



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

GAP file

DEC 14 1982

Government Accountability Project
Institute for Policy Studies
ATTN: Ms. Billie P. Garde
Director
Citizens Clinic for
Accountable Government
1901 Que Street, NW
Washington, D. C. 20009

Dear Ms. Garde:

Thank you for your letters dated October 22, 1982 and November 11, 1982 addressed to Mr. Denton and me, conveying the Government Accountability Project's views on quality assurance matters and the third party assessment at the Midland Nuclear Power Station. We are considering your comments and concerns.

There have been two public meetings on the independent review program, one held October 25, 1982, and the second on November 5, 1982.

After the October 25 meeting Mr. Eisenhut and I informed Mr. James Cook of Consumers Power Company by telephone that our preliminary thoughts were that the following elements were necessary, but may not be sufficient, to accomplish an adequate overall review of QA matters:

1. The third party design review, which focused on the auxiliary feedwater system (proposed by TERA Corporation), should be broadened by including one or two additional safety systems and that the reviews should encompass an evaluation of the actual system installation (i.e., construction). In addition, consideration should be given to perhaps expanding the program for confirming construction quality.
2. The INPO and biennial QA audits are not an acceptable substitute for the third party review. While these activities do have merit, they do not fulfill the total needs we have identified.
3. Questions were raised concerning whether Management Analysis Company was sufficiently independent to assume lead responsibility for the independent review.

Regarding the ability of the Stone and Webster personnel to perform the third party independent review of the remedial soils work, the final decision will be made in the near future.

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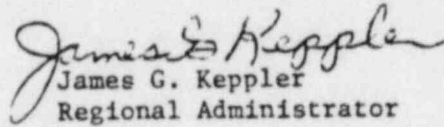
The remainder of the independent review effort is still under consideration. We intend to hold a public meeting, probably in Midland, regarding the independent review programs at the Midland site, but the date has not yet been scheduled.

You requested a series of documents in the November 11, 1982 letter. None of these are in the NRC's possession, although they would be available for our review at the plant site or corporate offices. You may wish to request access to the documents from Consumers Power.

I also understand from my staff that you have indicated to them that the Government Accountability Project has additional affidavits concerning construction activities at the Midland site. If you do have further information, I would hope that you would forward it to us promptly so that we may include it in our investigation of the affidavits you previously submitted.

I can assure you that the NRC shares your concern that any third party at Midland be both independent and competent. We also must be careful that we, the NRC, do not intrude into the review process ourselves and thus compromise its independence. We will, however, provide sufficient direction to assure the thoroughness and objectivity of the review.

Sincerely,


James G. Keppler
Regional Administrator

GOVERNMENT ACCOUNTABILITY PROJECT

Institute for Policy Studies

1901 Que Street, N.W., Washington, D.C. 20009

(202) 234-9382

October 22, 1982

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. J.G. Keppler
Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

RE: Midland Nuclear Power Plant, Units I & II
-Consumers Power Company Quality Assurance
Program Implementation for Soils Remedial Work
-Consumers Power Company Midland Plant Independent Review
Program

This letter provides additional comments to the current negotiations between the Nuclear Regulatory Commission ("NRC") and Consumers Power Company ("CPCo") regarding two major areas of concern to local citizens and our own staff:

- 1) soils remedial construction; and
- 2) Independent Review Program.

On behalf of those former employees, local citizens and the Lone Tree Council, the Government Accountability Project ("GAP") reviewed the various proposals submitted by the licensee of an independent review program as well as their description of the independent soils assessment program. Our questions and comments about both programs are outlined below. We appreciate the opportunity to provide this information.

Based on our review of the licensee proposals, we are asking the NRC to not approve the independent audit proposal in its present form. Further, we request on behalf of the local residents that live and work around the plant that the details of the independent contract be finalized in a series of public meetings--one in Jackson, Michigan (the corporate home of CPCo) and one in Midland, Michigan (the plant site). Further, we ask that the public comment offered at these two meetings, as well as this letter, be included in the analysis of CPCo's proposal.

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This request is consistent with Mr. Keppler's stated intention to invite public comment surrounding Midland's problems; and also in line with Region III policy surrounding the Zack controversy at LaSalle, which allowed several public participants to comment and suggest improvements in the independent audit of the Heating, Ventilating and Air Conditioning ("HVAC") equipment imposed on Commonwealth Edison by the NRC.

As you know, it is the position of our project that the only avenue to restore public confidence in a nuclear power plant that has suffered from extreme loss of credibility is to offer the public the opportunity to participate in the decision-making process. This is particularly applicable to the situation at the Midland plant.

Clearly the utility and the regulators are aware of the substantial problems that have occurred in building the Midland plant. Indeed, it is the history of these problems that have led to this meeting in the first place. Yet, apparently there has been little desire to tackle the real issue of corporate negligence in the construction of this plant.

Background

The Government Accountability Project is a project of the Institute for Policy Studies. It is a national public interest organization that assists individuals, often called "whistleblowers," who expose waste, fraud or abuse in the federal workplace; or safety and health hazards within communities through GAP's Citizen's Clinic for Accountable Government. As an organization dedicated to protecting individuals who have the courage to bring information forward on behalf of their fellow citizens GAP has had a close working relation with various Congressional and Senatorial committees, government agencies and other public interest organizations.

In recent years GAP has been approached by a growing number of nuclear witnesses from various nuclear power plants under construction. In keeping with its objectives the GAP Whistleblower Review Panel and the Citizens Clinic Review Panel have directed the staff to pursue aggressively the complaints and problems that nuclear workers bring forward. Our first case involving a nuclear witness began when we were approached by a Mr. Thomas Applegate about serious problems at the William H. Zimmer Nuclear Power Station near Cincinnati Ohio. As you are aware Mr. Applegate's allegations and the subsequent investigations, reinvestigations, Congressional inquiries, and intense public scrutiny have revealed the Mr. Applegate exposed only the tip of the iceberg of problems. Zimmer was recently described in the Cleveland Plain Dealer as "the worst nuclear construction project in the midwest, possibly the country...." (October 3, 1982.)*

*This article also referred to the Midland Plant. Mr. John Sinclair, an NRC inspector, responded to the question of whether there are other "Zimmers" around the country by stating that Zimmer's problems "were similar to those found at [Midland]."

