

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

February 18, 1983

MEMORANDUM TO: Norman Haller

Roxanne Goldsmith

Jim Milhoan Steve Chestnut John Austin

FROM:

T. A. Rehm, OEDO

SUBJECT:

BRIEFING BOOK - HEARING ISSUES

Attached are two sets of Q&A's which you may find relevant to Udall hearing issues:

- 1. Region III responses to points raised in the GAP letter of January 31, 1983, which addressed Zimmer issues.
- Responses from Region III and NRR in regard to issues raised in the letter from Congressman Udall of February 14, 1983. They related to Shoreham and Zimmer.
- An issue regarding pipe hangers at Zimmer which Henry Myers has been involved with (not attached - will fax later today on receipt).

Enclosures As above

CC: OCA

OUESTION

What is being done to assure public confidence in the results of reviews and assessments required by the Commission's November 12, 1982 Order regarding the W. H. Zimmer Plant?

## ALISWER

The NRC is going to considerable length to assure that the public is kept well informed.

- Public meetings are frequently held.
- o Documents placed in the Public Document Room.

## DISCUSSION:

A Plan of Action has been prepared and is being followed by the NRC staff for reviewing Cincinnati Gas and Electric Company's (CG&E) implementation of the Commission Order. Copies of this Plan of Action were made available to interested members of the public. In this Plan, emphasis has been given to providing meaningful opportunity for public comment prior to the NRC staff taking action on the various requirements of the Order. This includes soliciting written comments from interested members of the public on submitted proposals from the licensee, holding meetings with the licensee in full view of the public, and responding to questions from the public at the conclusion of these meetings. For example, in evaluating CG&E's recommendation to have Bechtel conduct the management review of the Zimmer Project, Region III provided copies of CG&E's submittals and other background documents to interested parties for their comments. Based on the staff's review of the comments received, Mr. James G. Keppler, Region III Administrator, held a public meeting in Cincinnati on January 5, 1983 to obtain clarifying information on some of the comments and to provide opportunity for other members of the public who did not submit written comments to express their views.

The NRC staff will also require protocols governing communications between and among CG&E and the independent parties which may be involved in the Zimmer project.

Under these protocols all recommendations, findings, evaluations and exchanges of correspondence, including drafts, between the independent parties and CG&E shall be submitted to the Administrator of NRC Region III at the same time they are submitted to CG&E. All other communications and transmittals of information between CG&E and the independent parties shall be maintained in a location accessible for NRC examination. By these steps, the NRC staff will be able to monitor the independent reviews.

The protocols will also require that any discussions of substantive matters between or among CG&E and the independent parties or any discussion regarding an interim report, findings, or conclusions of the independent parties to CG&E be conducted in meetings open to public observation. Transcripts or written minutes of such meetings will also be kept.

The NRC staff also intends to conduct most meetings it has with CG&E or the independent parties in public; however, there may be countervailing reasons which make it appropriate to conduct certain meetings just with CG&E and/or the independent parties.

All documents to or from the NRC staff regarding the independent reviews on Zimmer will be placed in the NRC Public Document Rooms in Batavia, Ohio and Washington, D.C..

The staff believes that its Plan of Action and the protocol will assure that the public's input is considered in decisions to be made under the Order and that the public has opportunities to follow the independent reviews. It is our hope that these steps will cause the public to have confidence in the independent reviews to be conducted on the Zimmer project.

QUESTION

In this regard I would like a description of actions taken by NRC staff to determine the scope and findings of audits, assessments, and/or reviews undertaken by consultants retained since April 1982 by the Cincinnati Gas and Electric Company for the purpose of assessing the status of the Zimmer project and recommending actions to resolve outstanding questions.

# ANSHER

- Consultants were retained by CG&E to:
  - Examine CG&E management structure (completed)
  - Develop a design verification program (completed)
  - Resolve ASME code problems (continuing)
- Bechtel has been retained to perform the management assessment required by Commission Order, if the Commission approves.

# DISCUSSION

In approximately July of 1982 CG&E retained the servies of O'Donnell and Associates, Incorporated. O'Donnell in turn hired (1) Reedy, Herbert, Gibbons, and Associates, (2) Scientific Management, Incorporated, and (3) Stiefel Associates, Incorporated.

Stiefel Associates, Incorporated was hired to examine the CG&E management structure. Reedy, Herbert, Gibbons, and Associates was hired to help resolve ASME code problems identified by the National Board of Boiler Pressure Vessel Inspectors. Scientific Management, Incorporated was hired to help develop a design verification program, and O'Donnell and Associates, Incorporated also worked on the design verification program. O'Donnell's contract terminated on November 5, 1982. Scientific Management, Incorporated, and Stiefel Associates, Incorporated were also terminated on November 5, 1982. Reedy, Herbert, Gibbons, and Associates was retained to continue helping on ASME code problems.

