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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONBefore the Atomic Safety and Licensing Board

In the Matter of: )  
 )  
The Cincinnati Gas & Electric )  
Company, et al. ) Docket No. 50-358  
 )  
(Wm. H. Zimmer Nuclear Power )  
Plant) )

MVPP'S REPLY TO APPLICANTS' AND STAFF'S  
RESPONSES TO MVPP'S MOTION FOR LEAVE TO FILE NEW CONTENTIONS

Intervenor MVPP files this reply in answer to Applicants' Opposition to its request to file new contentions and the NRC Staff's response in support of reopening the record in this licensing hearing.

While welcoming the Staff's support, MVPP must emphasize that of the eight contentions presented, its central and most important contention is the one challenging the character, integrity and technical competence of Cincinnati Gas & Electric ("CG&E") to operate a nuclear power plant.

I. INTERVENOR MVPP HAS STANDING TO INTRODUCE  
NEW CONTENTIONS

CG&E charged in its Opposition that Intervenor MVPP was merely a "facade, used and then discarded, by succeeding self-

appointed groups....," Opposition at 7, and that Intervenor's motion was itself "merely a vehicle for GAP to launch another unwarranted attack against the Zimmer quality assurance program in its efforts to delay the plant," Opposition at 2. CG&E failed, however, to provide a minimal factual basis for these emotional allegations. Instead, through rhetoric and insinuation, CG&E has tried to draw a picture of itself encircled and beseiged by hostile forces.

The truth is that MVPP, a Cincinnati grassroots citizens' group, has been a longstanding and central intervenor in this licensing proceeding. It is a wholly-owned subsidiary of the Cincinnati Alliance for Responsible Energy ("CARE"), a local advocate for serious examination of the construction deficiencies and quality assurance breakdown at Zimmer.

Nor is the Government Accountability Project of the Institute for Policy Studies ("GAP") the intervenor. MVPP has retained GAP to represent it in the licensing proceedings. GAP's primary purpose is to offer legal counsel to whistleblowers, to provide a legal education to law students on First Amendment and civil service issues, to bring meaningful reform to the workplace, and to expose employer actions -- whether governmental or private -- that are wasteful, illegal, or pose a threat to the health and safety of the American public.<sup>1/</sup>

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<sup>1/</sup>H. Patrick Swygert and Mary Eastwood, former Special Counsels of the Merit Systems Protection Board, have praised GAP's efforts to monitor implementation of whistleblower reform, as has Congresswoman Patricia Schroeder, chairwoman of the House Civil Service Subcommittee.

Since 1979 GAP has operated a Legal Clinic with the participation of Antioch Law School students, has produced two films, and has organized a national Whistleblower's Conference. GAP attorneys have frequently testified before Congress. In addition, GAP formerly represented Mr. Thomas Applegate regarding his allegations about illegalities at the Zimmer site.

MVPP has retained GAP to represent it within the traditional attorney-client relationship. CG&E's attempts to mischaracterize GAP's role in this licensing proceeding must be seen as nothing more than a blatant interference with MVPP's relationship with its attorneys. As such, this Board should resoundingly reject CG&E's arguments that MVPP has no standing to raise new contentions.

Applicants surely cannot complain that Intervenor has out-of-town counsel when they themselves have retained the Washington, D. C. law firm of Conner & Wetterhahn to represent them in this licensing proceeding.

II. MVPP HAS MET THE STANDARD FOR ACCEPTANCE OF NEW CONTENTIONS AND THE STANDARD FOR REOPENING THE RECORD

Applicants contend that MVPP has failed to satisfy the five criteria for filing new contentions or carried its "heavy burden" to reopen the record. The NRC Staff effectively argues that Intervenor meets both standards and recommends reopening the proceeding for litigation of MVPP's proposed eight contentions.

MVPP has clearly met the five criteria set out in 10 C.F.R. § 2.714(a)(1):

A. Good Cause

MVPP filed new contentions only after it obtained numerous affidavits from Zimmer workers and internal documents substantiating the serious allegations contained in its contentions concerning the fatal deficiencies in CG&E's quality assurance ("QA") program, which includes the Quality Confirmation Program ("QCP"), and concerning

CG&E's lack of character and competence to operate a nuclear reactor.

Much of this information was disclosed to MVPP only after workers spoke to the NRC during its investigation and determined that the NRC had not, and could not, adequately remedy the severe engineering, construction, QA and management problems the workers reported at the plant. As the exhibits to MVPP's Motion and to this Reply illustrate, MVPP has gathered significant new information demonstrating the continuing failures and structural deficiencies in CG&E's QA program.

Most disturbing is that the new documentation demonstrates that CG&E officials have made misrepresentations and misleading statements to the NRC in attempting to shun responsibility for the QA breakdown at Zimmer. For example, Earl Borgmann and other top CG&E officials told the House Subcommittee on Energy and the Environment of the United States Congress and the full Nuclear Regulatory Commission that they were largely unaware of Kaiser's QA problems at Zimmer prior to November, 1980, did nothing to prevent adequate Kaiser QA staffing, and did not interfere with Kaiser inspections. See Cincinnati Enquirer article, June 12, 1982, attached and incorporated herein as Exhibit A.

Internal memoranda show these statements are false and that CG&E has been substantially involved in the QA program at Zimmer since 1973. The following document CG&E's acting policy role in QA at Zimmer:

(1) CG&E refused to provide Kaiser with a representative of the architect and engineer, Sargent & Lundy, on-site to review Kaiser drawings after a Kaiser request in January 1972. See January 14, 1972 Letter, attached and incorporated herein as



Exhibit B.

(2) On July 18, 1973, CG&E "suggested" that Kaiser not write nonconformance reports on rejection of materials purchased for the Zimmer project and repeatedly emphasized that was CG&E's position. See July 18, 1973 Letter, attached and incorporated herein as Exhibit C.

(3) On July 19, 1973, CG&E told Kaiser that it was not necessary to perform tests on sections of stainless steel piping in full compliance with ASME standards since tests in compliance with ASME would be done later on the system as a whole. See July 19, 1973 Letter, attached and incorporated herein as Exhibit D.

(4) On March 18, 1974, CG&E directed Kaiser to stop issuing nonconformance reports on material and procedures for temporary construction. See March 18, 1974 Letter, attached and incorporated herein as Exhibit E.

(5) CG&E and Kaiser had numerous discussions, some encompassed in written correspondence, about approval of vendors:

--On February 20, 1974, Kaiser QA Manager William Friedrich told CG&E that he disagreed with its disapproval of Kaiser's requests to do surveys of the Quality System Programs of Suppliers to meet ASME standards. See February 20, 1974 Letter, attached and incorporated herein as Exhibit F.

--On March 28, 1974, Kaiser asked CG&E a series of questions about the procedures Kaiser was to follow in inspecting CG&E-purchased equipment. See March 28, 1974 Letter, attached and incorporated herein as Exhibit G.

--On April 9, 1974, CG&E answered all the questions posed

by Kaiser and stated that CG&E's procedures differ from those of General Electric. See April 9, 1974 Letter, attached and incorporated herein as Exhibit H.

--On April 19, 1974, Kaiser outlined for CG&E its proposed "receiving inspection program" and asked CG&E to amend any part of the program that was not responsive to CG&E directives. See April 19, 1974 Letter, attached and incorporated herein as Exhibit I.

In other words, Kaiser set up its entire inspection program in accordance with specific CG&E-imposed requirements.

--On September 19, 1975, CG&E clarified for Kaiser what documentation Kaiser needed to include in its "Receiving Inspection Plans." See Letter of September 19, 1975, attached and incorporated herein as Exhibit J.

(6) In a September 14, 1976 letter, Borgmann informed the NRC of changes in the management structure for the Zimmer project. He stated explicitly that "the purpose of this reorganization was to give the Cincinnati Gas & Electric Company a more direct and active role in all phase of the Zimmer project...." See September 14, 1976 Letter, attached and incorporated herein as Exhibit K.

(7) In an October 22, 1976 letter, William Schwiers, then CG&E's principal QA engineer, informed Kaiser that the signatures of Sponsor Engineers would no longer be necessary on "essential or non-essential Nonconforming Reports with rework or reject dispositions." See October 22, 1976 Letter, attached and incorporated herein as Exhibit L.

(8) In an April 1, 1977 letter, Schwiers told Kaiser that it was "CG&E's intention to maintain a minimum of inspection in the

non-essential area" and to delete "construction inspection plans and similar Quality Control responsibilities" from the scope of work of Kaiser's QA program. See April 1, 1977 Letter, attached and incorporated herein as Exhibit M.

The press has also reported that internal correspondence between Kaiser and CG&E show CG&E's deep involvement in the QA program at the Zimmer site since at least 1974. The following, inter alia, has been reported:

(1) On October 14, 1974, Friedrich told CG&E it was "absolutely necessary" to improve Kaiser's QA staff to satisfy federal standards. Two weeks later, CG&E President William Dickhoner refused because he found "no justification" for providing more QA personnel.

(2) On January 15, 1975, in response to further requests by Kaiser for more QA personnel Borgmann wrote, "Quality rather than quantity is the real answer on a project of this nature...."

(3) Friedrich responded on February 17, 1975 that such cut-backs would make it impossible to run an adequate QA program.

(4) On March 26, 1975, Friedrich complained again that CG&E's refusal to provide more QA personnel made it impossible to do adequate inspections of the three shifts of construction work then in progress.

(5) In a March 8, 1976 letter, Borgmann approved five new QA inspectors for Kaiser but vetoed a request for five others. See Exhibit A, supra at 4.

The press also disclosed that an independent report conducted by Kaiser in 1981 charged CG&E had insisted that up to 90 percent of

structural materials at Zimmer be purchased as non-essential even though they were later used as essential materials. CG&E did not notify the NRC of this confidential report which documents defects and noncompliances even though NRC regulations require CG&E to report such known deficiencies that could compromise the public health and safety within 48 hours. 10 C.F.R. Part 21. CG&E could be fined up to \$25,000 per day or be subject to criminal prosecution. See Cincinnati Enquirer Article, June 9, 1982, attached and incorporated herein as Exhibit N.

CG&E's deliberate refusal to report such deficiencies is even more clearly shown, however, by a January 20, 1981 memorandum from CG&E QA engineer R. P. Ehas to Schwiers that describes how 30 to 40 percent of a set of "W8 X 17 beams" for supporting essential hangers may have been purchased from non-approved vendors. Ehas tells Schwiers that this is a "potential 50-55e against the HJK QA program," and if true demonstrates that "we have a breakdown in the QA program that should have been discovered by a QA audit. Frank Adams - a Cinti [sic] scrap dealer supplied a large amount of the beams. He and the mill -- U S Steel Co. are non approved." See January 20, 1981 Ehas Memorandum, attached and incorporated herein as Exhibit O. Deficiencies reportable under 10 C.F.R. 50.55(e) are considered so significant that the utility is required to notify the NRC of such deficiencies within 24 hours to avoid severe enforcement sanctions.

Not only did CG&E not report this breakdown in vendor approval procedures in January 1981, but it failed a second time to report the problem after Kaiser's independent report verified the

noncompliances. Even today, CG&E has refused to report the deficiencies in its vendor approval procedures as 10 C.F.R. 50.55(e) requires. This is a blatant violation of NRC regulations.<sup>2/</sup>

B. Availability of Other Means to Protect  
Petitioner's Interest

MVPP and its counsel GAP, which also serves as attorney to Thomas Applegate, have been the first to bring many of these quality control and "character and competence" problems to the NRC's attention. The NRC issued two reports to respond to Mr. Applegate and other Zimmer workers' allegations. Report of the Office of Investigation and Enforcement ("IE"), November 25, 1981; Report of the Office of Inspector and Auditor ("OIA Report"), August 7, 1981. Contrary to Applicants' statements in their Answer, Applicants' Answer at 3 n. 3 and 18, nearly all of Mr. Applegate's charges have been substantiated. See OIA Report at 1-2 and IE Report at 3, attached as Exhibit P.

Although the NRC Reports are the best proof that the NRC substantiated most if not all of Mr. Applegate's charges, a memorandum from Mr. Keppler to the File, dated July 8, 1981, corroborates the reports. In that memorandum, Mr. Keppler states that he received a telephone call from Mr. Applegate who

...stated that Mr. Dickhoner, during a recent speaking engagement, had told his audience that the NRC found Applegate's allegations to be without substance. He said that Mr. McCarten had told him earlier that many of his allegations had been substantiated and he

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<sup>2/</sup> The documents listed above, as well as others, will be incorporated in Intervenor's forthcoming Petition to Stop Construction.

wanted to know if we were changing our story.

I told Mr. Applegate that we were not in a position to control Mr. Dickhoner's statements and that our investigation findings had confirmed many of his allegations -- either in whole or in part.

See Keppler Memorandum to File, July 8, 1981, attached and incorporated herein as Exhibit Q.

Moreover the Staff's recent support of Intervenor's request to reopen the licensing hearing demonstrates the NRC's appreciation of Intervenor's major role in investigating QA deficiencies at Zimmer.

Applicants now argue that most of the information about the QA breakdown and lack of CG&E character and competence to run Zimmer is contained in the two NRC reports. MVPP disagrees. However, even the substance of these two reports would not now be before this Licensing Board unless Intervenor had urged the Board to give both a close examination. As noted in MVPP's Motion, Motion at 25, the NRC Staff did no more than inform this Board that the IE and OIA Reports were in the Commission's Public Documents Room. Moreover, prior to the Staff's recent shift in position, it stood in unqualified support of granting an operating license to CG&E. Certainly without Intervenor's motion to reopen the record, the Intervenor's investigation of severe, perhaps fatal, CG&E QA and management problems, these issues would never have been raised before Region III, before the Commission, or before this Licensing Board.



C. Petitioner's Assistance in Developing  
the Record

Intervenor can clearly be expected to contribute significantly to development of a sound record on the eight contentions it has proposed. As noted above, the numerous internal memoranda and affidavits from former and present KEI workers are critical to this Board's understanding and consideration of Applicants' QA program and management structure. CG&E's past conduct, and its present attempts to cover up or disguise those past actions reveal its basic lack of character and competence to operate Zimmer.

D. Representation by Existing Parties

It has been MVPP and GAP, representing Mr. Applegate, who have forced Region III to re-examine the CG&E QA program. Mr. Keppler, Director of Region III, conceded at recent hearings before the House Subcommittee on Energy and the Environment that it was GAP and not the NRC that discovered the problems at Zimmer. See Cincinnati Enquirer Article, June 11, 1982, attached and incorporated herein as Exhibit R.

E. MVPP's Participation Will Not Delay  
the Proceeding

As Region III revealed at a June 7, 1982 briefing of the Commission, the ongoing criminal investigation at Zimmer has been reopened since June 1982.

This Licensing Board has already denied an operating license for Zimmer until CG&E fulfills certain requirements for emergency

planning.

Further, Mr. Keppler has stated that he does not expect CG&E will identify all the corrective actions needed at Zimmer prior to December 1982. After that, he expects much of the corrective work will still need to be completed.

Therefore, admission and litigation of Intervenor's proposed new contentions will not in any way delay this licensing proceeding.

Although the QA and "character and competence" issues are new ones in this proceeding, they are crucially important to the Board's determination of whether Zimmer can be operated in a manner by the current Applicants to ensure the public health and safety are protected.

MVPP has additionally satisfied any burden it carries to reopen this licensing hearing. As previously explained, MVPP, after disclosure to it of numerous internal memoranda and worker affidavits, proceeded expeditiously to file new contentions. And Applicants' repeated complaints about MVPP and GAP's previous activities demonstrates that all parties to this licensing proceeding have long been put on notice of the Intervenor, its counsel, and the general public's criticism of the Applicants' QA program, the QCP and CG&E's management conduct. See CARE Shareholder Resolution, attached and incorporated herein as Exhibit S; GAP News Release, November 25, 1981, and Cincinnati Enquirer Article, June 17, 1982, attached and incorporated herein as Exhibits T and U respectively, both demonstrating GAP's consistent criticism of CG&E's control over the Quality Confirmation Program.

