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 HARBOR, C.D. Pacific Gas & Electric Co.
 POWERS, R.P. Pacific Gas & Electric Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 96-015-00: on 961105, TS 6.5.2.6 was not met when cores reloaded w/o plant staff review of safety evaluations due to programmatic deficiency. Will revise SE procedures. W/961205 ltr.

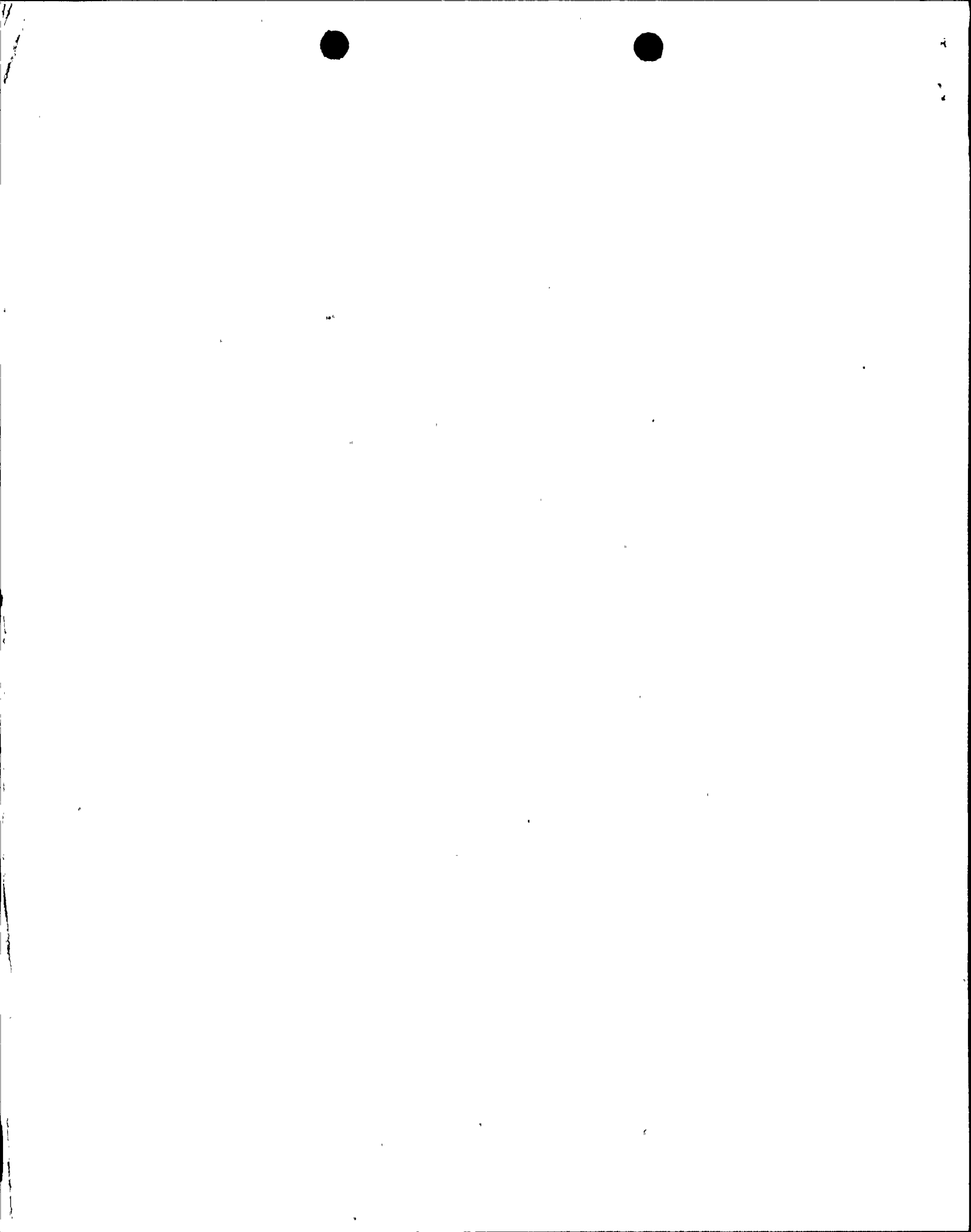
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	NRR/DE/EMEB	1 1	NRR/DRCH/HHFB	1 1
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Pacific Gas and Electric Company

