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

OCT 2 1 1983

NOTE TO: Hans Schierling

FROM: James P. Knight, A/D CSE, DE

Attached is a specific list of the information that we will need in order to conduct a meaningful audit on October 25-27, 1983, regarding the various allegations received in the course of the Diablo Canyon review. Also included under Item B on this list is a list of information to be audited in relation to open items in SSER Nos. 18 and 19. It is our intent that these lists be telefaxed to PG&E so that the first package of information (Item A) will be on the table ready for us to proceed at 9:00 a.m. Tuesday, October 25.

James P. Knight, Assistant Director
for Components & Structures Engineering
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cc: R. Vollmer
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Information Requested for NRC Audit of October 25-27, 1983

A. Requested as available for immediate review at 9:00 a.m. Tuesday October 25, 1983 (through Thursday October 27, 1983)

1. A list of computer programs used for the Diablo Canyon reverification program.

2. Documentation and verification of computer program CE 217.

3. Calculations for the dynamic model of the containment exterior shell. This includes the mass and stiffness calculations of the containment dome, shell and foundation.

4. Deconvolution calculations for the containment - inputs (soil/rock properties) model, and computer printouts (for DE and DDE analyses)

5. Calculations on soil-structure interaction model for containment and inputs (for DE and DDE analyses).

6. Computer printout for DE and DDE containment exterior shell analysis.

7. General description on design methods and codes used for containment penetrations and connections.

   Typical calculations for inserts and attachment to containment shell and to the liner plate (two each).

8. Mass and stiffness calculations for the annulus structure of dynamic model (vertical and horizontal).

9. Drawings showing all modifications to the containment annulus structure (including shop drawings).

10. Dynamic models of the annulus structure (vertical and horizontal).

11. Computer printouts on vertical seismic response of the annulus structure.

12. Computer printouts on horizontal frequency evaluation of annulus floors.

13. Stress combination evaluations of structural members in the annulus structure.

14. Calculations used to select critical members for containment annulus structure.

15. Stress combination calculations for built-up and composite members in the annulus structures.

B. Requested as available - Tentative 2 p.m. Tuesday October 25, 1983 through Thursday, October 27, 1983.

1. Design Manual DCM C-54, "Structural Evaluation of Pipe Whip Restraints Outside Containment".

2. Design Manual DCM C-64 "Design of Rupture Restraints Inside Containment"

3. a. Completion report of PGE Open Item 39.
   b. Test data for design of crushable bumpers.

4. Representative design packages of rupture restraints and crushable bumpers inside containment.

5. List of essential systems or portions of systems
   a. targets on these systems, piping and equipment
   b. sources for these targets
   c. Specific information on 54 + 68 civil/structural cases and 48 piping cases which were not required or did not have analyses or reviews. (Listed in PGE response of 10-12-83 to SSER open items 29 on jet impingement).

6. Table of piping and conduit threshold pressures.

7. a. Design Manual DCM M-65 Rev. 1 "Jet Impingement Analysis Criteria for Inside Containment"
   b. Document MEP, Rev. 0 "Engineering Procedure for the Analysis of Jet Impingement Effects Inside Containment"

8. Sample calculations for linear support buckling.

COMMISSION BRIEFING

OCTOBER 28, 1983

OUTLINE

- BACKGROUND
- DESIGN VERIFICATION PROGRAM STATUS (STAFF & IDVP)
- PGE/PLANT STATUS/SCHEDULE
- ALLEGATIONS
- FUEL LOAD READINESS

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BACKGROUND

- SSER-13 (August 5, 1983)
  - PRESENTED STAFF EVALUATION OF IDVP AND ITP (STEPS 1, 2 AND 3)
  - IDENTIFIED OPEN ITEMS, INCOMPLETE EFFORT, AND NEED FOR FURTHER DOCUMENTATION

- SECY 83-366 (September 13, 1983 Commission Meeting)
  - DISCUSSED AT SEPTEMBER 13, 1983 COMMISSION MEETING
  - ACKNOWLEDGED OPEN ISSUES
  - PRESENTED STAFF EVALUATION, CONCLUSIONS, AND RECOMMENDATION

- COMMISSION MEETING (September 27, 1983)
  - IDENTIFIED 30 SPECIFIC OPEN ITEMS: 14 FOR STEP 1
    13 FOR STEP 2
    3 FOR STEP 3
  - PRESENTED PG&E PLANT STATUS AND SCHEDULE

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STAFF EVALUATION

- SSER-19 (OCTOBER 14, 1983)
  - SPECIFICALLY DIRECTED TO FUEL LOAD ISSUES
  - LISTS OTHER OPEN ITEMS
  - STAFF CONCLUSION: ALL ITEMS FOR FUEL LOAD DECISION RESOLVED

    (6 ITEMS REQUIRE SOME FOLLOWUP VERIFICATION WORK)

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DESIGN VERIFICATION PROGRAM STATUS