Neither the NRC nor Applicants can claim they are surprised

or prejudiced by Intervenor's motion to file new contentions.<sup>3/</sup>

MVPP has, in its contentions, put into issue CG&E's basic ability to operate a nuclear plant. MVPP questions both whether CG&E has the basic integrity to participate in self-regulation under the Atomic Energy Act and whether it possesses the technical competence to direct its employees and contractors to ensure sound construction according to an approved design, and an independent and adequate QA program.

Mr. Dircks, testifying on June 10, 1982, before the House Subcommittee on Energy and the Environment, stated:

If it [Zimmer] were a completely government-owned project, then the government would have full responsibility to be in there. These people [Applicants] are licensees. We trust them to operate the plant. We had trusted them to build the plant correctly.... It is a difficult problem.

Difficult or not, whether CG&E has demonstrated the necessary character and competence to operate Zimmer must be the bottom-line question this Licensing Board considers.

### III. MVPP'S PRIMARY CONCERN AND PRIMARY CONTENTION QUESTION WHETHER CG&E HAS THE CHARACTER TO OPERATE A NUCLEAR REACTOR

While seven of the eight contentions MVPP wishes to introduce encompass concerns about CG&E's "out-of-control" QA program, MVPP's

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<sup>3/</sup> Intervenor's counsel Mr. Devine has outlined his critique of CG&E's quality assurance program to the Commission. See Devine Statement, June 16, 1982, attached and incorporated herein as Exhibit V.

His criticisms are specific and have included examples corroborated by former workers, including Richard Reiter, former Kaiser documents reviewer, and David Jones, former senior QA analyst for Kaiser.

final and eighth contention is the most important: "CG&E lacks the necessary character and competence to operate a nuclear plant."

The Commission, in Houston Lighting and Power Company (South Texas Project, Units 1 & 2), CLI-80-32, 12 NRC 281 (1980), ruled that both abdication of responsibility for construction to a contractor or abdication of knowledge about construction activities by a prospective licensee is sufficient basis to deny an operating license, 12 NRC at 291. The Commission further said that it could not legally "ignore false statements in documents submitted to it," id., at 291, n. 4, since Section 186a of the Atomic Energy Act allows denial of licenses for "intentional false statements."<sup>4/</sup>

MVPP outlined in its original motion, Motion at 16-18, misrepresentations made by high CG&E officials to the NRC, to CG&E shareholders, and to the press. Subsequently, CG&E Vice President Borgmann testified, Intervenor believes falsely, on June 10, 1982 to a Congressional subcommittee and on June 16, 1982 to the full Nuclear Regulatory Commission, that CG&E had never interfered with Kaiser's quality assurance program. See Exhibits A through O, and Exhibit 9 to Intervenor's Motion.

Mr. Borgmann further testified to the Commission on June 16, 1982 that he knew of no CG&E officials who had been questioned in connection with a criminal investigation. However, Exhibit 52 to the IE Report, Exhibit 12 to Intervenor's Motion, confirms that

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<sup>4/</sup>The Commission suggested that even if not made intentionally but only with disregard for the truth, "misrepresentations can be sufficient ground for denial of a license." Ibid; Virginia Electric & Power Company v. NRC, 571 F.2d 1289 (4th Cir. 1978).

CG&E QA Manager Schwiers knew of the criminal investigation and the targeting of CG&E officials. On October 27 and 28, 1981, the Commissioners discussed ongoing law enforcement proceedings at Zimmer. Other internal memoranda demonstrate clearly that the NRC was considering a criminal investigation for falsification of QA records and that the investigation focused in part on CG&E officials. See Exhibit 12 to Intervenor's Motion.

Viewing the past misrepresentations of CG&E top officials such as Mr. Borgmann, who has been personally involved in the Zimmer project for the past decade, and his most recent misrepresentations, this Licensing Board has no choice but to examine carefully whether CG&E has the honesty, integrity and "character" to ensure its diligent compliance with the largely self-regulatory framework for NRC licensees.<sup>5/</sup>

Moreover, in light of the public's increasing distrust of CG&E's ability to manage Zimmer, this Licensing Board must provide a full airing and litigation of these issues to allay well-justified fears of the public about Zimmer's safety.

#### IV. CONCLUSION

For the foregoing reasons, this Board should reopen the record to allow full litigation of Intervenor MVPP's eight

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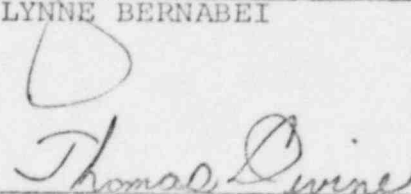
<sup>5/</sup> Intervenor would again emphasize that contrary to the characterization of its eighth contention by the NRC Staff as one questioning CG&E's technical competence, the main thrust of the contention is to put at issue CG&E's basic integrity and character to operate Zimmer safely and in accordance with NRC regulations.

suggested contentions, and set a discovery schedule as soon as possible.

Respectfully submitted,



LYNNE BERNABEI



THOMAS DEVINE

Government Accountability Project  
of the Institute for Policy Studies  
1901 Q Street, N. W.  
Washington, D. C. 20009  
202/234-9382

Counsel for Intervenor

DATED: July 8, 1982



# THE CINCINNATI

SATURDAY, JUNE 12, 1982



"In my opinion the basic quality assurance policy for construction was Kaiser's and CG&E had the obligation to assure itself that the QA program was adequate. On various occasions our QA manager had differences of opinions with Kaiser but certainly did not attempt to direct or shortcut the overall program." . . . "obviously we should have had deeper involvement. We should have completely controlled the program. But to say the program was not carried out because we deliberately told Kaiser to shortcut it or not carry it out is false."

— Earl Bergmann, CG&E Senior Vice President  
Before Urban Committee, June 10, 1982

ENCOUNTER

THE CINCINNATI GAS &amp; ELECTRIC COMPANY

March 8, 1976  
KEB-43

Kaiser Engineers, Inc.  
P.O. Box 201  
Moscow, Ohio 43153

Attention: Mr. W. J. Friedrich

RE: WM. H. BIPMER NUCLEAR POWER STATION -  
UNIT 1 - INSPECTION PERSONNEL  
W.O. 57300-957, JCA E-5599

Gentlemen:

This is in response to your letter of February 10, 1976 requesting 10 additional inspectors for the Quality Assurance Staff. Our people have done extensive evaluations on the need for additional inspectors. The request for 10 additional people seems rather high at this time and I do not like the idea of giving you blanket approval for 10 personnel requisitions.

I would like you to proceed with adding 2 mechanical welding inspectors, 1 instrumentation inspector and 2 electrical inspectors to your staff if these people are required immediately in your opinion. I also ask you to consider the transferring of some of the structural inspectors to electrical work in lieu of hiring these 2 additional electrical inspectors.

Over the next few months, as we see the workload demands in the field, we will re-evaluate the need for additional personnel. Quantity is not always the answer in getting satisfactory inspection. The need is for qualified and dedicated personnel and this is our objective.

I certainly am amenable to your reviewing the situation on a month to month basis and when the situation warrants, I will certainly review any request that you might make for personnel subject to the advice of my staff.

Very truly yours,

THE CINCINNATI GAS &amp; ELECTRIC COMPANY

By *E. A. Bergmann*  
E. A. BERGMANN  
Vice President - Engineering



WJB:cw  
cc: C. C. Gray  
B. A. Culver  
E. C. Pandorf  
W. W. Schwiers

COPY

# CG&E Denied Kaiser's Pleas For Inspectors

THE ENQUIRER

Saturday, June 12, 1982

BY DAVID SHAPIRO  
RICHARD WHITMIRE  
Gannett News Service

and BEN L. KAUFMAN  
Enquirer Reporter  
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WASHINGTON—Documents obtained by Gannett News Service dispute claims by Cincinnati Gas and Electric Co. (CG&E) that it did not interfere with the quality assurance program run by its contractor at the Zimmer nuclear power station.

It was a lack of adequate quality assurance that led to the problems that still plague Zimmer.

All along, CG&E has blamed its contractor, Kaiser Engineering, for the quality problems at Zimmer, claiming its only fault was in not watching over Kaiser closely enough.

The Nuclear Regulatory Commission (NRC) accepted that argument last year. At that time, the NRC put CG&E in charge of its own quality confirmation program to identify and correct the problems at Zimmer.

BUT CONTINUED problems at Zimmer have recently led to widespread calls for independent auditors to look into the plant's deficiencies.

In testimony Thursday before the House Interior Subcommittee on Energy and the Environment, CG&E Senior Vice President Earl Borgmann again denied that CG&E had any direct role in the quality breakdown at Zimmer.

"On various occasions, our quality assurance manager had differences of opinion with Kaiser, but certainly did not attempt to direct or to restrict the overall program," Borgmann said.

"In retrospect, . . . obviously we should have had deeper involvement. We should have completely controlled the program. But we say the program was not carried out because we deliberately told Kaiser to shut out if or not carry it out is false."

However, correspondence between CG&E and Kaiser—including two letters signed by Borgmann and one signed by CG&E President William Dickhoner—

tell a different story.

In many cases, it was CG&E that prevented Kaiser from carrying out an adequate quality control program by refusing Kaiser permission to hire enough people to do the job, the correspondence shows.

FOLLOWING IS a sampling of the correspondence:

• In a letter to Borgmann dated Oct. 14, 1974, William Friedrich, then quality assurance manager, said it was "absolutely necessary" to beef up Kaiser's quality assurance staff if the company was to comply with federal inspection regulations and "maintain the current confidence that the system is sound and adequate."

Two weeks later, CG&E President William Dickhoner responded that there was "no justification" for further quality assurance manpower. "As you are aware, we are making every effort to maintain the minimum labor force on all projects, consistent with acceptable levels of supervision, craft labor and inspection of the work," Dickhoner said.

A few days later, a Kaiser official, V.P. McMahon, wrote an internal memorandum expressing great concern about Dickhoner's position. He said, "Needless to say, we cannot conduct a proper QA program without the necessary manpower."

• As Kaiser kept agitating for more quality personnel, Borgmann wrote the construction firm on Jan. 15, 1975, advising that, "Quality rather than quantity is the real answer on a project of this nature and you should exhort your staff to attain the highest effort possible before instituting complaints about being overworked."

Borgmann added, "The level of expenditures attained to date on this project makes it mandatory to tighten the control reins, hopefully without jeopardizing your (quality assurance) efforts."

In response to Borgmann's letter, Kaiser circulated an internal

memorandum on Jan. 23 announcing a "cost consciousness" program and asking quality assurance managers to find areas of their program that could be streamlined, simplified or possibly, in some cases, deleted.

Friedrich responded in a Feb. 17 memorandum that such cutbacks would make it impossible to run an adequate quality assurance program. "I solicit your help in getting the personnel necessary to do a satisfactory job," he said.

• Friedrich wrote another internal memo on March 23, 1975, explaining that six months had passed since CG&E denied his original request for more manpower. "Construction intends to start a third shift," he said. "We do not even have coverage on the second shift, which is building hp."

• In yet another memorandum on CG&E-imposed hiring limits dated Aug. 1, 1975, Friedrich complained of having to rely on temporary summer help under a youth affirmative action program to keep the Zimmer site documentation center in order.

• In a letter dated March 6, 1976, Borgmann approved five new quality assurance inspectors for Kaiser, but vetoed a request for another five hires. In a note by then a familiar refrain, he said, "Quantity is not always the answer in getting satisfactory inspection."

THE QUESTION of CG&E's role in Kaiser's quality assurance program also arose during interviews by NRC investigators from the Office of Inspector and Audit, who were looking into possible falsification of documents at Zimmer.

An NRC interview on July 8, 1981, with Phillip Gittings, former quality assurance manager for Kaiser at Zimmer, quotes Gittings saying that Kaiser was "doing the work for a very tough client (CG&E) and that any requisition for additional manpower or staffing for QA-QC had to go through the client."

Gittings told NRC investigators that numerous memos sent to CG&E asking for additional quality control staff were turned down by the utility—specifically rejected by William Schwiers, who at that time was quality assurance manager for CG&E.

Gittings also told investigators that quality assurance and quality control staffing in the past had not been "adequate to meet the requirements of 10 CFR Part 50, Appendix B," the Code of Federal Regulations that governs nuclear power.

THE FOLLOWING day, July 9, the NRC investigators interviewed Schwiers.

At first, Schwiers disputed Gittings' assertions that he had turned down Kaiser's requests for more manpower. Then Schwiers told NRC investigators that any decision to deny quality control inspections would have come from CG&E management meetings. Schwiers identified his boss

as Earl Borgmann, but he said he could not recall if Borgmann had attended those management meetings.

Schwiers told investigators he was under "tremendous pressure" during his assignment at Zimmer. Refusing to describe the pressure, Schwiers cut off the interview by saying he was going to limit his responses to "yes" and "no" answers.

CG&E spokesman Dave Altemus said he could not reach Borgmann for further comment. Altemus acknowledged that CG&E had written letters, but said, "Our philosophy has been and is that we're looking for competent staffing, efficiency and production. What I'm saying is we're not translating slider numbers into quality."

"If we saw instances where we could see excessive manpower might be sought in an area, we would turn it down. If there was doubt, we might question. If there was a genuine need for more manpower to do the job properly, then we were supportive of it."

CONTINUED FROM PAGE A-1

## THE CINCINNATI GAS &amp; ELECTRIC COMPANY



January 14, 1972

Kaiser Engineers, Inc.  
P.O. Box 658  
Cincinnati, Ohio 45201

Attention: Mr. D. R. McSparrin

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
COORDINATING MEETING,  
W.O. 57300-902, JOB E-5590

Gentlemen:

We are enclosing two copies of the minutes of the coordinating meeting held at the Sargent & Lundy offices on Thursday, January 6, 1972.

Anyone having corrections or clarifying comments pertaining to these minutes should advise us as soon as possible in order that appropriate action can be taken prior to the next meeting.

Very truly yours,

THE CINCINNATI GAS &amp; ELECTRIC COMPANY

By

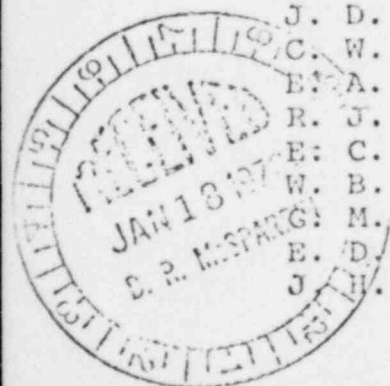
*A. E. Rothenberg*  
A. E. ROTHENBERG, CHIEF ENGINEER,  
& Manager - General Engineering Department

AER:dk

Enclosure

cc: W. H. Dickhoner  
W. V. van Gilse (3)  
W. J. Moran  
R. F. Schierland  
J. D. Flynn  
C. W. Beringhaus (2)  
E. A. Borgmann (2)  
R. J. Van Veen (2)  
E. C. Pandorf  
W. B. Murray  
M. Pemberton (2)  
E. D. Smith  
J. H. Inskeep

FROM:	DATE:
McSPARRIN	1-18-72
COPIES TO:	
TAB (2) ✓	JPB ✓
RJW ✓	JPJ ✓
GLR ✓	Handwritten
JWE ✓	Handwritten
CCG ✓	



Wm. H. Zimmer Nuclear Power Station - Unit 1  
Minutes of Construction Coordination  
Meeting Held In Sargent & Lundy Offices  
On January 6, 1972

The following persons were in attendance:

The Cincinnati Gas & Electric Company

W. V. van Gilse, A. E. Rothenberg, J. D. Flynn  
J. R. Schott, R. J. Van Veen, C. W. Beringhaus,  
and E. A. Borgmann

Kaiser Engineers, Inc.

