

50-758

THE CINCINNATI GAS & ELECTRIC COMPANY



CINCINNATI OHIO 45201

September 30, 1983

NRC Region III Regional Administrator  
799 Roosevelt Drive  
Glen Ellyn, IL 60137

ATTENTION: J. G. Keppler

Dear Mr. Keppler:

PRINCIPAL STAFF			
RA	ENF		
O/RA	USCS		3
A/RA	PAO		
DPRP	SLO		
DRMA	RC		
DRMSP			
DE			
ML			
OL	FILE		

On September 29, 1983, a pre-bid meeting for the Independent Design Review (IDR) was held at the Zimmer Nuclear Power Station. The attendees are listed as Attachment I to this letter.

Mr. Wagner, Assistant Vice President of Nuclear Engineering, conducted this meeting and followed the agenda and topics which are also included as in Attachment II of this letter. The last agenda item at the meeting was a question and answer period. A copy of these questions and the responses are included in this package as Attachment III.

I have also included two other Attachments, which were requested as a result of questions posed during this meeting. These include a Quality Assurance Matrix (Attachment IV) and a copy of the Isometrics on the Residual Heat Removal System (Attachment V).

I hope these items will be of benefit to you and if you have any questions, please feel free to call me.

Sincerely,

*H. Joseph Kraus, Jr.*

H. Joseph Kraus, Jr.  
Associate Buyer  
Materials Management Dept.  
Nuclear Division

Enclosure

HJK: smb

IE01  
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Addressees:

Cygn Energy Services  
Ebasco Services, Inc.  
E. G. & G. Services  
Gilbert/Commonwealth  
M. P. R. Assoc., Inc.  
Teledyne Engineering Services  
Technical Audit Associates Inc.  
NRC Region III Regional Administrator (without Attachment IV & V)  
NRC Office of Inspection & Enforcement (without Attachment IV & V)  
NRC Zimmer Senior Resident Inspector (without Attachment IV & V)  
NRC Zimmer Project Inspector, Region III (without Attachment IV & V)

cc:

J. Williams, Jr.  
E. J. Wagner  
W. M. Hill  
R. J. Pruski  
J. F. Shaffer  
H. C. Brinkmann  
J. C. Herman  
D. C. Funke  
J. L. Haun  
K. K. Chitkara  
C. Dick

INDEPENDENT DESIGN REVIEW

ATTACHMENT 1

ATTENDANCE LIST

INDEPENDENT DESIGN REVIEW PRE-BID MEETING

CYGNA ENERGY SERVICES

J. A. Famiglietti

J. A. Fung

John E. B. J.

Frank A. Modine

EBASCO SERVICES, INC.

LOUIS J. SAS

E. G. & G. SERVICES

Bob Schultz

GILBERT/COMMONWEALTH

D. R. Thomas

R. F. Harkley

M. P. R. ASSOC., INC.

R. P. Ruff

W. R. Schmitt

TELEDYNE ENGINEERING SERVICES

James A. Flaherty

George A. Carpenter

TECHNICAL AUDIT ASSOCIATES, INC.

A. V. Loney

J. J. Murphy

ATTENDANCE LIST

INDEPENDENT DESIGN REVIEW PRE-BID MEETING

CYGNA ENERGY SERVICES

J. A. Lamigle

D. A. Ing

Frank A. Molini

EBASCO SERVICES, INC.

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E. G. & G. SERVICES

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R. Banoff

W. R. Schmitt

TELEDYNE ENGINEERING SERVICES

James A. Flaherty

George A. Carpenter

TECHNICAL ADOTT ASSOCIATES, INC.