- IDVP
  - ALL ITR'S AND REVISIONS SUBMITTED
  - IDVP FINAL REPORT COMPLETE
  - IDVP EFFORT COMPLETE
- NRC STAFF
  - ALL FUEL LOAD OPEN ITEMS RESOLVED
  - OPEN ITEMS REQUIRED FOR STEP 2 (13) AND STEP 3 (3) IDENTIFIED
  - REVIEW OF IDVP REPORTS COMPLETE FOR FUEL LOAD (SSER 19)
  - FUTURE SSER WILL ADDRESS ALL REMAINING ISSUES (STEP 2 AND 3) INCLUDING FOLLOWUP FROM STEP 1

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PGE STATUS/SCHEDULE

• FUEL LOAD MODIFICATIONS COMPLETE INSIDE CONTAINMENT	OCTOBER 28
• SECURITY PLAN IN EFFECT (PLUS 30 DAYS)	NOVEMBER 3
• ALL FUEL LOAD MODIFICATIONS COMPLETE	NOVEMBER 9
• PLANT WALKDOWN COMPLETE	NOVEMBER 10
• PLANT READY FOR FUEL LOAD (STEP 1)	NOVEMBER 15
• ALL MODIFICATIONS FROM DESIGN VERIFICATION PROGRAM COMPLETE (STEP 2/3)	DECEMBER 31
• PLANT READY FOR LOW-POWER TESTING (STEP 2)	DECEMBER 31
• ACHIEVE CRITICALITY	JANUARY 17
• PLANT READY TO EXCEED 5% POWER (STEP 3)	FEBRUARY 15

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SUMMARY OF ALLEGATIONS

1. CONFIDENTIAL (MR. SMITH) JAN. 1983 BN 83-03	1. COMPONENT COOLING WATER SYSTEM	SSER 16
	2. 10 ITEMS RELATED TO CLASSIFICATION AND DESIGN OF SYSTEMS (SOURCE - CONFIDENTIAL)	SSER IN PREPARATIO
2. ANONYMOUS VIA D.FLEISCHAKER (BN 83-48)	8 ALLEGATIONS REGARDING SEISMIC STRUCTURAL DESIGN	REVIEW CON-DUCTED, SSI IN PREPARA
3. CONFIDENTIAL SEPT. 22 (BN 83-163)	SYSTEMS INTERACTION (SOURCE/INFORMATION - CONFIDENTIAL)	STAFF AUDI OCT. 25-26
4. ANONYMOUS VIA GOV. CALIF. SEPT. 28,1983 (BN 83-170)	DOCUMENTATION PROBLEMS IN H. P. FOLEY ELECTRICAL CONSTRUCTION WORK	UNDER REVI
5. ANONYMOUS BECHTEL.PG&E EMPLOYEES OCT. 12, 1983 (BN 83-16)	8 ALLEGATIONS REGARDING SEISMIC STRUCTURAL DESIGN	STAFF AUDI OCT. 25-26
6. CONFIDENTIAL OCT. 19, 1983 (BN 83-164)	ALLEGATIONS ON H. P. FOLEY QA/QC MATTERS (SOURCE/INFORMATION - CONFIDENTIAL)	(JUST RECEIVED)

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7. Mr. John Cooper Oct. 24, 1983 (BN 83-169)	RHR System Operation and Instrumentation	(Just Received)
8. Anonymous Oct. 27, 1983 (BN 83-171)	Small Bore Piping & Support	(Just Received)
9. Anonymous "Bill" Oct. 24, 1983	Serious Inadequacies in Foley and Pullman QA Programs	(No Details provided)

OTHER ALLEGATIONS UNDER REVIEW BY REGION V AND OI

FUEL LOAD READINESS

- ALL MAJOR MODIFICATIONS INSIDE CONTAINMENT MUST BE COMPLETED.
- ALL FUEL LOAD OPEN ITEMS OF DESIGN VERIFICATION PROGRAM ARE RESOLVED.
- FUEL LOAD AUTHORIZATION (STEP 1) WILL INCLUDE MODE 6 AND MODE 5 OF TECHNICAL SPECIFICATIONS (I.E., UP TO 140°F REACTOR COOLANT TEMPERATURE)

BACKUP SLIDE 1

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FUEL LOAD ITEMS (6) REQUIRING FOLLOWUP

(SSER 19 PAGE C.5-2)

1.	SPECTRUM AVERAGING FOR CONTAINMENT ANANULUS	RESOLVED - ADDITIONAL INFORMATION HAS BEEN PROVIDED
2.	20 HZ CUT OFF FREQUENCY	RESOLVED - ADDITIONAL INFORMATION HAS BEEN PROVIDED
17.	BUCKLING CRITERIA FOR LINEAR SUPPORTS	RESOLVED - AUDIT ON 10/25-27
18.	ANALYSIS OF PIPING SYSTEMS	RESOLVED - COMPLETION AT STEP 3
29.	JET IMPINGEMENT LOADS	RESOLVED - COMPLETION AT STEP 3
30.	RUPTURE RESTRAINTS	RESOLVED - AUDIT ON 10/25-27

BACKUP SLIDE 2

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