



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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March 31, 2000

Gregory M. Rueger, Senior Vice President  
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**SUBJECT: PLANT PERFORMANCE REVIEW - DIABLO CANYON, UNITS 1 AND 2**

Dear Mr. Rueger:

The purpose of this letter is to communicate our assessment of your performance and to inform you of our planned inspections at your facility. On March 2, 2000, we completed a Plant Performance Review (PPR) of the Diablo Canyon, Units 1 and 2, facility. We conduct these reviews to develop an integrated overview of the safety performance of each operating nuclear power plant. We use the results of the PPR in planning and allocating inspection resources and as inputs to our senior management meeting (SMM) process. This PPR evaluated inspection results and safety performance information for the period from January 25, 1999, through February 11, 2000, but emphasized the last 6 months to ensure that our assessment reflected your current performance. Our most recent summary of plant performance at Diablo Canyon was provided to you in a letter dated September 16, 1999.

The NRC has been developing a revised reactor oversight process that will replace our existing inspection and assessment processes, including the PPR, the SMM, and the Systematic Assessment of Licensee Performance (SALP). We recently completed a pilot program for the revised reactor oversight process at nine participating sites and are making necessary adjustments based on feedback and lessons learned. We are beginning initial implementation of the revised reactor oversight process industry-wide, including your facility, on April 2, 2000.

This PPR reflects continued process improvements as we make the transition into the revised reactor oversight process. You will notice that the following summary of plant performance is organized differently from our previous performance summaries. Instead of characterizing our assessment results by SALP functional area, we are organizing the results into the strategic performance arenas embodied in the revised reactor oversight process. Additionally, in assessing your performance, we have considered the historical performance indicator data that you submitted in January 2000 in conjunction with the inspection results. The results of this PPR were used to establish the inspection plan in accordance with the new risk-informed inspection program (consisting of baseline and supplemental inspections). Although this letter

incorporates some terms and concepts associated with the new oversight process, it does not reflect the much broader changes in inspection and assessment that will be evident after we have fully implemented our revised reactor oversight process.

During the last 6 months, Unit 1 typically operated at 100 percent power; however, the plant experienced one automatic reactor trip, one unplanned manual reactor shutdown, and two unplanned power reductions. Except for the refueling outage and one unplanned manual reactor shutdown, Unit 2 also operated at 100 percent power. We noted that on three occasions your staff conservatively reduced power: (1) as a part of contingency planning for the Year 2000 transition and (2) twice in response to high swell warnings.

Based on a review of inspection results and the performance indicators, we did not identify any significant performance issues in the reactor safety, radiation safety, or safeguards strategic arenas. We did note numerous challenges to plant operations from external factors, such as kelp intrusion and lightning strikes; however, the plant staff consistently assured the units were operated safely. As a result, only baseline inspections are planned, but we will monitor your continuing efforts to limit trips from external factors.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that was used during this PPR process to arrive at our integrated view of your performance trends. The PIM for this assessment is grouped by the prior SALP functional areas of operations, maintenance, engineering, and plant support, although the future PIM will be organized along the cornerstones of safety as described in the revised reactor oversight process. The enclosed PIM includes items summarized from inspection reports or other docketed correspondence regarding Diablo Canyon, Units 1 and 2. We did not document all aspects of licensee programs and performance that may be functioning appropriately. Rather, we only documented issues that we believe warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since our last inspection report was issued but had not yet received full review and consideration. We will make this material publically available as part of the normal issuance of our inspection reports and other correspondence.

Enclosure 2 lists our planned inspections for the period April 2000 through March 2001 at Diablo Canyon, Units 1 and 2, to allow you to resolve scheduling conflicts and personnel availability in advance of our inspector arrival onsite. The inspection schedule for the latter half of the period is more tentative and may be adjusted in the future because of emerging performance issues at Diablo Canyon, Units 1 and 2, or other Region IV facilities. Routine resident inspections are not listed because of their ongoing and continuous nature.

We will inform you of any changes to the inspection plan. If you have any questions, please contact me at (817/860-8137).

