

(ACCELERATED RIDS PROCESSING)

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

DOCKET # DOC.DATE: 95/11/06 NOTARIZED: NO ACCESSION NBR:9511130013 FACIL:50-275 Diablo Canyon Nuclear Power Plant, Unit 1, Pacific Ga 05000275 AUTHOR AFFILIATION AUTH.NAME Pacific Gas & Electric Co. BEHNKE, D.G. Pacific Gas & Electric Co. RUEGER, G.M. RECIPIENT AFFILIATION RECIP.NAME SUBJECT: LER 95-006-00:on 951006, TS 3.9.12 was not met due to personnel error. Clarified emergency power supply operability requirements.W/951106 ltr. DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR ENCL SIZE: TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc. NOTES: RECIPIENT COPIES COPIES RECIPIENT LTTR ENCL ID CODE/NAME LTTR ENCL ID CODE/NAME 1 1 1 BLOOM, S PD4-2 PD 1 2 AEOD/SPD/RAB INTERNAL: ACRS 1 1 FILE CENTER AEOD/SPD/RRAB 1 1 1 1 NRR/DE/EELB NRR/DE/ECGB 1 1 1 1 1 NRR/DRCH/HHFB NRR/DE/EMEB 1 1 NRR/DRCH/HICB 1 1 NRR/DRCH/HOLB 1 1 1 1 NRR/DRPM/PECB NRR/DRCH/HQMB 1 1 1 1 NRR/DSSA/SPSB/B NRR/DSSA/SPLB 1 NRR/DSSA/SRXB 1 1 RES/DSIR/EIB 1 RGN4 FILE 01 2 LITCO BRYCE, J H EXTERNAL: L ST LOBBY WARD 1 1 NOAC MURPHY, G.A 1 NOAC POORE, W. 1 1 1 NUDOCS FULL TXT NRC PDR

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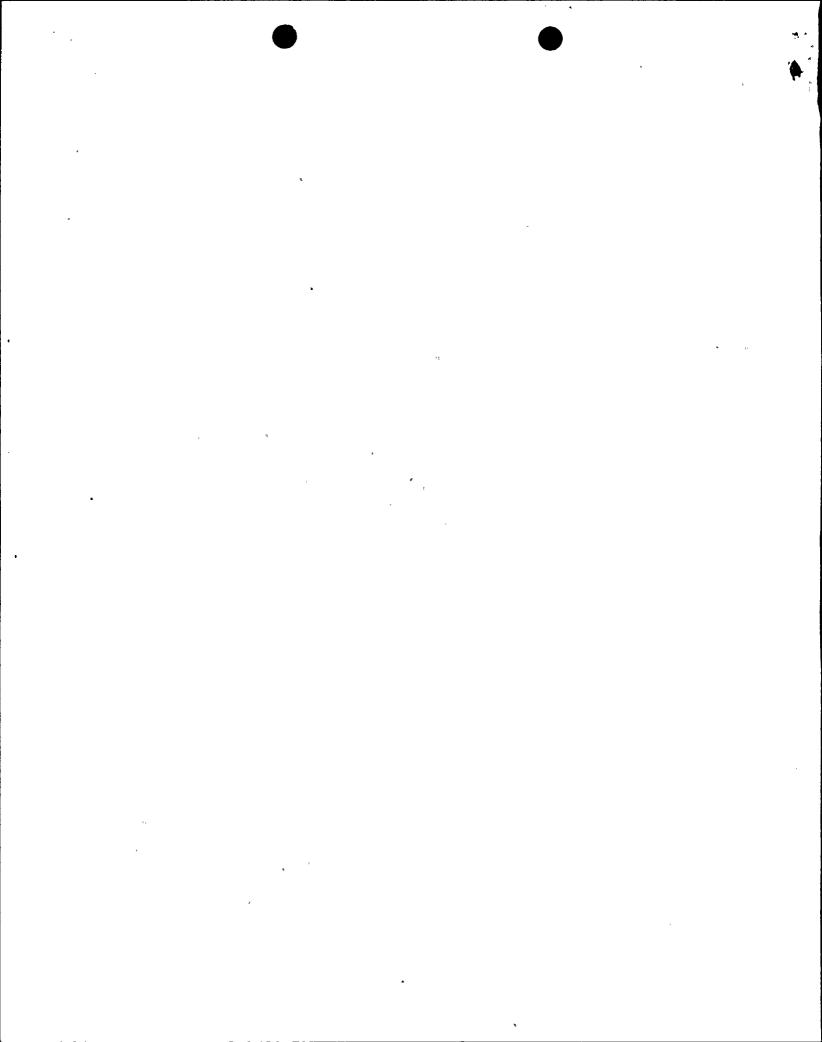
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77 Beale Street, Room 1451-B14A San Francisco, CA 94105 Mailling Address Mail Code B14A P.O. Box 770000 San Francisco, CA 94177 415/973-4684 Fax 415/973-2313 Gregory M. Rueger Senior Vice President and General Manager Nuclear Power Generation

