UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

March 4, 2011

John T. Conway
Senior Vice President-Energy &
Supply and Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Nuclear Plant
77 Beale Street, Mail Code B32
San Francisco, CA 94105

SUBJECT: ANNUAL ASSESSMENT LETTER FOR DIABLO CANYON POWER PLANT UNITS 1 AND 2 (REPORT 05000275/2011001 AND 05000323/2011001)

Dear Mr. Conway:

On February 3, 2011, the NRC completed its end-of-cycle performance review of Diablo Canyon Power Plant. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2010 through December 31, 2010. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined that overall, Diablo Canyon Power Plant operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Diablo Canyon during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., Green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

In its assessment letter dated March 3, 2010, (ML100620897), the NRC opened a substantive cross-cutting issue in the problem identification and resolution area associated with the aspect of thoroughness of problem evaluation [P.1(c)]. To address the substantive cross-cutting issue, your staff completed an additional root cause evaluation in June 2010 to more fully evaluate the depth and breadth of the issue, and developed a range of additional corrective actions and performance measures. We also noted that you commenced a licensing basis verification project, which you presented to the NRC at a public meeting in September 2010. The NRC previously identified fourteen findings with this cross-cutting aspect in our midcycle assessment and concluded your actions had not yet proven effective in substantially mitigating the adverse trend in problem evaluation at that time. Since then, you have taken additional corrective action which has resulted in some improvement. However, we continue to identify findings associated with the thoroughness of problem evaluation, especially in engineering evaluations. Based on

the findings we continue to identify in this area, we concluded your actions to address the theme have not yet proven effective. Therefore, the substantive crosscutting issue in problem identification and resolution associated with the thoroughness of problem evaluation [P.1(c)] will remain open.

The NRC plans to conduct additional inspection to evaluate the effectiveness of your performance improvement efforts. Specifically, the NRC intends to perform additional focused problem identification and resolution inspection as described in Section 13.03 of Inspection Manual Chapter 0305, "Operating Reactor Assessment Program." Accordingly, we request you provide us a letter informing us of Diablo Canyon Power Plant's readiness for inspection of your corrective actions in addressing the safety culture theme in problem evaluation. The NRC will then perform an inspection focusing on the station's progress in developing and implementing corrective actions and the metrics and measures used to determine performance improvement effectiveness. The substantive cross-cutting issue in problem identification and resolution will remain open until we determine through our inspection that your corrective actions have been effective and the station has demonstrated sustained and measurable improvement.

Of note, this is the third consecutive assessment with a substantive cross-cutting issue in problem identification and resolution associated with the thoroughness of problem evaluation. We understand that you recently completed a safety culture survey in February 2011. We intend to review the results of this safety culture assessment during the focused problem identification and resolution inspection described above. We are specifically interested in any weaknesses identified by the assessment, your planned corrective actions to address these weaknesses, and how you intend to apply the assessment results and corrective actions to improve overall station performance in problem identification and resolution. We also request you address your improvement efforts in problem identification and resolution during our annual end-of-cycle assessment meeting.

During this assessment period the NRC also identified a cross-cutting theme in the area of human performance associated with the use of conservative assumptions in decision making [H.1(b)]. Specifically, eight findings were identified in this assessment period with this cross-cutting aspect. This theme was also present at the midcycle 2010 assessment. At that time, we determined that your staff had appropriately recognized the declining trend, entered the trend into the corrective action program, and developed corrective actions; however, a reasonable duration of time had not passed to determine the effectiveness of your corrective actions. In our current evaluation of the scope of your efforts and progress in addressing the cross-cutting theme in conservative decision making, we note that we have identified only one finding with this cross-cutting aspect since you fully implemented corrective actions to address the issue. Therefore, the NRC has determined that your efforts to date have demonstrated improved performance in this area, and a substantive cross-cutting issue does not exist at this time. The NRC will continue to monitor your staff's effort and progress in addressing this theme through the baseline inspection program.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. Of note, the NRC plans to conduct Temporary Instruction 2515/177 Inspection, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat

Removal, and Containment Spray Systems," which remains to be scheduled, but will be completed during the 2011 calendar year.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Please contact me at 817-860-8141 with any questions you have regarding this letter.

Sincerely,

Geoffrey B. Miller, Chief
Reactor Projects Branch B
Division of Reactor Projects

Docket Nos.: 50-275; 50-323
License Nos.: DPR-80; DPR-82

Enclosure: Diablo Canyon Power Plant Inspection/Activity Plan

cc: Distribution via ListServ

Diablo Canyon
Inspection / Activity Plan
03/01/2011 - 06/30/2012

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			BRQ INSP	**- BRQ INSPECTION**	2
1, 2	04/04/2011	04/08/2011	IP 7111111B	Licensed Operator Requalification Program	
			EXAM	**- INITIAL OPERATOR EXAM**	6
1	05/23/2011	05/27/2011	X02471	INITIAL EXAM - UNIT 1 - DC (07/2011)	
2	05/23/2011	05/27/2011	X02472	INITIAL EXAM - UNIT 2 - DC (07/2011)	
1	07/11/2011	07/22/2011	X02471	INITIAL EXAM - UNIT 1 - DC (07/2011)	
2	07/11/2011	07/22/2011	X02472	INITIAL EXAM - UNIT 2 - DC (07/2011)	
			RS123MCA	**- RADIATION SAFETY**	3
1, 2	05/09/2011	05/13/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	05/09/2011	05/13/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	05/09/2011	05/13/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	05/09/2011	05/13/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	05/09/2011	05/13/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			PSB2-08P	**- INSERVICE INSPECTION - U2**	2
2	05/09/2011	05/20/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			TI-177	**- 2515/TI-177: ECCS GAS ACCUMULATION**	1
1, 2	06/27/2011	07/01/2011	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	
			EP1	**- BIENNIAL EP PROGRAM INSPECTION**	1
1, 2	08/22/2011	08/26/2011	IP 7111402	Alert and Notification System Testing	
1, 2	08/22/2011	08/26/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	08/22/2011	08/26/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	08/22/2011	08/26/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	08/22/2011	08/26/2011	IP 71151	Performance Indicator Verification	
			EB1-17	**- 50.59 AND MODS**	6
1, 2	09/19/2011	09/30/2011	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
			RS45	**- RADIATION SAFETY**	2
1, 2	12/05/2011	12/09/2011	IP 71124.04	Occupational Dose Assessment	
1, 2	12/05/2011	12/09/2011	IP 71124.05	Radiation Monitoring Instrumentation	
			RS5678	**- RADIATION SAFETY TEAM**	4
1, 2	05/14/2012	05/18/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	05/14/2012	05/18/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	05/14/2012	05/18/2012	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	05/14/2012	05/18/2012	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.