



**Pacific Gas and  
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September 14, 2006

PG&E Letter DCL-06-108

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

Docket No. 50-275, OL-DPR-80  
Docket No. 50-323, OL-DPR-82  
Diablo Canyon Units 1 and 2  
Licensee Event Report 1-2006-001-00  
Excessive Dead Birds Found at the Pacific Ocean Cooling Water Intake

Dear Commissioners and Staff:

In accordance with Facility Operating Licenses Nos. DPR-80 and DPR-82, Appendix B, Section 5.4.2, "Environmental Protection Plan (non-radiological)," Pacific Gas and Electric Company (PG&E) is submitting the enclosed nonroutine report of an unusually large number of dead birds found on the bar racks associated with the Diablo Canyon Power Plant (DCPP) cooling water intake.

PG&E believes that the birds died of natural causes and collected on the bar racks due to the intake cooling water currents, and the event was not related to plant operation. Since the deaths are not believed to be related with DCPP operation, no corrective actions were identified.

This event did not adversely affect the health and safety of the public. There are no new or revised regulatory commitments in this report.

Sincerely,

James R. Becker

ddm/2246/A0675474

Enclosure

cc/enc: Bruce S. Mallett, NRC Region IV  
Terry W. Jackson, NRC Senior Resident Inspector  
Alan B. Wang, NRR Project Manager  
Diablo Distribution  
INPO

A member of the STARS (Strategic Teaming and Resource Sharing) Alliance  
Callaway • Comanche Peak • Diablo Canyon • Palo Verde • South Texas Project • WolfCreek

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# LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <b>Diablo Canyon Units 1</b>										DOCKET NUMBER (2) <b>0 5 0 0 0 2 7 5</b>					PAGE (3) <b>1 OF 5</b>				
TITLE (4) <b>Excessive Dead Birds Found at the Pacific Ocean Cooling Water Intake</b>																			
EVENT DATE (5)			LER NUMBER (6)					REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)								
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MO	DAY	YEAR	FACILITY NAME				DOCKET NUMBER						
<b>08</b>	<b>15</b>	<b>2006</b>	<b>2006</b>	<b>- 0 0 1 -</b>	<b>0 0</b>	<b>09</b>	<b>14</b>	<b>2006</b>	<b>Unit 2</b>				<b>0 5 0 0 0 3 2 3</b>						
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (11)																
<b>1</b>			<div style="display: flex; justify-content: space-between;"> <span><b>X</b> OTHER</span> <span><b>Licenses DPR-80 and DPR-82, Appendix B,</b></span> </div> <div style="display: flex; justify-content: space-between;"> <span><b>X</b> OTHER</span> <span><b>Environmental Protection Plan, Subsection 5.4.2</b></span> </div>																
POWER LEVEL (10)			(SPECIFY IN ABSTRACT BELOW AND IN TEXT, NRC FORM 366A)																
<b>1 0 0</b>																			
LICENSEE CONTACT FOR THIS LER (12)																			
Lawrence M. Parker - Senior Regulatory Services Engineer														TELEPHONE NUMBER					
														AREA CODE		805		545-3386	
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																			
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX										
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)				MON DAY YR					
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO									
ABSTRACT (Limit to 1400 spaces. i.e., approximately 15 single-spaced typewritten lines.) (16)																			
<p>On August 15, 2006, during diving operations to clean the bar racks associated with Diablo Canyon Power Plant (DCPP) cooling water intake structure bar racks, approximately 100 dead cormorants were discovered. Cormorants are diving sea birds common to the California central coast and often feed in the DCPP intake cove. They have recently started nesting in larger numbers on a large rock at the southern end of the intake cove.</p> <p>On August 15, 2006, at 15:21 PDT, Pacific Gas and Electric Company (PG&amp;E) made a nonemergency report in accordance with Facility Operating License Nos. DPR-80 and DPR-82, Appendix B, "Environmental Protection Plan (non-radiological)," Subsection 4.1 as an "Unusual or Important Environmental Event," requiring NRC notification.</p> <p>PG&amp;E believes that the birds died of natural causes and collected on the bar racks due to the intake cooling water currents, and the event was not related to plant operation. Since the deaths are not believed to be related with DCPP operation, no corrective actions were identified. To help confirm the cause of death, some of the cormorants' remains were sent to the California Animal Health and Food Safety Laboratory at the University of California at Davis, California, for testing and analysis. The results of the testing and analysis of the bird remains are expected by the end of October, 2006.</p> <p>The event did not impact plant operations.</p>																			

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)								LER NUMBER (6)						PAGE (3)		
									YEAR	SEQUENTIAL NUMBER				REVISION NUMBER			
Diablo Canyon Unit 1	0	5	0	0	0	2	7	5	2006	-	0	0	1	-	0	0	2 OF 5

TEXT

I. Plant Conditions

Pacific Gas and Electric Company (PG&E) Units 1 and 2 were in Mode 1 (Power Operation) at approximately 100 percent reactor power during the event.