November 6, 1995



PG&E Letter DCL-95-232

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

Docket No. 50-275, OL-DPR-80
Diablo Canyon Unit 1
<u>Licensee Event Report 1-95-006-00</u>
<u>Technical Specification 3.9.12 Not Met Due to Personnel Error</u>

Gentlemen:

Pursuant to 10 CFR 50.73(a)(2)(i)(B), PG&E is submitting the enclosed Licensee Event Report concerning not meeting Technical Specification 3.9.12 due to personnel error.

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

Sincerely,

Gregory M. Rueger

CC:

Steven D. Bloom L.J. Callan Kenneth E. Perkins John J. Russell Michael D. Tschiltz Diablo Distribution INPO

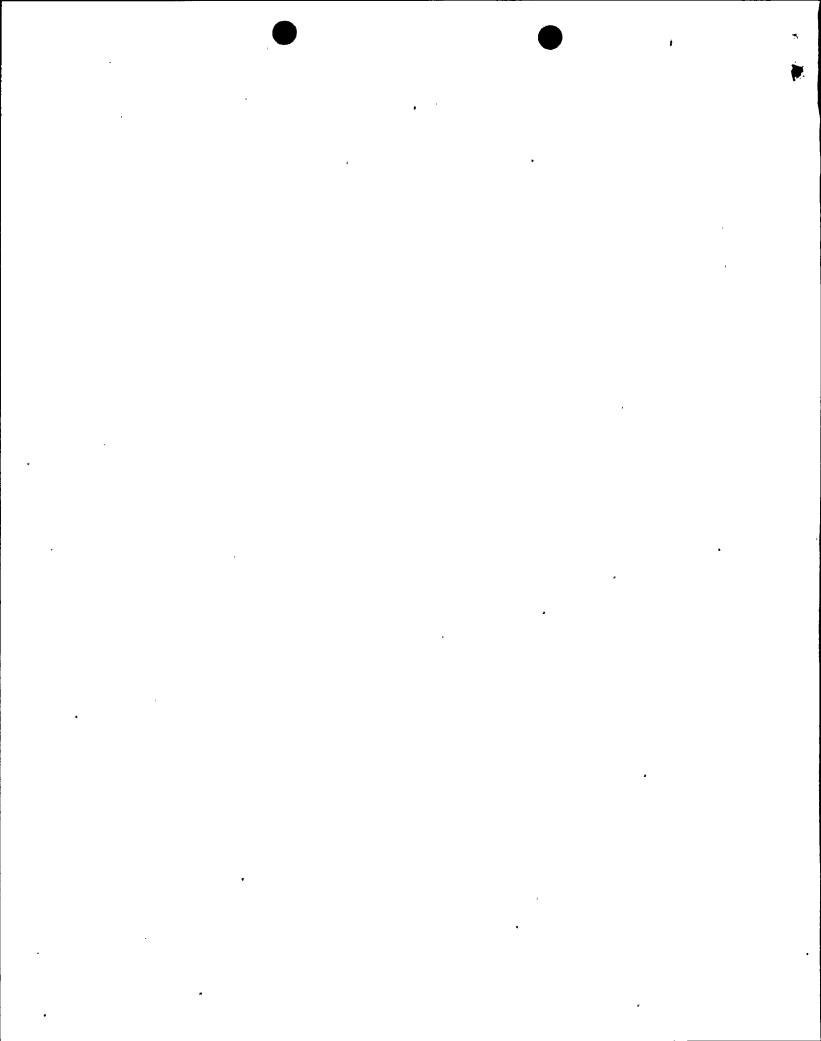
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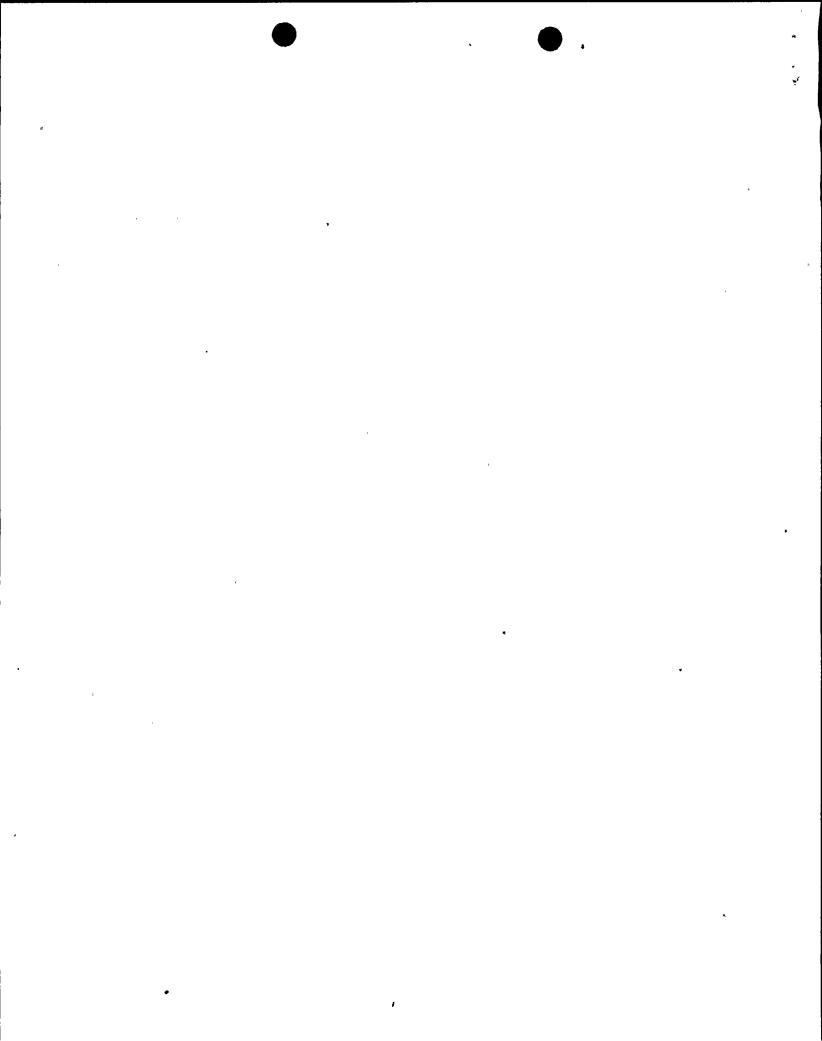


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On October 6, 1995, at approximately 1530 PDT, with Unit 1 in Mode 6 (Refueling) and the core off-loaded, Technical Specification 3.9.12 was violated when crane operations with loads over the spent fuel pool were commenced without the fuel handling building ventilation system having an automatic source of emergency power.

The cause was determined to be personnel error (cognitive), inattention to detail. The senior licensed reactor operator assigned to review the refueling outage schedule overlooked the fact that crane operations over the spent fuel pool would be occurring during a time when diesel generator and vital bus alignment was not scheduled to provide an operable emergency power supply to the fuel handling building ventilation system.

Corrective actions included clarifying emergency power supply operability requirements, and licensed operator requalification training prior to the next refueling outage.



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I. Plant Conditions

Unit 1 was in Mode 6 (Refueling) with the core off-loaded.

II. <u>Description of Problem</u>

A. Summary:

On October 6, 1995, at approximately 1530 PDT, with Unit 1 in Mode 6 (Refueling) and the core off-loaded, Technical Specification (TS) 3.9.12 was violated when crane operations with loads over the spent fuel pool were commenced without the fuel handling building ventilation (FHBV) system having an automatic source of emergency power.

