



**Pacific Gas and
Electric Company®**

Barry S. Allen
Site Vice President

Diablo Canyon Power Plant
Mail Code 104/6
P. O. Box 56
Avila Beach, CA 93424

805.545.4888
Internal: 691.4888
Fax: 805.545.6445

February 18, 2014

PG&E Letter DCL-14-012

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

10 CFR 50.73

Docket No. 50-275, OL-DPR-80
Diablo Canyon Unit 1
Licensee Event Report 1-2013-010-00, Two Emergency Diesel Generators
Inoperable Due to Operator Error

Dear Commissioners and Staff;

Pacific Gas and Electric Company (PG&E) submits the enclosed Licensee Event Report in accordance with 10 CFR 50.73(a)(2)(v)(D) and 50.73(a)(2)(ii)(B).

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this report. All the corrective actions identified in this letter will be implemented in accordance with the Diablo Canyon Power Plant Corrective Action Program.

This event did not adversely affect the health and safety of the public.

Sincerely,

Barry S. Allen

mjrm/4557/50600810

Enclosure

cc/enc:

Marc L. Dapas, NRC Region IV Administrator
Thomas R. Hipschman, NRC Senior Resident Inspector
James S. Kim, NRR Project Manager
INPO
Diablo Distribution



LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to Infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME

Diablo Canyon Power Plant, Unit 1

2. DOCKET NUMBER

05000 275

3. PAGE

1 OF 4

4. TITLE

Two Emergency Diesel Generators Inoperable Due to Operator Error

5. EVENT DATE

MONTH	DAY	YEAR
12	19	2013

6. LER NUMBER

YEAR	SEQUENTIAL NUMBER	REV NO.
2013	010	00

7. REPORT DATE

MONTH	DAY	YEAR
02	18	2014

8. OTHER FACILITIES INVOLVED

FACILITY NAME	DOCKET NUMBER
	05000
FACILITY NAME	DOCKET NUMBER
	05000

9. OPERATING MODE

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

1

☐ 20.2201(b)☐ 20.2203(a)(3)(i)☐ 50.73(a)(2)(i)(C)☐ 50.73(a)(2)(vii)☐ 20.2201(d)☐ 20.2203(a)(3)(ii)☐ 50.73(a)(2)(ii)(A)☐ 50.73(a)(2)(viii)(A)☐ 20.2203(a)(1)☐ 20.2203(a)(4)☒ 50.73(a)(2)(ii)(B)☐ 50.73(a)(2)(viii)(B)☐ 20.2203(a)(2)(i)☐ 50.36(c)(1)(i)(A)☐ 50.73(a)(2)(iii)☐ 50.73(a)(2)(ix)(A)

10. POWER LEVEL

100

☐ 20.2203(a)(2)(ii)☐ 50.36(c)(1)(ii)(A)☐ 50.73(a)(2)(iv)(A)☐ 50.73(a)(2)(x)☐ 20.2203(a)(2)(iii)☐ 50.36(c)(2)☐ 50.73(a)(2)(v)(A)☐ 73.71(a)(4)☐ 20.2203(a)(2)(iv)☐ 50.46(a)(3)(ii)☐ 50.73(a)(2)(v)(B)☐ 73.71(a)(5)☐ 20.2203(a)(2)(v)☐ 50.73(a)(2)(i)(A)☐ 50.73(a)(2)(v)(C)☐ OTHER☐ 20.2203(a)(2)(vi)☐ 50.73(a)(2)(i)(B)☒ 50.73(a)(2)(v)(D)Specify in Abstract below or in
NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME

Michael Richardson, Senior Engineer, Regulatory Services

TELEPHONE NUMBER (Include Area Code)

(805) 545-4557

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

CAUSE	SYSTEM	COMPONENT	MANU- FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU- FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO15. EXPECTED
SUBMISSION
DATE

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On December 19, 2013, Diablo Canyon Power Plant was conducting post maintenance testing on Emergency Diesel Generator (EDG) 1-2. While EDG 1-2 was still inoperable, a field operator inspected EDG 1-3 in order to familiarize himself with the location of a drive belt he would be inspecting at the next step of EDG 1-2 testing. At approximately 0752 PDT, the operator inadvertently caught his foot on the fuel oil priming pump fuel line which snagged and broke. This resulted in a second inoperable EDG on Unit 1, and constituted a reportable unanalyzed condition that significantly degraded plant safety and a condition that could have prevented the fulfillment of a safety function that is needed to mitigate the consequences of an accident. Reference EN 49663. On December 19, 2013, at 0953 PST, operators completed EDG 1-2 testing and declared it operable. At the time of the event, both offsite power circuits were operable.

The cause of the event was identified as a knowledge gap – Operators did not have adequate knowledge of the published standards to prevent inadvertent operational events. Corrective actions included issuing Operations Standing Orders and Shift Orders emphasizing the standards as they apply to operators.

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

LICENSEE EVENT REPORT (LER) U.S. NUCLEAR REGULATORY COMMISSION
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Diablo Canyon Power Plant, Unit 1	50-275	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 4
		2013	- 010	- 00	

NARRATIVE

I. Plant Conditions

At the time of the event, Unit 1 was in Mode 1 (Power Operation) at approximately 100 percent reactor [RCT] power with normal operating reactor coolant temperature and pressure. Both offsite power circuits were operable.