D. Williams, D. R. McSparrin, C. Gray, and  
J. Billings

Sargent & Lundy

W. Hegener, R. Heider, R. Pruski, R. Cotta, and  
L. Oyen

The following items were discussed:

1. A clarification of item 8 on page 3 of the minutes of the meeting held in December was requested. This item referred to an agreement regarding revised S&L design drawings and led to an extended discussion as to how drawing revisions and progress prints are to be handled. The following procedures were finally agreed upon:
  - a. No so-called progress prints of a drawing will be issued after that drawing has been once issued "For Construction".
  - b. When significant design changes are made to a drawing after having been issued for construction, Sargent & Lundy will issue official revisions of the drawing.



If Sargent & Lundy drawing changes are not significant to the design nor if they do not affect the Constructor's effort to any degree, such changes will be accumulated until Sargent & Lundy believes an official revision to a drawing is justified.

- c. It will be the responsibility of Sargent & Lundy to call to the attention of Kaiser Engineers any design changes in progress to critical areas. This should be done in advance of any issue of revised drawings.
  - d. Sargent & Lundy requested that Kaiser submit to them for approval any fabrication detail drawings made by Kaiser, both for shop and field work.
2. In view of S&L's request to approve Kaiser detail drawings, Mr. McSparrin requested a Sargent & Lundy man in the field to review K-E drawings. This request had previously been made of CG&E and Mr. Flynn again refused this request of Kaiser's.
3. The 23 Action Items resulting from the December 6, 1971 meeting were then reviewed. The following are the dispositions made of those items:
- a. Items 1, 2, 8, 11, 14, 16, 17, 22 will be dropped either because they were completed or are of a continuing nature.
  - b. Items 6, 18, and 21 were on the agenda of the meeting.
  - c. Item 7 covering the culverts under Little Indian Creek will be dropped since S&L has decided to route the cooling tower blow-off line under the creek. Therefore, the present four, 36" culverts will remain in place.

- d. Item 20 covering the well water storage tank will be dropped inasmuch as S&L has concluded this tank can be used for construction fire protection service and moved as required for permanent well water storage service.
  - e. Items 3, 4, 5, 9, 10, 12, 13, 15, 19, and 23 are in progress and will continue to be carried.
- 4. K-E requested that a meeting be set up in February to discuss testing, particularly pre-op testing. CG&E agreed to review the information previously submitted by S&L and to decide if a meeting on the subject is worthwhile at this time.
  - 5. S&L indicated that some additional piping single line diagrams are about ready to be sent to CG&E Co. for review.
  - 6. Sargent & Lundy has concluded that a 75,000 to 100,000 gallon well water tank should be utilized. S&L requested that Kaiser construction fire protection layout be submitted to them for review and approval.
  - 7. CG&E Co. indicated that they will begin logging the S&L numbered project letters in and out of the General Engineering Department mailroom. K-E indicated that they have also adopted a K-C numbering system on all of their project letters since the beginning of 1972. These will also be logged by CG&E.
  - 8. Sargent & Lundy indicated that the project equipment list is being completed. A computer print-out of this list is currently being contemplated. The mechanical list is pretty well along and the electrical and heating and ventilating list is being worked on. Target date for list completion is March 15.
  - 9. Sargent & Lundy stated that their piping line lists will cover all piping shown on their P&ID's. Normally, S&L will issue line lists with the release of single line piping diagrams.

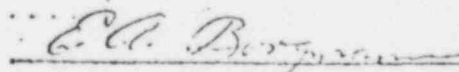


10. K-E suggested that procurement identification of Class I valves be done on the basis of valve serial numbers rather than on the basis of the assigned S&L valve numbers. The idea behind this suggestion was to eliminate possible documentation problems if it becomes desirable to assign identical valves to services other than those originally assigned by the S&L valve list number. After some discussion, it was agreed that the disadvantages of relying on serial numbers for valve identification outweighed its advantages. Therefore, it was agreed that the S&L valve identification numbers will remain the primary means of identifying valves on this project. (Subsequent to the meeting, during a discussion between K-E and CG&E, it was agreed that something could be worked out with the successful valve vendors to allow some flexibility in installing valves. The vendor can be asked to refrain from permanently imprinting into the valve body the S&L identification number. The identification tags affixed to the valves can be permanently affixed while still being transferable, if desired, through the use of screws or some similar type of removable fastener.)
11. Comments on the proposed valve procurement criteria will be forwarded to S&L by CG&E after some disagreements with K-E are worked out.
12. Sargent & Lundy indicated on drawing S-3 the new location of the service water discharge line. It is still 200 ft. downstream of the intake but the revised orientation of the intake moved the service water discharge line further north (downstream). It now encroaches on the proposed location for the concrete batch plant but K-E indicated that something will be done to accommodate the discharge line as shown by S&L.
13. S&L indicated that the discharge from the permanent sewage treatment plant will enter the Ohio River via the storm drain just upstream of the intake structure. The location of the sewage plant is now indicated on drawing S-3. Mr. Van Veen will transmit the information on the sewage

plant discharge line to Battelle Northwest. Copies of revised drawing S-3 will be transmitted to CG&E by S&L.

14. CG&E indicated that information on control points was transmitted to their Distribution Department to allow completion of the Ann Brehms property survey.
15. S&L indicated that they are formally transmitting answers to the K-E questions on the concrete specification. Where they are in agreement with K-E comments the specification will be revised accordingly. The following three areas of concern were specifically discussed at the meeting:
  - a. Point of sampling for field tests. S&L will still specify that all samples be taken at the point of discharge into the forms. K-E will determine in the field if this can be done in all instances from a practical standpoint.
  - b. Time interval between batches. S&L will continue to specify 30 minutes between batches and believes that K-E planning should be on that basis. For cases where this time interval can't be met, K-E should determine the means of determining plasticity for longer time intervals between pours.
  - c. Void ratio on cadweld splices. This was briefly discussed by S&L as to how it affects the possible number of rejected adjacent cadwelds in the vicinity of a defective cadweld. This will be covered in more detail in the S&L letter.
16. CG&E indicated that they believed the drawings with the proposed K-E rebar bid package were not complete. K-E pointed out that rebar will be bid on unit prices but that they did intend to include all applicable drawings

- available at the time of bidding. S&L believed sufficient drawings are available to obtain representative unit price bids on the rebar. It was agreed that K-E will formally transmit the rebar package to CG&E for review and comments.
17. CG&E expressed some concern over K-E not intending to ask for lump sum bids on waterproofing. K-E expressed a preference for taking unit price bids on waterproofing and will transmit the bid package to CG&E for review on that basis. S&L indicated that they are formally answering K-E questions on the waterproofing specification.
  18. CG&E indicated that they did not wish to take bids until required by timing of work in the field. It was agreed that bid packages would not be sent out until required by the latest projected construction schedule.
  19. K-E requested some information on construction details inside the containment. They were shown the latest S&L drawings in this area and expressed satisfaction that all steel connections are bolted.
  20. The shieldwall erection was discussed. It was S&L's belief that K-E intended to erect the shieldwall and that they should review the design. K-E will review the design for construction joints and for sequence of erection in conjunction with the free standing mirror insulation for the vessel.
  21. K-E left a drawing with S&L showing loads on the containment for one proposed method of placing the reactor pressure vessel. More information is being obtained by K-E from other erectors which they will forward to S&L for review when received.
  22. The next meeting is scheduled for 8:30 A.M. on February 2<sup>3</sup>, 1972 in the offices of CG&E.

  
E. A. Borgmann

## THE CINCINNATI GAS &amp; ELECTRIC COMPANY



July 18, 1973

Mr. W. J. Friedrich  
Quality Assurance Manager  
Kaiser Engineers, Inc.  
P.O. Box 658  
Cincinnati, Ohio 45201

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
NON-CONFORMANCE REPORTS COVERING  
REJECTIONS, W.O. 57300-960, JOB E-5590

Gentlemen:

Recently, we received copies of Non-conformance Reports N39 and E68, both of which covered rejections upon receipt of materials purchased for the project. Previously, in discussions with Mr. J. W. Sutton of the AEC, he suggested that Non-conformance Reports should be used with a degree of judgment in order to minimize the total number issued. His main complaint however, was the more written the greater number would be in the non-dispositioned status, which he felt was undesirable.

It is our opinion that any material which has not been accepted at the project site and has been rejected, should not be covered by a Non-conformance Report. We feel that once the material has been received, is placed in storage and at a future time, is found to be deficient and is rejected, then a Non-conformance Report should be prepared. However, those materials rejected on the basis of a test failure prior to receipt or inspection at time of receipt should not be covered by a Non-conformance Report. If it is necessary to maintain records on vendors supplying material that has been rejected, it is suggested that some means other than a Non-conformance Report be utilized for this purpose.

We further emphasize our position by citing the fact that for trucks of concrete rejected there is not a Non-conformance Report prepared. It is contended that criteria are established for their rejection and similar

To: Mr. W. J. Friedrich

July 18, 1973

Re: Wm. H. Zimmer Nuclear Power Station -  
Non-conformance Reports Covering  
Rejections, W.O. 57300-960, Job E-5590

Page #2

criteria can be established for other materials. The concrete documentation does include record of rejections and it is suggested that other material rejected could be documented in a similar manner.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By

*E. Pandorf*  
EDWARD C. PANDORF  
Principal Quality Assurance  
and Standards Engineer  
General Engineering Department

WWS:dew

*Chet - Mike - Cal*  
*lef muf CAS*

THE CINCINNATI GAS & ELECTRIC COMPANY

July 19, 1973

Kaiser Engineers, Inc.  
P. O. Box 658  
Cincinnati, Ohio 45201

Attention: Mr. D. R. McSparrin

RE: WM. H. ZIMMER NUCLEAR POWER STATION  
UNIT 1 - PHASE 1 PIPING SYSTEM  
ERECTION, S&L SPEC. H-2254,  
W.O. 57322, JOB E-5590, FILE #2400-1

Gentlemen:

This letter will confirm information given to you verbally by Mr. H. C. Brinkmann during the construction meeting held in your offices on July 18, 1973.

We feel it is advisable to continue using distilled water for testing of sections of stainless steel piping since we cannot "prove" that chlorine attack would not occur if well water were used.

It is not necessary, however, to perform these tests in full compliance with ASME Standards since the test for ASME Standards will be done on the whole system as one piece at a later time. It further seems reasonable that we could reuse hoses from previous tests without sending them again to laboratories for chemical analysis if we simply flush the hoses with distilled water prior to using them.

Please take this as our instruction to continue using distilled water for testing of stainless steel piping.

As mentioned by Mr. Brinkmann in the above meeting, this memo applies to stainless steel piping. Our previous memo pertaining to stainless steel tanks which permitted use of well water in the tanks still stands. The reason for

CINCINNATI OHIO 45201 DATE: 7-25-73		
COPIES:	ROUTE	INITIAL
McSparrin		
G.R.		
D.W.		
R.W.		
J.P.		
M.C.		
L.C.		
L.L.		
S.C.		
S.S.		
T.G.		
C.H.		
E.L.		
B.S.		
C.V.		
B.C.		
J.P.A.		



To: Kaiser Engineers, Inc.

July 19, 1973

Re: Wm. H. Zimmer Nuclear Power Station  
Unit 1 - Phase I Piping System  
Erection, S&L Spec. H-2254,  
W.O. 57322, Job E-5590, File #2400-1

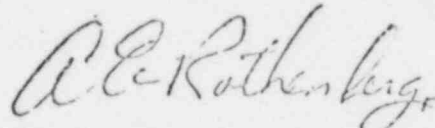
Page #2

permitting well water to test the tanks but not the piping  
is that we can drain the tanks immediately after testing  
and thus assure no prolonged exposure.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By



A. E. ROTHENBERG, CHIEF ENGINEER,  
& Manager - General Engineering Department

AER:ah

cc: C. C. Gray  
E. P. Cooper  
M. L. Evans  
W. E. Hasmann  
J. D. Flynn  
E. A. Borgmann  
W. B. Murray  
W. W. Schwiers



THE CINCINNATI GAS & ELECTRIC COMPANY



July 24, 1973

Kaiser Engineers  
P.O. Box 201  
Moscow, Ohio

Attention: Mr. D. R. McSparrin

RE: WM. H. ZIMMER NUCLEAR POWER STATION  
UNIT 1 - ERECTION OF PHASE I PIPING  
SYSTEM, S&L SPEC. H-2254, W.O. 57322,  
JOB E-5590, FILE 2400-1

Gentlemen:

The purpose of this letter is to clear up any confusion which may exist as to the requirements for residual chlorides and the demineralized water being used to hydrostatically test stainless steel piping. Although the above mentioned Sargent & Lundy specification indicates that strained river water or deep well water can be used to hydrostatically test, we wish to make it very clear that only demineralized water can be used for hydrostatically testing stainless steel piping. Furthermore, the demineralized water used under no conditions should contain more than one ppm residual chlorides.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By

*A. E. Rothenberg*  
A. E. ROTHENBERG, CHIEF ENGINEER,  
& Manager - General Engineering Department

AER:mjl

J. D. Flynn  
E. A. Borgmann  
E. C. Pandorf  
W. B. Murray  
W. W. Schwiars  
E. Hasmann  
C. Gray  
E. P. Cooper  
T. Fox

SEARCHED	INDEXED	SERIALIZED	FILED
JUL 25 1973			
FBI - CINCINNATI			
7-25-73			

March 18, 1974

Attention: Mr. D. R. McSparrin

RE: WM. H. ZIMMER NUCLEAR POWER STATION - UNIT 1  
FILE - GEN. #37, W.O. 57300, JOB E-5590

This letter will confirm that "nonconformance report" No. N-96 was approved and handed to J. P. Billings on March 8, 1974, by Mr. T. T. Fox. This nonconformance report deals with material for temporary construction, and while we have approved this nonconformance report, we will not approve such NR's in the future since we do not feel that a quality assurance program is necessary for temporary construction. The cost of such a program does not gain any benefit in terms of the completed project.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

A. E. ROTHENBERG, CHIEF ENGINEER,  
& Manager - General Engineering Department

cc: J. D. Flynn  
E. A. Borgmann  
H. C. Brinkmann  
T. T. Fox  
W. B. Murray  
W. W. Schwiers

[illegible]

KAISER ENGINEERS, INC.

WM. H. ZIMMER POWER STATION

## NONCONFORMANCE REPORT

NO.

N-96

PAGE

1

OF

1

1. DWG/INSTALLATION NO.

2. DWG/INSTALLATION NAME:

3. PO/CONTRACT NO.

4. SUPPLIER/CONTRACTOR NAME:

ASK-2B-102

OIL STORAGE TANK

7070-9536

C.S.C. INCORPORATED

5. INSPECTION PLAN NO.:

6. INSPECTOR:

7. DATE:

8. SPECIFICATION NO.

ASME

G3-1-10-B

J. DEERWESTER

3-5-74

ASTM-A105

YES ☐NO ☒

9. DESCRIPTION OF NONCONFORMANCE

10. DISPOSITION

11. DISPOSITION INSTRUCTIONS/JUSTIFICATION

REQUIREMENTS:

1) A-105, 2" - 3000# HALF  
COUPLING, SOCKET WELD  
FITTINGS TO BE IDENTIFIED

~~7.1.1.1.1~~  
~~7.1.1.1.1~~  
Rework

Procurement to  
obtain Cert of Compl.

FAULT:

FITTINGS NOT IDENTIFIED

2) P/O + sketch require  
Socket Weld fittings.

Accept  
as is

Fittings will be  
socket welded in  
field.