B. Background:

The FHBV system is designed to exhaust in the iodine removal mode through either of two redundant exhaust fans, fan E-5 powered by vital bus F with diesel generator (DG) 1-3 as its emergency power source, or fan E-6 powered by vital bus H with DG 1-1 as its emergency power source.

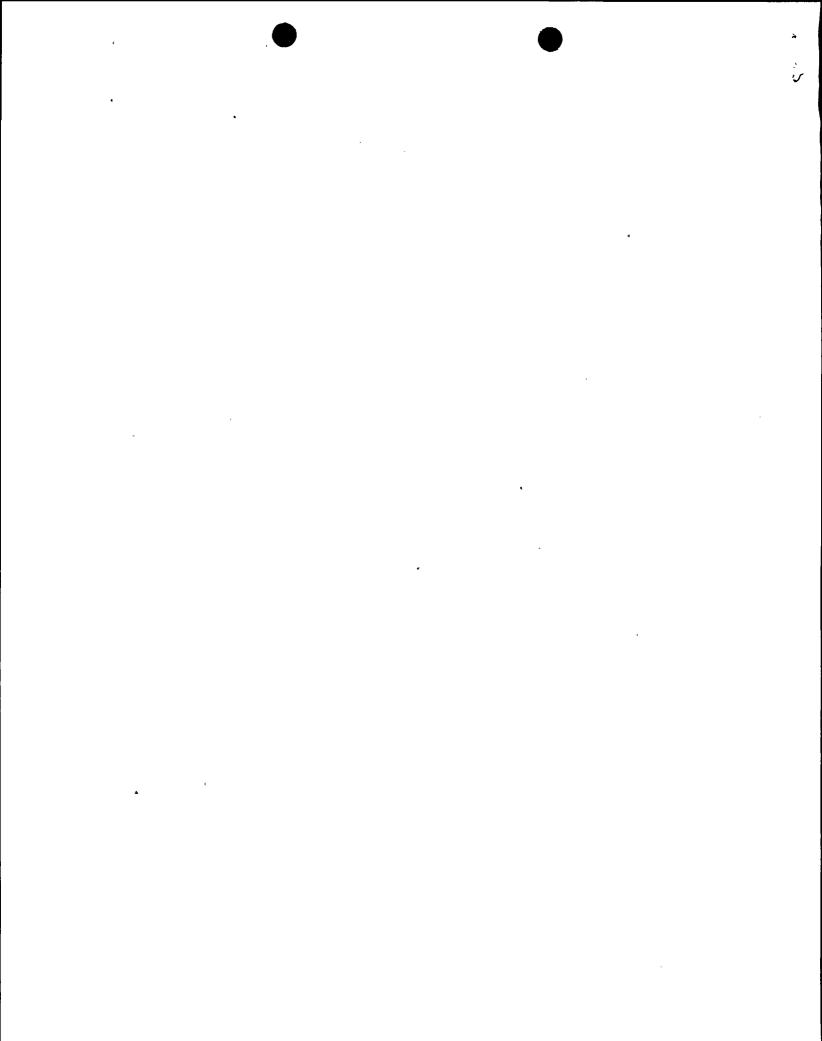
TS 3.9.12 requires both FHBV exhaust systems to be operable whenever irradiated fuel is in the spent fuel pool. With one FHBV system inoperable, fuel movement or crane operations with loads over the spent fuel pool may proceed provided the operable FHBV system is capable of being powered from an operable emergency power source. PG&E requires the FHBV system to be capable of being powered automatically from an operable emergency DG.

C. Event Description:

On October 6, 1995, at 1323 PDT, DG 1-1 was cleared for maintenance. This action removed the emergency power source for vital bus H which supplied the in-service FHBV system exhaust fan E-6.

On October 6, 1995, at approximately 1530 PDT, TS 3.9.12 was violated when crane operations commenced with loads over the spent fuel pool. These operations consisted of relocation of fuel assembly inserts (control rods and sources) for the core reload fuel assemblies.

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On October 6, 1995, at 2050 PDT, in anticipation of clearing bus H for maintenance, 4 kV bus F and 480V bus F were declared operable. At this time the control room staff believed that having bus F operable met the TS 3.9.12 requirements, although the bus F emergency power source, DG 1-3, had earlier been cleared for maintenance. This conclusion was reached after discussion with the operations representative to the outage coordination center (OCC) who felt that meeting the requirements for bus operability (DG 1-2 was available to be cross-tied to bus F) also satisfied the emergency power supply requirements of TS 3.9.12. FHBV was then shifted from exhaust fan E-6 (supplied by bus H) to E-5 (supplied by bus F). However, bus F did not have the capability to be supplied automatically by its emergency power source (DG 1-3).