Following the GAP staff work at Zimmer we received a request from the Lone Tree Council of the Tri-City Michigan area to pursue worker allegations of major problems at the Midland Nuclear Power Plant in Midland, Michigan. Our preliminary investigation resulted in six affidavits being filed with the Nuclear Regulatory Commission on June 29, 1982. Since then we have filed an additional four affidavits resulting from the HVAC quality assurance breakdown revelations. We are also preparing an expanded affidavit of one of our original witnesses, Mr. E. Earl Kent, of serious welding construction problems at the Midland site. Other worker allegations-ranging from security system breakdowns to worker safety problems have come to our attention at an alarming rate.

The Citizens Clinic Review Panel a panel of seven respected individuals, met recently to review the status of Clinic cases. It was their unanimous recommendation to begin a thorough and aggressive probe of Midland's problems. We look forward to beginning that probe shortly. Unfortunately our previous experience at Zimmer and LaSalle has given us a good idea of what to look for and what we will find.

I. SOILS REMEDIAL WORK

The 1980/81 SALP Report, issued April 20, 1982 gave CPCo a Category 3 rating in soils and foundations.

A Category 3 rating, according to the SALP criteria states:

Both NRC and licensee attention should be increased... weaknesses are evident; licensee resources appear to be strained or not effectively used such that minimally satisfactory performance with respect to operational safety or construction is being achieved.

Clearly this rating, the lowest rating that can be given was deserved by the licensee. Although the soils settlement problems have resulted in the most serious construction problems that CPCo has faced, the SALP report points out in its analysis:

In spite of this attention, every inspection involving regional based inspectors and addressing soils settlement issues has resulted in at least one significant item of non-compliance. (p. 9)

This trend continues to the present date. As recently as May 20, 1982, Mr. R.B. Landsman the soils specialist of the Region III Midland Special Team discovered significant differences between the as-built condition of the plant in relation to the soils remedial work and the approved April 30, 1982 ASLB order.

Although Mr. Landsman had no quarrel with the technical aspects of the excavation in question he had a significant disagreement with the licensee's failure to notify NRR of their plans. He aptly captured the essence of the problem in his August 24, 1982 memo to Mr. W.D. Shafer, Chief of the Midland Section:

Since the licensee usually does not know what is in the ground or where it is, as usual the 22 foot duct bank was found at approximately 35 feet. It also was not in the right location. . . in addition, . . . they inadvertently drilled into the duct bank. . . .

On August 20, 1982 Mr. Keppler requested the Office of Investigations to investigate two instances of apparent violation of the April 30, 1982 ASLB Order.

This latest experience with the licensee's failure to comply with NRC requirements is indicative of the reasons that the Advisory Committee on Reactor Safeguards, in a letter to NRC Chairman Nunzio Palladino, deferred its approval of full power operation of the Midland plant until an audit of the plant's quality. This QA program audit is to include electrical, control, and mechanical systems as well as underground piping and foundations.

Now CPCo is again asking for "another chance" to get its corporate act together. They offer to institute a series of steps to "enhance the implementation of the quality program with regard to the soils remedial work" (Letter to Mr. Harold Denton from Mr. James Cook, September 17, 1982, p. 2.) Unfortunately, as pointed out below, the program on soils remedial work leaves much to be desired if public confidence is to be restored in the ultimate safety of the Midland plant.

A. Consumers Power Company Retention of Stone & Webster as a Third Party to Independently Assess the Implementation of the Auxillary Building Underpinning Work

Based on a careful investigation of Stone & Webster's ("S&W") performance in the nuclear power industry this decision, already made, may unfortunately for the licensee prove to be as disastrous as the pre-load operation of several years ago.

Our assessment is based on information obtained from the NRC Public Documents Room, private audits of S&W's performance on nuclear projects, legal briefs from intervenors, NRC "Notice of Violation" reports, public source information, and interviews with intervenors, engineers, as well as current and former employees of the NRC familiar with S&W's work.

1. History

S&W has been the chief contractor and architect/engineer at eight plants now operating, and for six plants presently under construction. In reviewing numerous documents concerning two nuclear plants now under construction at which S&W was, or still is, the Project Manager and chief architect/engineer, this investigation has documented S&W's reputation for massive cost overruns at its nuclear construction sites, major problems with Quality Control and construction management, and significant design errors at a number of these plants. The Shoreham plant on Long Island, N.Y., and the Nine Mile 2 plant near Syracuse, N.Y., are both infamous nuclear boondoggles constructed by S&W.

a) Nine Mile 2

The Nine Mile 2 plant has been described as a "disaster area." Cost overruns have gone from an original 360 million to 3.7 billion dollars, and the NRC has cited the plant for numerous violations. According to an article in the Syracuse Post-Standard newspaper (May 17, 1982), "Nearly everything that can go wrong with a major construction project has beset Nine Mile 2."

In 1980 Niagara Mohawk, the utility which is building the plant, hired the firm of Black and Veatch Consulting Engineers to conduct an "independent assessment" of the management systems, costs, and work accomplished at the Nine Mile 2 plant. The final Project Evaluation Report (September 1980) was extremely critical of S&W's performance, describing their work as "poor," "lacking" and "confused." The evaluation found 127 problem areas at the plant. Below is a list of some of the problems S&W were explicitly cited for:

- * Failure to effectively implement the Quality Control program.
- * Significant overruns against budget.
- * Ineffective Project Management Reports.
- * Inadequate management control of engineering work.
- * Engineering Management System was "never properly implemented on the Unit 2 project."
- * "Key components of good cost control are not present.
- * Inadequate "problem identification, impact analysis, and descriptions of corrective action plans."
- * Failure to keep abreast of regulatory changes.

- * Drawings used for construction based on unapproved documents.
- * Inadequate construction pro-planning/constructability review.
- * Inaccuracies in the engineering and procurement status which have diminished user confidence in existing reports.

Many of the conditions cited in this audit have not been improved. According to a May 17, 1982 inspection letter from the NRC, S&W has failed to remedy these identified problems:

There is a significant problem in the timeliness of corrective action resulting from S&W responses to Niagara Mohawk audit findings. Determination of corrective action to be taken is repeatedly delayed due to either belated answers by S&W and/or inadequate responses by S&W. NMPC Quality Assurance Management has been unable to correct the problem.

