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August 22, 2013

PG&E Letter DCL-13-084

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 1-2013-004-00, All Three Unit 1 Emergency Diesel
Generators Momentarily Inoperable

Dear Commissioners and Staff;

In accordance with 10 CFR 50.73(a)(2)(ii)(B) and 10 CFR 50.73(a)(2)(v)(D), Pacific Gas and Electric Company (PG&E) submits the enclosed Licensee Event Report (LER). This LER describes Unit 1 being in an unanalyzed condition and a condition that could have prevented fulfillment of a safety function due to human error.

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this report.

All of 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

SSZ1/4040/50570582

Enclosure

cc: Thomas R. Hipschman, NRC Senior Resident Inspector
Jennivine K. Rankin, NRR Project Manager
Steven A. Reynolds, NRC Region IV
Diablo Distribution
INPO

NRC FORM 366 (10-2010)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0104	EXPIRES: 10/31/2013
LICENSEE EVENT REPORT (LER) (See reverse 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 Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.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 All Three Unit 1 Emergency Diesel Generators Momentarily Inoperable			
5. EVENT DATE		6. LER NUMBER	
MONTH DAY YEAR	YEAR SEQUENTIAL NUMBER REV NO.		
06 23 2013	2013 - 004 - 00		
7. REPORT DATE		8. OTHER FACILITIES INVOLVED	
MONTH DAY YEAR		FACILITY NAME DOCKET NUMBER	
08 22 2013		FACILITY NAME DOCKET NUMBER	
9. OPERATING MODE			
1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)		
	<input type="checkbox"/> 20.2201(b) <input type="checkbox"/> 20.2203(a)(3)(i) <input type="checkbox"/> 50.73(a)(2)(i)(C) <input type="checkbox"/> 50.73(a)(2)(vii) <input type="checkbox"/> 20.2201(d) <input type="checkbox"/> 20.2203(a)(3)(ii) <input type="checkbox"/> 50.73(a)(2)(ii)(A) <input type="checkbox"/> 50.73(a)(2)(viii)(A) <input type="checkbox"/> 20.2203(a)(1) <input type="checkbox"/> 20.2203(a)(4) <input checked="" type="checkbox"/> 50.73(a)(2)(ii)(B) <input type="checkbox"/> 50.73(a)(2)(viii)(B) <input type="checkbox"/> 20.2203(a)(2)(i) <input type="checkbox"/> 50.36(c)(1)(i)(A) <input type="checkbox"/> 50.73(a)(2)(iii) <input type="checkbox"/> 50.73(a)(2)(ix)(A) <input type="checkbox"/> 20.2203(a)(2)(ii) <input type="checkbox"/> 50.36(c)(1)(ii)(A) <input type="checkbox"/> 50.73(a)(2)(iv)(A) <input type="checkbox"/> 50.73(a)(2)(x) <input type="checkbox"/> 20.2203(a)(2)(iii) <input type="checkbox"/> 50.36(c)(2) <input type="checkbox"/> 50.73(a)(2)(v)(A) <input type="checkbox"/> 73.71(a)(4) <input type="checkbox"/> 20.2203(a)(2)(iv) <input type="checkbox"/> 50.46(a)(3)(ii) <input type="checkbox"/> 50.73(a)(2)(v)(B) <input type="checkbox"/> 73.71(a)(5) <input type="checkbox"/> 20.2203(a)(2)(v) <input type="checkbox"/> 50.73(a)(2)(i)(A) <input type="checkbox"/> 50.73(a)(2)(v)(C) <input type="checkbox"/> OTHER <input type="checkbox"/> 20.2203(a)(2)(vi) <input type="checkbox"/> 50.73(a)(2)(i)(B) <input checked="" type="checkbox"/> 50.73(a)(2)(v)(D) Specify in Abstract below or in NRC Form 366A		
100			
12. LICENSEE CONTACT FOR THIS LER			
FACILITY NAME		TELEPHONE NUMBER (Include Area Code)	
Steven Zawalick, Senior Engineer, Regulatory Services		(805) 545-4040	
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT			
CAUSE	SYSTEM	COMPONENT	MANUFACTURER
14. SUPPLEMENTAL REPORT EXPECTED		15. EXPECTED SUBMISSION DATE	
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO		MONTH DAY YEAR ____	
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)			
<p>On June 23, 2013, at 22:01 PDT, Pacific Gas and Electric Company (PG&E) Diablo Canyon Power Plant (DCPP) Unit 1 control room operators used an annunciator response procedure to address the loss of startup power. Contrary to Technical Specification, 3.8.1, plant operators made all three Unit 1 emergency diesel generators inoperable when they simultaneously placed all three emergency diesel generator control switches into manual control. On June 24, 2013, at 22:07 PDT, PG&E made an 8-hour, non-emergency report to the NRC (reference NRC Event Notification Number 49147).</p> <p>DCPP determined that this was the result of inattention by control room operators, lack of oversight by the Shift Foreman, and an absence of cautionary instructions in the annunciator response procedure.</p> <p>Plant management issued an Operations Shift Order that reinforces guidance and expectations for oversight, processed personnel accountability as appropriate, and will revise plant procedures for oversight and annunciator response. All actions are scheduled to be complete by September 26, 2013.</p> <p>This event did not adversely affect the health or safety of the public.</p>			

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	05000-275	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 4
		2013	- 004	- 00	

NARRATIVE

I. Plant Conditions

Unit 1 operated in Mode 1 (Power Operation) at approximately 100 percent reactor power with normal operating reactor coolant temperature and pressure throughout the event.