On October 7, 1995, at approximately 1000 PDT, movement of fuel assembly inserts in the spent fuel pool was completed.

On October 8, 1995, at 0730 PDT, plant management identified that a TS violation occurred.

On October 11, 1995, at 0238 PDT, DG 1-3 was returned to operable status as the emergency power source for bus F and FHBV exhaust fan E-5, and plant management authorized scheduled fuel inspections to proceed.

- D. Inoperable Structures, Components, or Systems that Contributed to the Event:None.
- E. Dates and Approximate Times for Major Occurrences:

1. October 6, 1995, 1530 PDT: Event date. Crane operations over the

spent fuel pool commenced with no automatic emergency power available to supply the FHBV train in service

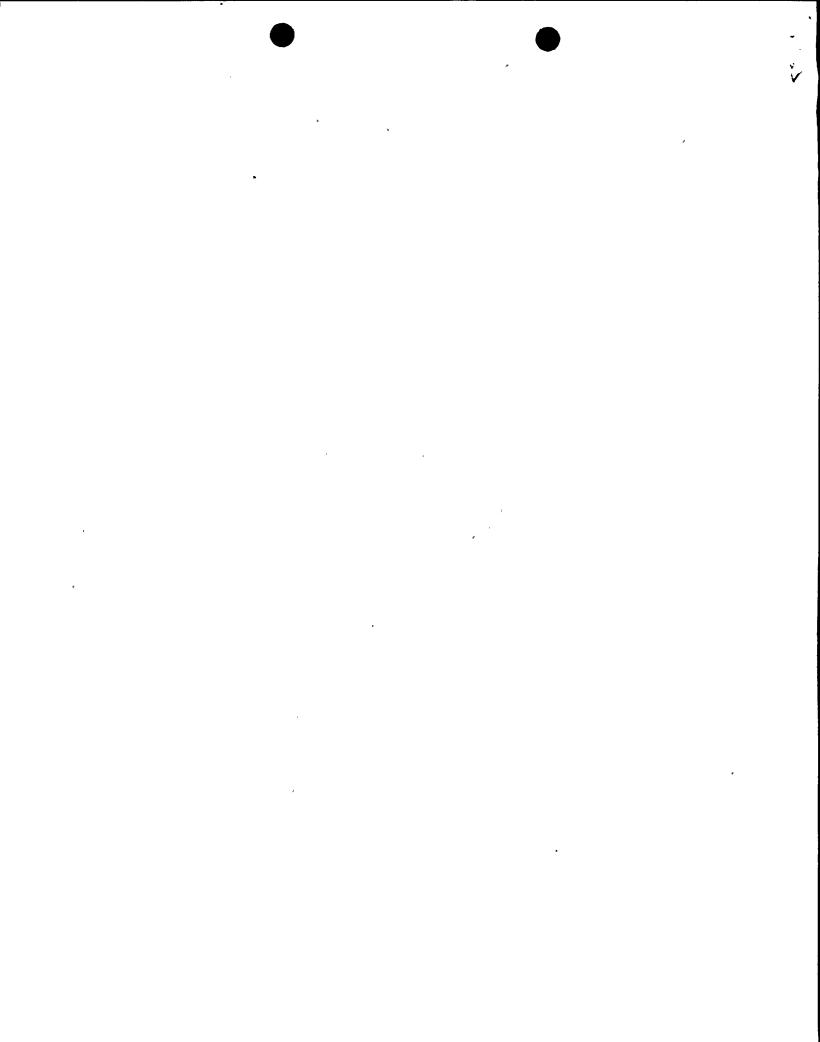
which violated TS 3.9.12.

2. October 8, 1995, 0730 PDT: Discovery date. Plant management

was informed a TS violation had

occurred and placed a hold on starting

scheduled fuel inspections.



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F. Other Systems or Secondary Functions Affected:

None.

G. Method of Discovery:

A PG&E licensed senior reactor operator (SRO), who was the operations representative to the OCC, questioned the required emergency DG power supplies during his review of the refueling outage schedule.