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424
805/545-6000

Robert P. Powers
Vice President—Diablo Canyon
Operations and Plant Manager

December 5, 1996

PG&E Letter DCL-96-226



U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Licensee Event Report 1-96-015-00
Technical Specification 6.5.2.6 Not Met When Cores Reloaded Without Plant
Staff Review Committee Review of Safety Evaluations Due to Programmatic
Deficiency

Dear Commissioners and Staff:

Pursuant to 10 CFR 50.73(a)(2)(i)(B), PG&E is submitting the enclosed Licensee Event Report regarding Technical Specification 6.5.2.6, "Plant Staff Review Committee Responsibilities," not being met when the Unit 2, cycle 7, core and the Units 1 and 2, cycle 8, cores were loaded without the Plant Staff Review Committee having reviewed the reload safety evaluations.

This condition did not affect the health and safety of the public.

Sincerely,


Robert P. Powers

cc: Steven D. Bloom
L. J. Callan
Larry L. Cossette
Stanley C. Ketelsen

Kenneth E. Perkins
Michael D. Tschiltz
Diablo Distribution
INPO

Enclosure

WEC/2246/N0002000

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Diablo Canyon Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 7 5 1	PAGE (3) 1 OF 7
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TITLE (4) **Technical Specification 6.5.2.6 Not Met When Cores Reloaded Without Plant Staff Review Committee Review of Safety Evaluations Due to Programmatic Deficiency**

EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)																
MON	DAY	YR	YR	SEQUENTIAL NUMBER			REVISION NUMBER	MON	DAY	YR	FACILITY NAMES				DOCKET NUMBER (5)											
10	12	94	96	-	0	1	5	-	0	0	12	05	96	Diablo Canyon Unit 2				0	5	0	0	0	3	2	3	
10	16	95	96	-	0	1	5	-	0	0	12	05	96													
05	02	96	96	-	0	1	5	-	0	0	12	05	96													

OPERATING MODE (9) **1**

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (11)

POWER LEVEL (10) **1 | 0 | 0**

10 CFR 50.73(a)(2)(i)(B)
 OTHER - _____
 (Specify in Abstract below and in text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

Cary D. Harbor - Senior Regulatory Services Engineer	TELEPHONE NUMBER	AREA CODE	NUMBER
		805	545-4348

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14) YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (16)

On November 5, 1996, with Units 1 and 2 in Mode 1 (Power Operation) at 100 percent power, PG&E determined the Technical Specification (TS) 6.5.2.6 requirement for the Plant Staff Review Committee (PSRC) to review the reload safety evaluations (RSEs) for the new cycle cores had not been met for Units 1 and 2, cycle 8. On November 21, 1996, with Unit 2 in Mode 1 at 100 percent power, PG&E determined the same requirement had not been met for Unit 2, cycle 7. The RSEs had been prepared by the vendor and were used by PG&E as the basis for pre-core-load safety evaluation screens. PG&E Engineering personnel discovered these events while reviewing a monthly operating report discrepancy.

The cause of these events was a programmatic deficiency in the procedures and training of personnel on PSRC review requirements for safety evaluations produced by vendors.

The PSRC reviewed the cycle 8 RSEs for Units 1 and 2 on October 24, 1996, and concurred with the safety evaluation screens that there were no unreviewed safety questions. The PSRC had previously reviewed the respective core operating limits reports prior to the startup of each unit.

The safety evaluation procedures will be revised to clarify requirements regarding PSRC review of vendor-generated safety evaluations. Personnel will be notified of the changes and the changes will be reviewed in quarterly Technical Staff update sessions.