On top of these problems, the NRC cited S&W, in the May 17, 1982 letter, for "significant" nonconformances with NRC regulations. One major problem was found in S&W's philosophy on QC. Instead of analyzing problems to find their causes, S&W would just put the identified mistake into "technical acceptability." According to the NRC, this caused a repetition of problems:

The lack of identification and correction of the root cause of the nonconformance has led to numerous nonconformances being written in a short period of time involving the same functional area. . . .

The QC program was also cited for its lack of training and its high personnel turnover.

S&W also failed to properly oversee subcontractors at Nine Mile 2. For example, over 300 bad welds were identified as made by one sub-contractor. These faulty welds were discovered after S&W inspectors had certified that they met construction standards. (Post-Standard, May 19, 1982.)

b) Shoreham

S&W was the Project Manager and chief architect/engineer at Shoreham. In September 1977 the Long Island Lighting Company ("LILCo"), the utility which is building the Shoreham plant, removed S&W as Project Manager. Although initially denied, LILCo reports obtained by intervenors in discovery, have documented LILCo's dissatisfaction with S&W--dissatisfaction which led to their termination.

In an April 1977 report (Shoreham Nuclear Power Station Schedule and Construction Management Evaluation), prepared by LILCo's Project Manager and other LILCo engineers, S&W was criticized and the utility was urged to terminate their services. Examples of S&W's unsatisfactory performance outline in this report were:

- * Design problems.
- * Inaccurate monitoring and controlling systems.
- * Unnecessary and redundant procedures.
- * Responsibility for cost overruns.

Other LILCo documents charged:

- * Failure to produce or meet work schedules.
- * Inability to adequately define urgent needs.
- * Poor physical work documents.

Shoreham, described by the New York State Public Service Commission as "seriously deficient," has suffered from cost overruns which will make the electricity produced at the plant the most costly of any nuclear plant in the country. The overrun has been from 265 million to 2.49 billion dollars.

S&W was also at fault with Shoreham's largest design error. The reactor size which was originally planned for Shoreham was increased, but S&W failed to make adjustments and increases in the size of the reactor building. According to Newsday, this error had led to costly design problems and changes, and cramped work space within the reactor building.

Shoreham has also been cited by the NRC for numerous violations. Between 1975 and 1981 the Commission cited Shoreham for 46 violations. For example, S&W was cited for repeatedly failing to have electrical cables installed correctly, and for allowing dirt in sensitive areas.

2. Problems Found in S&W Operating Reactors

Most serious for the Midland plant was our discovery of S&W's work at the North Anna Plant.

a) North Anna

According to a Washington Star article (May 5, 1978), the North Anna plant has suffered from serious design problems regarding soils settlement. A pumphouse, designed to funnel cooling water into the

reactor in event of a nuclear emergency, "settled" into the ground at a much higher rate than planned. In only six years the pump-house sunk more than 79% of the amount planned for its forty year life expectancy. This settlement caused "cracks in nearby walls and forced accordion-like pleats to be added to nearby pipes." According to the Star, this soils problem could lead to the plant's premature closing.

Other mechanical malfunctions have also been reported at North Anna. For example, a malfunction in a steam pump and turbine contributed to a "negligible" overexposure of five plant workers to radiation, and the release of contaminated gas. (Washington Post, September 27, 1979.)

It is incredulous to us that the NRC could allow S&W, a construction firm that has caused untold amounts in cost overruns, shut-down damaged plants and lengthy lists of NRC violations to be transformed into an independent party, capable of enough internal reform to audit the work of the Bechtel construction of the Midland plant.

Further, S&W committed a serious design error in the vital cooling system's pipe design. This error potentially rendered the pipes exposed to failure in the event of even a minor earthquake, and could have created a major nuclear accident. Upon discovery of the error, the NRC ordered all five plants temporarily closed for investigation and repair. (Excerpt from the Public Meeting Briefing on Seismic Design Capability of Operating Reactors, NRC, June 28 1979.)

When the NRC entered these plants to inspect the pipes, they found additional problems. According to the NRC document Surry I, Beaver Valley and FitzPatrick all suffered from "significant differences between original design and the 'as built' conditions...." For example, Surry I had the following problems: "mislocated supports, wrong support type, and different pipe geometry."

b) Other plants

All of the other operating nuclear plants investigated reported numerous problems. For example, in 1981 a faulty weld at the Beaver Valley plant caused a "minor leakage" of radioactivity into the local environment. Within one year after the Maine Yankee was turned on in 1972, 58 "malfunctions" were reported, including leaks in the cooling water systems. A review of the NRC report--Licensed Operating Reactors Status Report--of May 1982 revealed that all S&W plants were operating at an operating history of below 80% of the industry goal. Beaver Valley, for example, had a lifetime operating history of only 30%.

3. Stone & Webster Corporate Attitude

Our review of S&W's past attempts at constructing nuclear power plants prevents us from being convinced of anything but a future that is a dismal repeat of the past.

This fear was confirmed by an article written by the Chairman and Chief Executive Office of Stone and Webster, Mr. William T. Allen, Jr. in the Public Utilities Fortnightly, May 13, 1982, entitled "Much of the Anxiety about Nuclear Power Is Needless."

In this article Mr. Allen displays a critical disregard and disrespect for the regulatory system that this nation has mandated to protect its citizens from the corporate instincts of profit and survival. His dialogue begins by labeling the public as apathetic about energy needs. He wishfully hypothesizes a 12% boost of electrical demand for a single year when the economy recovers.

Mr. Allen moves quickly to his conclusion that the energy needs of the future can be met with only coal and nuclear power, but his real point is made when he calls for the "necessary institutional adjustments to revitalize the nuclear industry." Mr. Allen's view of the revitalization is a chilling indication of his companies commitment to safety. This excerpt is most revealing:

[W]e are working, along with others in the industry, in support of those activities which we hope will restore nuclear power to a state of robust health. In that connection, one specific effort we have undertaken within Stone & Webster is the consolidation and analysis of recent data pertaining to the amount of radiation which possibly would be released to the environment in the event of an accident in a nuclear power plant. . . . [B]ased on information our people have assembled it now is becoming clear to the scientific and engineering communities that criteria established years ago, but still in use today, are incredibly and needlessly conservative."