Screwed fittings  
furnished

12. REVIEW BOARD (REQUIRED ON ALL ACCEPT/REPAIR DISPOSITIONS)

N/A  
S&L DATE

11/10 3/6/74  
CG&E SPONSOR ENGR DATE

11/10 3-2-74  
CG&E O.A.&S. DATE  
KEI OAE

13. REPAIR/REWORK COMPLETE AND ACCEPTABLE

INSPECTOR/ENGINEER

DATE

14. CAUSE

15. CORRECTIVE ACTION

N/A

N/A

February 20, 1974

KC-1760-Q

Mr. A. E. Rothenberg, Manager  
General Engineering Department  
The Cincinnati Gas & Electric Co.  
139 East Fourth Street  
Cincinnati, Ohio 45202

Attention: E. C. Pandorf, Principal Engineer

Subject: Vendor Surveys for ASME Code Materials

Gentlemen:

As a manufacturer and holder of an "N" stamp, we are obligated under section KA 3361 of the code for surveying and qualifying the Quality System Programs of suppliers.

Our Quality Assurance Manual QAP #5, Procurement Document Control, paragraph 6 was rewritten to satisfy the Code Committee (Mr. Fritts). He was very emphatic at that time that this paragraph be included and complied with. He stated that this is one item that is reviewed by the Code Inspector assigned to the project.

At the present time KEI is purchasing code materials such as weld rod, pipe, and pipe fittings. It has been our practice to perform surveys at the suppliers plant, and we wish to continue and not put our ASME status in jeopardy.

Recently you have disapproved requests for such surveys. At the time of your decision it was discussed with me and I did agree. However, since that time I have had an opportunity to review the code and discuss the details with the KEI personnel involved. I am convinced now that you and I erred, and I would like you to reconsider.

This same requirement is imposed in Appendix B of 10CFR50 Criterion VII, and it would behoove you to review your procedures relative to essential hardware and act accordingly.

Very truly yours,

KATSER ENGINEERS, INC.

W. J. Friedrich  
Site Quality Assurance Manager

WJF:abc

cc: D. A. McFarlin  
D. H. Williams  
T. A. Bedford

March 28, 1974  
KC-1908-Q

Mr. A. E. Rothenberg, Manager  
General Engineering Department  
The Cincinnati Gas & Electric Co.  
139 East Fourth Street  
Cincinnati, Ohio 45202

Attention: E. C. Pandorf, Principal Engineer

Subject: Receiving Inspection

Gentlemen:

Following are some questions regarding the receiving and inspection of CG&E purchased equipment which require clarification and/or resolution.

After the questions, we have written our understanding of past instructions from CG&E. We would appreciate having you review the questions and our answers. If we have misunderstood CG&E's position on these points please advise.

1. What documentation should KEI have in the Site Document Center files to show that CG&E vendors have been approved?

Presumed Answer: No documentation is required in SDC files. CG&E is responsible for maintaining records to demonstrate evaluation and approval of their vendors.

2. On GE equipment a certification is attached indicating that the item has been released for shipment. On other equipment purchased by CG&E what system is to be used to indicate that shipment has been authorized?

Presumed Answer: CG&E to develop a release system.

3. Is KEI to develop a check list for documentation on each item purchased by CG&E?

Presumed Answer: No, CG&E will develop the necessary check list since they will be receiving, reviewing, and approving these documents.



4. On GE equipment a PQCL is forwarded to KEI to indicate that all the required documentation has been received and approved. KEI releases the item from hold based on the PQCL. For equipment purchased by CG&E will a document equivalent to a PQCL be prepared by CG&E?

Presumed Answer: Yes, CG&E will provide a document equivalent to the PQCL to release equipment for installation.

5. What is KEI's receiving inspection responsibility on CG&E purchased equipment?

Presumed Answer: On all CG&E purchased equipment, including GE items, KEI is to inspect for shipping damage and identification. Undamaged equipment may be released for installation as soon as the PQCL or CG&E's equivalent document is received.

6. Does the classification of an item change the KEI receiving inspection requirements?

Presumed Answer: No, the classification will effect the amount of documentation which CG&E must review but will not effect KEI's inspection responsibility.

7. Is KEI to review any of the documentation on CG&E purchased equipment?

Presumed Answer: No, KEI is only responsible for the filing of documentation which will previously have been reviewed and accepted by CG&E. KEI should verify that all documents have been stamped by CG&E prior to filing and that the documentation Check List has been signed by the cognizant CG&E QA&S Engineer.

Very truly yours,

KAISER ENGINEERS, INC.

W. J. Friedrich  
Site Quality Assurance Manager

CAS:ebc,

bcc: D. R. McSparrin  
D. H. Williams  
V. P. McMahon

cc: W. W. Schuchert

April 9, 1974  
QA-411

Kaiser Engineers, Inc.  
P.O. Box 201  
Moscow, Ohio 45153

Attention: Mr. D. R. McSparrin

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
UNIT 1, RECEIVING INSPECTION,  
W.O. 57300-957, JOB E-5590

Gentlemen:

This is in reply to your letter KC-1908-Q containing questions relating to receiving inspection and handling of documentation. The following answers pertain to all equipment purchased by The Cincinnati Gas & Electric Company except Phase II piping assemblies, which are covered by the "Procedure for Verification and Handling of QA Documentation for Phase II Piping Subassemblies".

1. Your "presumed answer" is correct.
2. The Cincinnati Gas & Electric Company does not have a formalized release for shipment program comparable to that of General Electric. Most components are released by the vendor according to a predetermined shipment schedule. An exception exists in the case of certain electrical equipment for which CG&E reviews test data and documentation prior to release for shipment.
3. Your "presumed answer" is correct.
4. We do not anticipate the need for a document comparable to General Electric's Product Quality Certification (which superseded the PQCC effective January 1, 1974). Release for installation will be based on receiving inspection and receipt of required QA documents.

To: Kaiser Engineers, Inc.

April 9, 1974  
Page 02

Re: Wm. H. Zimmer Nuclear Power Station -  
Unit 1, Receiving Inspection,  
W.O. 57300-957, Job E-5590

5. KEI's receiving inspection responsibility includes the reporting of any observed non-conformance to the procurement documents, including shipping damage and identification. Receipt of QA documentation for essential CG&E and KEI purchases is required prior to installation or use.
6. Your "presumed answer" is correct. Refer to the answer to question 5. Also, we do not plan to conduct in-depth reviews of documentation for non-essential components.
7. Your "presumed answer" is correct insofar as QA documents received from CG&E vendors is concerned. However, KEI has responsibility for review and acceptance of QA documents generated as a result of any field operations involving CG&E-purchased components. Your answer also implies that each document is stamped. Our practice is to stamp each document package to indicate QA&S audit.

We trust that this will clarify the concerns expressed in letter KC-1908-Q. If there are questions, please let us know.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By

*A. E. Rothenberg*  
A. E. ROTHENBERG, CHIEF ENGINEER,  
& Manager - General Engineering Department

AER:rt

cc: W. J. Friedrich ✓  
J. D. Flynn  
E. A. Bergmann  
E. C. Pandorf  
W. W. Schwiers



**KAISER**  
ENGINEERS

EXHIBIT I

KAISER ENGINEERS, INC.  
P. O. BOX 201  
MOSCOW, OHIO 45155

April 19, 1974  
KC-2000-Q

Mr. A. E. Rothenberg, Manager  
General Engineering Department  
The Cincinnati Gas & Electric Co.  
139 East Fourth Street  
Cincinnati, Ohio 45202

Attention: E. C. Pandorf, Principal Engineer

Subject: Receiving Inspection

Gentlemen:

Your letter of April 9, clarifying our receiving inspection responsibility has been very helpful. The following is an outline of the receiving inspection program we are implementing in response to your directives. If we have misunderstood you in any point please let us know so that we can take corrective action.

1. When a CG&E purchased item arrives on the job site KEI inspects for shipping damage, identification, and for documentation. In addition the inspector will report any observed condition which he knows is not in compliance with procurement documents. This reporting of casually observed nonconformances does not mean that KEI is to review specifications, drawings, and any other purchase order document to extract requirements for verification by the receiving inspector. This will have already been accomplished by CG&E.
2. If KEI has received the CG&E document check list indicating that all of the required documentation has been received and approved then an undamaged item will immediately be released for installation.
3. If KEI has not received the completed CG&E document check list for an item, a Document Deficiency Notice (DDN) will be prepared and a Hold tag will be attached to the item.
4. An item in quarantine for Document Deficiency will be released when:
  - 1) The complete document check list is received from CG&E, or
  - 11) The DDN is returned by CG&E indicating that the item is non-essential and may be released without documentation, or

- iii) An NR is processed authorizing the installation of the item prior to receipt of required documentation.
5. GE material will be handled similarly, but their Product Quality Certification will be an acceptable substitute for CG&E's document check list.
  6. The receiving inspection program for Bristol Steel shipments has not yet been finalized. John Hoffman has advised that he is presently writing instructions for receiving this material.
  7. The component classification listing would be beneficial to receiving inspection for distinguishing essential and non-essential items if it was brought up-to-date.

Very truly yours, .

KAISER ENGINEERS, INC.

*W. J. Friedrich*

W. J. Friedrich  
Site Quality Assurance Manager

CAS:sbc

cc: W. B. Murray

bcc: D. R. McSparrin  
D. H. Williams  
V. P. McMahon

## THE CINCINNATI GAS &amp; ELECTRIC COMPANY



September 19, 1975  
KEQ-43

Kaiser Engineers  
P.O. Box 201  
Moscow, Ohio 45153

Attention: Mr. W. J. Friedrich

RE: WM. H. ZIMMER NUCLEAR POWER STATION  
UNIT #1, RECEIVING INSPECTION PLANS  
W.O. 57300-957, JOB E-5590

Gentlemen:

The Sargent & Lundy Specifications for essential or non-essential equipment requires a vendor to submit with shipment three (3) copies of all required documentation. The vendor is instructed to mail two (2) copies to my attention and one (1) copy is to accompany the shipment.

The Quality Assurance & Standards Section is responsible for obtaining, reviewing for completeness, accepting and transmitting one copy to the Site Document Center using the Document Check List.

It will not be necessary to include Documentation as an item on your Receiving Inspection Plans.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By *E. C. Pandorf*

E. C. PANDORF  
Principal Quality Assurance  
& Standards Engineer  
General Engineering Department

RPE:rat

cc: C. C. Gray  
E. A. Borgmann  
J. H. Hoffman  
QA&S File





## THE CINCINNATI GAS &amp; ELECTRIC COMPANY



September 14, 1976

E. A. BORGMANN  
VICE PRESIDENT-ENGINEERING

United States Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Attention: Mr. E. L. Jordan, Acting Chief  
Reactor Construction and Engineering  
Support Branch

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
UNIT 1 - PROJECT ORGANIZATION  
DOCKET NO. 50-358, CONSTRUCTION PERMIT  
NO. CPPR-88, W.O. 57300-956, JOB E-5590

Gentlemen:

The purpose of this letter is to advise you of recent changes in the Wm. H. Zimmer Nuclear Power Station project organization.

The position of Field Project Engineer has been eliminated and replaced by a Site Construction Manager, reporting directly to Mr. B. K. Culver, Principal Construction Engineer. Gearco, Inc., represented by Mr. H. B. Gear, has been engaged as Site Construction Manager. Mr. Gear has responsibility for all construction activities, including the construction activities of Kaiser Engineers, Inc., all subcontractors, and CG&E Co. field construction personnel. Because some of Gearco's present activities were formerly performed by Kaiser Engineers, Inc., Kaiser's staff has been reorganized and reduced accordingly.

Kaiser Engineers' site Quality Assurance Organization remains independent of the construction activities, and continues under the direction of the Corporate Quality Assurance Manager in Oakland, California.

A revised project organization chart is attached for your information.

To: United States Nuclear  
Regulatory Commission

September 14, 1976

Re: Wm. H. Zimmer Nuclear Power Station -  
Unit 1 - Project Organization  
Docket No. 50-358, Construction Permit  
No. CPPR-88, W.O. 57300-956, Job E-5590

Page #2

The purpose of this reorganization was to give The Cincinnati Gas & Electric Company a more direct and active role in all phases of the Zimmer project with Kaiser Engineers remaining as the Constructor.

Effective September 1, 1976, Mr. E. C. Pandorf, Principal Quality Assurance & Standards Engineer, retired from service with The Cincinnati Gas & Electric Company. Mr. W. W. Schwieters, formerly Field Project Engineer, but who has Quality Assurance experience, has been named to replace Mr. Pandorf as Principal Quality Assurance & Standards Engineer.

The Cincinnati Gas & Electric Company Quality Assurance & Standards Section now consists of the Principal QA&S Engineer, one Structural Engineer, one Electrical Engineer, and two Mechanical Engineers, one responsible for mechanical components, the other responsible for piping systems and reactor components.

The Structural QA Engineer is currently assigned to the Zimmer Site as Field QA Engineer. We plan to reassign the remaining personnel of the Quality Assurance & Standards Section to the project site shortly after October 1, 1976.

Also effective September 1, 1976, Mr. R. J. Van Veen, Principal Structural Engineer, retired from service with The Cincinnati Gas & Electric Company. Mr. H. E. Crail, formerly Assistant Principal Structural Engineer, has been named to replace Mr. Van Veen as Principal Structural Engineer.

We trust that this adequately describes personnel changes which have been effected on the Zimmer project and the reasons therefor. If additional information is desired, please let us know.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By

  
E. A. BORGMANN

EAB:daw

cc: I. Peltier

October 22, 1976

KEW-71

EXHIBIT L

Kaiser Engineers, Inc.  
P. O. Box 201  
Moscow, Ohio 45153

Attention: Mr. W. J. Friedrich

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
UNIT I - AUTHORIZED CG&E CONSTRUCTION  
ENGINEERING SIGNATURES ON NONCONFORMANCE  
REPORTS

Gentlemen:

The disposition of Rework or Reject on Nonconformance Reports does not change design. Because of this, the approval signatures of Sponsor Engineers will no longer be mandatory on essential or non-essential Nonconforming Reports with rework or reject dispositions.

In place of the Sponsor's signature, the approval signature of CG&E Construction Engineering personnel will be acceptable. The implementation of this procedure is to be affective immediately.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By

*W. W. Schiers*

W. W. SCHIERS  
PRINCIPAL QUALITY ASSURANCE AND  
STANDARDS ENGINEER

RPE:pa

cc: B. K. Culver  
H. B. Gear  
C. W. Beringhaus  
R. L. Dirr  
H. E. Crail

QUALITY ASSURANCE & STANDARDS SECTION		
DATE: 10/25/76		
ROUTE TO	INIT.	COPY
OK	WWS	
	ONE	175
	RLW	LCW
	JRH	JRH
	JFW	JFW
QA & S FILE		

THE CINCINNATI GAS & ELECTRIC COMPANY



November 1, 1976  
KEQ-74

Kaiser Engineers, Inc.  
P. O. Box 201  
Moscow, Ohio 45153

Attention: Mr. W. J. Friedrich

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
UNIT I - AUTHORIZED SIGNATURES FOR  
NONCONFORMANCE REPORTS AND NON-ESSENTIAL  
DESIGN DOCUMENT CHANGE REQUESTS

Gentlemen:

My letter of October 22, 1976 stated that CG&E Construction Engineering personnel signatures would be accepted for Rework or Reject dispositioned Nonconformance Reports. This should also include non-essential Design Document Change Requests.

Employees of the EDS Corporation are working under the direction of the Site Construction Manager and as such, their signatures should be accepted in those same cases where CG&E Construction Engineers are permitted to sign non-essential DDC's and NR's.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By *W. W. Schwiens* Ed  
W. W. SCHWIERS  
PRINCIPAL QUALITY ASSURANCE  
AND STANDARDS ENGINEER

RPE:pa

cc: B. K. Culver  
H. B. Gear  
C. W. Beringhaus  
R. L. Dirr  
H. E. Crafl

## THE CINCINNATI GAS &amp; ELECTRIC COMPANY

CINCINNATI, OHIO 45201

April 1, 1977  
KEQ-120

Kaiser Engineers, Inc.  
P. O. Box 201  
Moscow, Ohio 45153

Attention: Mr. R. E. Turner

RE: WM. H. ZIMMER NUCLEAR POWER STATION -  
UNIT 1 - QUALITY ASSURANCE CONCERNS -  
W.O. #57300-957, JOB E-5590

Gentlemen:

In accordance with your request, attached is a list of those Quality Assurance items that are of concern to CG&E. Below is listed a brief discussion concerning each item.