Sincerely,

**/RA/**

Linda Joy Smith, Chief  
Project Branch E  
Division of Reactor Projects

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

Enclosures:

1. Plant Issues Matrix
2. Inspection Plan

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# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
01/31/2000	1999019	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Conservative reduction in power for high ocean swells</b>  The inspectors concluded that the licensee focused on safety and took conservative action to reduce power in both Units to 14 percent in anticipation of an incoming storm with high sea swells.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
01/31/2000	1999019	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Licensee actions for GL 98-02 (valve control in Mode 4) were thorough</b>  Although the plant design made both Units 1 and 2 susceptible to a loss of inventory event in Mode 4, the inspectors concluded that the corrective actions in response to Generic Letter 98-02 were thorough and minimized the potential for a loss of inventory event in Mode 4. The inspectors considered the procedures, training, and quality oversight appropriate for maintaining configuration control.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
12/02/1999	1999018	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Good operator response to circulating water pump trip</b>  Unit 2 operators responded promptly and in accordance with procedures to reduce power to 50 percent following the trip of Circulating Water Pump 2-2. Subsequent efforts to determine and correct the source of the problem, a failed pressure switch, were conducted in a safety conscious manner and were successful in returning the plant to full power.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
11/19/1999	1999018	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Conservative plant shutdown for high ocean swells</b>  The inspectors concluded that the licensee's action to shut down both units in anticipation of an incoming storm was conservative and focused on safety.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2 05000323 Diablo Canyon 2						
10/28/1999	1999017	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Good safety focus and response to adverse weather</b>  Plant management provided excellent oversight and guidance prior to experiencing high seas. Management conservatively curtailed Unit 1 to 60 percent power and held Unit 2 at 35 percent power in anticipation of the storm. Nonetheless, kelp and other debris clogged the circulating water pump intake screens and operators manually tripped both units. Prompt and effective operator response ensured that both units were placed in a safe condition despite the loss of condenser cooling.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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10/25/1999	1999018-01	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 4B <b>Sec:</b> 5C <b>Ter:</b>	<b>Ineffective corrective actions led to ECCS voiding</b>  A violation of 10 CFR Part 50, Appendix B, Criterion XVI, was identified for failure to prevent recurrence of a significant condition adverse to quality. An excessive gas void formed in the emergency core cooling system because the licensee failed to completely fill and vent plant systems following Outage 2R9. This 0.9 cubic foot gas void rendered both of the safety injection pumps or both of the centrifugal charging pumps inoperable for approximately 4 hours while Unit 2 was in Mode 3. This condition existed longer than necessary because enhanced monitoring techniques, used following a previous outage to detect gas voiding, were deemed unnecessary. This event had the same root cause as several similar events (failure to provide an adequate fill and vent of plant systems following outages). The licensee concluded that this event was of low safety and risk significance. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This item was placed in the corrective action program as Action Request A0495969.
<b>Dockets Discussed:</b> 05000323 Diablo Canyon 2						
10/20/1999	1999017	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Failure to evaluate effects of reinitiating steam generator fill</b>  The inspectors considered that the operators' response to an apparent loss of reactor coolant system inventory was adequate. However, the inspectors considered the cause of the problem was not immediately understood by the operators because of failure to discuss the affects of reinitiation of a suspended steam generator secondary side fill procedure. The apparent change in inventory resulted from colder steam generator water cooling and contracting the air in the primary side of the steam generator tubes.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/17/1999	1999017-01	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Inadequate control of reactor inventory while shutdown</b>  On October 17, 1999, operators drained the refueling cavity without venting the pressurizer as required by the refueling procedures. This created a vacuum in the pressurizer causing water level in the pressurizer to be at the 122 foot level when reactor vessel level was at the 112 foot level. The inspectors considered that a weak procedure, poor turnovers, failure to monitor pressurizer level during the reactor cavity draining, and failure to maintain a status board contributed to the violation. Technical Specification 6.8.1.a requires that refueling procedures be implemented. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. The licensee placed this deficiency in their corrective action program as Quality Evaluation Q0012155 and Action Request A0494864.
<b>Dockets Discussed:</b> 05000323 Diablo Canyon 2						
10/03/1999	1999014	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1A <b>Sec:</b> 2A <b>Ter:</b>	<b>Failure to protect offsite source</b>  Even though the outage risk plan required that the single source of offsite power be protected from production work, the licensee parked a truck within several feet of the single source of offsite power. The licensee had to remove the vehicle barriers to place the truck in this location.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/02/1999	1999014	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Inappropriate start of steam generator secondary side draining while in mid-loop</b>  Operators started to drain Steam Generator 2-2 based on a misunderstanding of a prerequisite. The midloop procedure required at least two steam generators to be filled to 15 percent on the narrow-range with the reactor coolant system at reduced inventory. However, operators incorrectly believed that the prerequisite referred to 15 percent on the wide range. After the inspectors identified this issue to the operators, operators stopped the steam generator drain prior to lowering level below 15 percent on the narrow range. Although the midloop procedure was not violated, and subsequent review of the outage safety plan revealed that maintaining water in the steam generators was only required when the reactor coolant system intact, operators demonstrated poor attention to detail.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						



