including Temple's June 30 letter.

5. Other unaddressed fuel cycle issues - transportation of radioactive wastes - also, site storage of nuclear wastes - these must be considered.

B. Factors to be considered in suspension hearing (5) - Consumers assumes Cherry will not appear because of lack of funds - Consumers says suspension hearing most critical - they believe that since there is no discovery, and probably no intervenor cross-examination - will be able to finesse Dow-Consumers continuing dispute.

1. Significant adverse effect in environment - Consumers believes interim rule will allow further licensing - neither interim rule nor final rule will affect Midland construction - Consumers must prepare two cases.

- a. Until interim rule comes out - impact of suspension or non-suspension.
- b. Until final rule comes out - impact of suspension or non-suspension.

Must consider adverse environmental impact of either continuing construction and halting construction.

2. Reasonable alternatives foreclosed - will continued construction foreclose modification of plant that may be ordered as a result of the promulgation of interim rule - Consumers said one of alternatives that may be foreclosed by continued construction is Dow generating its own steam, and this would affect configuration of Unit #1 - maybe now is only time Dow can put in new unit. (Note: don't really understand this point.)

3. Effect of delay electric - Consumers must put an entirely new "need for power" case to replace that done originally - will discuss shut-off of Canadian crude to Bay City power house and other factors affecting reserves - will also have to put on testimony as to the 300 megawatts Dow must take under current nuclear electric contract - Dow witness will have to testify as to Dow's intent to take 300 megawatts - will discuss increased costs to Consumers - four month suspension will

Sidebar

result in eight month delay and increased construction costs of \$130 million (doesn't include purchased power) - one year suspension means eighteen month delay - Consumers said didn't have cost figures yet on one year suspension.

* 4. Effect of delay steam, and cost/benefit analysis tilted - Dow becomes very important because here two issues (above) can come together - Rex suggested that Dow witness might be someone from Dow Chemical U.S.A. or Corporate area who is unaware of Midland Division recommendation to Orefice - this person would testify as to effects of further delay upon Dow - if Dow accepts division recommendation and takes that position in suspension hearing, then construction license will be suspended for at least one year - no doubt about it - Falahee added that Consumers may lose its construction permit entirely - Consumers said that as long as construction continues, Consumers has a lever and will drag feet in hearing on merits - if construction stopped, intervenors have lever and will drag feet in hearing on merits - Consumers further pointed out that final FES (environmental statement?) states that if construction permit for Midland is cancelled, Consumers will cancel one Unit and transfer the other to Palisades - this was one of basis for issuance of construction license - Consumers threat - Falahee brought up the point that Dow has an obligation (Bacon interjects "Section 3") under the General Agreement to support Consumers in the licensing proceeding. Falahee said "If Dow takes this posture, Consumers and Dow will have a helluva legal problem" - (Note: strong implication that Consumers would regard us in breach if we went too far in our testimony) - Hanes replied that Dow's witness would tell the truth as he honestly believed it to be, whoever the Dow witness - Falahee then made naked threat that if Dow testimony not supportive of Consumers (Note: no longer just if we go too far) and that results in suspension or cancellation of permit, then Consumers will file suit for breach and include as damages cost of delay, cost of project if cancelled and all damages resulting from cancellation of project if it causes irreparable financial harm to Consumers (bankruptcy). (Note: pretty damn close to blackmail)

5. General policy concerns - main case will be jobs - jobs at site, in Midland, and affect on economy of Michigan - Stan Arnold of AFL-CIO will testify for Consumers.

Summary

Above issues discussed in Consumers' September 7 brief - Rex said he wanted to know Dow's position before he files his brief on September 29 - Nute replied that they were inconsistent, threatening - a massive lawsuit on one hand if Dow takes hasty position, yet demanding immediate statement of position on the other - Dow replied that it would state its position as soon as able, but may have to go before the Board of Directors - Rex said he wanted an outline of Dow witness testimony to use as basis for prepping witness on October 4 and 5 - no response from Dow - Dow committed to get back to Rex before September 29, one way or other.