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 three electrical buses [BU] to mitigate the consequences of a design basis accident (DBA) whenever normal or offsite power sources [EK] 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 shutdown systems required to mitigate any DBA condition.

Each EDG is supplied with a control room selector switch [HS] for auto or manual mode control. When the selector switch for an EDG is taken to manual, the EDG is inoperable as it will not start in response to normal autostart signals or load onto the vital electrical buses.

B. Event Description

On June 24, 2013, at 16:15 PDT, an operator reviewing EDG performance data (related to the loss of 230 kV startup power [EK] event reported in NRC Event Notification (EN) Number 49143) identified that during the previous night operators had simultaneously disabled all three Unit 1 EDGs, prior to restoring them to their automatic standby control alignment. DCPP was in this condition for 1 minute and 44 seconds (between 22:01:10 PDT and 22:02:54 PDT, on June 23, 2013). During this time, less than the required minimum of two EDGs were available to automatically respond to a DBA. Due to the event reported in NRC EN Number 49143, the startup 230 kV power source was also inoperable at this time.

As reported in NRC EN Number 49143, DCPP lost startup power due to an offsite transmission system relay actuation. This resulted in a valid, anticipatory start of all six EDGs. During the restoration activities, operators were in the procedurally-guided process of placing each of the running EDG's controls to manual and shutting them down. Once this was complete, the EDGs were returned to the automatic standby control alignment. However, the operators placed all three EDGs in manual and shut them down before returning them to automatic control. During this time, the operators would have responded to a plant event by returning the affected EDGs to auto, whereupon the normal starting and loading sequence would have resumed in accordance with existing accident analyses.

At the time of discovery all offsite and onsite power sources were operable.

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	05000-275	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 4
		2013	- 004	- 00	

NARRATIVE

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

Due to the event reported in NRC EN Number 49143, the startup 230 kV power source was also inoperable during the restoration activities. On June 24, 2013, at 02:00 PDT, operators restored the 230 kV system to operable status.

D. Other Systems or Secondary Functions Affected

None.

E. Method of Discovery

An operator reviewing EDG performance data discovered the reportable condition caused by the error.

F. Operator Actions

At the time of discovery, all offsite and onsite power sources were operable. No actions were required

G. Safety System Responses

None.

III. Cause of the Problem

Pacific Gas and Electric Company (PG&E) determined the cause of this event was an inattentive error by control room operators who placed all EDGs in manual before returning the selector switch to auto. Additionally, the Shift Foreman did not provide oversight as required by plant procedures and the annunciator response procedure did not contain any caution or note to prevent operators from using manual control to shut down all three EDGs concurrently.

IV. Assessment of Safety Consequences

DCPP performed a probabilistic risk assessment and documented the results in a formal calculation for the exposure period. The exposure timeframe started when the second EDG was stopped and ended when the second EDG was placed in auto. DCPP was in this condition for 1 minute and 44 seconds (between 22:01:10 PDT and 22:02:54 PDT, on June 23, 2013). During this time, less than the required minimum two EDGs were available to automatically respond to a DBA.

The calculation showed that both incremental core damage and large early release probabilities were well below their respective acceptance criteria. Therefore, the event is not considered risk significant and did not adversely affect the health and safety of the public. This event was a safety system functional failure.

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	05000-275	YEAR	SEQUENTIAL NUMBER	REV NO.	4 OF 4
		2013	- 004	- 00	

NARRATIVE

V. Corrective Actions

A. Immediate Corrective Actions

Plant management issued an operations shift order that reinforces guidance and expectations for oversight as stated in plant procedures.

B. Other Corrective Actions

PG&E reviewed the personnel performance of the Shift Foreman, Work Control Lead, Balance of Plant Control Operator, and the Control Operator using the accountability process to assess their response. In accordance with plant processes, an action plan will be maintained in the crew notebook as required.

DCPP will revise Departmental Administrative Procedure OP1.DC10, "Conduct of Operations," to enhance Shift Foreman oversight expectations to provide direct supervision and oversight of the control room operators for equipment manipulations on the front control board panels. The revision will also ensure that an adequate prejob brief is performed for similar evolutions.

DCPP will revise Annunciator Response Procedure PK19-04, "12KV SU BUS UV," (startup bus undervoltage) to have sequential steps for placing EDGs in manual and securing them, one at a time, with specific notes or cautions highlighting EDG inoperability when in manual.

VI. Additional Information

A. Failed Components

None.

B. Previous Similar Events

None.

C. Industry Reports

None.