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10/02/1999	1999014	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Good preparations and execution of mid-loop operations</b>  The training, preparations, and contingencies for early midloop operations were conservative and properly implemented. Operable equipment exceeded that required by the Technical Specifications. The pre-evolution briefings were thorough and informative. The training for midloop operations included draindown, maintenance and refill for midloop operations, as well as several casualties. Operators drained down to the midloop condition, maintained level, and refilled the reactor coolant system in a careful, deliberate manner. The addition of new methods of level indication was an excellent initiative, which provided a diverse method of vessel level indication. These diverse methods included two new wide- and narrow-range level systems using pressure transmitters and ultrasonic indication on the loop piping.
		<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2				
09/30/1999	1999014	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Good Operator response to feedwater leak transient</b>  Operators responded well to a significant leak from the suction flange of Main Feedwater Pump 1-1 by immediately ramping down Unit 1, then tripping and isolating the pump. The shift supervisor performed frequent crew briefings, used extra personnel appropriately, and exhibited conservative decision making in that a precautionary evacuation of the turbine building was ordered upon discovery of the magnitude of the leak.
		<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2				
09/23/1999	1999014-01	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 5B <b>Sec:</b> <b>Ter:</b>	<b>Late report of engineered safety features actuation</b>  A violation of 10 CFR 50.72 was identified for failure to report an engineered safety features actuation within 4 hours to the NRC operations center. Turbine-driven Auxiliary Feedwater Pump 1-1 automatically started on low voltage following a loss of 500 kV startup power. Operators reported this actuation approximately 5½ hours later because of competing operational priorities. This Severity Level IV violation is being treated as a noncited violation in accordance with Appendix C of the Enforcement Policy. This item is in the licensee's corrective action system as Action Request A0491952.
		<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2				
09/22/1999	1999014	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1B <b>Sec:</b> <b>Ter:</b>	<b>Good operator response to reactor trip</b>  Operators responded well to a reactor trip that resulted from a lightning strike near the facility. The shift foreman followed emergency procedures appropriately, exhibited conservative decision making, performed frequent and informative crew briefings, and effectively used extra off-shift operators to ensure equipment problems were resolved in a timely manner. The posttrip review appropriately described the sequence of events and identified the root cause.
		<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2				
08/21/1999	1999012	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1C <b>Sec:</b> 5A <b>Ter:</b>	<b>emergency core cooling system</b>  The licensee responded appropriately to indications of voiding in the emergency core cooling system. The licensee demonstrated good initiative, by plant walkdowns and systems analysis, in identifying potential locations in which gas voids could have developed.
		<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2				