MICHIGAN DIVISION

September 8, 1976

MIDLAND, MICHIGAN 49343

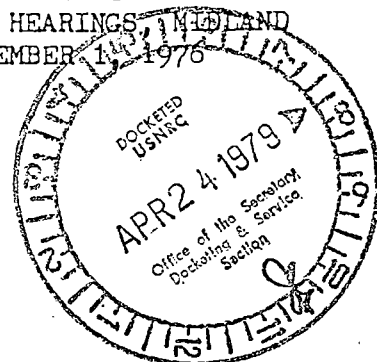
ENTERED INTO THE PUBLIC RECORD: CONSUMERS POWER'S MIDLAND UNITS 1 and 2

"DOW CONFIDENTIAL"NRC HEARINGS, MIDLAND
DECEMBER 14, 1976

Paul F. Orefice
U.S.A. Administration
2020 Building

cc: J. M. Leathers

RE: NUCLEAR-STEAM - MIDLAND PLANT



As we discussed last evening, I now have a serious concern as to whether the nuclear-project and our current contracts with Consumers Power Company aren't indeed in the process of becoming deterrents to our ability to assure the successful and reliable operation of the Midland Plant in the future. We declared publicly last fall that for planning purposes the Division was no longer considering the cost and availability of nuclear-steam to be an advantage to this location.

Since January of this year, we have been negotiating with Consumers for contract changes that would accomplish these objectives:

1. Reduce to an absolute minimum our dependence upon the Consumers Power Company.
2. Gain complete freedom to generate our own power -- in any way that we may choose.
3. Gain the ability to make steam in any way and in any quantity that we may choose.
4. Remove all restrictions on what we can do with the steam we purchase from Consumers Power Company.
5. Increase Consumers Power Company's responsibility for Dow plant shutdowns resulting from their inability to deliver contract quantities of steam.
6. Establish a timetable for the completion of key aspects of the plant and provide that Dow may terminate the steam contract if it becomes apparent that Consumers will be unable to provide steam by the end of 1984.



September 8, 1976

A very significant event occurred on July 21, 1976, when the Washington D.C. District Court of Appeals remanded to the N.R.C. the question of whether the construction license for the Midland Plant should indeed have been issued. The N.R.C. was ordered to reopen hearings on four specific questions -- one of which involves the disposal of nuclear-wastes and potentially impacts all nuclear-plants in the U.S.; and three other questions that relate specifically to the Midland case. The N.R.C. has reconstituted the licensing board; and briefs on one initial question, regarding the disposal of nuclear-wastes, were due in to that board yesterday.

One of the issues to be reexamined is the cost-benefit analysis, which is based on the purchase of steam by Dow from the nuclear-plant. Consumers has always maintained that Dow's commitment to purchase steam is critical to their retaining a valid construction license. We are nearly positive that we will be required, during some part of the upcoming proceedings, to state our current position; e.g., Is the nuclear-plant and nuclear-steam essential to Dow's Midland Plant? Is it advantageous? Does the evidence in 1976 demonstrate a considerable cost advantage of nuclear over coal or oil? Is Dow's growth in Midland dependent upon the availability of nuclear-steam? Will Dow continue to operate and build in Midland if nuclear-steam is not going to be available? I believe that answers to these kinds of questions are going to be required, or at the very least that we, Dow, need to have well thought-out answers to them upon which to base our response, or responses, to either a formal request from the N.R.C. or to questions from the attorney for the intervenors -- Myron Cherry -- who is dedicated to stopping the Midland Nuclear-Plant.

In our judgment, the July decision by the Court of Appeals has dramatically and adversely affected the odds that Consumers will complete the plant by their new, target completion-operation date. There is a new, official cost estimate of \$1,670M; and we are also aware that there are unofficial, internal cost estimates from Bechtel of \$2,000M. This information became known to us on August 5th. Decisions are being made at the present time by the N.R.C. on serious "retro-fit" questions which, if adverse to Consumers, can add significantly to costs. All of this may also affect the cost-benefit analysis upon which the construction license was based.

As of now, construction on the site continues. Russ Youngdahl told me on August 5, 1976, this decision is subject to change on very short notice and could almost be

September 8, 1976

considered "day-to-day." We have had no word from Consumers since early August on their plans for coping with the July 21st Court of Appeals decision -- or of their assessment of the situation which we believe is very fluid and very critical.

I believe that there are more unknowns for us today than perhaps at any time in the history of the Midland nuclear-project. Our deliberations here -- and my own judgment -- cause me to conclude that under today's conditions and considering the history of this project, that the nuclear-project will be most likely to be disadvantageous to Dow and to the Midland Plant and to our employees in this community.