H. Operator Actions:

None.

I. Safety System Responses:

None.

III. Cause of the Problem

A. Immediate Cause:

The in-service train of FHBV was not capable of being powered automatically from an operable emergency power source.

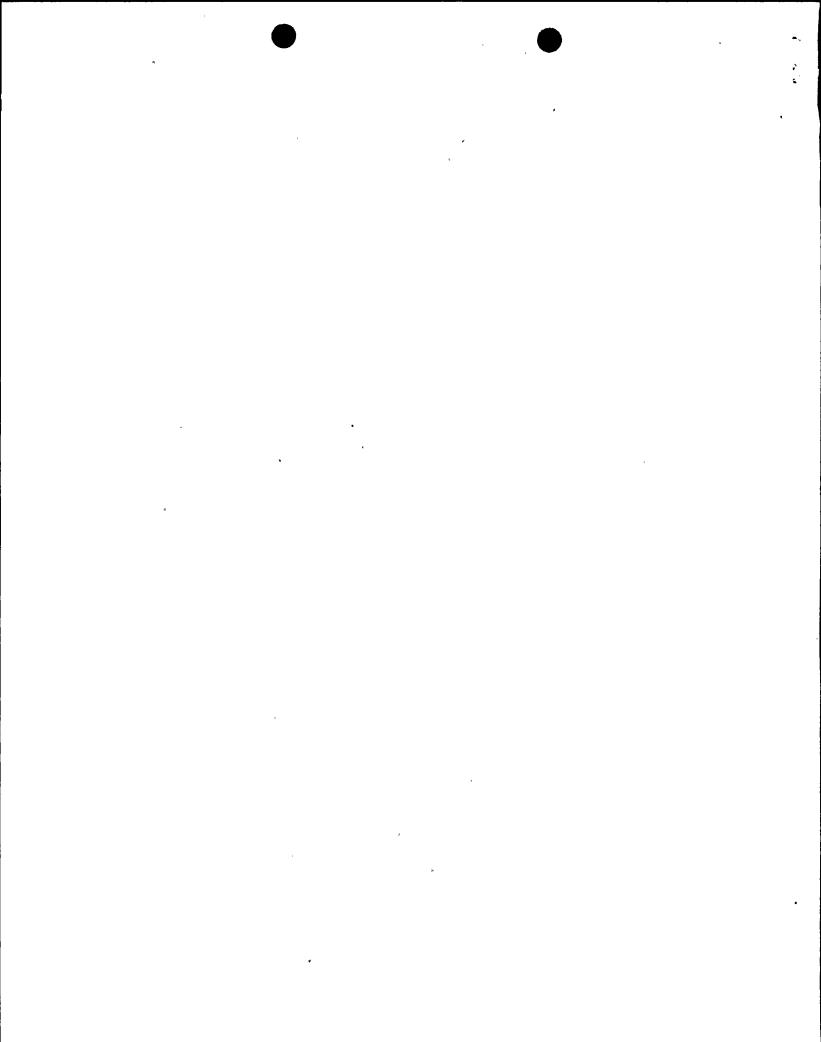
B. Root Cause:

The root cause was determined to be personnel error (cognitive), inattention to detail, in that the SRO assigned to review the refueling schedule overlooked the fact that fuel handling operations would be occurring during a time when DG and vital bus alignment was not scheduled to provide an operable emergency power supply to the FHBV system.

IV. Analysis of the Event

During this event, DG 1-2 was available but it would have been necessary to manually start it and cross-tie it to provide a source of emergency power. Due to this configuration, there is a question whether the FHBV system would have been operable in the event of a design basis fuel handling accident concurrent with a loss of off-site power.

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Under this postulated scenario, there would be a period of time when the iodines exfiltrate from the fuel handling building (FHB) directly to the environment without exhausting through the charcoal filters. After the control room personnel start and cross-tie the DG to power the FHBV system, the remaining radioactivity in the FHB will be filtered through the charcoal filters prior to being exhausted to the environment. Under this scenario (exfiltration plus FHBV system eventually available), calculations indicate thyroid dose results would be below the 10 CFR 100 limit of 75 rem.

Therefore, this event did not adversely affect the health and safety of the public.

