



**Pacific Gas and
Electric Company®**

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April 6, 2006

PG&E Letter DCL-06-045

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

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2

Response to Request for Additional Information Regarding License Amendment
Request 05-03, "Request for Amendment to Recapture Low-Power Testing Time"

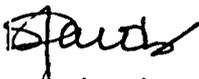
Dear Commissioners and Staff:

Pacific Gas and Electric Company Letter DCL-05-098, dated August 23, 2005, submitted License Amendment Request (LAR) 05-03, "Request for Amendment to Recapture Low-Power Testing Time Revision," to revise the expiration dates of the Units 1 and 2 facility-operating licenses to recapture low-power testing time. Specifically, the expiration date of each unit's full-power operating license (FPOL) would be revised to reflect a 40-year term measured from the date of issuance of the FPOL, as permitted by 10 CFR 50.51.

On January 27, 2006, the NRC staff requested additional information required to complete the review of LAR 05-03. During a March 29, 2006, telephone conference, the staff provided clarification to its request for additional information. Enclosure 1 provides additional information required by the NRC staff to complete its review of LAR 05-03. Enclosure 2 provides the fluences at the clad base metal interface.

If you have any questions or require additional information, please contact Mr. Terence Grebel at (805) 545-4160.

Sincerely,


Donna Jacobs

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gwh/4162
Enclosures

cc: Edgar Bailey, DHS
Terry W. Jackson
Bruce S. Mallett
Diablo Distribution

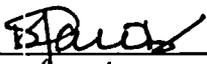
cc/enc: Alan B. Wang

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of PACIFIC GAS AND ELECTRIC COMPANY)) Diablo Canyon Power Plant) Units 1 and 2)	Docket No. 50-275 Facility Operating License No. DPR-80) Docket No. 50-323 Facility Operating License No. DPR-82
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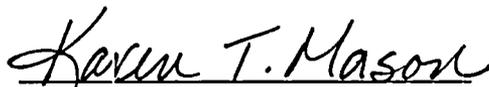
AFFIDAVIT

Donna Jacobs, being of lawful age, first being duly sworn upon oath states that she is Vice President – Nuclear Services of Pacific Gas and Electric Company; that she has executed this response to the NRC request for additional information regarding License Amendment Request 05-03 on behalf of said company with full power and authority to do so; that she is familiar with the content thereof; and that the facts stated therein are true and correct to the best of her knowledge, information, and belief.

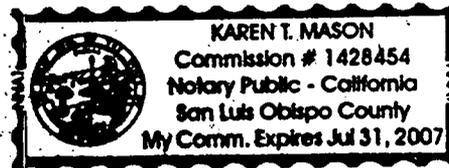


Donna Jacobs
 Vice President – Nuclear Services

Subscribed and sworn to before me this 6th day of April, 2006, by Donna Jacobs, personally known to me or proved to me on the basis of satisfactory evidence to be the person who appeared before me.



Karen T. Mason
 Notary Public
 County of San Luis Obispo
 State of California



**Response to Request for Additional Information
Regarding License Amendment Request 05-03,
“Request for Amendment to Recapture Low-Power Testing Time”**

NRC Question

The license amendment request proposes to add approximately 37 months of full power operation for the DCP-1 reactor and approximately 4 months of full power operation for the DCP-2 reactor. The additional time at full power operations will expose the RV beltline materials for the DCP-1/2 RVs to additional neutron radiation (i.e., increasing the neutron fluence - in units of n/cm², E > 1.0 MeV). Therefore, to support anticipated approval of the license amendment, the NRC staff requests that PGE provide the “Low-power Test Recovery-Impacted” PTS and USE calculations for the DCP-1/2 RV beltline materials, as assessed through to the revised “Low-Power Test Recovery” expiration dates for the units.

During a telephone conference call on March 29, 2006, the staff requested that PG&E provide the fluences at the clad base metal interface.

PG&E Response to NRC Question

For the proposed Unit 1 end of operating license (EOL) at approximately 35.2 effective full-power years (EFPY) on November 2, 2024, the limiting RT_{PTS} values calculated and their respective 10 CFR 50.61 screening limits are:

RT_{PTS}(weld 3-442C) = 258.7°F, which is < 270°F plate or axial weld limit

RT_{PTS}(weld 9-442) = 198.7°F, which is < 300°F circumferential weld limit

For the proposed Unit 2 EOL at approximately 35.8 EFPY on August 26, 2025, the limiting RT_{PTS} values calculated and their respective 10 CFR 50.61 screening limits are:

RT_{PTS}(plate B5454-2) = 214.8°F, which is < 270°F plate or axial weld limit

RT_{PTS}(weld 9-201) = 20.5°F, which is < 300°F circumferential weld limit

Appendix G of 10 CFR 50 requires that the upper shelf energy (USE) remain \geq 50 ft-lbs throughout the life of the vessel at T/4. For Unit 1, the limiting (minimum) T/4 USE at EOL is 61.1 ft-lbs. This is predicted to occur for axial weld 3-442C.

Similarly, for Unit 2, the limiting (minimum) T/4 USE at EOL is 57.7 ft-lbs. This is predicted to occur for axial weld 3-201B.

Enclosure 2 contains the fluences at the clad base metal interface for Units 1 and 2.

Fluences at the Clad Base Metal Interface for Units 1 and 2

The following information was derived from Pacific Gas and Electric Company Calculation N-297, Revision 0, which estimates the pressurized thermal shock reference temperature and upper shelf energy for all reactor vessel beltline materials at the projected end of operating license for both Diablo Canyon units.

DCPP 1 Fluences On November 2, 2024		
<u>Material</u>	<u>Fast Fluences (n/cm²)</u>	
Intermed. Shell Plates		
B4106-1	1.43E+19	
B4106-2	1.43E+19	
B4106-3	1.43E+19	
Lower Shell Plates		
B4107-1	1.43E+19	
B4107-2	1.43E+19	
B4107-3	1.43E+19	
Intermed. Shell Long.		
Welds 2-442 A,B	1.10E+19	
2-442 C	5.46E+18	
Intermed. Shell to Lower		
Shell Weld 9-442	1.43E+19	
Lower Shell Long.		
Welds 3-442 A,B	9.08E+18	
3-442 C	1.43E+19	

DCPP 2 Fluences On August 26, 2025

<u>Material</u>	<u>Fast Fluence (n/cm²)</u>
Intermed. Shell Plate	
B5454-1	1.68E+19
B5454-2	1.68E+19
B5454-3	1.68E+19
Lower Shell Plate	
B5455-1	1.68E+19
B5455-2	1.68E+19
B5455-3	1.68E+19
Intermed. Shell Long.	
Welds 2-201 A	9.15E+18
2-201 B	8.64E+18
2-201 C	7.25E+18
Intermed. Shell to Lower	
Shell Weld 9-201	1.68E+19
Lower Shell Long.	
Welds 3-201 A	7.25E+18
3-201 B	9.15E+18
3-201 C	8.64E+18