

Docket Nos: 50-329 OM, OL  
and 50-330 OM, OL

APPLICANT: Consumers Power Company  
FACILITY: Midland Plant, Units 1 and 2  
SUBJECT: SUMMARY OF NOVEMBER 5, 1982, MEETING ON  
INDEPENDENT ASSESSMENT OF AUXILIARY BUILDING  
UNDERPINNING

On November 5, 1982, the NRC staff met in Bethesda, Maryland with Consumers Power Company (CPCo); Stone and Webster Engineering Corp. (S&W); and Parsons, Brinkerhoff, Quade and Douglas, Inc. (PBQD) to discuss the qualifications and charter of S&W and PBQD regarding the independent assessment of the implementation of the auxiliary building underpinning work. Representatives of the Government Accountability Project (GAP), a public interest group, also attended and provided questions and comments. Meeting attendees are listed by Enclosure 1. Handouts (Enclosure 2) were provided during CPCo's presentation.

Mr. J. Mooney of CPCo reviewed relevant portions of CPCo's letter of September 17, 1982, which announced that S&W and PBQD would conduct a third party assessment of the initial phase of the construction of the auxiliary building underpinning. The assessment team, which consists of eight people, is reviewing the soils design documents and construction plans, and will review construction itself, to assure that the design intent is being implemented and that construction is consistent with industry standards. The assessment will also assure that the quality assurance (QA) program is being implemented satisfactorily and that construction is being implemented in accordance with the construction documents.

Mr. Mooney also reviewed a previous meeting between CPCo and NRC Region III personnel which provided copies and discussed the associated Project Quality Plan and the professional qualifications of the team members.

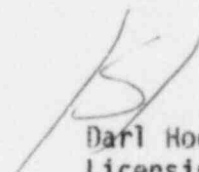
Professional qualifications of team members were reviewed by Mr. Stan Lucks of S&W, the team project manager, and by Mr. Louis Silano of PBQD. Messrs Lucks and Silano stated that all members of the review team met the independency criteria specified in Chairman Palladino's letter of February 1, 1982, to Representative John Dingell. S&W experience with independent assessments was noted to include the Summer and Diablo Canyon plants. Underpinning experience of PDQB was noted to include numerous structures and activities associated with construction of the San Francisco and Atlanta transit systems.

Mr. Mooney noted that any nonconformance report, weekly progress reports, and a written final report would be submitted to the NRC with copies to CPCo. The duration of the program is targeted for 90 days from start of underpinning construction (which will encompass installation of the grillage beam for pier 8 as identified in SSER #2, Appendix I), but the duration will be determined by the assessment team.

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SURNAME	.... PDR ADOCK 05000329	.....	.....	.....	.....	.....
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Mr. Wayne Kilker of S&W discussed the activities of the assessment team since arrival at the site six weeks ago. These have included review of the vertical access shaft, material storage area, test facility, and the offsite concrete facility. The team has also reviewed QA documents, inspection instructions and SSER #2. Daily meetings are held with site engineering and construction personnel.

At the conclusion of the meeting, the GAP representative provided comments and questions. GAP emphasized that the professional qualifications of the assessment members, the Project Quality Plan, and the raw data for the summary reports should be part of the public record. GAP questioned whether 90 days was a sufficient duration to assess an underpinning project projected to require in excess of 18 months to complete. GAP encouraged that public meetings be held by the assessment team and plans to document its comments on the assessment team's methodology in the near future.

  
Darl Hood, Project Manager  
Licensing Branch No. 4  
Division of Licensing

Enclosure:  
As stated

cc: See next page

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MIDLAND

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Mr. J. W. Cook

- 2 -

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ENCLOSURE 1

ATTENDEES  
11/5/82

NAME

ORGANIZATION

Darl S. Hood	LB #4/DL/NRR
W. D. Shafer	OCS RIII
J. A. Mooney	CPCo
John Schaub	CPCo
A. S. Lucks	Stone & Webster
Wayne E. Kilker	Stone & Webster
Louis Silano	Parsons, Brinckerhoff
Jim Brunner	CPCo, legal
George Lear	HGEB-DE-NRR
Joseph Kane	NRR:DE:HGEB
E. J. Sullivan, Jr.	NRC:DE
Melanie A. Miller	NRR:DL:LB #4
P. T. Kuo	NRR:DE:SEB
Frank Rinaldi	NRR:DE:SEP
William Paton	GELD
Walter Haass	NRR/QAB
E. G. Adensam	NRR:DL:LB #4
J. P. Knight	NRR:DE
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Billie Garde	GAP
Lyman Heller	NRR/HGEB
Roger Houston	CPCo
Charles Ader	Stone & Webster
S. Holuy	GAP

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
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DATE ▶	.....	.....	.....	.....	.....	.....	.....

