



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
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ARLINGTON, TEXAS 76011-4125

September 1, 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: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –  
DIABLO CANYON POWER PLANT – UNITS 1 AND 2

Dear Mr. Conway:

On August 16, 2011, the NRC completed its mid-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 July 1, 2010, through June 30, 2011. 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.

Overall, Diablo Canyon Power Plant operated in a manner that preserved public health and safety and fully met all cornerstone objectives. The NRC determined the performance at Diablo Canyon Power Plant Unit 1 and Unit 2 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)]. The staff first identified this theme in the 2008 annual assessment letter, dated March 4, 2009. During the subsequent assessment periods, we reviewed your efforts to address the substantive cross-cutting issue. Overall, PG&E has implemented significant programmatic changes to address the theme in problem evaluation. These changes included enhancements and metrics for the 50.59 process, corrective action program, operability determinations and the Corrective Action Review Board. In addition, your staff began an extensive validation of the plant licensing basis documentation and provided plant engineers with improved search tools to access this information. Your staff also

completed a safety culture survey in February 2011 and developed a comprehensive safety culture improvement plan to address the results.

The NRC identified that this theme continued through the current 12-month assessment period with six Green findings and one Severity Level IV non-cited violation with documented crosscutting aspects in the area of problem identification associated with the aspect of the thoroughness of problem evaluation [P.1(c)]. In our end-of-cycle 2010 assessment letter dated March 4, 2011, (ML110630091) we notified you of our intention to perform additional inspection to evaluate the effectiveness of your performance improvement efforts. We recently performed this inspection focusing on the station's progress in developing and implementing corrective actions and the metrics and measures used to determine performance improvement effectiveness. During the inspection, we noted that your staff had performed a comprehensive and thorough root cause analysis and developed a recovery plan to address the appropriate deficiencies necessary for overall performance improvement. However, the inspectors concluded that many of the initiatives in the plan had not been in place for a sufficient period of time to provide assurance that their intended goals would be met for sustained improvement. Additionally, the inspectors identified a weakness in the corrective actions addressing the portion of the root cause statement associated with the extended leadership team effectively demonstrating or reinforcing behaviors among the staff. The inspectors found evidence of this weakness reflected during their focus group interviews with plant personnel. The inspectors determined additional corrective actions were needed to address this portion of the station root cause analysis. The NRC concluded that while Pacific Gas and Electric has implemented a range of actions to address the crosscutting theme, these actions have not yet demonstrated sustained and measurable improvement in substantially mitigating the adverse trend. The substantive cross-cutting issue in problem identification and resolution associated with the thoroughness of problem evaluation [P.1(c)] will remain open.

We intend to review the progress of your performance measures and the corrective actions you developed in response to the focused problem identification and review inspection during a followup focused baseline inspection to be conducted before the end of the calendar year. This inspection will have a specific focus on the corrective actions associated with the portion of your root cause statement regarding the role of management and supervision in demonstrating and reinforcing behaviors leading to thorough and complete problem evaluations.

The staff also identified a continued theme in the area of human performance associated with the failure of site personnel to use conservative assumptions in decision making and conduct effectiveness reviews of safety-significant decisions [H.1(b)]. Specifically, four findings were identified in this assessment period with this cross-cutting aspect. The staff first identified a theme in this area in the mid-cycle 2010 assessment and noted it was also present at the end-of-cycle 2010 assessment. We noted at that time that your staff had appropriately recognized the declining trend, entered the trend into the corrective action program, and developed corrective actions. We have identified only one finding with this cross-cutting aspect since the implementation of your corrective actions, and none during the current calendar year. Therefore, the NRC has determined that a substantive cross-cutting issue does not exist at this time. The NRC will continue to monitor your effort and progress in addressing this theme through the baseline inspection program.