R. Laney

J. J. Murphy

INDEPENDENT DESIGN REVIEW

ATTACHMENT 2

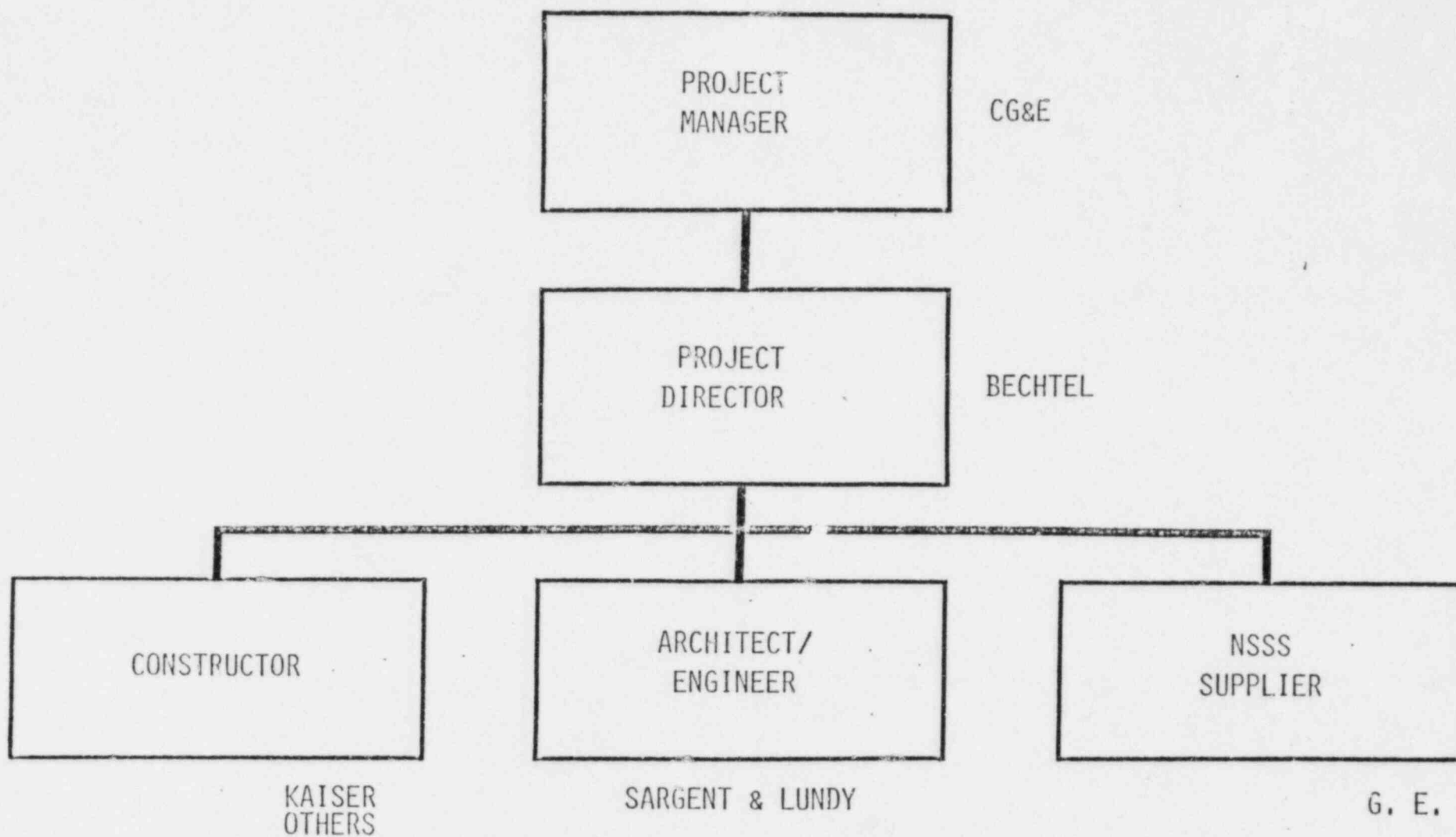
WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

AGENDA  
SEPTEMBER 29, 1983

9:00 A.M.	INTRODUCTION
9:30 A.M.	DISCUSSION OF IDR
10:30 A.M.	PLANT TOUR
12:00 P.M.	LUNCH
1:00 P.M.	QUESTIONS AND ANSWERS
3:00 P.M.	CONCLUSION

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

ORGANIZATION





WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

KEY PERSONNEL

CG&E

SR. VICE PRESIDENT, NUCLEAR OPERATIONS -	J. WILLIAMS, JR.
ASST. VICE PRESIDENT, NUCLEAR PROJECTS -	G. F. COLE
ASST. VICE PRESIDENT, NUCLEAR ENGINEERING -	E. J. WAGNER
ASST. VICE PRESIDENT, NUCLEAR OPERATIONS -	D. S. CRUDEN
MANAGER, QUALITY ASSURANCE -	J. F. SHAFFER
MANAGER, NUCLEAR ENGINEERING DEPARTMENT -	H. C. BRINKMANN
MANAGER, NUCLEAR SERVICES DEPARTMENT -	K. K. CHITKARA
DIRECTOR, MATERIALS MANAGEMENT -	J. HAUN
BUYERS, MATERIALS MANAGEMENT, NUCLEAR DIVISION -	B. FIELDS; H. JOSEPH KRAUS, JR.