Therefore, I recommend the following:

1. When we meet with Consumers on Monday, September 13, 1976, that we get, and then give full consideration to their analysis of the situation, to their plans and to their projections for the future.
2. Using what they tell us, decide whether our conclusion as described in the previous paragraph is still a valid one.
3. If our conclusion is still a valid one, I recommend that this is an important enough issue that you, personally, call for a corporate review of the entire question. Such a review would be designed to evaluate all aspects of the conclusion that we have reached here in the Division and the potential problems that arriving at such a conclusion could cause for others.

Such a review should start as soon as possible after our session with Consumers and be completed in approximately one month. Until such a review is completed to your satisfaction, Dow should avoid taking any position. I have some ideas on questions that I think need to be addressed in this review and plan on discussing them with you next week when I know the results of our scheduled meeting with Consumers.

It is important that a minimum number of people know the Division's (my) conclusion and that those who do consider it very much "Dow confidential" because of its potential impact on the community. Please let me know if you have any questions.

Best regards,

J. G. Temple, Jr.

Consumers Threat to Dow revealed

Midland Daily News

14/76 By SANDRA L. DICKEY
Daily News staff writer

Financially-troubled Consumers Power Company threatened Dow Chemical Company with a \$600 million lawsuit if the chemical giant abandoned its commitment to use process steam from Midland's nuclear power plant under construction.

The threat was revealed Wednesday. Michigan Division general manager Joseph G. Temple Jr., who said if there was no chance of a lawsuit, Dow would "go its own way" and not use steam produced by nuclear power to operate its plant.

Temple testified Consumers board chairman A. H. (Al) Aymond told Dow officials the utility could go bankrupt if the plant is shut down permanently.

He said Aymond estimated Consumers' potential losses at \$600 million and told Dow officials Consumers would pursue "any avenue to recover full damage from Dow."

The testimony during a federal hearing on the Consumers'-owned nuclear plant indicated the potential legal battle is the only reason Dow reaffirmed its commitment to obtain steam from the plant.

Temple himself recommended to the corporate board of directors the company abandon nuclear power because he concluded it would be disadvantageous to Dow, the Michigan Division and its employees.

His conclusion is still the position of the Michigan division, Temple testified, and no one from Dow U.S.A. has disagreed with him.

However, he said corporate board of director Paul F. Orefice, also president of Dow U.S.A., decided the company would honor its contract for steam from the plant after two meetings with Consumers officials, when the lawsuits were threatened.

The company also conducted a vast review of the nuclear project, assessing impact of Dow's abandonment on the

Midland community, Consumers, nuclear power in Michigan and the U.S., and the national energy program.

Even the corporate stand is not firm, according to Temple's written testimony, which stated the nuclear plant is under continuous review by the company and "Dow will continue to keep all of its options open."

Temple said the company is now "actively considering" several alternative power sources including a new power plant at the Michigan division.

If the nuclear plant cannot provide a reliable supply of steam by 1984, Temple said, "we feel we have been discharged of our obligations" to Consumers.

The two parties currently are renegotiating a contract for the steam. Consumers claims Dow is bound by a 1974 contract pending the negotiations.

But Temple said Aymond told Dow officials they could get out of the contract in 1984 unless Dow's abandonment would jeopardize the nuclear plant's

construction license.

Dow's problem is that its aging fossil fuel plants, which now provide the Michigan division with power, will not operate past 1984.

Added to the burden is an upcoming hearing with the Michigan Air Pollution Commission (MAPC), in which the company must indicate how it will comply with air quality standards by 1980.

Temple said the MAPC has allowed delays in the company's solving the air quality problem caused by the old power plants, because of its plan to switch to nuclear power in 1982.

But the date is too uncertain, Temple believes. "We have been promised a lot of other things, (by Consumers) and it has slipped and slipped and slipped."

Temple called his conclusion that the nuclear plant "is not going to be a good deal for Dow" one of the most difficult decisions of his career.

Under questions by Intervenor attorney Myron Cherry, Temple said the decision was based on several factors:

- The substantial increases in cost of the plant, from \$256 million to \$1.67 billion, since construction began.

- Numerous delays which pushed back the start-up date of the plant from 1974-75 to 1982.

- Consumers' ability to finance construction of the plant which "is questionable in our minds."

- Skyrocketing costs of nuclear fuel.

- His assessment that the level of confidence of Consumers is "quite low."

- Dow's concern of becoming totally dependent on Consumers for process steam.

During Wednesday's cross examination, words flew among attorneys, who were reprimanded by the presiding Atomic Safety and Licensing Board (ASLB) several times.