In the days following the Fukushima Dai-ichi nuclear accident in Japan, the Commission directed the staff to establish a senior-level agency task force to conduct a methodical and systematic review of the NRC's processes and regulations to determine whether the agency should make additional improvements to its regulatory system. The NRC has since completed

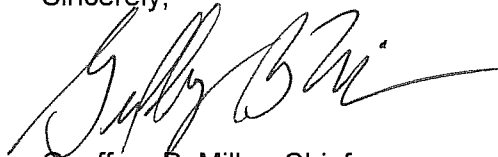
Temporary Instruction (TI) 183, "Follow-up to Fukushima Dai-ichi Nuclear Station Fuel Damage Event," and TI-184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" at your facility. Results of these inspections can be found here: <http://www.nrc.gov/japan/japan-activities.html>. Additionally, on May 11, 2011, the agency issued NRC Bulletin 2011-01, "Mitigating Strategies," to confirm compliance with Order EA-02-026, subsequently imposed license conditions, and 10 CFR 50.54(hh)(2), and to determine the status of licensee mitigating strategies programs. On July 12, 2011, the NRC's Task Force made its recommendations to the Commission in its report, "Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident." The Commission is currently reviewing the Task Force's recommendations to determine whether additional actions may be warranted.

The enclosed inspection plan lists the inspections scheduled through December 31, 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 end-of-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 complete the final portions of Temporary Instruction 2515/177 Inspection, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," as part of resident inspection during the 2012 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 Plan

cc: Distribution via ListServ

**Diablo Canyon  
Inspection / Activity Plan  
09/01/2011 - 12/31/2012**

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1,2	09/19/2011 09/30/2011	<b>EB1-17 - 50.59 AND MODS</b>	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	3
1,2	12/05/2011 12/09/2011	<b>RS45 - RADIATION SAFETY</b>	Occupational Dose Assessment	2
1,2	12/05/2011 12/09/2011	IP 71124.04 IP 71124.05	Radiation Monitoring Instrumentation	
1,2	01/22/2012 01/26/2012	<b>TSB-52B - BIENNIAL PI&amp;R INSPECTION</b>	Problem Identification and Resolution	4
1,2	02/07/2012 02/11/2012	IP 71152B IP 71152B	Problem Identification and Resolution	
1	08/13/2012 08/17/2012	<b>EXAM - INITIAL OPERATOR EXAM</b>		5
2	08/13/2012 08/17/2012	X02490 X02491	INITIAL EXAM - UNIT 1 - DC (09/2012) INITIAL EXAM - UNIT 2 - DC (09/2012)	
1	09/24/2012 10/05/2012	X02490	INITIAL EXAM - UNIT 1 - DC (09/2012)	
2	09/24/2012 10/05/2012	X02491	INITIAL EXAM - UNIT 2 - DC (09/2012)	
2	05/08/2012 05/19/2012	<b>PSB2-08P - INSERVICE INSPECTION - U1</b>	Inservice Inspection Activities - PWR	2
1,2	05/14/2012 05/18/2012	<b>RS5678 - RADIATION SAFETY TEAM</b>		4
1,2	05/14/2012 05/18/2012	IP 71124.05 IP 71124.06	Radiation Monitoring Instrumentation 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	
1,2	09/17/2012 09/21/2012	<b>RS12 - RADIATION SAFETY</b>		2
1,2	09/17/2012 09/21/2012	IP 71124.01 IP 71124.02	Radiological Hazard Assessment and Exposure Controls Occupational ALARA Planning and Controls	
1	09/17/2012 09/21/2012	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	09/17/2012 09/21/2012	IP 71151-PR01	RETS/ODCM Radiological Effluent	
1,2	10/22/2012 10/26/2012	<b>EB2-05T - TRIENNIAL FIRE PROTECTION INSPECTION</b>		4
1,2	11/05/2012 11/09/2012	IP 7111105P IP 7111105P	Fire Protection-NFPA 805 Transition Period [Triennial] Fire Protection-NFPA 805 Transition Period [Triennial]	
1,2	11/05/2012 11/09/2012	<b>EP-1 - BIENNIAL EP EXERCISE</b>		3
1,2	11/05/2012 11/09/2012	IP 7111401 IP 7111404	Exercise Evaluation Emergency Action Level and Emergency Plan Changes	
1,2	11/05/2012 11/09/2012	IP 71151-EP01	Drill/Exercise Performance	
1,2	11/05/2012 11/09/2012	IP 71151-EP02	ERO Drill Participation	
1,2	11/05/2012 11/09/2012	IP 71151-EP03	Alert & Notification System	

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