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By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
07/14/1999	1999007-01	Pri: OPS Sec:	NRC	NCV	Pri: 5C Sec: 3B Ter: 3A	<b>Failure to take appropriate corrective action upon ID of voids in ECCS piping</b>  A noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," (EA 99-178) was identified for: (1) failing, on March 27 and 28, 1999, to promptly identify and correct a void in the emergency core cooling crossover piping that exceeded the acceptance criteria specified in Procedure STP M-89A, "Void Volume Measurement in Safety Injection Pump/Centrifugal Charging Pump Suction Crosstie Piping," Revision 1. This void potentially impacted operability of the safety injection pumps and the centrifugal charging pumps; and (2) failing to implement effective corrective actions to preclude voiding. Specifically, as a resolution to a 1991 nonconformance report, the licensee calculated the acceptable void size for the suction of the safety injection pumps and centrifugal charging pumps. However, engineers did not incorporate the results into operating or surveillance procedures or refer to this calculation to address subsequent voiding issues (Sections O4.1 and E1.1.b.2).
07/10/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: Ter:	<b>misunderstood actuation logic for the containment high-high pressure</b>  Operations, Technical Maintenance, and Engineering personnel misunderstood the actuation logic for the containment high-high pressure trip and incorrectly assumed that, considering the specific hardware failure, bypassing a failed channel was not possible. Instead, operators placed the channel in trip during corrective maintenance, making the containment spray system more vulnerable to a spurious actuation.  Action 17 for Technical Specification 3.3.2 was nonconservative because it did not specify a required time for placing a failed containment high-high pressure channel in bypass. The licensee planned to correct this specification to include a required time frame for completing this action
07/10/1999	1999010	Pri: OPS Sec:	NRC	POS	Pri: 2A Sec: Ter:	<b>Efforts to reduce control room deficiencies</b>  Because of successful licensee efforts to reduce control room deficiencies, both units operated with a "black board" (i.e., no illuminated annunciators) for most of this inspection period
05/20/1999	1999006-02	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: 1C Ter: 3A	<b>Two examples of failure to follow Admin procedures</b>  Two examples of a noncited violation of TS 6.8.1.a, in accordance with Appendix C of the enforcement policy, were identified for failure to follow procedures. In the first example, carpenters installed a scaffold that blocked a fire suppression sprinkler in the area of a component cooling water pump, in violation of the scaffolding procedure. In the second example, operators improperly implemented Equipment Control Guideline 18.4, when declaring the fire suppression system inoperable in the area of component cooling water Pump 1-3. Operators initiated an hourly fire tour instead of a continuous fire watch as required by Equipment Control Guideline 18.4. The fire protection engineer performed a subsequent review that determined that the fire suppression system was degraded, but operable. Four other recent operator errors with respect to implementation of the Equipment Control Guidelines indicated that improvement was necessary in this area. These two examples of the violation were placed in the corrective action program as Action Requests A0485075 and A0484540.
04/08/1999	1999002	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	<b>Good operator communications during exam scenario.</b>  Operators practiced good three-legged communications, peer checking, and crew briefings during dynamic simulator scenarios. Facility evaluators administered the requalification examination professionally and provided well documented findings to support their evaluations. (Sections O4.1, O5.2)