II. Description of Problem

A. Background

PG&E's Diablo Canyon Nuclear Generating Station, Units 1 and 2, Docket Nos. 50-275 and 50-323, Facility Operating Licenses Nos. DPR-80 and DPR-82, Appendix B, "Environmental Protection Plan (non-radiological)" (EPP), dated August 1985, Subsection 4.1, "Unusual or Important Environmental Events," requires, in part, that, "Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to station operation shall be recorded and promptly reported to the NRC within 24 hours by telephone, telegraph, or facsimile transmissions followed by a written report within 30 days, as specified in Subsection 5.4.2." The EPP describes, "excessive bird impaction events," as an example.

EPP Subsection 5.4.2, "Nonroutine Reports," states, in part, "A written report shall be submitted to the NRC within 30 days of occurrence of {a} nonroutine event. The report shall (a) describe, analyze, and evaluate the event including extent and magnitude of the impact and operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses."

Cooling water for Diablo Canyon Power Plant (DCPP) Units 1 and 2 is obtained by pumping Pacific Ocean sea water from an intake structure that incorporates a heavy bar or trash rack ahead of the moving debris removal screens. PG&E routinely sends commercial divers into the area in front of the bar racks to check for accumulation of debris and assist in its removal.

Cormorants are diving sea birds and are common to the California Central Coast and often feed in the DCPP intake cove. The cormorants have recently started nesting in larger numbers on a large rock at the southern end of the intake cove.

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TEXT

**B. Event Description [EPP 5.4.2(a)]**

On August 15, 2006, a commercial diver discovered approximately 100 dead cormorants during scheduled plant diving operations to clean intake bar racks.

On August 15, 2006, a nonemergency report in accordance with EPP, Subsection 4.1 as an "Unusual or Important Environmental Event," requiring NRC notification within 24-hours was made at 15:21 PDT.

On August 16, 2006, PG&E transferred the remains of four cormorants to the California Department of Fish and Game (CDF&G) who transported the bird samples to California Animal Health and Food Safety (CAHFS) Laboratory at the University of California at Davis, California (UCD), for testing and analysis.

**C. Status of Inoperable Structures, Systems, or Components that Contributed to the Event**

None.

**D. Other Systems or Secondary Functions Affected**

None.

**E. Method of Discovery**

The dead birds were found during routine scheduled cleaning of the DCPD cooling water intake structure bar racks.

**F. Operator Actions**

None.

**G. Safety System Responses**

None.

**III. Cause of the Problem [EPP 5.4.2(b)]**

- A.** The number of dead birds found is unusual. Thus, an investigation was initiated to determine the cause in accordance with the requirements of the EPP. The remains of four cormorants were transferred to the CDF&G

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Diablo Canyon Unit 1	0	5	0	0	0	2	7	5	2006	-	0	0	1	-	0	0	4	OF	5

TEXT

for transport to the CAHFS Laboratory at the UCD, for testing and analysis. Also regional water samples from the Central Coast during the week were reviewed for algae and toxin production associated with an algae bloom, or red tide. Ongoing monitoring of the bar racks found no further incidents of excessive accumulation of dead birds.

### B. Root Cause

The gross examination findings, demographics, and historical information are most suggestive of a toxic, viral, or unusual stochastic event as the cause of the cormorant deaths.

The testing of bird tissue samples for domoic acid toxin were all negative.

Toxicosis from domoic acid or another harmful algal bloom has been ruled out to the best of the CAHFS' testing ability. Further investigation of a viral etiology, other type of toxicosis, or stochastic etiology will be dictated by histologic findings. These results will not be available until late October.

PG&E believes that the birds died of natural causes and collected on the bar racks due to the intake cooling water currents, and the event was not related to plant operation. If the CAHFS testing described above identifies a cause related to plant operation, a supplement to this report will be submitted.

### IV. Assessment of {Environmental} Safety Consequences [EPP 5.4.2(a)]

There were no actual safety consequences involved in this event since plant operation was not affected, and routine scheduled cleaning of the DCCP cooling water intake structure bar racks ensures adequate plant cooling is maintained. There is no environmental safety consequences identified based upon PG&E's belief that the bird deaths are due to a naturally occurring cause.

Also, this condition is not considered a Safety System Functional Failure.

Therefore, the event is not considered risk significant, and it did not adversely affect the health and safety of the public.

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### TEXT

#### V. Corrective Actions [EPP 5.4.2.(c)]

##### A. Immediate Corrective Actions

The dead birds were removed and forensic evidence sent to CDF&G, and transferred to CAHFS for additional testing and analysis.

##### B. Corrective Actions to Prevent Recurrence

PG&E believes that the birds died of natural causes and collected on the bar racks due to the intake cooling water currents, and the event was not related to plant operation. Since the deaths are not believed to be related with DCPD operation, no corrective actions were identified.

#### VI. Additional Information [EPP 5.4.2(e)]

##### A. Other agencies notified and their preliminary responses:

The CDF&G, the CAHFS, the United States Fish and Wildlife Service, and the Regional Water Quality Control Board.

The gross examination findings, demographics, and historical information are most suggestive of a toxic, viral, or unusual stochastic event as the cause of the cormorant deaths. Testing of bird tissue samples for domoic acid toxin were all negative.

##### B. Previous Similar Events

None.