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TEXT (17)

I. Plant Conditions

Units 1 and 2 have been in various modes and at various power levels.

II. Description of Problem

A. Summary:

On November 5, 1996, with Units 1 and 2 in Mode 1 (Power Operation) at 100 percent power, PG&E determined that the Technical Specification (TS) 6.5.2.6 requirement for the Plant Staff Review Committee (PSRC) to review the vendor-generated reload safety evaluations (RSEs) for the new cycle cores had not been met for Units 1 and 2, cycle 8. On November 21, 1996, with Unit 2 in Mode 1 at 100 percent power, PG&E determined that the TS 6.5.2.6 requirement for PSRC to review Revision 1 of the vendor-generated RSE had not been met for Unit 2, cycle 7. PG&E Engineering personnel discovered these events while reviewing a discrepancy in the monthly operating report.

B. Background:

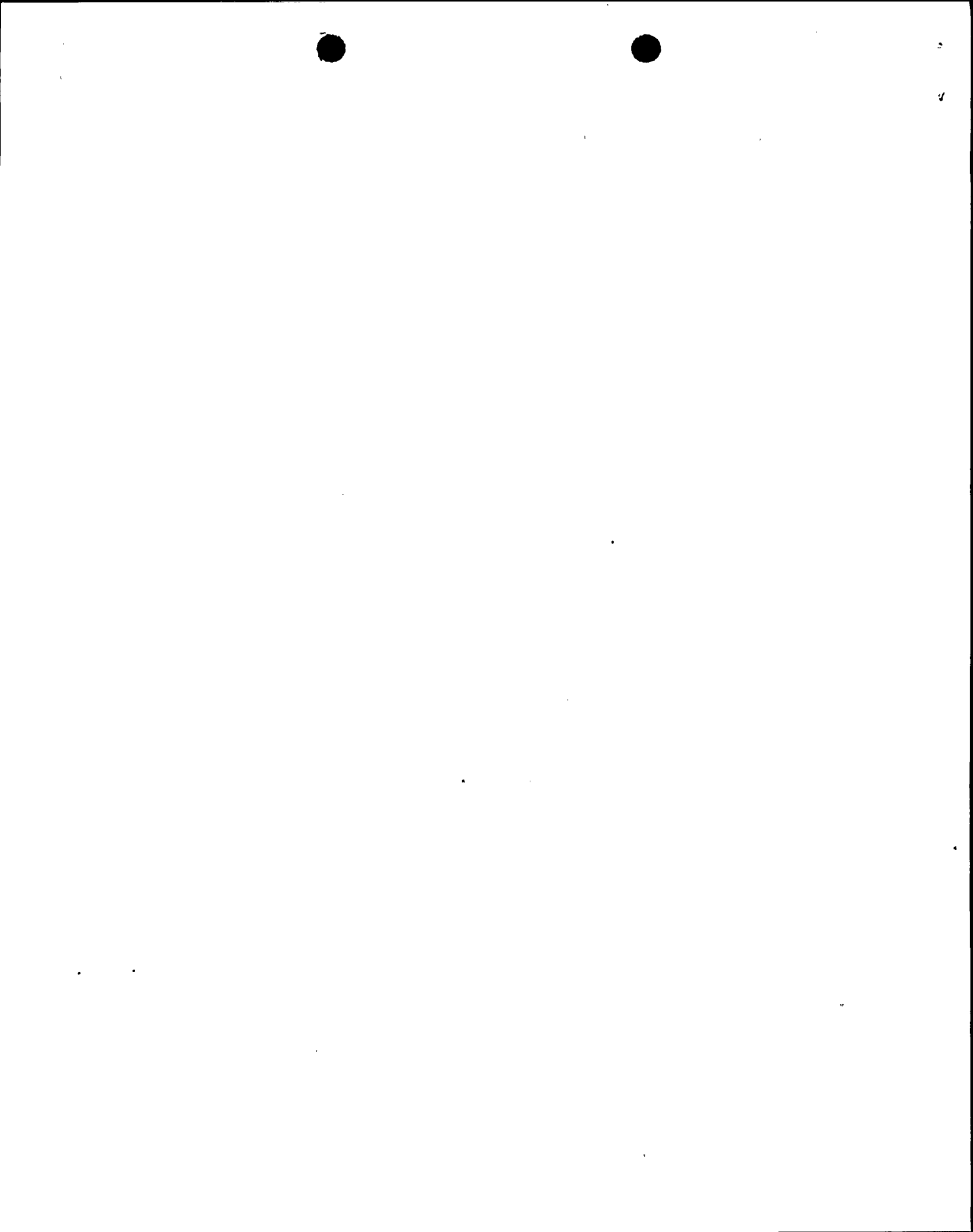
Technical Specifications

TS 6.5.2.6 requires that the PSRC review safety evaluations for plant modifications and changes to procedures to verify that such actions do not constitute an unreviewed safety question.

TS3.ID2, "Licensing Basis Impact Evaluations"

Diablo Canyon Power Plant (DCPP) procedure TS3.ID2 implements the TS and 10 CFR 50.59 requirements. The procedure includes a provision for a safety evaluation screen to determine if proposed procedure and plant modifications require a more formal evaluation. Plant personnel are directed to perform the screen using a form entitled, "Licensing Basis Impact Evaluation (LBIE) Screen."

If any of the LBIE screen questions are answered yes, an LBIE must be performed using a form entitled, "Licensing Basis Impact Evaluation." Should all LBIE screen questions be answered no, a sufficient 10 CFR 50.59 safety evaluation is considered to have been completed. The procedure directs that



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TEXT (17)

any LBIEs must be reviewed by the PSRC and approved by the Plant Manager before changes may be implemented.

Reload Practices