11/5/82  
J. Murney

Enclosure 2

MIDLAND PROJECT  
SOILS REMEDIAL WORK  
INDEPENDENT ASSESSMENT

COMMITMENT  
(LETTER OF SEPTEMBER 17, 1982)

- RETAIN THIRD PARTY
  - INDEPENDENT APPRAISAL
  - INITIAL PHASES OF CONSTRUCTION
  - AUXILIARY BUILDING UNDERPINNING
  
- PROVISION TO EXPAND BOTH SCOPE AND DURATION
  
- ASSESSMENT TEAM
  - CONSTRUCTION EXPERTS
  - QA EXPERTS
  - SUPPLEMENTED BY UNDERPINNING CONSULTANT
  
- REVIEW TO INCLUDE
  - SOILS DESIGN DOCUMENTS,
  - CONSTRUCTION PLANS
  - CONSTRUCTION ACTIVITIES
  
- ASSESSMENT TO INSURE
  - SATISFACTORY QA PROGRAM IMPLEMENTATION
  - CONSTRUCTION CONSISTENT WITH DESIGN INTENT
  - CONSTRUCTION CONSISTENT WITH INDUSTRY STANDARDS

## SELECTION OF ASSESSMENT TEAM

- SELECTION CRITERIA

- INDEPENDENT
- EXPERIENCED

Design Review

Construction

Underpinning

Nuclear QA/QC

- ASSESSMENT TEAM REQUIRED JOINT EFFORT

- NUCLEAR AE/CONSTRUCTOR
- UNDERPINNING SPECIALIST



ASSESSMENT TEAM

- STONE & WEBSTER
  - INDEPENDENT
  - EXPERIENCED NUCLEAR AE/CONSTRUCTOR
  - EXPERIENCED IN THIRD PARTY INSPECTIONS
  
- PARSONS, BRINCKERHOFF, QUADE & DOUGLAS
  - INDEPENDENT
  - EXPERIENCED IN SOILS/UNDERPINNING
  - EXPERIENCED IN THIRD PARTY INSPECTIONS

ASSESSMENT TEAM MEMBERS

<u>NAME</u>	<u>PREVIOUS POSITION</u>	<u>EXPERIENCE</u>
STAN LUCKS	CHIEF GEOTECHNICAL ENGINEER - BOSTON	20 YEARS AS CIVIL AND SOILS ENGINEER. PhD IN CIVIL ENGINEERING (SOILS)
WAYNE KILKER	SENIOR SOILS ENGINEER - BOSTON	18 YEARS AS CIVIL ENGINEER. MS SOIL MECHANICS
LARRY ROUEN	SENIOR QUALITY ASSURANCE ENGINEER - CLINCH RIVER	8 YEARS AS QUALITY INSPECTOR IN NUCLEAR POWER INDUSTRY. ACI/ASME LEVEL III INSPECTION ENGINEER
AL SCOTT	CHIEF CONSTRUCTION ENGINEER - RIVER BEND	34 YEARS AS CONSTRUCTION ENGINEER

ASSESSMENT TEAM MEMBERS (CONTD)

<u>NAME</u>	<u>PREVIOUS POSITION</u>	<u>EXPERIENCE</u>
PAUL BARRY	STRUCTURAL ENGINEER - BOSTON	11 YEARS AS CIVIL ENGINEER
BARRY HOLSINGER	QUALITY ASSURANCE ENGINEER - NINE MILE	13 YEARS AS QUALITY INSPECTOR
WALT PARRISH	CIVIL/STRUCTURAL ENGINEER - PITTSBURGH SUBWAY INSTALLATION	25 YEARS EXPERIENCE IN CIVIL/STRUCTURAL ENGINEERING
JERRY RATNER	CONSTRUCTION ENGINEER - NEW YORK CITY	20 YEARS CONSTRUCTION

## SCOPE OF ASSESSMENT

- DEVELOPMENT OF ASSESSMENT PROGRAM COVERING AUXILIARY BUILDING UNDERPINNING
- PREPARATION OF PROJECT QUALITY PLAN
- OVERVIEW DESIGN AND CONSTRUCTION DOCUMENTS
- EVALUATE ADEQUACY OF TECHNICAL, CONSTRUCTION, AND QUALITY PROCEDURES
- EVALUATE PROCEDURAL IMPLEMENTATION
- SUBMITTAL OF ANY NONCONFORMANCE REPORTS TO THE NRC WITH COPY TO CPCO
- SUBMITTAL OF WEEKLY PROGRESS REPORTS TO THE NRC WITH COPY TO CPCO
- SUBMITTAL OF FINAL REPORT TO NRC WITH COPY TO CPCO
- DURATION OF ASSESSMENT WILL BE DETERMINED BY ASSESSMENT TEAM
- NO LIMIT ON NUMBER OF ASSIGNED PERSONNEL

November 22, 1982

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-329/330 CM, OL

NRC/PDR

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NSIC

PRC System

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F. Rinaldi

W. Paton

W. Haass

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bcc: Applicant & Service List