This quoted paragraph captures Mr. Allen's observations although he goes on to attempt to convince his "apathetic public" that the three basic components in the source term (the quantity of radioactivity postulated to be available for leakage from the reactor containment into the environment) are needlessly conservative. The arguments into the size of a "safe dose of radiiodine" contradict all other literature we have reviewed on the subject. Mr. Allen's attempts to allay the fears of the public about nuclear power have only increased the fears that GAP has about its allegedly independent audit of the soils work.

If Mr. Allen's corporation believe s the regulations over nuclear power are needlessly conservative, and he is not concerned with the

levels of radiiodine, I find it difficult to believe he will approach the Midland Auxillary Building with the attitude it will take to produce any replica of a safe nuclear facility.

As a result of our investigation, and our well-known support for independent audits of nuclear construction projects, it is impossible for GAP to accept the S&W review of the soils work under the Auxillary Building as anything more than another licensee "rubber stamp."

B. Recommendations

It is the recommendation of the Government Accountability Project that certain minimum requirements be used by the NRC in determining the acceptability of independent audit charters. Further we recommend that the Midland public meeting (infra, at 15) include a presentation of the charters, and the availability of the auditors for public questioning into the understanding of this contract responsibility. These charters should include the following:

- 1) The independent contractor should be responsible directly to the NRC, Submitting all interim and final product simultaneously with CPCo and the NRC.

This is somewhat different from the proposal explained in the CPCo letters, which suggests that all reports would first be processed through the licensee.

- 2) The independent contractor should do a historical assessment of CPCo's prior work, including a frank report of the causes of the soils settlement problem.

This suggestion from the ACRS July 9, 1982 letter, is particularly appropriate to get on the public record.

- 3) The charter should ensure that, once hired, CPCo cannot dismiss the independent contractor from the project without prior notice to the NRC and a NRC-sponsored public meeting to justify the decision.

Further, the NRC should make it clear that the licensing conditions will not be met for Midland if the NRC does not approve of any such dismissal. Although CPCo is hiring and paying several auditors, their credibility in the eyes of the public will be voided without a truly independent accountability structure. Otherwise the entire exercise is little better than an expensive public relations gimmick.

- 4) The charter should require that each auditor, at least 5 already identified, sub-contract any services for which its

direct personnel are not qualified.

Proof of qualifications should be provided for every task in the Midland contracts.

- 5) The charter should require that the proposed methodology be disclosed; specifically selection criteria and size of the samples for inspections and testing.

This is particularly critical with the proposed audits of the historical quality assurance breakdown. It is impossible to have any confidence in the results of an independent inspection and testing program if the selection criteria and size of the sample are a mystery.

- 6) The charter should require the auditors to provide calculations demonstrating that it is possible to adequately complete its work during the proposed timeframe.

This is particularly important at the Midland site where "rush jobs" are all too common under the pressure of the 1984 deadline.

- 7) The charter should require the auditors to support its proposed methodology through references to established professional codes (ASIM, ASME, ANSI, AWS, etc.).

This will insure that the methodology is a product of professional standards, rather than CPCo's timetable for operations. This is particularly important in the light of recent disclosures putting the Bechtel codes in opposition to the AWS codes.

- 8) The charter's should require all auditors to report all safety-related information directly to the NRC.

CPCo's own judgment in determining when to inform the NRC, and about what, is highly suspect. Only with stringent guidelines for an independent auditor is there any hope for public trust in the work performed on CPCo's payroll.

- 9) The employees and auditors should demonstrate that the personnel assigned to the project are free from conflicts of interest.

In the October 5 letter, CPCo references the conflict of interest points presented in a February 1, 1982 letter from NRC Chairman Nunzio Pallidino to Representative John Dingell. These five points should apply to all employees of the audit teams. It is insufficient for the company to be free of conflicts of interest if the key fact finders and decision-makers are not.

It seems only reasonable that all auditors should guarantee and demonstrate the absence of any conflicts of interest on the organizational and individual levels. Insignificant conflicts should be fully disclosed and explained, subject to the NRC's approval.

- 10) The auditors must recommend corrective action, and then control its implementation.

If the independent auditors are not allowed to develop corrective actions the teams become a highly paid research department for the licensee. The NRC must receive the independent recommendations of the auditor teams prior to the finalizations of any licensee plan on any system. Without this final and critical step there will be no resolution of the key question--can Midland ever operate safely?

II. CONSUMERS POWER COMPANY INTEGRATION OF THE SCILS QA AND QA/QC FUNCTIONS UNDER THE DIRECTION OF MPQAD

This reorganization, putting CPCo in charge of the Quality Assurance/Quality Control program raises serious questions in our analysis. First, CPCo has consistently disregarded the importance of Quality Assurance/Quality Control in the past. Nothing in their historical performance or their recent past indicates that CPCo's MPQAD has the type of serious commitment to QA/QC that will produce meticulous attention to detail. Further, the experience that GAP's witnesses have had with MPQAD have been far from favorable. In fact, all of our witnesses (but one who resigned after refusing to approve faulty equipment) have tried in vain to get their in-house management to do something about their allegations. All of them were dismissed--the result of their efforts to ensure a safe nuclear plant.

Mr. Dean Darty, Mr. Terry Howard, Mrs. Sharon Morella, Mr. Mark Cions and Mr. Charles Grant have attested to the failure of the MPQAD. If the Zack experience has demonstrated nothing else, it has certainly left a clear warning to construction employees that committing the truth is not a virtue at the Midland site.

GAP's previous experience with nuclear construction projects that take total control of a QA program has firmly been negative. At Zimmer the switch from contractor to owner brought with it deliberate coverups instead of corporate bungling. We believe that based on CPCo's previous performance and attitude that it is unacceptable for CPCo to offer their MPQAD to be the new answer to an old problem.

In a September 30, 1982 Midland Daily News article, Mr. Wayne Shafer stated that the new move to put CPCo at the helm will give

them "first hand knowledge" of the problems with the Midland plant. Mr. Shafer has apparently mistaken Midland for Zimmer on a very serious point.