PG&E is currently not licensed to perform RSEs. Analyses to support a reload core design are performed by the nuclear fuel vendor, Westinghouse, and are documented in the reload RSE which is sent to PG&E with each reload.

Prior to the Unit 2 sixth refueling outage (2R6), the RSEs were attached to design change packages (DCPs) which require PSRC review. Beginning with 2R6 (loading of cycle 7), the process of noting the completion of the analyses and receipt of the RSE was contained within a maintenance modification package (MMP). The administrative procedure governing MMPs does not require they be reviewed by the PSRC.

PSRC Review of Core Operating Limits Reports (COLRs)

TS 6.9.1.8 requires that core operating limits be established and documented in the COLR before each reload cycle. To accomplish this, Westinghouse reviews the previous cycle COLR for changes and generates a markup which is submitted to PG&E as an attachment to the RSE. PG&E then prepares the final COLR which is reviewed in the same manner as a quality-related procedure. The COLR is then submitted to the PSRC for their review of cycle specific changes prior to each cycle startup.

The foregoing process was followed for Unit 2, cycles 7 and 8, and Unit 1, cycle 8, and the PSRC concurred with the Westinghouse changes.

C. Event Description:

Unit 2, Cycle 7

On August 30, 1994, PG&E approved an MMP defining the new method for implementing core reloads on Unit 2. In October 1994, Westinghouse issued the RSE for Unit 2, cycle 7. PG&E Engineering personnel who prepared and reviewed the LBIE screen for the MMP used the Westinghouse RSE as a basis for responding negatively to the LBIE screen questions. Therefore, an LBIE was not prepared and PSRC review was not required. On October 12, 1994, PG&E commenced loading cycle 7 without PSRC review of the Westinghouse RSE.



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The COLR for cycle 7 was reviewed by the PSRC and was approved by the Plant Manager on October 21, 1994. The unit was taken critical on October 26, 1994.

