



**Pacific Gas and
Electric Company**

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PG&E Letter DCL-03-137

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 NRC Request for Additional Information Regarding License
Amendment Request 03-02, "Response Time Testing Elimination and Revision to
Technical Specification 3.3.1, 'Reactor Trip System (RTS) Instrumentation'"

Dear Commissioners and Staff:

PG&E Letter DCL-03-016, dated February 28, 2003, submitted License Amendment Request (LAR) 03-02 which proposes to revise Technical Specification 3.3.1, "Reactor Trip System (RTS) Instrumentation," to add Surveillance Requirement 3.3.1.16 to function 3.a, Power Range Neutron Flux Rate - High Positive Rate Trip in Table 3.3.1-1. In addition, LAR 03-02 proposes to eliminate periodic pressure sensor response time testing (RTT) in accordance with WCAP-13632-P-A, Revision 2, "Elimination of Pressure Sensing Response Time Testing Requirements," and to eliminate periodic protection channel RTT in accordance with WCAP-14036-P-A, Revision 1, "Elimination of Periodic Protection Channel Response Time Tests."

On July 1, 2003, and July 25, 2003, the NRC staff identified additional information required to complete the evaluation associated with PG&E LAR 03-02. PG&E's response to the July 25, 2003, request for additional information is included in Enclosure 1. PG&E's response to the July 1, 2003, request for additional information will follow by separate transmittal.

The additional information does not affect the results of the safety evaluation or no significant hazards consideration determination previously transmitted in PG&E letter DCL-03-016.

A001



If you have any questions regarding this response, please contact Stan Ketelsen at (805) 545-4720.

Sincerely,

David H. Oatley
Vice President and General Manager - Diablo Canyon

mjr/4557
Enclosures

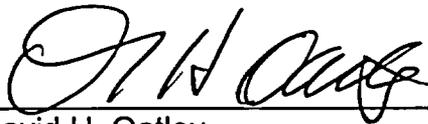
cc: Edgar Bailey, DHS
Bruce S. Mallett
David L. Proulx
Diablo Distribution
cc/enc: Girija S. Shukla

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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

AFFIDAVIT

David H. Oatley, of lawful age, first being duly sworn upon oath says that he is Vice President and General Manager - Diablo Canyon of Pacific Gas and Electric Company; that he has executed this response to the request for additional information on License Amendment Request LAR 03-02 on behalf of said company with full power and authority to do so; that he is familiar with the content thereof; and that the facts stated therein are true and correct to the best of his knowledge, information, and belief.

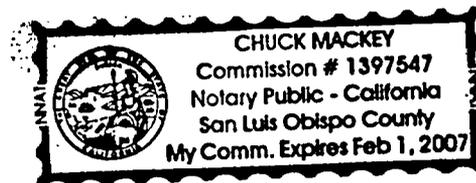


David H. Oatley
Vice President and General Manager - Diablo Canyon

Subscribed and sworn to before me this 30th day of October 2003.



Notary Public
County of San Luis Obispo
State of California



**PG&E Response to NRC Request for Additional Information Regarding
License Amendment Request 03-02, "Response Time Testing Elimination and
Revision to Technical Specification 3.3.1, 'Reactor Trip System (RTS)
Instrumentation'"**

Questions received on July 25, 2003

NRC Question 1

The SER on WCAP 13632 states that utilities must perform a hydraulic RTT prior to installation of new transmitters/switches. PG&E states they will perform an appropriate response time test, including hydraulic, noise, or power interrupt tests prior to installation. In what situations will noise or power interrupt tests be used in place of hydraulic tests?

PG&E Response

In most cases, response time testing (RTT) of new transmitters will be performed on the bench using the hydraulic method. In some cases, it may be desired or required to perform the RTT in-situ. An example would be capillary line applications. In in-situ situations, PG&E may elect to use the noise analysis method in addition to the bench hydraulic method. This would allow PG&E to establish baseline data of the complete installation for future comparison. The power interrupt test would only be used if the design of the transmitter meets the criteria of WCAP-13632.