BECHTEL

PROJECT DIRECTOR -	G. B. JONES
DEPUTY PROJECT DIRECTOR -	J. P. LASPA
ASSISTANT TO PROJECT DIRECTOR -	R. P. METZGER
MANAGER, ENGINEERING	C. DICK

S&L

PROJECT DIRECTOR -	R. F. SCHEIBEL
PROJECT MANAGER -	R. J. PRUSKI
FIELD PROJECT MANAGER -	T. J. DALEY

NRC

RESIDENT SITE SUPERVISOR -	W. M. HILL
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WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

SHOW CAUSE ORDER  
NOVEMBER 12, 1982

- INDEPENDENT REVIEW OF ZIMMER PROJECT MANAGEMENT (COMPLETED BY TORREY PINES TECHNOLOGY)
- CG&E RECOMMENDED COURSE OF ACTION (COA)
- PLAN TO VERIFY QUALITY OF CONSTRUCTION (PVQC)
- INDEPENDENT AUDIT OF VERIFICATION PROGRAM
- CONTINUATION OF CONSTRUCTION PROGRAM (CCP)

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

NET REPORT  
NUREG-0969

- CONDUCTED JANUARY 24 THROUGH MARCH 4, 1983
- IDENTIFIED DEFICIENCIES IN DESIGN AND CONSTRUCTION
- ONE DESIGN DEFICIENCY

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

INDEPENDENT REVIEW  
ZIMMER PROJECT MANAGEMENT

TORREY PINE TECHNOLOGY REPORT DATED AUGUST, 1983

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

COURSE OF ACTION (COA)

- SUBMITTED SEPTEMBER, 1983
- 14 MAJOR ACTIONS PROPOSED
- IDR INCLUDED

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

PLAN TO VERIFY QUALITY OF CONSTRUCTION (PVQC)

- BECHTEL MANAGEMENT
- DETERMINE QUALITY OF SAFETY RELATED ITEMS
- INDEPENDENT AUDITOR

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

CONTINUATION OF CONSTRUCTION PROGRAM (CCP)

- BECHTEL MANAGEMENT
- REWORK TO CORRECT DEFICIENCIES
- COMPLETION OF REMAINING CONSTRUCTION

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

INDEPENDENT DESIGN REVIEW SCOPE

1. REVIEW QA PROGRAM FOR DESIGN

- DESIGN CONTROL PROGRAM
- USE RHR SYSTEM

2. REVIEW DESIGN OF THE RHR SYSTEM

- PIPE STRESS ANALYSES
- PIPE SUPPORT DESIGN
- STRUCTURAL DESIGN
- ELECTRICAL POWER SUPPLY AND CONTROL CIRCUIT DESIGN
- EQUIPMENT (SEISMIC) QUALIFICATION
- ADEQUACY TO CONVEY AND CONTROL DETAILS OF CONSTRUCTION
- PERFORM PLANT WALKDOWN



WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

INDEPENDENCE

- INDEPENDENCE CRITERIA - ATTACHMENT II OF RFP
- CG&E OVERSIGHT BY INDEPENDENT CG&E INDIVIDUALS

WM. H. ZIMMER NUCLEAR POWER STATION  
INDEPENDENT DESIGN REVIEW

SCHEDULE

- PROPOSALS DUE OCTOBER 14, 1983
- IDR BASED ON 8 MONTH SCHEDULE

INDEPENDENT DESIGN REVIEW

ATTACHMENT 3

QUESTIONS AND RESPONSES

NOTE: All answers provided by E.J. Wagner unless noted

1. Mr. Laney - Technical Audit Assoc., Inc.

Question: How is the scope of the IDR affected by the following two (2) items of the RFP:

- 1) Page 2 of the RFP talks about modification to the scope as a result of the ongoing activities under the SCO?
- 2) Attachment 1, Section 3, Paragraph 3, states that depending on the results of the IDR, it may be necessary to expand the scope of review?

Answer: Since the IDR specification was written before the Course Of Action, NRC interaction could cause change to the specifications of the IDR. Bidders should bid on the specifications in the RFP. Should any changes be required, the bidders will be formally advised.

Regarding Item (2), this statement recognizes that expansion of the IDR may be necessitated by the results of the specified IDR.

2. Mr. Famiglietti - Cygna Energy Services

Question: Should the proposal include a detailed budget and when will the IDR be awarded?

Answer: Considering the nature of the work to be performed in the IDR, a detailed, itemized budget was not required. Costs for major work elements is required.

The award could depend on NRC action on the Course Of Action, but CG&E expects to award the purchase order for the IDR within (1) month after receipt of the proposals, approximately mid to late November.

3. Mr. Thomas - Cilbert/Commonwealth

Question: Where is the data to be used in the IDR?

Answer: The data is at the Zimmer site and in the Chicago offices of Sargent & Lundy. Calculations are in Chicago. Hanger work and hanger calculations will be moved to the site in November.

4. Mr. Uniferro - Technical Audit Associates, Inc.

Question: Are we to assume Sargent & Lundy will furnish detailed calculations or furnish books of calculations?

Answer: Sargent & Lundy will cooperate with the needs of the reviewer and Sargent & Lundy will provide documents as required.

5. Mr. Sas - Ebasco Services, Inc.

Question: Explain "functional licensing requirements".