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04/08/1999	1999002	<b>Pri:</b> OPS <b>Sec:</b>	NRC	STR	<b>Pri:</b> 3B <b>Sec:</b> <b>Ter:</b>	<b>Good management support of and involvement in operator training</b>  Operations management involvement in the licensed operator requalification training program, including the role of the operations liaison, was considered a strength (Sections O5.2, O5.3)
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
04/06/1999	1999004-01	<b>Pri:</b> OPS <b>Sec:</b>	Licensee	NCV	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Inadequate procedures to ensure pressurizer mixing</b>  .A noncited violation was identified for failure to adequately maintain procedures, as required by Technical Specification 6.8.1.a. Specifically, procedures did not direct operators to energize the pressurizer backup heaters to ensure mixing when the pressurizer steam space sample valves were opened. Knowledge of the need to perform this action was not within the skill of the newer operators. The licensee performed a good investigation, and this noncited violation was documented in the corrective action program as Action Request A0482289.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1						
03/26/1999	1999004-03	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1A <b>Sec:</b> 1C <b>Ter:</b>	<b>Failure to implement the Procedure for establishing a fire watch</b>  An NRC-identified noncited violation of Technical Specification 6.8.1.h was identified. Operators failed to implement a fire protection procedure for establishing a fire watch, because of weak knowledge of fire protection program requirements. Although this condition existed for approximately 15 hours, the issue was mitigated because the area was patrolled hourly for an unrelated fire impairment. This noncited violation was documented in the corrective action program as Action Request A0481645.
<b>Dockets Discussed:</b> 05000323 Diablo Canyon 2						
03/20/1999	1999004	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1A <b>Sec:</b> 1B <b>Ter:</b>	<b>Operator ramp down in power to 50%.</b>  Operators ramped Unit 1 to 50 percent power on indication of elevated differential pressure across the main condenser because of mussel shells. The root cause analysis was thorough, determined that the influx of mussel shells resulted from incomplete cleaning of the Unit 1 traveling screens during Refueling Outage 1R9, and categorized this as a maintenance preventable functional failure.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
03/20/1999	1999004-02	<b>Pri:</b> OPS <b>Sec:</b>	Licensee	NCV	<b>Pri:</b> 2A <b>Sec:</b> 2B <b>Ter:</b>	<b>Inadequate procedures for controlling OT and OP delta-T reactor protection channel bypassing</b>  A noncited violation of Technical Specification 6.8.1.a was identified because operators had placed two reactor protection system channels for Overtemperature T and Overpower T in bypass simultaneously, which was prohibited by Technical Specification 3.3.1. The shift foreman and licensing personnel demonstrated excellent attention to detail in identification of this issue. This noncited violation was documented in the corrective action program as AR A0481553.
<b>Dockets Discussed:</b> 05000323 Diablo Canyon 2						
03/06/1999	1999003	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Overall efforts during 1R9 refueling improved from 2R8</b>  With the exception of minor procedure and communications problems, which occurred during performance of the initial steps of the refueling, all parties involved in the fuel load performed well. Performance during core alterations was improved in that procedure and performance concerns identified in Refueling Outage 2R8 were corrected for Refueling Outage 1R9.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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03/06/1999	1999003	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Equipment clearance program improved in 1R9 from previous outages</b>  Clearance performance during Refueling Outage 1R9 improved as compared to previous outages. A sampling of clearances that the inspectors examined revealed only one minor error. In addition, the licensee identified fewer significant clearance errors than during Refueling Outage 2R8, indicating that corrective actions effectively improved clearance performance, but further improvement in this area is still necessary
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
03/04/1999	1999003	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Good performance during RCS drain downs in U1</b>  The planning, preparations, and execution of the two draindowns of the Unit 1 reactor to reduced inventory conditions were generally conducted in a conservative manner. Licensee contingencies and compensatory actions were appropriate to the circumstances .
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/25/1999	1999003	<b>Pri:</b> OPS <b>Sec:</b>	Self	NEG	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Operator monitoring of spent fuel pool temperature after core offload not conservative</b>  Operating procedures were not conservative with respect to monitoring spent fuel pool temperature since increased temperature monitoring was not required with a full core offload in the spent fuel pool. Operators continued to monitor the Unit 1 spent fuel pool temperature every 12 hours. As a result, following an inadvertent trip of Spent Fuel Cooling Pump 1-2, the pump trip went undetected for 4 hours, until a spent fuel pool high temperature annunciator alarmed.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/11/1999	1999003	<b>Pri:</b> OPS <b>Sec:</b>	Self	NEG	<b>Pri:</b> 1A <b>Sec:</b> 3B <b>Ter:</b>	<b>Nitrogen pressurization effects during midloop not anticipated</b>  In Mode 6, while pressurizing the primary relief tank with nitrogen during the draindown to midloop, operators did not have a full understanding of its effect on reactor vessel level. As a result, reactor vessel level dropped approximately 2 feet in an uncontrolled manner, and water flowed into the steam generator tubes. No procedural limits were exceeded.