At Zimmer the owner, Cincinnati Gas and Electric Company, was fined \$200,000.00 in November 1981. They claimed that their main failure was to supervise their contractor, Kaiser, in the construction. At Midland there has never been a question of who is in control of the construction decisions. CPCo has consistently had some degree of involvement--usually substantial--with the history of problems on the site.

III. CONSUMERS POWER COMPANY HAS PROPOSED A SINGLE-POINT ACCOUNTABILITY SYSTEM TO ACCOMPLISH ALL WORK COVERED BY THE ASLB ORDER

Although none of the documentation defines what "single-point accountability" is, there is some hint through other comments from CPCo. In both the September 17, 1982 letter from Mr. Cook to Messrs. Keppler and Denton and several local newspapers, there is a specific reference to "good and dedicated" employees. Even Robert Warnick, acting director of the Office of Special Cases, stated in the September 30, 1982 Midland Daily News article, "Consumers to Take Responsibility for QC":

It'll only work if you've got good, strong people doing the job. I guess the proof of the pudding is in the performance.

We agree whole heartedly with Mr. Warnick. GAP has always maintained that the only way to make any regulatory system work effectively is to have strong, trustworthy individuals of high integrity. As a project GAP has watched many "good, strong people" attempt to do their jobs correctly, only to be scorned, fined and ostracized by corporations or bureaucracies that ignored their responsibility to the public.

Ironically, perhaps the strongest, most credible good person GAP has worked with recently was fired by Bechtel and CPCo from the Midland site--Mr. E. Earl Kent.

Mr. Kent's allegations were among those submitted on June 29, 1982 to the NRC. After GAP submitted his allegations to the NRC, Mr. Kent prepared his evidence and documentation for the anticipated visit by NRC investigators. Unfortunately the investigators never arrived. In mid-August, at Mr. Kent's own expense, he went to the Regional Office of the NRC to talk to the government officials charged with investigating his allegations. He wanted to insure that the investigators understood completely the detail and specifically of his claims about the problems at Midland. Further he

wanted to clarify that the NRC was aware of his knowledge about serious hardware problems at the two other sites. Mr. Kent was seriously disappointed in his reception.

Following the mid-August visit, GAP wrote a letter to Mr. James Keppler, Regional Director, emphasizing our concerns about Mr. Kent's visit. In the three months following the submission of Mr. Kent's claims--serious construction flaws--there remained no efforts on the part of the NRC, other than Mr. Kent's own, to begin to untangle the mystery of Bechtels' inadequate welding procedures.

Mr. Kent's personal life has been irrevocably harmed as he has waited patiently for his allegations to be substantiated by the nuclear regulators that he placed his trust in. He has been unemployed for nearly a year. His professional reputation hangs in the balance of an ongoing federal investigation. His financial condition has dropped daily. However, it was not until a few weeks ago that Mr. Kent gave up on the NRC. Like so many other good strong workers before him, Mr. Kent sincerely believed that the regulators would pursue his allegations made in defense of the public health and safety, instead he discovered an agency promoting the industry positions.

Last week WXYZ Television Station, in Detroit, the Los Angeles Times, the Wall Street Journal, the Detroit Free Press, numerous local stations in California and Michigan--both radio and television, and national wire services carried the details of Mr. Earl Kent's allegations.

In the wake of the public revelation of Mr. Kent's claims the NRC has finally acted. The Region III office, in a flurry of "catch-up work," finally sent the affidavit to the Region V office. Region V investigators met with Mr. Kent for a seven and a half hour session on October 15, 1982. . Unfortunately, the intent of their questioning raises extensive concerns among GAP staff who have worked with nuclear witnesses and the NRC before. In fact, one of the first comments made by one of the investigators was to inform Mr. Kent that his allegations were well-known now all over the United States, as "well as Russia."

The direction of the NRC's questioning was obvious to Mr. Kent. He remains unconvinced that there will be an aggressive investigation into the allegations he has been making for the past eighteen months. His concerns over serious structural flaws at three nuclear plants remain as real as when he risked--and lost--his career to bring them to the attention of his industry supervisors.

Mr. Kent is by far one of the most credible and honest individuals with whom GAP has had the opportunity to work. Our investigation

of his qualifications, professional experience, and contributions to the field of welding impressed us even more than his humility and integrity. I urge either or both of you to personally talk to Mr. Kent if there is any doubt about the allegations that he is making, or about the seriousness of the consequences if these problems that he has identified remain unresolved.

Mr. Warnick's statement about the "proof being in the pudding" seems hopelessly blinded as to the experience of nuclear witnesses at the Midland facility.

A single-point accountability system certainly depends on strong individuals, but with CPCo's reputation for swift and cruel disposition of those workers who point out problems, only a fool would allow himself to be placed in a position of single-point accountability ("SPA").

In order for this proposition to have any credibility GAP recommends that this critical QA/QC link be explained fully at the GAP-proposed meeting in Jackson, Michigan. Along with specific details of this SPA system, we would request that the individual or individuals who are to perform this function explain their personal approach to their position.

Along with the above, GAP recommends the following structural elements be included in this ombudsman program:

- 1) Final approval of the individual(s) should rest with the NRC in a courtesy agreement between CPCo and Region III.
- 2) The SPA officials should have at least one meeting with those public nuclear witnesses who do not believe their allegations have been resolved. This visit should include a site tour structured by the witness to satisfy himself/herself whether repairs have been made on the systems he/she raised questions about. No group of individuals is better prepared to or qualified to assist with identifying problems to be corrected than the witnesses themselves.
- 3) These SPA officials should have frequent (weekly) regularly scheduled meetings with the public to discuss the status of the repair work. These meetings should include an honest discussion of all problems encountered in construction. This "good faith" measure on the part of the utility would do much to recapture some of its lost credibility.

IV. UPGRADED TRAINING ACTIVITIES AND THE QUALITY IMPROVEMENT PROGRAM

The concepts incorporated into the proposals on upgraded retraining were largely positive steps forward. GAP's analysis specifically

approves of the extensive training efforts--including the test pit--to provide as much direct training for workers and quality control personnel involved in the massive work involved. Most specifically GAP appreciates the efforts to increase communication between "individual feedback."

We would like to have more specific information on the mechanisms within the Quality Improvement Program for feedback. Further, if these steps are deemed appropriate to the soils project it would seem only reasonable to incorporate them throughout the construction project. Our analysis of the QIP was limited by the lack of information and ^{we} look forward to receiving more detail before the final assessment.