Cherry announced he plans to call several more witnesses including Orefice, Aymond, Consumers executive vice president Russell C. Youngdahl,

and several Dow corporate officers who were aware Temple's confidential memo.

The Chicago attorney, who represents the Saginaw Intervenor in the proceedings, said he planned to question the men about factors that led to Orefice's rejection of Temple's recommendation.

Temple's testimony was given during the second day of hearings held at the Holiday Inn.

The hearing was scheduled following a U.S. Court of Appeals ruling that the Atomic Energy Commission (AEC), predecessor of the Nuclear Regulatory Commission (NRC) did not properly investigate full impact of nuclear plant construction in Midland.

The basic issue is whether complete consideration was given to nuclear alternatives and whether the plant will be needed with recent emphasis on energy conservation, according to an NRC spokesman.

KASLaris, Michigan Avenue

Manufacturer/AMCrockett, Parnall Road

March 16, 1972

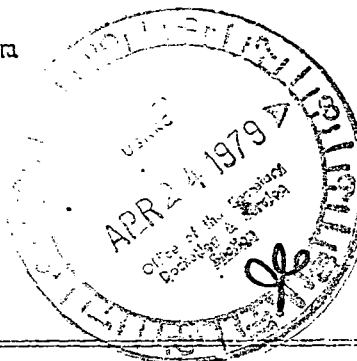
Palisades Waste Gas System

Exhibit 3
CONSUMERS
POWER
Company



INTERNAL CORRESPONDENCE

cc
LH Hausler, Covert
GS Keeley, Michigan Avenue
RC Bauman, Michigan Avenue
JR Schaub, Michigan Avenue



In reference to your letter to Bechtel Corporation dated March 9, 1972, Operations Department takes serious exception to two points which we have not been able to reconcile in a meeting with R. C. Bauman and J. R. Schaub.

The item on the waste gas decay tank inlet and outlet valves states that neither a second isolation valve nor a test connection and valve are necessary. We feel they are necessary for the following reasons:

1. We believe these valves will only be accessible during refueling shutdowns due to radiation from gas stored in the adjacent tanks. Therefore, a second valve is necessary as a backup to insure a reliable method of isolation will be available from refueling to refueling.
2. Leakage through certain valves in the system is intolerable; in the case of the outlet valves, the result would be leakage out the stack (CV-1123, located downstream, is not a gas-tight valve). In the case of the inlet valves, leakage during maintenance of relief valves (which has been a frequent maintenance item in the past) would result in leakage from the high-pressure part of the system to atmosphere.
3. It is necessary to have some means of detecting leakage from the system to the environment before significant amounts of gas have been lost. Leakage to atmosphere can be detected by bubble tests. But leakage through valves can only be detected by a test connection. Observing pressure decay is not an acceptable method because, by the time the pressure drop is large enough to be observed, too much gas has been lost. Total gas loss in both surge tank and decay tanks must be less than 4% to insure compliance with Appendix I limits on rare gases.

The second disputed item is Number 25 on the need for a charcoal filter for F-58. In the event that it becomes necessary to bypass the decay tanks due to compressor malfunction, which is allowed by the Tech Specs for up to seven days, we will exceed the proposed Appendix I limits for I-131 by a factor of 1000 simply by tripping down the primary system drain tank with 0.1% failed fuel. Operations requests that this charcoal filter be added.

TO: RLHaueter, P. Hall Rd
FROM: KASwartz, Michigan Ave

DATE: March 22, 1972

Subject: Palisades Plant
Waste Gas System

INTERNAL CORRESPONDENCE

- Reference 1) CPCo letter to Bechtel dated 3/9/72
2) RLHauster memo to KASwatts dated 3/16/72

CC - 1

RCBauman, Michigan Ave
AKCrockett, Parnall Rd
~~W. Gausler, Site~~

GSKeeley, Michigan Ave
GBMatheny, Michigan Ave
JRSchaub, Michigan Ave

Two areas of concern are still unsettled as noted in your memo of March 16, 1972. They are:

- 1) Whether or not two valves and a test connection should be added to the inlet and outlet of the gas decay tanks; and
- 2) Whether or not the filter from the gas decay tanks (F-58) should be changed to the charcoal variety.