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/03/1999	1999003	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1A <b>Sec:</b> 3B <b>Ter:</b>	<b>Operators failed to revise risk assessment during RHR flush after adding systems</b>  Operators failed to revise the risk assessment of performing the residual heat removal system flush during power operation when they elected to include removal of the boric acid storage tanks from service as part of the evolution. Operators understood that the boric acid storage tanks were of low risk significance and believed that a revision of the risk assessment was unnecessary because of weak knowledge of the on-line maintenance risk assessment procedure. Subsequent evaluation of the risk associated with this activity confirmed the risk was low.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/03/1999	1999004-04	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1A <b>Sec:</b> 1C <b>Ter:</b> 4B	<b>Failure to follow administrative controls for on-line maintenance</b>  The failure to properly follow an administrative procedure for controlling maintenance activities was identified as a noncited violation of Technical Specification 6.8.1.a. Operators performed the risk assessment, used to determine if on-line maintenance is acceptable, after declaring the auxiliary saltwater supply to Component Cooling Water Heat Exchanger 2-1 inoperable for replacement of the inlet expansion joint. The operators also failed to consult with the onsite Probabilistic Risk Assessment group, as required. In addition, the licensee identified several performance weaknesses, such as failure to properly document actions taken and poor communication among operators and between operators and management related to the risk involved with the emergent maintenance. This noncited violation was documented in the corrective action program as Action Request A0476004
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
01/28/1999	1999301	<b>Pri:</b> OPS <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1C <b>Sec:</b> 3A <b>Ter:</b>	<b>Poor quality for licensee initial exam submittal</b>  The licensee's initial examination submittal was considered acceptable for administration requiring only minor enhancement suggestions. However, subsequent post-written examinations resulted in, the licensee commenting on six written examination questions, which required justification by the licensee and an explanation of how future post-examination comments will be minimized.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
01/28/1999	1999301	<b>Pri:</b> OPS <b>Sec:</b>	NRC	POS	<b>Pri:</b> 1C <b>Sec:</b> 3B <b>Ter:</b>	<b>Overall licensed operator applicant performance satisfactory</b>  All six applicants demonstrated the requisite knowledge and skills to satisfy the requirements of 10 CFR Part 55 and were issued senior operator licenses (Section O4.1). All six applicants demonstrated the requisite knowledge and skills to satisfy the requirements of 10 CFR Part 55 and were issued senior operator licenses.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
01/28/1999	1999301	<b>Pri:</b> OPS <b>Sec:</b>	NRC	STR	<b>Pri:</b> 1C <b>Sec:</b> 3B <b>Ter:</b>	<b>Good overall license operator exam performance</b>  Overall, licensed operator applicants performed well during the examination. Operators demonstrated good 3-way communications practices, peer checking, and crew briefs. No generic performance weaknesses were identified.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
01/11/2000	1999019	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Emergent maintenance was performed well</b>  The inspectors concluded that corrective maintenance on the failed Turbine-driven Auxiliary Feedwater Pump 1-1 was well performed. The inspectors concluded that the licensee focused on safety and prudently took immediate action to test another auxiliary feedwater pump to verify that no common mode failure had resulted.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/30/1999	1999014	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 2A <b>Sec:</b> <b>Ter:</b>	<b>Inadequate installation of nonsafety-related temp leak seal fittings</b>  Maintenance personnel failed to properly tighten a fitting used to inject liquid sealant, as part of a temporary leak repair of the suction flange to nonsafety-related Main Feedwater Pump 1-1. The repair had occurred during a forced outage, resulted in a significant flange leak after Unit 1 returned to 100 percent power, and caused an unplanned down power to 50 percent. The licensee subsequently correctly installed the temporary leak repair rig. The licensee appropriately characterized this issue as a maintenance preventable functional failure.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/23/1999	1999014	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 2A <b>Sec:</b> <b>Ter:</b>	<b>Inappropriate control of switchyard activities results in ESF acuation</b>  System maintenance personnel at the switchyard inappropriately placed nonsafety-related Overvoltage Relay 559-1 in service with a trip signal in place, resulting in a loss of 500 kV offsite power and an automatic start of Turbine-driven Auxiliary Feedwater Pump 1-1, while Unit 1 was in Mode 3. This transient indicated that controls over switchyard work required improvement. All other loads successfully transferred to the startup transformer..
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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09/22/1999	1999014	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1C <b>Sec:</b> 2A <b>Ter:</b>	<b>Sequence of socket inspections not safety-based or properly risk informed</b>  The licensee initially prioritized the control room socket inspections incorrectly. The inspectors identified that the inspection priority did not focus on ensuring a train of safe shutdown for a seismic event (probable socket failure mechanism) but focused on the risk achievement worth of internal events. Subsequently, the licensee adjusted the inspection priority based on the external event or seismic risk assessment
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/22/1999	1999014-02	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	URI	<b>Pri:</b> 2A <b>Sec:</b> <b>Ter:</b>	<b>NRC review of the safety consequence evaluation of simultaneous light socket failures</b>  The licensee identified 48 control board light socket failures, many of which affected the control power for safety related systems, out of 1300 sockets inspected. In order to review the potential safety consequence of the simultaneous failure of all of these items, this issue will be treated as an unresolved item