GAP recommends that the training session that covers Federal Nuclear Regulations, the NRC Quality Programs in general and the Remedial Soils Quality Plan be expanded significantly and that the NRC review and comment on the training materials.

Further, that the NRC provide a summary of its intentions and expectations of workers-in soils remedial work as well as QA in general.

GAP also requests that Mr. Keppler conduct a personal visit to the site, similar to his visit to Zimmer, and talk to all the QA/QC employees as soon as possible.

V. INCREASED MANAGEMENT INVOLVEMENT

Finally we express reservations about the increased senior management involvement. While we recognize the intent of this commitment, we are concerned with the lack of corporate character demonstrated to date. It appears quite clear to us that there has been extensive senior management level direct participation to date. That involvement has been less than complimentary to CPCo. In recent months the "argumentative attitude" of CPCo officials have emerged in many forums:

- An August article in the Detroit News, in which President John Selby said he was tired of "subsidizing the public."
- The June and July public "red-baiting" of GAP for its work on behalf of citizens and former workers.
- The recent distribution of a flyer accusing a Detroit television station of "sensationalist and yellow journalism."
- The continuous attempts to influence and intimidate local reporters, editors and newspapers to print only biased accounts of the Midland story.

Although approving in principal of the weekly in depth reviews of all aspects of the construction project, we remain skeptical of this step doing anything to improve the Midland situation. Certainly it should not be confused with the independent audit recommendation of the ACRS, ASLB, and NRC staff.

VI. INPO EVALUATION

The answer to the mystery of Midland's problems is to be provided by an INPO evaluation conducted by qualified, independent contractors. This results from the June 8, 1982 ACRS report, and the July 9, 1982 NRC staff letter requesting such an assessment.

The proposal offered by CPCo, a replica of INPO criteria for independent evaluations, is divided into three parts:

- 1) Horizontal type review;
- 2) Biennial QA Audit; and
- 3) Independent Design Verification (Vertical slice).

It is particularly distressing to us to note that CPCo received proposals and then selected the Management Analysis Company ("MAC") to perform two of the three audits.

MAC is far from an independent contractor on CPCo construction projects. In fact, MAC has been involved with both the Midland and Palisades projects at various times throughout the past decade. For example:

- In 1981 MAC performed an assessment of the hardware problems on site. They failed to identify Zack's continuing HVAC problems, the bad welds in the control panels, and improper welds and cable tray/hanger discrepancies.
- Further, MAC failed to identify the problems of uncertified and/or unqualified welders on site.

GAP strongly disagrees with the choice of MAC. It is an insult to the NRC and the public to accept MAC's review of its own previous analysis as a new and independent audit. Although Mr. L.J. Keebe appears to be both an experienced and credible individual, it does not remove the connection of MAC to two other CPCo-Bechtel productions. This relationship is simply too close for the comfort of the public.

The MAC INPO review may be extremely valuable to CPCo officials as a self-criticism review, however, it should not be presented to the NRC as "independent" by any stretch of the imagination.

Further, there was a marked lack of specific methodology and information about the audit to be performed. GAP staff was particularly disappointed with the lack of specificity into the work to be performed by the "experts." [This report read more like a college term paper review than a technical review of a crucial independent audit.]

It confirms GAP's overall reservations about INPO audits as building an effective wall between the public and the true nature of the problems on the site. Our reservations seems confirmed with reference to establishing layers of informal reporting-- including an initial verbal report to the project--before the actual acknowledgement of identified problems. (October 5, 1982 letter, p. 12.)

The selection of the Tera Corporation to perform the Independent Design Verification is more positive. (GAP was unable to determine whether or not the Tera Corporation has been involved previously with the Midland plant.) Tera's work experience, as presented in the October 5, 1982 letter, at the Vermont Yankee Nuclear Power Plant has been determined to be both extremely thorough and of high quality. The Yankee Plant is rated among the best operating nuclear power plants (those with the least problems) according to the Nuclear Power Safety Report: 1981 (Public Citizen). With the acknowledgement of previous reservations and recommendations about independent audit work at Midland, we concur with the selection of the Tera Corporation for the Independent Design Verification.

The October 5 letter referred extensively to the confirmation of installed systems reflecting system design requirements. GAP hopes that, unlike other audits we have seen, the Tera Corporation does not simply confirm the findings.

Additionally GAP requests that the entire record of comments, investigations and additional information will be provided to the NRC, and also placed in the Public Documents Room, as opposed to CPCo's offer to "maintain" the "auditable record."

There was no reference to the percentage of the work that would be audited by a field verification. This is critical to any type of credible independent review of construction, particularly at plants like Midland and Zimmer where every weld and cable is suspect. We believe the percentage of field review should be established.

The discrepancies documented throughout the review ("findings") should be reported to the NRC simultaneously with the referral to senior level review teams. There is little point to delaying the referral of the findings -- only delays the inevitable, taking time that CPCo doesn't have.

VII. CONCLUSION

The evidence of noncompliances, improprieties, quality assurance breakdowns, misrepresentations, false statements, waste, corporate imprudence and massive construction failures repeatedly meets the general NRC and Region III criteria for suspension of a construction permit or the denial of an operating license. The NRC's own assessment concludes that Midland's Quality Assurance Program--the backbone of any safe nuclear construction--had generic problems. Mr. Keppler concluded that, next to Zimmer, Midland was the worst plant in his region. Last year William Dircks classified it as one of the worst five plants in the country.

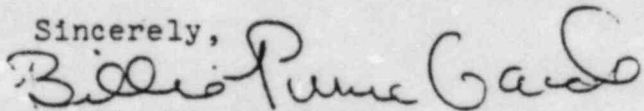
In recent months Midland has been the subject of repeated revelations and accusations of construction flaws, coverups, and negligence. The evidence already on the record is indicative of a significant failure on the part of CPCo to demonstrate respect for the nuclear power it hopes to generate, or the agency which regulates its activities.

CPCo has taken repeated risks with its stockholders' investments, its corporate credibility and its regulatory image. In each of these risks it has lost. It is too much to expect citizens to accept CPCo's arrogant disregard for the public's health and safety.