NRC Question 2

The SER on WCAP 13632 requires that utilities perform a RTT on transmitters and switches that use capillary tubes after initial installation, and after any maintenance or modification that could damage the capillary tubes. PG&E states this would be done on pressure sensors. Why the change in wording, and are there any sensors other than pressure which use capillary tubes? Identify all the sensors for which RTT is to be eliminated that use capillary tubes.

PG&E Response

In PG&E Letter DCL-03-016, PG&E uses the words pressure sensors, sensors, transmitters, and pressure transmitters interchangeably, which is consistent with the wording in WCAP-13632, which only considers RTT elimination for pressure sensors (standard or differential). "Pressure sensors" are clarified to mean "transmitters" in this context. Diablo Canyon Power Plant (DCPP) currently does not use any pressure switches for any function for which RTT elimination is proposed. Pressure sensors are the only types of sensors that DCPP has which have capillary tubes. The pressure sensors that use capillary tubes for which RTT elimination is proposed are the

containment pressure sensors. Each of the individual sensors has separate capillary filled sensing lines.

NRC Question 3

The SER on WCAP 13632 requires that utilities implement a method to assure that a sensor's potentiometer is at the required setting and cannot be inadvertently changed. This action is necessary to eliminate RTT for sensors which have variable damping. PG&E again seems to make a point of saying pressure transmitters instead of sensor. Why?

PG&E Response

In DCL-03-016, PG&E uses the words pressure sensors, sensors, transmitters, and pressure transmitters interchangeably, which is consistent with the wording in WCAP-13632, which only considers RTT elimination for pressure sensors. "Pressure transmitters" are clarified to mean "sensors" in this context.

NRC Question 4

In Table 1, the following functions each list two sensors:

- *Safety Injection - Steam Line Pressure - Low*
- *Steam Line Isolation- Steam Line Pressure - Low*
- *Steam Line Isolation - Steam Line Pressure - Negative Rate High*

The time allocations for these functions only account for one sensor. Explain how these sensors are connected and why the allocations only account for one response time.

PG&E Response

Multiple signal channels exist for each of the functions in Table 1 (i.e., two out of three logic, two out of four logic). Each signal channel only contains one sensor. The individual signal channels for the functions Safety Injection - Steam Line Pressure - Low, Steam Line Isolation - Steam Line Pressure - Low, and Steam Line Isolation - Steam Line Pressure - Negative Rate High use either the Barton or Rosemount sensors that are listed in Table 1. The Barton and Rosemount sensors have the same response times of 0.2 seconds. While both sensors are used for different channels in the above functions, Table 1 would be more clear by using "or" instead of "&".

ROSEMOUNT 1154SH9RC or BARTON 763

NRC Question 5

Both SERs on WCAPs 13632 and 14036 call for the addition of three paragraphs to the Instrumentation Bases (see Appendix A - Insert A of both 13632 and 14036.) The first paragraph of this insert is not present in PG&E's submittal, or in DCP's current Bases. Why wasn't this paragraph included among the changes?

PG&E Response

WCAP-13632, Appendix A, and WCAP-14036, Appendix A provide markups of generic technical specifications (TS) based on NUREG-0452 and NUREG-1431. The changes proposed in Insert A apply only to TS based on NUREG-0452, and are not applicable to the DCP TS, which are based on NUREG-1431. The proposed TS Bases for DCP include only those changes included in Inserts B, C, D, and E, which are applicable to TS based on NUREG-1431. The first paragraph in Insert A is not included in Inserts B and D, because it is redundant to other information already included in the TS Bases.

NRC Question 6

Both SERs on WCAPs 13632 and 14036 specify changes to the Technical Specification Surveillance Requirements. DCP's Technical Specifications do not include a Surveillance Requirements section in their Technical Specifications. How does PG&E plan on incorporating the required changes?

PG&E Response

The changes to TS surveillance requirement (SR) 4.3.1.2 specified in WCAP-13632 and WCAP-14036 to replace the words "demonstrated," "test," and "tested" with "verified" are applicable to TS based on NUREG-0452 only. No changes are required for TS based on NUREG-1431 (DCP TS SR 3.3.1.16 and SR 3.3.2.10), since the applicable SRs already require that the response times be "verified."