II. Problem Description

A. Background

Diablo Canyon Power Plant (DCPP) Unit 1 has three emergency diesel generators (EDGs) [DG] that provide vital backup power to each unit's three electrical buses [BU] to mitigate the consequences of a design basis accident (DBA) if off-site power sources are unavailable. DCPP EDGs are designed to function so that a single failure of any EDG will not jeopardize the capability of the remaining EDGs to start and provide power to operate the systems required to mitigate any DBA condition. DCPP technical specifications (TS) allow for one EDG to be inoperable for up to fourteen days, and two EDGs to be inoperable for up to two hours.

B. Event Description

On December 19, 2013, while operations was conducting testing on EDG 1-2 at the end of its maintenance outage window, a nuclear operator (NO) entered the EDG 1-3 room to use the telephone to coordinate with control room staff. Because the EDG 1-2 room was cleared of personnel for testing, the NO took the opportunity in the EDG 1-3 room to familiarize himself with the location of a pump drive belt that he later would be inspecting on EDG 1-2 following its current testing

Due to the 14-day extended Maintenance Outage Window on EDG 1-2, all other EDGs on Unit 1 were posted as protected equipment in accordance with DCPP Operations Procedure (OP) O-36, "Protected Equipment Postings."

Contrary to posting restrictions, the NO entered the EDG 1-3 room and proceeded to the vicinity of the fuel oil booster pump [P] drive belt without authorization from the work control shift foreman. In the process of maneuvering out of the drive belt area, the NO broke the EDG 1-3 fuel oil priming pump discharge fuel line thereby rendering EDG 1-3 inoperable. With two EDGs inoperable, Unit 1 entered TS 3.8.1 Condition E. This placed the unit in a 2-hour action to get an additional EDG operable, or be in Mode 3 in 6 hours and Mode 5 in 36 hours. At the time of the event, both off-site power circuits were operable.

This condition was entered into the corrective action program and was reported as an eight hour non-emergency report EN 49663.

This event is reportable pursuant to 10 CFR 50.73(a)(2)(ii)(B) and 10 CFR 50.73(a)(2)(v)(D), due to a reportable unanalyzed condition that significantly degraded plant safety and a condition that could have prevented the fulfillment of a safety function that is needed to mitigate the consequences of an accident, respectively.

**LICENSEE EVENT REPORT (LER) U.S. NUCLEAR REGULATORY COMMISSION
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Diablo Canyon Power Plant, Unit 1	50-275	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 4
		2013	- 010	- 00	

NARRATIVE

C. Status of Inoperable Structure, Systems, or Components That Contributed to the Event

EDG 1-2 was already inoperable for scheduled maintenance activities, from 16:17 PST on 12/8/13 to 09:53 PST on 12/19/2013. EDG 1-3 was inoperable due to the inoperable fuel line from 07:52 PST on 12/19/2013 to 21:03 PST on 12/19/2013.

D. Other Systems or Secondary Functions Affected

None.

E. Method of Discovery

The operator that contacted the fuel oil line called the control room EDG operator to report the broken line.

F. Operator Actions

None.

G. Safety System Responses

None.

III. Cause of the Problem

A. Immediate Cause

A human factors analysis was performed that concluded the event was caused by operator error. The immediate cause is the operator coming in contact with the fuel line causing a break.

B. Cause

Knowledge Gap – Operators did not have adequate knowledge of the established standards contained in OP O-36 to prevent inadvertent operational events.

IV. Assessment of Safety Consequences

The risk contribution incremental core damage probability of this event was less than 1E-06, and therefore considered insignificant.

LICENSEE EVENT REPORT (LER) U.S. NUCLEAR REGULATORY COMMISSION
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Diablo Canyon Power Plant, Unit 1	50-275	2013	- 010	- 00	4 OF 4

NARRATIVE

V. Corrective Actions

A. Immediate Corrective Actions

- 1) The NO involved was held accountable.
- 2) On 12/19/13, a site wide supervisory stand-down was held by station leadership to ensure a greater understanding of the risk associated with our actions in the power plant and the responsibilities as supervisors to ensure risk is properly mitigated.

B. Other Corrective Actions

Interim Corrective Actions

- 1) On 12/20/13 through 12/22/13, Operations Standing Orders and Shift Orders were issued clarifying expectations on what equipment must be protected when an EDG becomes unavailable, who may cross a protected equipment barrier, and that management authorization is required to pass a protected equipment barrier.

Corrective Actions

- 1) This Shift Order has been communicated to all five crews by their respective Shift Managers.
- 2) On January 14, 2014, an additional site wide communication was published that discussed the event, operational risk, procedural requirements, causes, and insights.

VI. Additional Information

As a prudent action, the protected equipment procedure is being elevated from an operating procedure to an interdepartmental administrative procedure that would apply to all personnel and require prior Operations management authorization to pass a barrier.

A. Failed Components

None.

B. Previous Similar Events

None.