GAP recognizes the steps forward by the Regional office--establishing a Special Section to monitor Midland's problems and the request for an independent audit. However, this must only be the beginning.

CPCo has numerous problems to worry about, and it is clearly not in their own best interest to put the strictest possible construction on the regulations under which they have agreed to build this nuclear facility. It is for just this reason that the nuclear industry is regulated -- but even regulation, fines, extensive public mistrust, and corporate embarrassment have not humbled Consumers Power Company. If Midland is ever going to be a safe nuclear facility, someone else is going to have to put their professional credibility on the line. This independent auditor, paid by CPCo, must be given strict guidelines for accountability and responsibility in order to justify its hard line recommendations.

GAP hopes that both the Office of Nuclear Reactor Regulation and the Region III office of the NRC will give serious consideration to GAP's concerns and recommendations set forth above and implement a system whereby there is a truly independent system of auditing the extensive problems with the Midland plant.

Sincerely,

Billie Pirner Garde
Director, Citizens Clinic for
Accountable Government

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November 11, 1982

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DESTEP			
ML			
OL		FILE	<i>NAW</i>

Re: Midland Nuclear Power Plant, Units I & II
 - Consumers Power Company, Quality Assurance Program
 Implementation for Soils Remedial Work
 - Consumers Power Company Midland Independent
 Review Program

Dear Sirs:

This letter provides a comprehensive review of the written materials and presentations from the October 24 and November 5, 1982 meetings between Consumers Power Company (CPCo) and the NRC at the Bethesda offices. We are submitting these comments on behalf of those former employees, local citizens and the Lone Tree Council of the tri-city area surrounding the plant.

We are pleased with a number of results to date; specifically the inclusion of the Tera Corporation's vertical slice review, the expertise of Parsons and Brinkerhoff, and the impressive qualifications of certain personnel selected to perform the independent assessment. Further, we are pleased with the consensus for the independent auditors to submit their reports simultaneously to CPCo and the Nuclear Regulatory Commission.

In general, however, we remain skeptical of the plan being provided by CPCo to allay legitimate NRC and public concerns over the safety of the Midland project. Although we are operating at a handicap due to the generalized nature of CPCo's presentations, the following specific concerns and observations may be helpful as you review the final CPCo proposal.

I. Summary of October 22, 1982 Recommendations

On October 22, 1982 GAP provided an extensive review of the three Consumers Power Company letters outlining the utility's proposed relief. The review

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included a number of specific concerns which remain unresolved, as well as pertinent recommendations. Based on our review of the licensee proposals (and subsequent presentations) we are asking the NRC:

1. To withhold approval of the independent audit proposal in its present form.
2. To require two further public meetings, in Michigan, that finalize the details of the independent contracts.
 - a. At least one of these meetings should be in Midland, so that local residents can be informed; and one of these meetings should fully explain the proposed single-point accountability (SPA) proposal, including having the individuals who are to perform this function explain their personal understanding of their respective responsibilities.
 - b. Further, GAP recommends that:
 1. Final approval of the SPA individuals rest with the NRC;
 2. SPA officials should commit to at least one meeting and site tour with public nuclear employee witnesses to resolve their allegations;
 3. SPA officials should be accessible to the public on a regularly scheduled basis to discuss the status of the work.
 - c. The second meeting should provide an opportunity for all the contracted independent auditors to meet directly with the NRC staff, in public, and review the terms and requirements of their contracts.
3. To require the expansion of the proposed training sessions, including NRC review of the training materials relating to NRC regulations and requirements.
4. To increase direct contact between NRC regional management officials and QA/QC personnel performing work on the soil remedial project, including written materials for each employee, a site visit by Mr. Keppler, and an "open door" policy with resident inspectors.
5. To reject the INPO evaluation by Management Analysis Company as the independent assessment. (Although GAP believes the INPO evaluation may be beneficial to CPCo management, it does not meet the minimum requirements for either independence or a comprehensive evaluation.)
6. To reject the selection of Stone & Webster for the independent assessment of QA implementation.
7. To request that the entire record, including all relevant, material raw data, be provided to the NRC with the weekly and monthly reports.

8. To require a mandated percentage of field verification of the systems being reviewed.

Finally, GAP provided a series of specific recommendations for the charters of the independent contractors and subcontractors. These are noted below:

1. The independent contractor should be responsible directly to the NRC, submitting all interim and final product simultaneously with CPCo and the NRC.
2. The independent contractor should do a historical assessment of CPCo's prior work, including a frank report of the causes of the soils settlement problem.
3. The charter should ensure that, once hired, CPCo cannot dismiss the independent contractor from the project without prior notice to the NRC and an NRC-sponsored public meeting to justify the decision.
4. The charter should require that each auditor, at least five already identified, subcontract any services for which its direct personnel are not qualified.
5. The charter should require that the proposed methodology be disclosed: specifically selection criteria and size of the samples for inspections and testing.
6. The charter should require the auditors to provide calculations demonstrating that it is possible to adequately complete its work during the proposed timeframe.
7. The charter should require the auditor to support its proposed methodology through references to established professional codes (ASIM, ASME, ANSI, AWS, etc.).
8. The charter's should require all auditors to report all safety-related information directly to the NRC.
9. The employees and auditors should demonstrate that the personnel assigned to the project are free from conflicts of interest.
10. The auditors must recommend corrective action, and then control its implementation.

Our further comments can be categorized into priority items and methodology.

A.. Priority Items

1. No soils work should be allowed to go forward until all questions on implementation review process are resolved.

- a. Lack of independence. At the November 5, 1982 meeting it was obvious that the most basic questions about Stone & Webster's (S&W) work had not been resolved. The disclosure that S&W in fact had done previous work for CPCo was particularly disturbing. This places S&W in the same position as MAC. According to the "Independency Criteria" outlined in the February 1, 1982 letter from Chairman Palladino to Congressman John Dengell, as well as the previous independence criteria used in Region III, S&W must be rejected.
 - b. Conflict of interest. Further, the conflict-of-interest clause pertaining to "significant amounts" of stock has not been adequately explained, nor has the specific stockholding been adequately disclosed for the members of S&W's management review team and the S&W corporation itself. Insignificant conflicts should be fully disclosed and explained, subject to NRC approval.
 - c. Lines of authority. Additionally, S&W and Consumers representatives could not provide adequate answers to explain who has final decisionmaking authority within and between S&W, Bechtel and Consumers. It was quite clear that Consumers "does not anticipate" any problems between the numerous involved parties. This optimistic attitude belies a sense of security that is inconsistent with both the potential and the historic problems between Bechtel and Stone & Webster. (Specifically, GAP recommends the use of the NRC dissenting professional opinion procedure throughout this process.
2. The CPCo option to provide QA implementation for only a 90-day period must be dropped.