- Item 1 - As previously discussed, we would like to make a combined audit schedule. At your earliest convenience, I would like to discuss the responsibilities for both KEI and CG&E concerning this schedule.
- ✓ Item 2 - At the recent Management Meeting between KEI, CG&E and S&L concern was expressed by the KEI Construction Section concerning the QA/QC of non-essential areas. It is CG&E's intention to maintain a minimum of inspection in the non-essential area and therefore, construction inspection plans and similar Quality Control responsibilities should be deleted from KEI's Quality Assurance scope of work.
- ✓ Item 3 - I have previously discussed pipe hanger inspections with you and a recent audit was conducted by CG&E which should detail the concerns we have concerning such inspections. Possibly we should have a meeting to determine the necessity of all of the paper work which is presently being developed for such inspections. We do intend to document that the hanger complies with design documents; however, we should generate only that paper which is necessary to confirm installation with appropriate S&L drawings.
- Item 4 - Concerns radiographic acceptance and this requires a discussion concerning the use of Magnaflux-Peabody and our independent audit of your acceptance of pipe welds.
- Item 5 - Covers a definition of the terms as listed. It is our preference to utilize 100% inspection only where absolutely

necessary. Presently, there are inspection plans which utilize full-time inspection. These should be analyzed to determine the benefits received from such inspections.

- Item 6 - Covers CG&E's review of KEI procedures. I would like to have some input into your procedure prior to the time it becomes a workable, fully accepted procedure.
- Item 7 - Concerns the format used in your audit reports. I do not feel that questions that are answered by a yes or no type answer fully documents that an appropriate audit has been conducted. I prefer questions and answers that demonstrate that important phases of given procedures are being implemented with examples of the areas that have been verified to demonstrate implementation.
- Item 8 - Covers a general discussion of QACMI's and the amount of detail incorporated into these procedures. I have frequently stated that QACMI's include too many construction activities which should be the responsibility of the Construction Group to prepare procedures as required. Quality Assurance procedures should only extract from these procedures those important activities which generally demonstrate compliance with the procedure.
- Item 9 - Covers inspection plans and involves a philosophy to assure that inspectors are performing the activities which are listed on the plan. I previously indicated that paper work should be minimized; however, in this area, we must detail those important activities which demonstrate an installation in accordance with design specifications.
- Item 10 - Covers the Quality Assurance Supplier and Receiving Engineering Activities. I have always felt that each individual Quality Assurance Engineer should review the requisitions for purchase on a discipline basis. For example, the mechanical Quality Assurance Engineer should verify that each procurement document incorporates the appropriate QA requirements for the subject purchase.
- Item 11 - Concerns personnel requirements, both at present and future, including relocation of inspectors and personnel to a more active discipline. For example, the necessity for the number of structural QC inspectors we presently have on the project.
- Item 12 - Covers the approval of KEI welding procedures that have been approved by S&L. Should these be included in our Configuration Control Center and listed on our Document Control Register Index

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

*W. B. O. [Signature]*



QUALITY ASSURANCE ITEMS - KEI

1. Combined Audit Schedule.
2. QA/QC non-essential components.
3. Pipe hanger inspections.
4. Radiography acceptance
5. Inspection, audit, surveillance.
6. KEI procedure reviews.
7. Audit reports - format.
8. QACMI's - Detail.
9. Inspection Plans - specific vs. area.
10. Material Purchases - Review by QA Engineer of associated discipline.
11. Personnel Requirements.
12. KEI Procedures that have been approved by S&L.

# THE CINCINNATI

WEDNESDAY, JUNE 9, 1982

## Zimmer Suspicion Fueled

### Engineer's Report Questions Materials

BY DAVID SHAPIRO  
RICHARD WHITMIRE  
Gannett News Service

and BEN L. KAUFMAN  
Enquirer Reporter  
©1982, Gannett News Service

A confidential report that recently arrived in a plain, brown envelope at the Nuclear Regulatory Commission is provoking new doubts about safety-related materials used in the Zimmer nuclear power station, Gannett News Service has learned.

The report was written last July by a corporate quality engineer for Henry J. Kaiser Co., a West Coast construction firm that is building the \$1.5 billion power station for Cincinnati Gas and Electric Co. (CG&E) and two other utilities.

The confidential report charged that:

- Up to 90% of the structural materials at Zimmer were, at CG&E's insistence, purchased "non-essential" (for non-safety-related uses) and later issued for essential uses.

- Steel beams were cut into sections without transferring vital heat numbers from the original beams to all the pieces, compromising the builders' ability to trace the steel and prove its quality.

- Inferior studs and nuts used to temporarily fasten critical components of the plant were left in place instead of being replaced by permanent fasteners that meet nuclear building codes set by the American Society of Mechanical Engineers.

- The approved vendors' list used to identify qualified suppliers of safety-related material was outdated and handled in a way that made it impossible to drop vendors from the list for poor performance.

- Site records were in such disarray that it was impossible to keep track of letters and memos that changed the Zimmer quality control program over the years.

# ENQUIRER

"COMPLIANCE TO (the Code of Federal Regulations) regarding demonstrable procurement and supplier control is, conservatively speaking, in doubt," the report concluded. "It is important that Kaiser be able to show an acquiescence to client (CG&E) demands rather than non-compliance with federal regulations."

According to other internal construction documents obtained by Gannett News Service, the report was part of a running disagreement between Kaiser and the utility over the proper procedures for inspecting critical components used in Zimmer.

Documents covering nine years of construction show CG&E frequently refusing Kaiser permission to conduct more stringent quality inspections of Zimmer suppliers.

CG&E and Kaiser executives now denigrate the sensitive Kaiser report, claiming it of little significance because it relies on "hearsay" evidence to rehash old problems at the plant.

"It was not an audit or a formal investigation so much as it was kind of a learning experience," said Gerald Charnoff, a Washington lawyer who represents Kaiser.

Earl Borgmann, senior CG&E vice president in charge of the Zimmer plant, said parts of the report—particularly sections dealing with upgrading of materials—were "absolutely untrue."

"THERE WAS nothing new in the report . . . that has not been covered either through our own programs or through the quality confirmation program," Borgmann said.

But if CG&E and its builder see no significance in the report, the Nuclear Regulatory Commission (NRC) does.

Since receiving it in the mail three months ago, NRC investigators from Chicago have crisscrossed the country seeking information about the 12-page document's allegations.

Commissioners were so interested in the report and its implications for the safety of the Zimmer plant that they held a closed meeting in Washington on Monday to get an update on the investigation.

Beyond checking facts of the document, the NRC wants to know why it received the report anonymously—and eight months late—instead of getting it officially from CG&E or Kaiser.

Gannett News Service has learned that NRC investigators made at least two trips to Oakland, Calif., in recent weeks to pose that question to top Kaiser officials. They also have visited Cincinnati to interview CG&E executives.

INVESTIGATORS SAY privately that the report clearly should have been submitted to the NRC under Part 21 of the Code of Federal Regulations.

Part 21 requires officers of nuclear utilities to report to the NRC any known non-compliance or defect that would cause a substantial safety hazard within 48 hours after the problem is found. Failure to comply with the reporting requirement can result in civil penalties.

If the charges in the Kaiser report are found to be true, a significant expansion of the quality confirmation program at Zimmer could result.

That massive effort to prove Zimmer's safety was ordered by the NRC last year after CG&E was fined \$200,000 for shoddy record-keeping, questionable construction practices and harassment of quality control inspectors.

Other problems in the quality confirmation program already are seen as virtually certain to delay start-up of Zimmer at least a year beyond the mid-1983 target set by CG&E.

The Kaiser report also could prove to be something of an embarrassment to the NRC staff.

(See ZIMMER, Page A-13)

TWO MONTHS after the report was written, NRC inspectors—unaware of the Kaiser findings—conducted their own routine investigation of procurement practices at Zimmer.

Although some of the same problems cited in the Kaiser report were noted by the inspectors, the NRC concluded in a letter to CG&E that "no items of noncompliance with NRC requirements were identified."

By contrast, the National Board of Boiler and Pressure Vessel Inspectors, which is investigating Zimmer for the State of Ohio, has sharply criticized CG&E for forcing Kaiser to accept vendors on the basis of CG&E's "personal experience," rather than letting Kaiser inspectors visit the vendors' plants to make independent audits of their quality programs.

Throughout the construction of Zimmer, the NRC has been accused by critics of the plant—and also occasionally by CG&E—of failure to recognize and correct potentially serious quality problems.

Dorwin Hunter, senior Region III NRC official in charge of the Zimmer investigation, said the confidential Kaiser report raises serious questions about the quality program at the plant.

He said the reported high incidence of upgrading materials from non-essential to essential, which carries far more stringent inspection requirements, is rare at nuclear plants.

"It just doesn't occur," he said. "Any upgrading from non-essential to essential, they (CG&E) will address."

HE SAID the apparent sectioning of steel at Zimmer without transferring the heat numbers to each piece could also cause major problems for CG&E.

"They've lost traceability," Hunter said. "They must certify the steel . . . either through finding the paperwork or testing the hardware. They could have put in a piece of steel that had been mistreated and didn't meet the minimum requirements. Until you test, you don't know that."

Hunter said new problems posed by the Kaiser report are being added to the quality confirmation program at Kaiser.

"We have it under active review and investigation," he said. "I can't give you a date to complete it, but it shouldn't be very long unless it grows."

With the NRC now expressing great interest in the Kaiser report, Kaiser and CG&E are treating the document like a hot potato.

Kaiser executives refused to discuss the report with Gannett News Service, referring all questions to attorney Charnoff, who is representing Kaiser before the NRC on the issue.

CHARNOFF SAID the report was written by Sherrill Nolder, a Kaiser quality engineer in Oakland, who was sent to Zimmer by David Howard, who had just become Kaiser's director of quality assurance programs.

Charnoff said Nolder, who spent six days in Cincinnati, was asked to get a "fresh view" of the situation at Zimmer, but had no specific instructions to conduct an investigation of purchasing practices.

"One of problems with that report is that it looks more formal than it probably deserves," he said.

The report is titled, "Investigation of Supplier Quality Assurance at William H. Zimmer Nuclear Generating Station."

And its formal statement of purpose clearly defines its aim as determining whether proper quality

procedures were followed in the purchase and upgrading of safety-related materials at Zimmer.

Charnoff said Kaiser never turned the report over to the NRC because it was based on "hearsay" and contained few "substantiated facts."

"It's an impressionistic report," he said. "It wasn't really intended to be an investigation or anything of the sort. Nobody treated it as being a highly dignified or formal type of document. I'm satisfied that there was absolutely no unauthorized withholding."

CHARNOFF DENIED the implication in the report that Kaiser is seeking to blame CG&E for Zimmer's quality problems.

"This is a relatively new person coming into Kaiser and saying,

'Hey, Kaiser, we ought to protect ourselves,'" Charnoff said. "But the general impression of the people I've talked to at Kaiser is that it didn't reflect where Kaiser was coming from."

Borgmann said CG&E first saw the report when it was delivered anonymously in the mail several weeks after it had already been sent to the NRC.

He said CG&E immediately expressed its displeasure to Kaiser about not receiving a formal copy of the report when it was written.

Borgmann said the current dispute over whether the report should have been sent to the NRC at the beginning "is something between the NRC and Kaiser, as far as I'm concerned."

CG&E strongly disputed charges that 90% of Zimmer's

non-essential work and later upgraded to essential uses.

BORGSMANN SAID the report must have been talking about steel that was purchased by Kaiser for miscellaneous uses, not the main structural steel used at Zimmer.

"All the steel bought was bought with mill certifications," he said. "When it came to upgrading certain parts of the steel, it was a very conscious program to upgrade some of the steel we already had mill certs (certifications) for. It was checked by the NRC and we have a letter from the NRC (written in 1975) accepting that program."

CG&E President William Dickhoner described the recent anonymous circulation of the Kaiser report as a "witchhunt."

"(Kaiser) sent this gal down to

get the flavor of what was going on at the site and she came back with this report that . . . was so fantastic and so far-fetched that the person who received it in the Kaiser home offices put it aside," he said.

Dickhoner was particularly incensed about charges that CG&E acted improperly when it refused to allow Kaiser to make independent inspections of material suppliers approved by CG&E.

"I don't think there was anything sinister in telling people who were working for us how to proceed," he said. "They were traipsing all over the country on junkets that weren't required. They've got qualified nuclear inspectors in these shops. What good would it have done other than to run up the cost to send another inspector?"

THE CINCINNATI ENQUIRER/Wednesday, June 9, 1982

Ball Schumers

Jan 20 198

Ken Shonkle and Don Kramer told me of a problem they have tried to solve without success and I believe this may be a potential SO-55C against HSK QA program.

I am told that 30-40% of the W8X17 beams installed in the Box and Rx building supporting essential hangers were purchased from non-approved distributors or mill's. This could even be higher in percentage.

I was also told that the Warehouse QA refused to sign or release the registration and/or warehouse release slips and he was overruled by previous HSK QA Mgrs.

If the above is true we have a breakdown in the QA program that should have been discovered by QA audit.

Frank Adams - a Anti scrap dealer supplied a large amount of the beams - He and the mill - US Steel Co are non approved.

Secondly - in the last 5 years there has been no program in HSK QA to inspect end connection welds. We must have thousands that need to be inspected.

/s/ P. S. Gattings

P. S. Gattings

## U.S. NUCLEAR REGULATORY COMMISSION

## REGION III

Report No. 50-358/81-13

Docket No. 50-358

License No. CPPR-88

Licensee: Cincinnati Gas and Electric Company  
139 East 4th Street  
Cincinnati, OH 45201

Facility: William H. Zimmer Nuclear Power Station

Investigation At: William H. Zimmer Site, Moscow, Ohio,  
Cincinnati and vicinity,  
Sargent & Lundy, Chicago, Illinois,  
and Other Locations

Dates of Investigation: January 12-16, 19-22, 26-30, February 9-13, 16-20,  
23-27, March 2-6, 9-13, 17, 20, 23-27, April 10,  
14-17, 20-23, 30, May 18-22, 31, June 1-5, 8-12,  
17-19, 29-31, July 1-2, 6-8, 12-16, August 10, 24-28,  
and October 5-9, 1981

Investigation Team Members:

F. A. Barrett  
F. A. Barrett  
Reactor Inspector

10/16/81  
Date

J. B. McCarten  
J. B. McCarten  
Investigator

10/16/81  
Date

R. M. Burton  
R. M. Burton  
Investigator

10/16/81  
Date

E. C. Gilbert  
E. C. Gilbert  
Investigator

10/17/81  
Date

J. E. Foster  
J. E. Foster  
Investigator

10/16/81  
Date



K. D. Ward  
K. D. Ward  
Reactor Inspector

10/16/81  
Date

C. M. Erb  
C. M. Erb  
Reactor Inspector

10/20/81  
Date

J. F. Schapker  
J. F. Schapker  
Reactor Inspector

10/23/81  
Date

F. A. Maura  
F. A. Maura  
Reactor Inspector

10/16/81  
Date

J. J. Harrison  
J. J. Harrison  
Senior Resident Inspector  
Marble Hill

10/17/81  
Date

W. J. Key  
W. J. Key  
Reactor Inspector

10/22/81  
Date

E. T. Daniels  
E. T. Daniels  
Senior Resident Inspector  
Zimmer

10/16/81  
Date

T. E. Gwynn  
T. E. Gwynn  
Resident Inspector  
Zimmer

10/20/81  
Date

Reviewed By: R. F. Warnick  
R. F. Warnick, Director  
Enforcement and Investigation Staff

10/16/81  
Date

J. F. Streeter  
J. F. Streeter, Chief  
Reactor Projects Branch 2

10/29/81  
Date



*A. B. Davis*

A. B. Davis  
Deputy Regional Administrator

*11/20/81*  
Date

*James G. Keppler*  
J. G. Keppler  
Regional Administrator

*11/20/81*  
Date

Investigation Summary: Investigation from January 12 through October 9, 1981  
(Report No. 50-358/81-13)

Areas Investigated: The NRC has been and is continuing to investigate quality assurance and quality control problems at the Zimmer nuclear facility as a result of (1) allegations received on November 18, 1980, from a former Zimmer site quality control inspector working at another construction site; (2) allegations received in January, 1981, from the Government Accountability Project of the Institute for Policy Studies on behalf of Mr. Thomas Applegate; (3) allegations received from numerous contractor workers and ex-contractor workers during the course of the investigation; and (4) other concerns identified by NRC inspectors during the course of the investigation.