We feel that the additional valves and test connection are not needed for the following reasons:

- 1) The cost of \$10,000 - \$20,000 is prohibitive;
- 2) The present valves will be replaced by air tight valves which will leak with such a slow frequency that two valves are not justified;
- 3) If it is postulated that the first valve would leak, the proper solution would be to replace the valve with a better valve, not add another leaky valve;
- 4) Three new tanks will be added so that one could easily divert the gas from a leaking tank and then keep the leaking tank out of service until the next refueling period;
- 5) There are backup valves downstream of the outlet valves presently;

- 6) Leakage will be detectable by RE-1113 before any limits are even approached; *Not true! Present installation includes a GM tube sees only down to $\sim 10^{-4}$ uCi/cc*
- 7) The relief valves are being fixed so that they will not leak, thus, any potential leakage through the tank inlet will only recirculate in the system not go to the atmosphere; *double check this item!*

This is what it does now - all igniting
is all the tanks pressuring together.

Rollimeter, Parnall
Palisades Plant
Waste Gas System
March 22, 1972

No; future will be 100

We are also operating by Tech Spec which says we will hold for 7 days

- 8) According to Table 11-4 of the FSAR, if all the gas is released with no holdup, the present Part 20 limits would be exceeded by 2.04. Recognizing that Appendix I will increase the limits by a factor of (50), that 1% failed fuel is 10 times too high (.1%), and that the source terms and diffusion terms amount to another factor of 10 conservatism, then the entire tank could be released without holdup and still meet Appendix I

not true for this situation

$$0.04 \times 50 \times \frac{1}{10} \times \frac{1}{10} \approx 1.00 = 10$$

Thus a great deal of gas would have to be released before any limits are exceeded so that the leaking tank could easily be taken out of commission before any problem evolved;

This statement is really aw... the issue. I have that my... ble Engineering would not use... argument to... their position

The point is that it is an everyday occurrence

- 9) The loss of gas from this system is an abnormal case that should not be designed for as an everyday occurrence;

That was the basis of the current design. However it is an everyday occurrence

- 10) It appears that a recombiner might be added to the system which will allow for more excess tank space so that a tank could easily be disconnected from the system;

- 11) If one postulates that a tank will leak, the double valve test connection has only a small probability of determining the source of leakage since there are other points that could be leaking;

- 12) The inlet valves will be double valves as discussed by Jim Shepards.

I thought... said they were not going to... This is... valve is a temporary stopgap measure

Although we do not agree with the above valve addition, we would not object to the Plant installing such a system in the future.

and F52?

We feel that F-58 should not be changed to a charcoal filter for the following reasons:

- 1) The Plant is presently experiencing a water problem with F-58 that should be resolved before any other changes are made;

This has nothing to do with the need for a charcoal filter!

I'll believe it when I see it.

- 2) A third compressor is being added to the system to increase its reliability so that the decay tanks will not be bypassed;

- 3) In the event the tanks are bypassed, we would be experiencing an abnormal or accident condition which is discussed as accident 3 of the environmental report. We do not wish to design for potential trivial accidents;

Are they serious?

Then design so... It would also help to change Tech Spec... are not so tightly bound to the...
...and we don't have trivial accidents...
...are not so tightly bound to the...

4) If the tanks were bypassed, the amount of iodine that would be released is very questionable. Experience and most calculations indicate that essentially no iodine would be released;

(what experience)
Already we are
reporting I disch
out of the stack
conc of $\sim 10^{12}$

5) The eventual outcome of Appendix I iodine limits are questionable and hopefully will be reduced from the present suggestions; Don't count on it!

6) Even if Appendix I is upheld as is, and we then bypass the tanks, it is questionable that a charcoal filter will be a mandatory requirement on all plants; for normal operations. They may be required for accident conditions which is what people do not wish to design and accordingly backfit to potential future regulations;

the original reg's

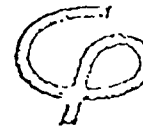
8) If it becomes mandatory in the future to install a charcoal filter in place of F-58, we will then re-evaluate our position.

There are other plants which are having to install these charcoal filters.
It seems to me that we had better get the engineering done on this so that backfitting time will be cut to a minimum.

If Consumers Power Company is the responsible Company it claims to be, I do not see how they could, in any way, defend the contents of this memo!

Melvin N. Taie
Palisades Plant Health Physicist

To *APPCWILL*
FROM R. L. Hausler *RLH*
DATE April 10, 1972
SUBJECT Waste Gas Systems
Palisades Plant
File 3900



Consumers
Power
Company

INTERNAL CORRESPONDENCE

CC R. L. Haueter
J. M. Simpson

Attached for your information is a copy of the recent memo from K.A. Swarts to R.L. Haueter on the Gas Waste System with plant staff comments.*

You must be aware of the fact that although our license states we will hold up all radioactive gases for a minimum period of 7 days we have in fact not been able to meet this requirement to date. **

Compliance will certainly bore in on this area in the near future with as a minimum a slap on the wrist citation for the record.