Unit 1, Cycle 8

Similarly as with Unit 2, cycle 7, in August of 1995, Westinghouse issued the RSE for Unit 1, cycle 8. PG&E prepared an MMP in accordance with the new method for implementing core reloads. PG&E engineering personnel who prepared and reviewed the LBIE screen for the MMP used the Westinghouse RSE as a basis for responding negatively to the LBIE screen questions. Therefore, an LBIE was not prepared and PSRC review was not required. On October 16, 1995, PG&E commenced loading cycle 8 without PSRC review of the Westinghouse RSE.

The COLR for cycle 8 was reviewed by the PSRC and was approved by the Plant Manager on November 6, 1995. The unit was taken critical on November 23, 1995.

Unit 2, Cycle 8

A DCP was used in Unit 2, cycle 8, because of an increase in allowable fuel enrichment to 5.0 weight percent and the introduction of ZIRLO fuel cladding. The DCP included the RSE as an attachment. The DCP and attached RSE were then submitted and reviewed by the PSRC.

Subsequently, a leaking fuel assembly resulted in a change to the core loading pattern with the reuse of four assemblies previously scheduled for discharge. Westinghouse analyzed the new core configuration and issued Revision 1 of the RSE which stated that the revised core configuration had been verified to comply with the existing design basis. PG&E Engineering personnel used Revision 1 of the RSE as a basis to generate the LBIE screen. All the screening questions were answered negatively, thus an LBIE was not required, and therefore the PSRC was not afforded an opportunity to review the revised RSE before the start of core reload on May 2, 1996.

The COLR for cycle 8 was reviewed by the PSRC and was approved by the Plant Manager on May 10, 1996. The unit was taken critical on May 21, 1996.



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D. Inoperable Structures, Components, or Systems that Contributed to the Event:

None.

E. Dates and Approximate Times for Major Occurrences:

1. October 12, 1994, at 2221 PDT: Event date: Unit 2, cycle 7, core reload began without PSRC review of RSE.

2. October 16, 1995, at 1658 PDT: Event date: Unit 1, cycle 8, core reload began without PSRC review of RSE.

3. May 2, 1996, at 2300 PDT: Event date: Unit 2, cycle 8, core reload began without PSRC review of Revision 1 to RSE.

4. November 5, 1996: Discovery date: PG&E determined the vendor-generated RSEs for Units 1 and 2, cycle 8, had not received PSRC review.

5. November 21, 1996: Discovery date: PG&E determined the vendor-generated RSE for Unit 2, cycle 7, had not received PSRC review

F. Other Systems or Secondary Functions Affected:

None.

G. Method of Discovery:

The events were discovered by Engineering personnel while investigating erroneous dates that appeared in the monthly operating reports (MORs) from December 1995 through September 1996. (Reference MOR for October 1996, DCL-96-219.)

H. Operator Actions:

None.



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I. Safety System Responses:

None.

III. Cause of the Problem

A. Immediate Cause:

The RSEs were not presented to the PSRC because Engineering personnel were unaware of the requirement.

B. Root Cause:

The root cause is a programmatic deficiency in the LBIE program. Both the procedure, TS3.ID2, and the training program did not contain specific requirements for processing vendor-generated safety evaluations. Responsible personnel were unaware that vendor safety evaluations, that are used to justify negative responses to LBIE screening questions, must still be reviewed by PSRC.

IV. Analysis of the Event

The PSRC reviewed the current cycle RSEs and concurred that there were no unreviewed safety questions. Thus, these events had no adverse effect on the health and safety of the public.