Results: This investigation has identified numerous examples of noncompliance with twelve of the eighteen Appendix B criteria for quality assurance. These examples are evidence of a widespread breakdown in the Zimmer quality assurance program. The majority of the problems identified to date focus on the ineffectiveness of controls implemented by the licensee and its contractors for assuring the quality of work performed. In that regard, numerous deficiencies were found concerning: false records, traceability of materials, harassment/intimidation of Quality Control Inspectors, handling of nonconformances, and the licensee's overview of ongoing work. Based on these findings, the licensee has taken significant corrective actions to assure the quality of future work. Limited independent measurements have been performed by NRC in selected areas of concern in an attempt to characterize the impact of the quality assurance deficiencies on construction work already completed. Although a few problems requiring corrective action were identified, the majority of the tests and examinations disclosed no hardware problems. In spite of the relatively favorable findings from the NRC's limited independent measurements, the NRC has required the licensee to establish a comprehensive Quality Confirmation Program to determine the quality of plant systems important to nuclear safety because of the widespread quality assurance problems identified. The NRC will confirm the adequacy of the licensee's program and is making additional independent verifications. Any deficiencies identified by these programs will require resolution prior to issuance of an Operating License. Approximately 350 mandays onsite were expended during this investigation and during the NRC independent measurements.



SPECIAL INQUIRY RE:

ADEQUACY OF IE INVESTIGATION 50-358/80-9  
AT THE WILLIAM H. ZIMMER NUCLEAR POWER STATION

DATE: AUG 7 1981

OFFICE OF INSPECTOR & AUDITOR  
U. S. NUCLEAR REGULATORY COMMISSION

## SUMMARY

In December 1980, the Government Accountability Project (GAP) made allegations on behalf of Mr. Thomas Applegate to the effect that (a) potentially faulty construction existed at the Zimmer Nuclear Power Station, Moscow, Ohio, and (b) the NRC failed to properly investigate the faulty construction allegations when they were first brought to the NRC's attention in February 1980 by Mr. Applegate. The Office of Inspector and Auditor (OIA) was directed to investigate GAP's latter allegation, i.e., whether the Office of Inspection and Enforcement (IE), Region III adequately investigated Mr. Applegate's February 1980 allegations. The scope of this report extends neither to the evaluation of other Region III actions relating to Zimmer nor to the question of allegedly faulty construction at Zimmer.

During the period December 1980 through February 1981, pertinent current and former Region III personnel were interviewed to identify what was done as a result of the initial allegations made by Applegate. All available documentation relating to IE regional investigative procedures and copies of inspection and investigation reports pertaining to the Zimmer site were reviewed.

Review of the material furnished by GAP in December 1980 disclosed that only a limited number of the GAP allegations had been brought to the attention of the Region III IE investigative staff by Applegate in February 1980.

Based on interviews conducted at Region III, OIA determined that the initial investigative effort conducted by Region III had assessed the allegations, had received available material, and had initiated an investigation into those allegations that Region III determined to be within the purview of the NRC. Regional personnel advised that the investigative effort was conducted in accordance with IE procedures and that they believed that the report thoroughly documented discoveries surfaced during the investigation.

OIA review of the investigative file disclosed inadequate documentation. For example, the investigative file contains no detailed documentation reflecting the results of interview with Applegate or principal witnesses and no detailed record or copies of the welding documentation reviewed by the investigators with regard to the specific welds alleged to be defective.

OIA review of Zimmer welding records revealed that of the three allegedly defective welds specifically identified by Applegate in his first allegation, two had been repaired or replaced, one (K-811) shortly before and the other (RH-42) during the IE investigative effort at the facility. The IE investigative report did not identify the dates on which the welding rework was conducted on weld K-811 or that a nonconformance report (NR) on K-811 that had initially been closed with the notation "accept as is" was later voided and reopened to order the weld cut out. The investigation also failed to determine that weld RH-42 had been cut out and replaced.

after the initiation of the IE investigation. Interviews of the investigators disclosed that they had no knowledge that welding repair on RH-42 had taken place. In fact none of the welds in question were inspected by the investigative team nor was all pertinent welding documentation reviewed by the investigators.

Applegate's second original allegation concerning the installation of safety-related prefabricated pipe containing allegedly defective welds was partially substantiated by the IE investigation. This allegation, as it related to improperly "closing out" an NR and installing the pipe, resulted in the region identifying one item of non-compliance and issuing the licensee an "infraction." However, the IE investigation neither fully investigated nor accurately reported on this aspect of the case. During the investigation of this allegation, information was received that the alteration of the NR - which released the spool pieces for installations - was ordered by the Cincinnati Gas and Electric Company (CG&E) Quality Assurance (QA) Manager. The IE report only identified this individual as "a CG&E official" - thus obscuring from the reader that this alteration was directed by the licensee's senior official responsible for the implementation of the QA program at Zimmer. In addition to not reporting this fact, IE did not fully investigate the circumstances surrounding the QA Manager's order.

OIA's review of records and interviews of regional personnel did not develop any additional information regarding the third allegation - inadequate pipe flushing procedures - that was not identified in the IE investigation report.

One of Applegate's main allegations was "that defective welds in safety-related systems have been accepted, among them welds CY 606, HR 42 (sic) and X 811." By virtue of prior IE inspections (Region III reports 78-30 and 79-17), it is clear that Region III was well aware of the chronic and long history of welding problems at Zimmer: specifically, that unacceptable welds in safety-related systems had for all intents and purposes been accepted by both the contractor and, in some cases, the licensee. Based upon these inspections, Region III required the licensee to rereview radiographs and reports of all welds which had been accepted for turnover prior to operation; this review started in October 1979 and portions of this review are still being studied by Region III. Nonetheless, the Region III report found that Applegate's allegation in this regard was "not substantiated" because the welds had not yet received "final acceptance." In fact, Applegate was correct in saying that defective welds in safety-related systems had been accepted. To say that Applegate's allegation was not substantiated appears to be a question of semantics and is not consistent with the facts. In summary the Region III investigative effort did not adequately pursue all of the allegations in sufficient depth or breadth and lacked adequate documentation.



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

EXHIBIT Q

*Zimmer*  
*File*

*A-22*

JUL 8 1981

MEMORANDUM FOR: File

FROM: James G. Keppler, Director

SUBJECT: TELEPHONE CALL FROM MR. THOMAS APPLGATE

On July 6, 1981, Mr. Applegate called and expressed concern over a number of areas relative to the ongoing NRC investigation at Zimmer. The specific concerns and my response to Mr. Applegate are summarized below:

1. Mr. Applegate stated that contrary to our early agreement, he had not been contacted recently by Mr. McCarten.

I told Mr. Applegate that I did not know why he had not heard from Mr. McCarten, that it was our intent to keep in contact with him each trip to Cincinnati and that I would check with Mr. McCarten. I informed Mr. Applegate that I knew Mr. McCarten had been in the office the last few weeks working on his investigation report and that may account for why he had not heard from us recently.

2. Mr. Applegate stated that Mr. Dickhoner, during a recent speaking engagement, had told his audience that the NRC found Applegate's allegations to be without substance. He said that Mr. McCarten had told him earlier that many of his allegations had been substantiated and he wanted to know if we were changing our story.

I told Mr. Applegate that we were not in a position to control Mr. Dickhoner's statements and that our investigation findings had confirmed many of his allegations -- either in whole or in part.

3. Mr. Applegate indicated that several key persons whom he had identified to NRC still had not been interviewed by NRC.

I told Mr. Applegate that we had not completed our investigation and that our present effort was directed toward dealing with what we considered to be the most important concerns. I added that it was our intent to pursue all identified leads.

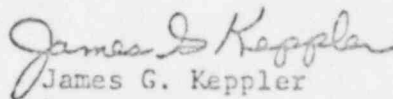
*Enclosure 23*

JUL 8 1981

4. Mr. Applegate stated he had learned that NRC investigators were doing a background check on his medical history with emphasis on mental problems.

I told Mr. Applegate that I was certain we would not be conducting such checks, and that our interest was directed toward determining the quality of construction at Zimmer. I mentioned that I knew other investigations were being conducted simultaneously but could not assure that such inquiries might not be made.

Mr. Applegate appeared to be relieved by my responses and thanked me for talking with him.

  
James G. Keppler  
Director

cc: J. Cummings, OIA  
J. H. Sniezek, IE  
D. Thompson, IE  
A. B. Davis, RIII  
J. F. Streeter, RIII  
R. F. Warnick, RIII  
J. B. McCarten, RIII  
P. A. Barrett, RIII  
Zimmer Files



# THE CINCINNATI ENQUIRER

FINAL EDITION/NEWSSTAND PRICE 25¢

FRIDAY, JUNE 11, 1962

A GANNETT NEWSPAPER

## NRC Plans To Reopen Zimmer Hearings

BY RICHARD WHITMIRE  
And DAVID SHAPIRO  
Gannett News Service

WASHINGTON—New doubts about construction defects at the Zimmer nuclear power station triggered an announcement Thursday that the staff of the Nuclear Regulatory Commission supports reopening licensing hearings for the plant.

That makes a hearing reopening inevitable—a major setback to Cincinnati Gas and Electric Co. (CG&E), which is building the plant at Moscow, Ohio.

James Keppler, director of the NRC's Region III office in Chicago, told the House subcommittee on energy and the environment Thursday that further hearings are needed to consider recent disclosures of serious quality control problems at Zimmer.

identified to date . . . we thought it was best to have us be counted in the public arena," Keppler said.

"There will not be a recommendation by me or my staff that this plant should be licensed until we are convinced that this plant is built properly," said Keppler.

Keppler said the hearings would center on possible flaws in the quality confirmation program ordered by the NRC last year after CG&E, the managing partner of three utilities building Zimmer, was fined \$200,000 for faulty record-keeping and harassment of quality inspectors.

That massive effort to prove Zimmer's safety is already seen as virtually certain to push the plant's opening well beyond the mid-1963 date planned by CG&E.

Earl Borgmann, senior CG&E vice president, said the utility will continue to oppose new hearings.

"I'M VERY disappointed," Borgmann

said. "We don't feel it is necessary because all of the items brought up (by the request to reopen) are old items that are covered by the quality confirmation program."

The request to reopen the hearings came from the Government Accountability Project, a Washington-based organization that triggered the 1961 investigation into Zimmer's problems.

At the hearing, Keppler agreed that it was the Government Accountability Project, and not the NRC, that discovered Zimmer's problems.

In other major developments at Thursday's hearing:

•Committee Chairman Morris Udall, D-Ariz., said the NRC should have taken the quality confirmation program away from CG&E and turned it over to independent auditors, as was done at the Diablo Canyon plant in California.

•A former quality assurance analyst for

Henry J. Kaiser Co., the construction firm building Zimmer for CG&E, charged that he was demoted to a clerical job for aggressively pointing out deficiencies at the plant.

•NRC officials disagreed with CG&E's suggestions that its structural steel welding problems involved only minor repairs.

•The National Board of Boiler and Pressure Vessel Operators called for CG&E to submit a plan outlining how CG&E will correct the problems discovered by the board.

The NRC's Atomic Safety Licensing Board concluded its hearings on Zimmer last year, and its staff has already recommended a license for the plant.

(See ZIMMER, back of this section)

EARL BORGSMANN

CG&E vice president

"WITH THE problems that have been

# ZIMMER

CONTINUED FROM PAGE A-1

TOM DEVINE, an attorney for the Government Accountability Project, told the Udall committee that the quality confirmation program at Zimmer does not cover all problems at the plant—only those identified by the NRC in last year's report.

Udall also questioned the wisdom of putting CG&E in charge of its own quality confirmation program.

"Since quality assurance was neglected for many years by the same company that is now charged with untangling the results of its neglect, I would have hoped that the NRC would have insisted on an audit by an independent concern," he said.

"I would like to know what the NRC and CG&E are doing to assure that the Zimmer quality confirmation program is structured so that significant problems cannot be swept under the rug."

CG&E's Borgmann insisted that his company's quality confirmation program will identify and correct any safety-related problems at Zimmer.

He said the program is 66% complete, and that while some minor deficiencies have been found, "none of . . . these deficiencies has proven significant, relative to impacting the safe operation of the Zimmer station."

"WE ARE very confident that our actions to upgrade our quality procedures at Zimmer will provide complete assurance as to the safety and integrity of the Zimmer station."

"The company has directed (Kaiser) to take necessary steps to assure the independence of the quality assurance-quality control organization from construction personnel, particularly to eliminate complaints that quality inspectors had been intimidated or harassed in performance of their inspections."

Borgmann took issue with a recent Gannett News Service story reporting that CG&E has been forced to repair 5% to 10% of its structural welds at Zimmer because the original work was faulty.

"This was somewhat a mischaracterization and an exaggeration of the hardware problems that are being encountered at Zimmer," he said.

But the NRC's Keppier disputed Borgmann's assertion, telling the committee, "The NRC views findings on structural steel as more significant than the utility has represented before this committee."

The surprise witness at the hearing was Dave Jones, a former senior quality assurance analyst for Kaiser who was recently demoted, but still works at Zimmer.

JONES HAS filed a complaint with the U.S. Department of Labor asking for reinstatement to his former job. In the complaint, he charges that he was demoted for insisting on proper inspections at Zimmer.

The incidents Jones cited include:

In February, 1981, Jones said he wrote a memo suggesting that the qualifications of some inspectors were suspect—and their work might need review.

Jones said his boss replied he wasn't hired to write memos. "He warned me if I wrote another one I would find myself on Route 52 (the road outside Zimmer)."

In April, 1981, Jones says he began a project to analyze how modifications are made to the reactor steam system. After discovering problems with the program Kaiser was using, Jones said he was pulled off the project.

Around June of 1981, Jones decided that since CG&E itself was providing materials to Kaiser, the utility needed to qualify as an approved vendor—those suppliers of safety-related materials with approved quality control programs.

After reporting that CG&E was unable to provide the necessary documents for the audit, Jones said he was pulled off the project. Later, Jones said another auditor was called in for the job. "The standards were relaxed and CG&E passed," he said.

THAT JULY, Jones said he and two others completed an audit that criticized Kaiser's program to identify and trace materials used on the job. Jones said no action was taken on the audit, and the audit was called "invalid."

In April, 1982, Jones said he was told that auditors should not write memos, make recommendations, or record observations. "I explained to him that I had no intention of respecting any gag order," Jones said.

Later that spring, Jones said he and others completed an audit of a supplier they said was not following the Kaiser quality assurance memo.

Jones said the Kaiser quality assurance manager responded: "I don't want to see any more of these types of memos. They tend to embarrass us and cause more accusations and allegations."