We are in deep trouble and the sooner engineering and Bechtel admits it the sooner we can find a solution.

* = Exhibit 2

** This the opposite of what they told the AEC; see page 2 of Exhibit 4.



Palisades
Power
Company

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

January 26, 1973

Mr. Boyce H. Grier
United States Atomic Energy
Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Re: Docket No 50-255
License No DPR-20

Dear Mr. Grier:

Your letter of December 21, 1972 stated that the Palisades Plant was in noncompliance with AEC requirements; namely, that gaseous waste may have been discharged directly to the stack for a period of several months which exceeds the allowable time for discharge of the waste gas surge tank directly to the stack. This letter will apprise you of the action that has been taken to improve the waste gas system performance such that the requirements of Article 3.9.17 of the Technical Specifications can consistently be adhered to.

During the early operation of the Palisades Plant (January and February 1972), evaluation of the performance of the waste gas system was difficult because of excessive gas collection from systems requiring the use of cover gases as well as gas collection from the many plant start-ups and shutdowns. During this time, it was difficult to achieve the required seven-day holdup time in the decay tanks and, in addition, it was suspected that the decay tank relief valves were leaking. The relief valve installation was modified to provide ease of maintenance and the relief valves were reset and lapped. Also during this period, the excessive gas collection problem was reduced somewhat. Following the work on the relief valves, it was concluded that leakage still existed from the decay tanks. In April 1972, all nine decay tank isolation valves were removed, reworked and re-installed in an attempt to stop the leakage. During May and June 1972, valve packings were continuously being reworked to prevent leakage. Gas collection rates were still excessive, but not as great as experienced early in the year. Even so, radioactive gas collection only represented an estimated 20% of the gases we were trying to hold up. The total gaseous activity released during the first half of 1972 was very low.

JAN 30 1973

Mr. Boyce H. Gr...
January 26, 1973

By July, valve leakage problems were again beginning to reduce holdup times. Continuous valve maintenance made no significant improvements in decay tank holdup performance. "H" stamp diaphragm valves were placed on order to replace the presently installed inlet, outlet and drain valves on each of the three decay tanks; however, due to the "H" stamp, delivery is not expected until February of 1973. During August and September 1972, the excessive gas collection rate problems were overcome; however, leakage from the decay tanks became worse with valve usage. In October 1972, a second valve was added on the inlet, outlet and drain lines to the decay tanks, which resulted in improved system performance. The system leakage tended to increase with time and usage of these valves.

During December 1972, seven valves of a type used in natural gas systems were acquired and installed. This has minimized the gas leakage to a point where the waste gas system is operating fully in accordance with Technical Specification requirements. At the first opportunity following receipt of the diaphragm type valves, they will be installed. This will provide additional reliability with respect to decay tank holdup times.

In summary, waste gas system performance was marginal throughout most of 1972. There were instances when decay tanks have not been held up for the required seven days due to leakage; however, the majority of the time, the seven-day holdup requirement has been achieved. In addition, we have never deliberately bypassed the decay tanks to discharge directly to the stack for a period of greater than seven days. Throughout 1972, the activities of gases released have always been low and well within release limits.

It is significant to note that there were originally nine valves associated directly with the decay tanks. The efforts to reduce the leakage rates of gases from the tanks have resulted in 16 additional valves being installed. We are confident that these efforts have improved the waste gas system such that it will allow full compliance with all Technical Specification requirements.

Yours very truly,



RBS/dmb

Ralph B. Sowell
Nuclear Licensing Administrator

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

CONSUMERS POWER COMPANY)

(Palisades Nuclear Plant))
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Docket No.(s) 50-255SP

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document(s) upon each person designated on the official service list compiled by the Office of the Secretary of the Commission in this proceeding in accordance with the requirements of Section 2.712 of 10 CFR Part 2 - Rules of Practice, of the Nuclear Regulatory Commission's Rules and Regulations.

Dated at Washington, D.C. this

24th day of April 1979.

Peggy T. Dawkins
Office of the Secretary of the Commission

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
CONSUMERS POWER COMPANY)	Docket No.(s) 50-255SP
)	
(Palisades Nuclear Plant))	
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