As proposed, the 90-day initial assessment period will cover only the trial period of construction. This limited scope cannot realistically present any assurance that CPCo and Bechtel have reversed a decade-long history of failures and bungling. Anything less than 100% review will fall short of accomplishing the goal of the proposed remedy.

3. Until the specific methodology of how S&W is going to evaluate the adequacy of technical, construction and quality procedures is disclosed, no approval should be issued.

Although the evaluation will be cumulative, it is critical that NRC staff and the public are aware of the methodology for S&W's review. Otherwise, faulty fact-finding techniques will be faits accomplis when the public has an opportunity to review them.

4. Release and Review of the Project Quality Plan for soils QA review is essential.

This document evidently holds the key to S&W review. It is through this Plan that the actual implementation will be reviewed and

monitored. It is critical that this document be released for public review and analysis before any NRC approval is given.

5. It is critical that CPCo commission an independent assessment team as quickly as possible.

1. As indicated previously, GAP cannot accept MAC and the INPO evaluation as a substitute for an independent review. (See October 22, 1982 letter, pp. 17-18.) As a result we have refrained from providing specific comment on the MAC proposals. However, some of the major programmatic weaknesses are listed below--

- lack of historical analysis of problems to get to the "root cause," leaving unanswered questions with regards to the causes (contradicting the ACRS's June 9, 1982 request to the NRC staff);
- lack of trending of systems or nonconformances to identify specifically weak areas of construction or QA/QC functions;
- time guidelines dictated by the utility, hampering the independence of any company to define the scope of necessary evaluations;
- lack of specified criteria to identify the qualifications of the key factfinders and inspectors;
- reporting procedures that exclude independent contact with the NRC;
- evaluation/contact report that provides a weak substitute for Nonconformance Reports without verification of corrective action;
- lack of recommendations for resolution of identified weaknesses; and
- lack of recognition for the gravity of Midland's problems, evidenced by attempting to substitute INPO for aggressive independent assessment.

6. Expansion of the role performed by Tera Corporation is appropriate.

a. The Tera Corporation proposed to look at the Auxiliary Feedwater System for its independent safety system. This system has been reviewed several times in previous audits. GAP recommends that this system be rejected in favor of a combination of two systems: one system under controversy -- the HVAC system specifically^{2/} -- and another system yet unidentified for major review or auditing.

^{2/} In an October 12, 1982 letter from Mr. J. G. Keppler to Ms. Billie Garde, it was suggested that the independent assessment would resolve the questions of the

- b. Tera's work, although admirable, failed to provide an acceptable or even identifiable level of field verification of the as-built condition and failed to explain the disclosed inconsistencies in the scope of its proposed field verification effort.

It is our recommendation that Tera provide additional qualified personnel to conduct comprehensive field review of the system(s) under scrutiny.

- c. Tera should be removed from any reporting line through MAC, answering directly (and simultaneously) to the NRC and the licensee with reports and findings. (This was already reflected in Tera written presentation, but was not clear in the MAC/CPCo comments at the October 24 meeting.)

B. Methodology

Generally, the specific methodology for assessments/audits was non-existent. Without the information on such issues as the size of samples, specific system criteria for examination, evaluation criteria, forms used for evaluations and reporting procedures, it is impossible to accept any review as adequate.

The Tera's presentation was a refreshing deviation from the otherwise public relations-style presentations. It is our request that any further meetings be delayed until after CPCo provides adequate comprehensive methodologies for analysis. (Perhaps the NRC could provide examples of particularly noteworthy independent reviews to CPCo in an effort to demonstrate a truly broad scope assessment.)

It is our earnest hope that this methodology, once provided, will provide a basis to begin restoration of public confidence in the plant. Anything short of an "open book" at this point will fall short of the goals of this expensive effort.

We have attempted to provide a thorough review of the massive independent assessment efforts at the Midland site. But a comprehensive effort is impossible based on the minimal public disclosure to date. As a result, we request the following specific plans or documents from the NRC in order to finish our evaluation.

1. The details of the Quality Improvement Plan (QIP) (September 17 letter to Denton).
2. The Project Quality Plan (S&W presentation, November 5, 1982)
3. The Single Point Accountability System. (September 17, 1982 CPCo letter to Denton)

(footnote continued)

HVAC systems adequacy. It does not appear to be the case in any of the presentations thus far.

Mr. Harry P. Denton
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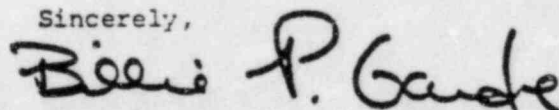
4. The criteria for selection of the independent auditors
5. The criteria for choosing the specific safety system
6. A reporting (communication line) chart, from the worker up and the NRC down
7. The conflict-of-interest disclosures for all independent assessment corporations, individuals and management
8. The training materials to be used as part of the QIP
9. The criteria for selection of field verification inspections by Tera personnel
10. The breakdown of S&W personnel with nuclear experience by plant site.

II. Conclusion

Finally, we wish to thank you for your inclusion of public comment into this procedure. It is a positive step forward on behalf of public safety issues.

We look forward to notification of the next meetings on the independent assessment of the Midland plant, as well as notification of any other pertinent meetings on the Midland project. As the role of the Government Accountability Project in the Midland investigation grows, it seems appropriate to repeat an oft-used phrase of Mr. James G. Keppler about the William H. Zimmer Nuclear Power Station. The "real sin" at Zimmer is that the plant is in the ground at 97% complete. Since Midland is far from complete, there remains an opportunity to avoid the sins of Zimmer -- but it will take concerted effort by all parties at this critical juncture.

Sincerely,



BILLIE P. GARDE
Director
Citizens Clinic for Accountable Government

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