Last May, Jones said he was demoted to documents reviewer, and later found the demotion was triggered by suspicions he was an NRC informant. Jones said his first contact with the NRC came later that month.

Borgmann said he hasn't had a chance to research Jones' charges. But Borgmann did say, "He (Jones) was always a documents reviewer . . . He is making statements and accusations much

broadly than his area of experience and expertise."

JONES, HOWEVER, says he was working as a senior quality assurance analyst before he was demoted to a documents clerk position last May.

"I've been an assistant quality assurance manager, I've been a quality control manager. I was a quality assurance engineer on that site. How much broader do you want to get?"

Jones attacks the heart of CG&E's defense—the quality confirmation program the utility says can catch all of Zimmer's problems.

"The quality confirmation program," he said, "will not work because there is not the freedom at Zimmer to make independent judgments. It takes an act of courage to do your job right there."

EXHIBIT S

Cincinnati Alliance for  
Responsible Energy  
2699 Clifton Ave  
Cincinnati, Ohio 45220  
(513) 861-3533

Decem<sup>r</sup> 19, 1981

Milan & Marjorie Busching  
1032 Valley Lane  
Cincinnati, Ohio 45229

Cincinnati Gas & Electric Company  
Chairman John Yeager  
4th & Main Street  
Cincinnati, Ohio 45202

Dear Mr. Chairman,

We are shareholders of CG&E and are concerned about the recent NRC findings at the Zimmer nuclear station, and particularly the role CG&E management played that led to the \$200,000 fine, in addition to the 100% Quality Confirmation program. CARE, Inc., are the owners of 1 (one) share of CG&E common stock, and are filing the attached resolution with Mrs. Marjorie Busching who is the owner of 200 shares of common stock. We will produce verification of our ownership at your request.

We hereby notify you of our intention to present the attached proposal for consideration and action by the stockholders at the next annual meeting, and we hereby submit it for inclusion in the proxy statement in accordance with Rule 14a-8 of the General Rules and Regulations of the Security and Exchange Act of 1934, as amended.

If you should, for any reason, desire to oppose the adoption of this proposal by the stockholders, please include in the corporation's proxy material the attached statement of security holders submitted in support of the proposal as required by the aforesaid rules and regulations.

Sincerely,

*Tom Carpenter*

Tom Carpenter  
Cincinnati Alliance for  
Responsible Energy

CC: Securities & Exchange Commission  
500 N. Capitol Street  
Washington D.C. 20549

Marjorie Busching

*Marjorie Busching*

Cincinnati Alliance for  
Responsible Energy  
2699 Clifton Avenue  
Cincinnati, Ohio 45220

December 19, 1981

Milan & Marjorie Busching  
1032 Valley Lane  
Cincinnati, Ohio 45229

#### SHAREHOLDER RESOLUTION

##### WHEREAS:

-A November, 1981 Nuclear Regulatory Commission report on Zimmer found improper voiding and alterations of quality assurance non-compliance reports on a widespread basis;

-The investigation uncovered harassment of quality control inspectors and dismissal threats for checking components too thoroughly, including examples of dousing inspectors with water;

-Congress recently added criminal liability to the Atomic Energy Act for "precisely the sort of actions that occurred at the Zimmer site";

-Government investigators have not yet determined criminal liability of relevant management officials for the above misconduct.

##### WHEREAS:

-A February 1981 NRC survey found more legal non-compliances at Zimmer than any other Region III plant under construction;

-A March 1981 letter from the Commission to the utility warned that "additional (quality assurance) violations...which demonstrate ineffective management...will likely lead to escalated enforcement";

-A November 1981 Commission report cited forty new items of legal non-compliances at Zimmer, almost double the number uncovered in the past two years. Simultaneously, the Commission Regional Director called Zimmer's quality assurance program "totally out of control". He equally blamed the utility and construction firm. The Commission proposed a \$200,000 fine, the largest for a plant under construction;

-The NRC investigation led to a quality confirmation program that "by itself, without factoring in any re-work...will be both costly and time consuming";

-The NRC Chairman recently called Zimmer one of the five plants under construction nationally with "major problems".

THEREFORE BE IT RESOLVED THAT THE SHAREHOLDERS REQUEST THE BOARD OF DIRECTORS:

Authorize a review panel of distinguished members of the community, wholly independent and free from conflicts of interest with the utility, to investigate utility management responsibility for the above issues; and request Cincinnati's City Manager to select the members with the advice and consent of the City Council after public input and comment.

Respectfully Submitted,

Tom Carpenter/Chairman  
Cincinnati Alliance for  
Responsible Energy

Marjorie Busching

CC: Securities & Exchange Commission  
500 N. Capitol Street  
Washington D.C. 20549

## SUPPORTING STATEMENT

The courts and the Securities & Exchange Commission have recognized that mismanagement, civil and criminal illegalities are of material concern to shareholders. In light of recent developments, the scope, causes and corrective action relevant to these revelations haven't been adequately disclosed in reports to the S.E.C.

The 1981 government findings at Zimmer have serious public health and safety implications. A Congressional committee observed, "the public health can be endangered by nuclear crimes just as surely as it can by street crimes". These findings have lowered CG&E's standing in the community, evidenced by a recent vote of Cincinnati's Environmental Advisory Council to recommend suspension of Zimmer's construction permit and an independent quality assurance review.

The development could threaten the shareholders' interest. The necessity for costly repairs and delay means major unanticipated expenses, and prevents prudent investment decisions.

The utility failed to disclose long-term investment risk that results from short-term cost cutting. CG&E is charged with a 100% reinspection of safety components at Zimmer. There are unresolved concerns that management officials responsible for conscious safety violations may be manipulating the re-testing program. Unless those responsible for previous abuses are identified and removed from Quality Confirmation, it will lack credibility.



GOVERNMENT ACCOUNTABILITY PROJECT

# Institute for Policy Studies News Release

RELEASE DATE: NOV. 25, 1981

FOR FURTHER INFORMATION PLEASE CONTACT:

THOMAS DEVINE: (513) 352-2100  
Room 953  
leave message until 6 pm  
9/25/81

FOR IMMEDIATE RELEASE

OR

LOUIS CLARK: (202) 966-0084  
6 pm Wed. to 6 pm Sun. 9/29/8

CINCINNATI -- Today the Nuclear Regulatory Commission (NRC) released a four inch thick report proposing a \$200,000.00 fine against Cincinnati Gas & Electric (CG&E), owners of the Zimmer Power plant under construction outside Cincinnati, Ohio. The fine would be the largest in NRC's history against a nuclear plant under construction. At a press briefing, NRC Midwest Regional Director, James Keppler, explained the action: "In terms of quality assurance I think Zimmer was totally out of control."

The report represents the first phase of the NRC's reinvestigation of Zimmer. The NRC reopened its probe after private detective Thomas Applegate, a former undercover agent for the utility, blew the whistle on a previous NRC investigation. He charged it was a whitewash. He went to the Government Accountability Project (GAP) of the Institute for Policy Studies (IPS), a non-partisan, public interest whistleblower support organization. GAP convinced the federal government's Office of the Special Counsel to order the NRC to reopen the case. Last week the Commission admitted the first investigation was inadequate. After today's new report was released Applegate observed, "My credibility has been reestablished. After nearly two years of frustration, the NRC has confirmed my complaints. This report is a good step forward. But we have to keep walking."

GAP Legal Director Thomas Devine commented, "The release of this report is a tremendous victory for us. It proves that one determined citizen can force the federal bureaucracy to overhaul the way it oversees public safety concerns. Unfortunately, the NRC admitted that it still cannot answer the ultimate question, will this plant be safe?" Keppler noted that the reinvestigation is only half complete.

The report found that CG&E had violated the law in three major areas of its quality assurance program:

- 1) False records -- including blueprints that did not match the reality of equipment installation and voiding of internal nonconformance reports that revealed safety defects.

1901 Que Street, N.W., Washington, D.C. 20009 202-231-9382

(MORE)

- 2) Harassment and intimidation of internal quality control inspectors, including threats of dismissal and bodily harm, and
- 3) Numerous examples of failure to implement an adequate quality assurance program, such as improper X-ray techniques for welds.

More specifically, preliminary findings from the investigation concluded that the pipes were not thick enough; a ratio of 1 of 9 randomly selected welds were the wrong size; 10 examples of welds that were improperly installed; and nearly half of internal non-conformance reports were improperly voided. Devine noted the significance of the last finding. "There are approximately 800 relevant nonconformance reports at Zimmer. If the NRC ratio holds up, there may have been 350-400 cases where the utility altered the records after learning of legal violations. That approach represents an intolerable gamble with public safety in order to cut corners on nuclear costs."

The report also confirmed allegations by GAP of inadequate X-rays for prefab pipes, inadequate inspection of cable tray welds, failure to verify weight loads for cable trays, suspect pipes for thermal loads, and failure to implement redesign corrections.

Keppler conceded that he is still worried about the safety of Zimmer and that the problems at the plant are not an aberration. He observed that, "We probably could find this anywhere."

Besides the \$200,000.00 fine, the NRC pledged to continue an intensive series of independent hardware tests that have just begun. GAP has submitted a list of 28 areas of the plant that should be covered by the tests. The NRC also is requiring CG&E itself to retest 100% of the components in the plant in a Quality Confirmation Program that the Commission has characterized as both "expensive and timeconsuming even without any rework." The nature of the new CG&E tests have not yet been finalized. Keppler emphasized that the utility will not be permitted to load fuel at the plant until the confirmation program and repairs are complete, in mid 1982 at the earliest.

Devine explained the significance of the report for the nuclear power industry and the public. "For the industry, it is a warning that investors must accept reality and the costs of constructing a nuclear plant. For example, in this case, CG&E has been forced to increase the number of quality control inspectors from six to 160. The industry might as well stop chasing the rainbow of a

(MORE)

NEWS RELEASE

11/24/81

PAGE 3

nuclear gravy train under the Reagan administration. While red tape, procedural delays and legal fees may decline, safety oversight will intensify. The industry must budget realistically for a thorough quality control program with the resulting expense and delays of sending parts back or doing work over until the job is done right and the plant is safe. If utilities fail to spend the money initially, their investors are liable to face \$200,000.00 fines and the financial nightmare that CG&E now faces.

"For the citizens of Cincinnati, the significance is that we simply do not know how dangerous the plant is. And we cannot count on the NRC's new reform program. While extensive, it still relies on the good faith and honesty of CG&E, but as Mr. Keppler admitted, 'You can point the finger at Keiser. I point the finger at CG&E just as strongly.' The core of the NRC findings is that for whatever reason, CG&E violated the public trust. We may just be switching a wolf for a fox as guardian of the henhouse. What is needed is an independent federally licensed quality assurance program, whose contractors report directly to the NRC and can only be fired by the NRC." In a briefing with Applegate and GAP this morning, NRC Deputy Regional Director Bert Davis stated that if CG&E's records and inspection are inaccurate again, suspending the construction license is "totally appropriate."

Devine concluded, "For the general public, the significance is that Zimmer does not represent an isolated exception. No one knows how many other Zimmer's are lying dormant as potential disasters unless another Tom Applegate has the courage to step forward."

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INDIANA FINAL/NEWSSTAND PRICE 25c

THURSDAY, JUNE 17, 1982

## CG&E Disputes Need For Audit

BY RICHARD WHITMIRE  
DAVID SHAPIRO  
and BEN L. KAUFMAN  
Gannett News Service

WASHINGTON—Cincinnati Gas and Electric Co. Wednesday disputed the need for an independent, third-party audit to confirm the safety of the Zimmer Nuclear Power Station.

At a meeting of the Nuclear Regulatory Commission (NRC) called at CG&E's request, CG&E President William Dickhoner argued that his company's existing quality confirmation program will prove that Zimmer was built properly.

"Another audit over and above the audits presently being conducted is unnecessary," Dickhoner said. "Another audit would be non-productive, time-consuming and would add to the cost of the project without providing any additional assurance of the qual-

ity of the plant's construction."

While Dickhoner defended the quality confirmation program, another CG&E official revealed that the utility is seeking permission from the NRC to pull back from its commitment for 100% dual inspections of all ongoing construction at Zimmer.

Under the quality confirmation program, CG&E has been re-inspecting work done by quality inspectors working for its contractor on the Zimmer project, Kaiser Engineering.

Ralph Sylvia, CG&E's vice president for nuclear operations, told the NRC that the utility now wants to re-inspect only 50% of Kaiser's work, and perform spot "surveillance" of some of the remaining 50%.

And officials from the NRC's Region III office in Chicago, who will make the final decision on CG&E's request, seem to be in-



WILLIAM DICKHONER  
... calls Zimmer safe

clined favorably toward the proposal.

"We've looked at the program closely, and it looks good to us," said Fred Christanson, senior resident inspector at Zimmer for the NRC.

(See DICKHONER,  
back of this section)

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The quality confirmation program at Zimmer was ordered by the NRC last year after CG&E was fined a record \$953,000 for false record-keeping and harassment of quality assurance inspectors at the plant.

BUT CITIZEN groups opposed to Zimmer have recently pressed the NRC to order a third-party audit and inspection of the plant, claiming CG&E's quality confirmation program is inadequate to solve Zimmer's construction problems.

The concept of a third-party audit was first proposed by the Citizens for Responsible Energy Development in investigating the problems at Zimmer.

Thomas Devine, an attorney for the Citizens and leader of the anti-Zimmer campaign, said the

NRC Wednesday that the quality confirmation program being run by CG&E will never have credibility.

Devine urged the NRC to shut down construction at Zimmer, bring in independent inspectors to go over the plant piece by piece and order a management audit to determine the competence of

CG&E and Kaiser to continue running the project.

Dickhoner said CG&E's quality confirmation program is already 66% complete and has found no serious hardware problems at Zimmer.

"WE FIRMLY believe these problems are behind us," he said.

The NRC will decide at its hearing.

The utility and GAP clashed over whether CG&E was short-cutting the NRC's non-conformance system—a dispute that arose over a report that was wrong with regard to the

using a new inspection form known as the "in-process inspection deficiency record." CG&E is trying to get around filling non-conformance reports, GAP charged.

CG&E Vice President Earl Bergmann took issue with letters published by Gannett News Service last Saturday suggesting that CG&E had prevented Kaiser from fully staffing its troubled quality control program.

"I can assure everyone there was no attempt to short-cut the program," said Bergmann. He said CG&E was just "reviewing" the requests for more quality control inspectors.

Bergmann said that he has seen two dozen examples of where Kaiser was overruled. Sometimes it was on staffing, sometimes it was on testing, sometimes it was when to make non-conformance reports. He said that the NRC's quality control audits.

INTRODUCTORY STATEMENT

For the

BRIEFING OF THE NRC COMMISSIONERS

By

THOMAS DEVINE  
Legal Director of the  
Government Accountability Project  
of the Institute for Policy Studies

Accompanied by

DAVID JONES

and

RICHARD REITER

Concerning the

ZIMMER NUCLEAR POWER STATION

June 16, 1982

Thank you for inviting our participation in this briefing. My name is Thomas Devine. I am the Legal Director of the Government Accountability Project ("GAP") of the Institute for Policy Studies ("IPS"). I am appearing on behalf of the Miami Valley Power Project ("MVPP"), the intervenor that recently moved to reopen licensing hearings at the Zimmer nuclear power station. I will be presenting today's prepared statement.