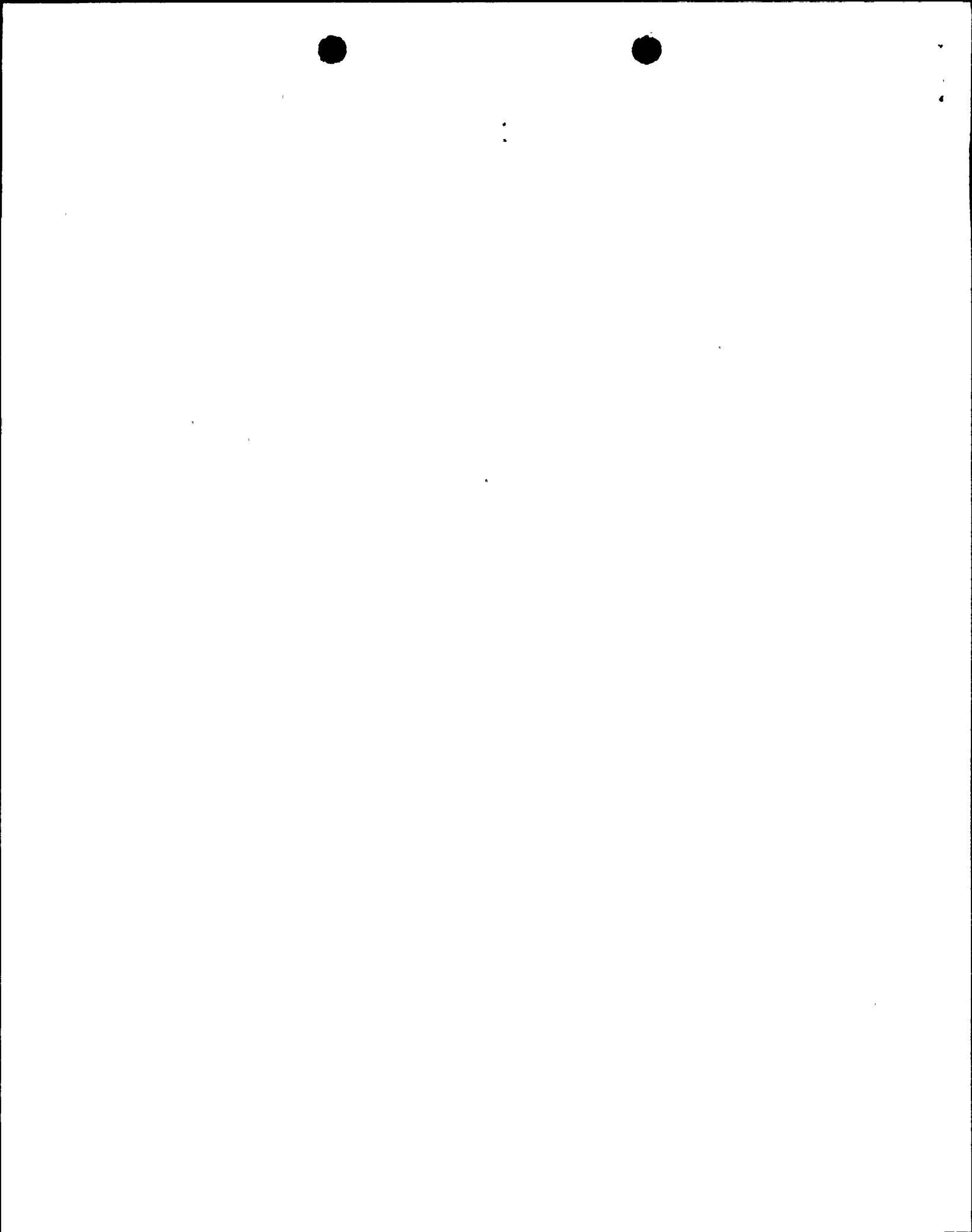
V. Corrective Actions

A. Immediate Corrective Actions:

On October 24, 1996, the PSRC reviewed the current RSEs for Units 1 and 2, cycle 8, and concurred with the Engineering safety evaluation screens performed before the core reloads that there were no unreviewed safety questions.

B. Corrective Actions to Prevent Recurrence:

The applicable safety evaluation procedures will be revised to clarify requirements regarding PSRC review of vendor-generated safety evaluations.



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Personnel will be notified of the procedure changes in accordance with administrative procedure AD1.ID2, "Review Level 'A' Procedure Review, Approval and Notification of Changes."

The procedure changes will be reviewed in quarterly Technical Staff update sessions.

VI. Additional Information

A. Failed Components:

None.

B. Previous LERs on Similar Problems:

None.



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