While the staff discussed the role of these consultants with CG&E management, no NRC inspections were conducted of the work performed by the consultants. According to CG&E no written reports have been issued by the . consultants.

A meeting was held on September 27, 1982 between CG&E management and Region III to discuss organizational changes proposed by CG&E as a result, at least in part, of recommendations from the consultants. Comments concerning the proposed organizational changes were given to CG&E by NRC representatives.

Region III receives and reviews reports submitted by CG2E every two weeks to the State of Chic, Department of Industrial Relations, Division of Boiler Inspections, in response to ASME code concerns raised by the National Board of Boiler and Pressure Vessel Inspectors. These reports receive input from Reedy, Herbert, Gibbons, and Associates. Our inspectors have also attended licensee and National Board meetings at which members of Reedy, Herbert, Gibbons, and Associates were in attendance.

In November 1982, CG&E obtained the services of Bechtel Power Corporation. As of February 16, 1983, the NRC review of Bechtel has been limited to evaluating the acceptability of Bechtel to perform the management assessment required by the Commission's Order of November 12, 1982.

QUESTION

What has happened at Zimmer since the Commission's November 12, 1982 Order and what will be done to determine whether the plant can eventually be operated.

#### ANSWER

- . Following Order all safety related construction halted
- . Status since Order
  - Quality Confirmation Program has continued
  - Documentation Verification Program has continued
  - National Board team has continued audits
- . NRC Action since Order
  - Zimmer Plan of Action Developed
  - Review of CG&E's Proposal to have Bechtel conduct
    Independent Management Audit
  - NRC Evaluation Team has conducted baseline evaluation of plant (focus on hardware) --- Bolting problem only new important issue identified
  - . Future Actions to Determine Plant Quality (All subject to NRC approval)
    - Independent Management Review
    - Verification of Plant Quality, including reassessment of QCP
    - Complete Construction, including rework

- . Other Significant Points
  - NRC Evaluation team will assess ongoing activities
  - IDVP and ICVP of one or more systems will be conducted at conclusion of Order

OVESTION. Please indicate five examples of system interactions of a kind that the staff and/or Mr. Conran believe might occur at Shoreham.

## ANSWER.

Five examples of systems interactions that could occur at a nuclear power station are:

- A failure in a power supply causing spurious signals to the control system which in turn can result in opening of relief valves and subsequent loss of primary coolant.
- A failure in power supply which could result in failure of control instrumentation leading to a transient resulting in reactor scram.
- Failure of both vent and drain systems, due to a common discharge, could lead to a partial failure to scram in BWRs.
- Failure of a turbine could generate a missile which in turn could damage safety related equipment.
- A fire in some compartments could result in some loss of decay heat removal capability.

Current licensing requirements and safety review procedures used by the NRC staff are designed to address many different types of potential system interactions, including those listed above. Adherence to the defense-in-depth actions, including those listed above. Adherence to the single failure principle and our related licensing requirements, such as the single failure principle and protection of each of the redundant safety systems against events systems, and protection of each of the redundant safety systems against events such as high energy line breaks, missiles, high winds, flooding, seismic events and fires. We believe that these licensing requirements, supplemented by the areview procedures of the Standard Review Plan (which provides for interdisciplinary reviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety systems and takes into account known potential system intereviews of safety of the public.

The purpose of Unresolved Safety Issue A-17 "Systems Interactions in Nuclear Power Plants" is to provide confirmation that present licensing requirements and procedures are adequate (or in the alternative, to identify needed improvements) by detailed and systematic analyses of potential systems interactions and their safety significance on various plants. On one plant we plan on applying various recognized methods and techniques to assess the efficacy of these methods to identify adverse systems interactions. The results and evaluation of these analyses are scheduled to be completed by October 1984.

QUESTION. Please indicate three examples of structures, systems, and components with regard to which there is disagreement between the NRC staff (and/or Conran) and the Long Island Lighting Company.

## AMSWER.

Three examples of structures, systems and components with regard to which there is an apparent disagreement between Mr. Conran and the Long Island Lighting Company are the effluent treatment, standby liquid control and rod block monitoring systems. Based on these examples (which he does not believe are significant of and by themselves) Mr. Conran has raised the question of whether the applicant's understanding of which features of the plant are or should be termed "important to safety", as used in NRC regulations, particularly General Design Criterion 1, is sufficient to provide reasonable assurance the public health and safety during plant operation will not be endangered. A meeting with Long Island Lighting Company and the NRC staff to discuss this issue will be held on February 18, 1983.