Messrs. David Jones and Richard Reiter have accompanied me to help respond to your questions about specific conditions in the plant. Mr. Reiter worked at Zimmer as a Document Reviewer. Through frustrating experience, he became an expert on design control and traceability deficiencies. Mr. Jones currently works at Zimmer as a Documents Reviewer for the contractor, Kaiser Engineering, Inc. Contrary to recent public statements by Cincinnati Gas and Electric ("CG&E") Vice President Earl Borgmann, however, that was not always the case. Until May Mr. Jones was a Senior Quality Assurance ("QA") Analyst, one of three advisors to the QA Manager at the top of the Kaiser organizational chart. Mr. Jones has worked as an auditor, a quality assurance engineer, a quality control manager and an assistant quality assurance manager. He was the man Kaiser assigned last spring to analyze whether the NRC was correct that nonconformance reports ("NR") were voided improperly. (When he agreed with the NRC, he was removed from the project.) He is particularly qualified to answer your questions on the causes and extent of the QA breakdown at Zimmer.



MVPP appreciates the recent staff recommendation to reopen the licensing hearings. But we agree that licensing proceedings should not delay ongoing investigations and repairs at the site. We believe that the issues raised in the eight new proposed contentions are too significant to wait solely for eventual resolution by the Atomic Safety and Licensing Board ("ASLB"). In our opinion, the issues require immediate enforcement action as well.

As a result, MVPP is preparing a petition to the Commission to--

- 1) suspend the construction permit at Zimmer;
- 2) replace the current Quality Confirmation Program with a comprehensive third-party reinspection program, with full authority to identify and impose corrective action on any nonconforming conditions; and
- 3) require an independent management audit of CG&E and KEI management, which would include recommendations whether to replace the permanent CG&E/KEI QA programs with independent structures administered by an outside organization.

We will present affidavits and documentary evidence to support the petition. Today I would like to discuss three reasons why the current Quality Confirmation Program ("QCP") must be replaced with an alternative enforcement policy.

#### I. INHERENT STRUCTURAL FLAWS IN THE QUALITY CONFIRMATION PROGRAM

Last November NRC's Region III Administrator James Keppler concluded that the Quality Assurance Program at Zimmer was "totally out of control." In an April 8, 1981 Immediate Action Letter, Region III had already imposed the CG&E-administered Quality Confirmation Program as the solution to the QA breakdown. Unfortunately, the

structure of this program is inherently flawed.

To summarize, the Quality Confirmation Program--

- 1) is not comprehensive. It only covers issues identified by the NRC in last November's report. Issues missed or postponed by the NRC will be missed by the QCP.
- 2) does not address the causes of the QA breakdown. At best the QCP deals with specific effects.
- 3) does not provide a unique independent internal structure. The ACP inspectors who write up NR's still funnel them through personnel from the existing QA system, including Kaiser management. The new QCP staff is little better than a massive team of research assistants. They do not have the organizational freedom to enforce their decisions.
- 4) does not identify the standards and criteria used to evaluate the reports presented by the QCP staff. What's good enough for CG&E may be questionable to other authorities. For example, an American Society of Mechanical Engineers ("ASME") team recently rejected a QCP appeal to relax ASME codes on control of radiograph quality. Similarly, at last Thursday's congressional hearing Mr. Keppler rejected CG&E's assessment that structural steel welding deficiencies were insignificant and cosmetic. It is not surprising that by far the most common disposition for nonconforming conditions identified by the QCP has been "accept-as-is."
- 5) is still basically a paperwork review. QCP field inspectors are limited to items where the paperwork is not satisfactory. Unfortunately the paperwork at Zimmer is a questionable foundation to screen out inspections. \$50,000 of last November's fine was for false records. As a result, QCP suffers from the same lack of credibility.
- 6) is too late. For many items, such as vendor components already assembled, the utility may lose the warranty if it breaks the seal to check the quality inside. Similarly, how can CG&E determine today that a vendor had a reliable QA program when a part was purchased 8 years ago? According to internal Kaiser findings, this flaw alone involves some 42,000 purchases. How can the utility establish traceability for beams purchased from a

junkyard that buys and sells scrap metal; or for pipes that were cut up years ago and scattered throughout the plant without keeping track of the heat numbers? How can valves damaged out of the plant by overstress during inadequately controlled hydrostatic tests be repaired now, without a massive repurchase program? How can irreplaceable records -- such as voided NR's and proof of welder qualifications -- be replaced when the documents are irretrievably lost?

- 7) relies on decisionmakers who have a built-in conflict of interest. Every repair that CG&E approves further delays opening, increases costs, and documents the effects of deficient leadership at the site. This spring the Securities and Exchange Commission approved, over CG&E's objections, a shareholder resolution by the Cincinnati Alliance for Responsible Energy ("CARE") to investigate alleged mismanagement that led to last November's fine. Nearly 5% of CG&E stockholders supported the resolution. It is naive, to say the least, to expect a manager to admit the full consequences of his or her own mismanagement.

## II. EMPIRICAL DETERIORATION SINCE APRIL 1981 OF THE QUALITY ASSURANCE PROGRAM

There has been nearly a year to assess the work of the Quality Confirmation Program. If it had worked effectively, the structural flaws outlined above would be academic. That is not the case.

Despite the pious rhetoric, the explanation is a lack of management commitment to the QCP. Last week Mr. Jones testified that the new site construction manager publicly announced his objective to return to the "pre-April 1981 mode" when Kaiser and CG&E had everything going for them and were building one of the cheapest nuclear plants in the country. The results were predictable. Mr. Jones suffered the bulk of his harassment after April 1981, when he challenged inadequate quality verification for work on

items purchased from vendors ("FDI's" and "FDDR's"); CG&E's inability to meet the audit requirements necessary for inclusion on Kaiser's own Approved Vendors List; inadequate material traceability and identification; structural compromises to the Vendor Surveys/Audit and Control Procedure; an inadequate degree of independence for Kaiser auditors; inadequate design controls to keep track of revisions; and serious flaws in the quality of work by the current company performing Nondestructive Examinations such as radiographs on-site.

If anything illustrates the continued deterioration of quality assurance at Zimmer, it is a new procedure introduced on June 2. The procedure, ZAPO-5, guts the entire nonconformance reporting system and replaces NR's with something called In-Process Inspection Deficiency Records ("IIDR"). As Kaiser announced frankly in a May 28, 1982 construction bulletin, "The major thrust of this effort [development of the IIDR system] has been to provide alternative means of documenting and resolving deficiencies without using the NR process." The QCP was producing up to 50 NR's per week. ZAPO-5 is an attempt to stifle that trend.

As ZAPO-5 explains in §1.2, Nonconformance Reports ("NR's") will only be written for deficiencies--

found after final inspection or that cannot be corrected through the In-Process Inspection Deficiency Record. In-Process Inspection Deficiency Records shall be written to document the correction of deficiencies identified during the HJK inspection process, up to and including final inspection.

The parallel QA procedure to ZAPO-5, QAP 16, Rev. 8, which was recently reviewed by the ASME survey team, does not mention IIDR's. The reason is simple: while IIDR's provide an alternative to NR's, they sacrifice accountability. There is no provision on the IIDR form to verify corrective action.

Similarly, IIDR's are prohibited from providing procedural instructions, which grants unlimited discretion for the nature of corrective action. IIDR's structurally eliminate the concept of QA independence from construction. The authorized engineer, who may be responsible for the deficiency, is given authority to overrule the inspector's decision to rework a deficiency. Only limited appeal is available. In the end, final review of IIDR disposition is controlled almost exclusively by the Manager of Quality Engineering, an individual who has been the focus of numerous allegations received by GAP.

While ZAPO-5 permits NR's, it subjects them to such a bureaucratic gauntlet that only the most stubborn inspector would still attempt to issue NR's under those circumstances. For instance, all NR's are "drafts" until approved by Quality Engineering. They are then subject to four levels of review by an assortment of personnel, including any "other individuals...determined by the cognizant supervisor." If it survives those cuts, the NR only then goes to the Material Review Board. If there is a dispute over disposition, during the interim ZAPO-5 permits work to continue unless suspended by the QA Manager. And there are no time limits to resolve disputes. In short, under ZAPO-5, NR's are reduced to an exercise in futility.

This procedure represents a fundamental change in the nature of internal quality control. From this point on, the premises of QA at Zimmer requires trust in the good faith of the construction department. This QA revolution defies all the findings of last November's NRC Report on Zimmer. If the Commission accepts this new approach at Zimmer as part of CG&E's "reform," it will signal the rest of the nuclear industry that NR's and structural independence are no

longer mandatory for quality assurance programs.

As QA procedures at Zimmer have deteriorated, retaliation has increased. In a February 26, 1982 response to the proposed NRC fine, CG&E took credit for "a prompt and vigorous response...." CG&E asserted that "the dousings subsequently ceased." Unfortunately, the facts belied their confidence. Just three weeks ago more QC inspectors reported dousings with "dirty water." Contrary to the utility's assurances, in a June 2, 1982 Cincinnati Post news article NRC senior inspector Dorwin Hunter stated: "I'll just say it's the same type of thing going on for awhile."

Empirically, the situation at Zimmer has gotten worse rather than better over the last year. This trend, combined with the structural flaws discussed above, renders the Quality Confirmation Program a fatally-flawed regulatory policy.

### III. CHARACTER AND COMPETENCE

While "character and competence" is a licensing issue for the ASLB, in this forum it addresses the question of credibility. In recent weeks, CG&E's credibility has been as weak as its Quality Confirmation Program.

The statements of Senior Vice President Earl Borgmann at last Thursday's congressional hearing are illustrative. He testified,

In my opinion, the basic Quality Assurance policy for construction was Kaiser's and CG&E had the obligation to assure itself that that QA Program was adequate. On various occasions, our QA manager had differences of opinion with Kaiser but certainly did not attempt to direct or shortcut the overall program. In retrospect, as I indicated this morning, obviously we should have had more deeper involvement. We should have completely controlled the program. But to say



that the program was not carried out because we deliberately told Kaiser to shortcut it or to not carry it out is false.

That statement was directly inaccurate. It is so drastically wrong that it is hard to believe Mr. Borgmann testified in good faith when he responded to the congressional inquiry. GAP has evidence of at least 29 examples between 1971 and 1977 where CG&E directly participated in establishing QA policies. In many instances, the utility imposed QA staffing or inspection compromises over Kaiser objections.

Nor is the CG&E domination merely an historical phenomenon. Last November's NRC report documented more than a dozen additional instances of CG&E knowledge or complicity in "Kaiser" policies investigated by Region III. A 1981 General Electric audit revealed that Kaiser had discontinued audits of work on GE purchases at CG&E's direction.

Mr. Borgmann's inaccuracy concerns a decisive premise for the reform imposed by Region III last April. The Quality Confirmation Program only makes sense if CG&E was truly unaware of the Kaiser policies. It is significant on another level, however. If CG&E officials do not testify in good faith to the Congress, there is little reason to think the utility's QCP reports to the NRC are any more reliable.

The inaccuracy was so blatant as to be insulting. Last Saturday the Cincinnati Enquirer published a March 8, 1976 letter from Mr. Borgmann to Kaiser's W. Friedrich, denying the funds for additional QA staff. The letter was published, because it directly contradicted Mr. Borgmann's testimony. The letter was already on

the public record as part of Exhibit 9 to MVPP's Motion for Leave to File New Contentions. When GAP submitted the Motion in May, CG&E's response was that it contained "nothing new."

Mr. Keppler's June 7 announcement that the Justice Department has reopened the criminal investigation at Zimmer should resolve any remaining doubts. When the probe was suspended last summer, NRC's Office of Inspector and Auditor ("OIA") was questioning CG&E management about criminal violations of the Atomic Energy Act. Unless the U. S. Attorney chooses not to pursue those leads, we are now faced with a curious scenario: The same organization under active criminal investigation is charged with implementing a reform program that may have been triggered by its own deliberate misconduct.

That policy does not make sense. If a public official were under active criminal investigation, he or she often would go on leave with or without pay. Is public trust in the management of a nuclear power plant any less necessary than for a government official?

Further, the NRC has not issued a comprehensive ban on destruction of records during the Quality Confirmation Program. Although there is a "documents Certification" program, in reality GAP has received repeated allegations of documents destruction at the site. In essence, CG&E has absolute control over the evidence that could be used to make a case against itself, criminal or otherwise. To illustrate the consequences, last year the GE auditors were only able to obtain eight of 22 work packages requested from CG&E, and no documents requested on electrical work.

Mr. Applegate has described Zimmer as a "crime scene" that must be secured. Last November OIA concluded that Mr. Applegate was right in his critical assessment of the original NRC investigation of his charges. The Commission should carefully consider his advice on this issue as well.

#### CONCLUSION

All parties agree that public confidence must be restored in the safety of the Zimmer plant. A reform program administered by CG&E cannot achieve that goal. Optimistic utility progress reports no longer are taken seriously. Under these circumstances, the Quality Confirmation Program is unfair to the utility. No matter how thorough CG&E's effort, the cloud of public distrust will remain.

Region III has suggested the possible use of consultants to evaluate the QCP. The suggestion confirms the lack of credibility for the current program. But the solution is not to add another layer of bureaucratic oversight. The only viable solution is to substitute a legitimate structure for an illegitimate program. In this case, at a minimum legitimacy means placing responsibility for comprehensive reinspection and corrective action of all safety-related work with an independent organization free from conflicts of interest. The public will no longer accept a program that relies on the fox to assess the strength of the henhouse.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Mr. John H. Frye III  
Judge Stanley M. Livingston  
Dr. Frank F. Hooper

In the Matter of )

CINCINNATI GAS & ELECTRIC )  
COMPANY, ET AL. )

(William H. Zimmer Nuclear )  
Power Station) )

Docket No. 50-358

APPLICATION FOR  
OPERATING LICENSE

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Intervenor's Reply to NRC and Applicants' Answer to Intervenor's Motion for Leave to File New Contentions and Motion for Protective Order have been served on the following persons by mailing copies, first class, postage prepaid, this 8th day of July, 1982 to the following:

\*Mr. John Frye III  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Mr. Troy B. Conner, Esquire  
Conner, Moore & Corber  
1747 Pennsylvania Avenue, N.W.  
Washington, D. C. 20006

Dr. Frank F. Hooper  
School of Natural Resources  
University of Michigan  
Ann Arbor, Michigan 48109

John D. Woliver, Esq.  
P. O. Box 47  
550 Kilgore Street  
Batavia, Ohio 45103

William J. Moran, Esq.  
General Counsel  
Cincinnati Gas & Electric Company  
P. O. Box 960  
Cincinnati, Ohio 45201

\*Chairman  
Atomic Safety and Licensing  
Appeal Board  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

W. Peter Heile, Esq.  
Assistant City Solicitor  
Room 214, City Hall  
Cincinnati, Ohio 45220

\*Stuart A. Treby, Esq.  
U. S. Nuclear Regulatory Commission  
Room MNBB 9604  
7735 Old Georgetown Road  
Bethesda, Maryland 20014

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

\*Richard S. Salzman, Esq.  
Chairman  
Atomic Safety and Licensing  
Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

\*Lawrence Quarles  
Atomic Safety and Licensing  
Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

\*Michael C. Farrar, Esq.  
Atomic Safety & Licensing  
Appeal Board  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

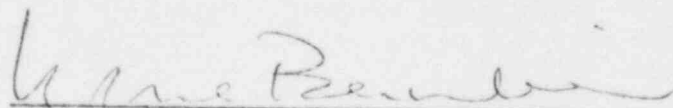
Administrative Judge M. Stanley  
Livingston  
1005 Calle Largo  
Santa Fe, New Mexico 87501

Mary Reder  
Box 270, Route 2  
California, Kentucky 41007

David K. Martin, Esq.  
Assistant Attorney General  
Division of Environmental Law  
Attorney General for the  
Commonwealth of Kentucky  
209 St. Clair Street  
Frankfort, Kentucky 40601

Andrew B. Dennison  
200 Main Street  
Batavia, Ohio 45103

George Pattison  
Prosecuting Attorney  
Clermont County  
154 Main Street  
Batavia, Ohio 45103

  
LYNNE BERNABEI  
Government Accountability Project  
1901 Q Street, N. W.  
Washington, D. C. 20009  
202/234-9382

\*Served through internal NRC mail system.