Answer: "Functional licensing requirements" means the technical requirements of the regulations. This attempted to differentiate these technical requirements from administrative licensing requirements. Bidders are not requested to make a licensing review of administrative requirements in this IDR.

Question: Define the scope of review of equipment seismic evaluations.

Answer: The reviewer should satisfy himself that vendors seismic evaluations were compliant.

Question: Do pipe rupture and jet impingement effects need to be evaluated?

Answer: Yes, to the extent that they are required on Zimmer.

5. Mr. Sas - Ebasco Services, Inc. (Cont'd)

Question: Should equipment operability be evaluated?

Answer: Yes, to the extent that it is required on Zimmer, keeping in mind the vintage of the plant and the requirements for this plant.

6. Mr. Thomas - Gilbert/Commonwealth

Question: Do you expect the reviewer to do any alternate design calculations in the area of pipe stress?

Answer: If the reviewer deems it necessary. The scope indicates that your program will be in compliance with the Quality Program requirements of 10CFR50. If you do calculations, we expect them to be compliant and to be delivered to CG&E.

7. Mr. Roberts - Cygna Energy Services

Question: What is the status of the plant in regard to Regulatory Guides 79-14, 79-02, and Appendix R?

Answer: These requirements have been incorporated into the scope of design. TMI requirements have been addressed in the design requirements also. Much of the engineering is completed but construction is not complete on all items and those actions of these regulations that require evaluation of final construction, such as walkdowns, are, therefore, not complete.

8. Mr. Schmidt - M. P. R. Assoc., Inc.

Question: What do you consider to be the cut-off date for licensing requirements?

Answer: Address the latest requirements in the FSAR.

9. Mr. Thomas - Gilbert/Commonwealth

Question: Is there a FSAR on site and in Chicago?

Answer: Yes.

10. Mr. Uniferro - Technical Audit Associates, Inc.

Question: Should the structures that house the RHR system be evaluated?

Answer: No, the IDR specification identifies the service water structure foundation to be reviewed for structural design.

11. Mr. Laney - Technical Audit Assoc., Inc.

Question: Is the reviewer expected to reach an overall conclusion on the adequacy of design of the plant per Attachment 2, Page 4, Item 9?

Question: Do you feel that the RHR system provides an adequate sample size to provide an overall plant design review?

Answer: Yes, the reviewer is expected to have an overall finding on adequacy of the design of the plant. The "two slice" approach in the IDR gives the reviewer the opportunity to evaluate an extensive plant system, which contains all the different processes of design, and to evaluate the overall design process applied on all plant design. The reviewer is further advised by the specification that he may need to evaluate processes not represented by the RHR system in order to complete the review of the overall design process. This "two slice" IDR should provide a basis for a finding about the overall plant design.

12. Mr. Hartstern - Gilbert/Commonwealth

Question: Relative to subcontractor design drawings, whose construction drawings will the reviewer use?

Answer: Hanger and support drawings were done by S&L. Some design drawings were prepared by H.J. Kaiser. Equipment is covered on vendor's drawings.

12. Mr. H. Stern - Gilbert/Commonwealth (Cont'd)

Question: Are H.J. Kaiser drawings to be picked up in the IDR?

Answer: Yes, if the review flows to a H.J. Kaiser area, documents will be made available to the reviewer. Access will be provided to any required design information, including information from CG&E, S&L, and Bechtel.

Question: Sargent & Lundy was responsible for shop drawings but in the design review process, how far should the reviewer look into the valve manufacturer's drawings?

Answer: It is not intended for the reviewer to review detail supplier design beyond the determination of compatibility of the valve design with requirements of the system being reviewed. If the reviewer develops indications that the valve design may not be compliant, further examination of detailed design may be necessary.

13. Mr. Panoff - M. P. R. Assoc., Inc.

Question: How does the reviewer state broad conclusions by reviewing only the RHR system? How does the reviewer conclude other systems are acceptable, such as the containment? I question the requirement to have a broad conclusion from a small sample.

This question references Mr. Laney's earlier question concerning the selection of the RHR system by the owner and the feasibility of using the RHR system to make broad statements concerning design acceptability.

Answer: See the answer to Mr. Laney's question (Question and Response Number 11).



14. Mr. Flaherty - Teledyne Engineering Services

Question: Mr. Flaherty questioned the number of the proposals.

Answer: One (1) copy of the proposal should be sent to the Materials Management Department, Attention: D.C. Funke, and three (3) copies should be sent To E.J. Wagner as stated in the RFP.

15. Comments offered by Mr. Pruski

The reviewer will have access to Sargent & Lundy documents but Sargent & Lundy standards and procedures will only be available to the reviewer in Chicago. Zimmer specific information will be available to the reviewer at his convenience.

Appendix B and a QA Matrix was offered to the bidders by Sargent & Lundy. The referenced document is attached to the notes of the meeting.