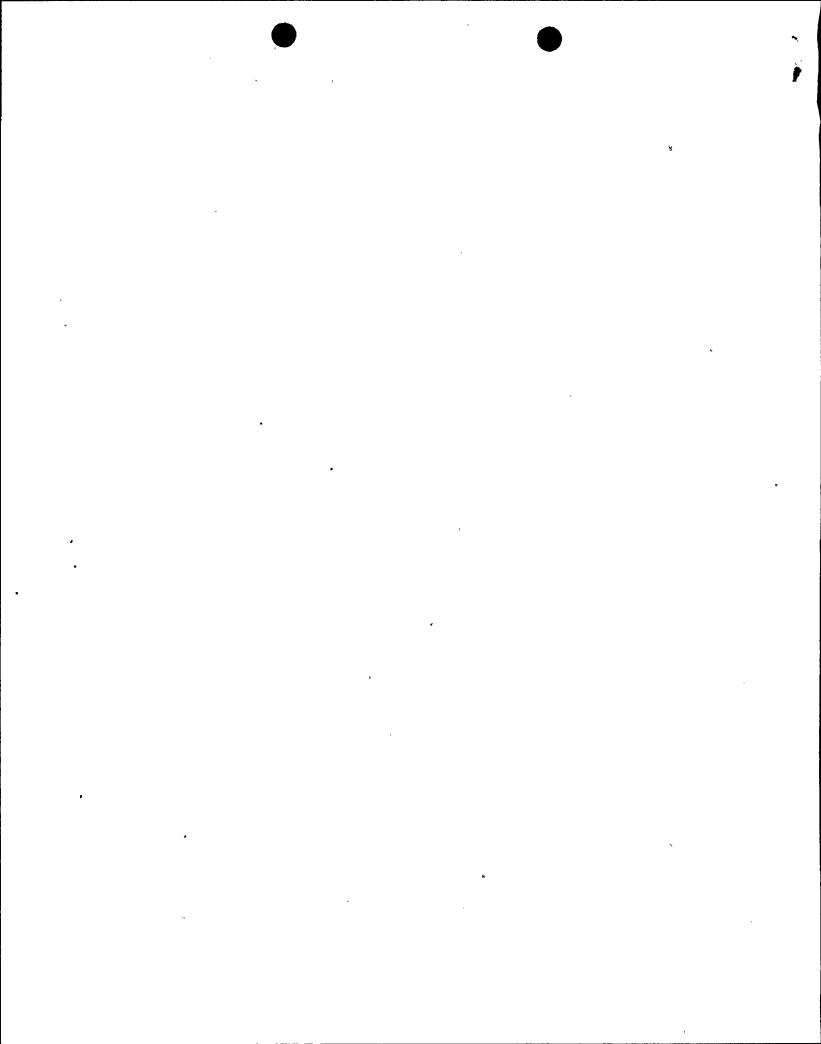
V. Corrective Actions

- A. Immediate Corrective Actions:
 - 1. On October 8, 1995, at 0730 PDT, plant management placed a hold on starting scheduled fuel inspections.
 - 2. On October 11, 1995, at 0238 PDT, DG 1-3 was returned to operable status allowing fuel inspection activities to proceed.
- B. Corrective Actions to Prevent Recurrence:
 - Guidance was issued to: (1) clarify vital bus operability requirements,
 (2) prohibit taking credit for DG cross-tie capability for those TSs that specifically require an operable emergency power supply such as FHBV, and (3) require an operable emergency power supply to the FHBV system regardless of whether one or two trains are operable.
 - 2. This event will be reviewed during licensed operator requalification training prior to the next refueling outage.

VI. Additional Information

A. Failed Components:

None.



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B. Previous LERs on Similar Problems:

LER 1-91-014-00 "Technical Specification 3.8.1.2 Was Not Met Due to Inadequate Guidance on Operability Requirements" addresses a similar event where heavy loads were being moved over the spent fuel pool at a time when all three DGs were inoperable. As a corrective action, PG&E issued procedural guidance to require at least one train of FHBV to be capable of being powered from an operable emergency power source. This guidance remains in effect and would have prevented the current event if the personnel involved in this event had referred directly to the TS's rather than to other documents. This will be covered in licensed operator requalification training prior to the next refueling outage.