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/14/1999	1999014	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2A <b>Sec:</b> 2B <b>Ter:</b>	<b>Good improving plant materiel condition</b>  Plant materiel condition was good and improved over the previous 6 months as evidenced by lower maintenance backlogs and availability of all essential equipment in preparation for the storm season.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/11/1999	1999018-03	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1C <b>Sec:</b> 2A <b>Ter:</b>	<b>Improper installation of DEG fuses</b>  A violation of Technical Specification 6.8.1.a was identified for failure to properly install the fuse holder for local operation of a diesel engine generator output breaker. For approximately 7 months, this action rendered the diesel engine generator incapable of performing its intended function for postulated fire scenarios that disabled off-site power and required control room evacuation. However, two other diesel engine generators were available or easily recoverable for local operation to mitigate the consequences of this fire scenario; thus, this event was of low potential safety consequence. The licensee determined that this event was not risk significant. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This item was placed in the corrective action program as Action Request A0491213.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
08/30/1999	1999014	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 5A <b>Sec:</b> 2A <b>Ter:</b>	<b>Good initiative in inspecting control room light sockets</b>  The licensee exhibited excellent initiative and a good focus on safety by inspecting all control room light sockets after operators noted an increasing trend in socket failures when changing out control board light bulbs. When additional failures were found during a sample inspection, the licensee commenced a 100 percent inspection.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
08/27/1999	1999014	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 5A <b>Sec:</b> <b>Ter:</b>	<b>Failure to document nonsafety-related test failures</b>  During main annunciator system testing after multiple card replacements, the inspectors observed that licensee personnel did not document a nonsafety-related main annunciator test failure until questioned by the inspectors 4 days later. The inspectors considered that the failure to document alarm problems when they were observed was a poor work practice.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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07/27/1999	1999012	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>left test cart unrestrained</b>  The inspectors observed that technicians left a test cart unrestrained near a panel containing Seismic Category 1 equipment. The licensee subsequently determined that the test cart in question was made of lightweight plastic and would not damage plant equipment during a seismic event. However, the inspectors noted that the technicians erroneously believed that leaving unrestrained equipment near Seismic Category I equipment for less than a shift was an acceptable practice. The technical maintenance supervisor stated that technicians routinely implemented this improper practice. This item is in the corrective action program as Action Request A0489903.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/13/1999	1999014-05	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>TS 4.1.1.1a not met because of personnel error</b>  A violation of Technical Specification 3.1.1.1 was identified for operators failing to complete conditional surveillance 4.1.1.1a. On July 13, 1999, operators declared the rod control system inoperable. Operators entered Technical Specification 3.1.3.1, Action c for inoperable rods but failed to enter Technical Specification 3.1.1.1. Technical Specification 3.1.1.1 required that an adequate shutdown margin be verified within 1 hour. This action was not completed until July 15. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the Enforcement Policy. The licensee included this item in the corrective action system as Nonconformance Report N0002100. This closes LER 1-99-005-00
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1						
07/10/1999	1999010-01	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 5C <b>Sec:</b> 3A <b>Ter:</b>	<b>failure to identify the cause and correct a slow DEG 1-1 start</b>  Two failures to take appropriate actions to identify the cause and preclude repetition of the August 31, 1998, slow start of Diesel Engine Generator 1-1 were identified as examples of a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," in accordance with Appendix C of the NRC Enforcement Policy. Operators did not adequately document the symptoms associated with the slow start. Similarly, system engineers did not contact the operators who had observed the slow start. Significant information that could have aided Engineering personnel in determining the cause of the slow start of Diesel Engine Generator 1-1 was not obtained from the operators until asked for by the inspectors. In addition, the licensee failed to test Diesel Engine Generator 1-1 within 1 week, as specified in Action Request A0467444 and, as a result, did not promptly correct the underlying deficiency, a loose wire. These issues resulted in Diesel Engine Generator 1-1 being in a degraded condition for 18 days. This violation was placed in the licensee's corrective action program as Action Request A0478728
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1						
07/06/1999	1999014-04	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1A <b>Sec:</b> <b>Ter:</b>	<b>Two examples of failure to meet TS 3.8.1 because of personnel error</b>  A violation of Technical Specifications 3.8.1.1 was identified for two examples of operators failing to perform conditional surveillance requirements. The conditional surveillance required that the remaining sources of electrical power be verified after one or more sources were taken out of service. One example was from July 1999 and one from July 1997. In both cases, after electrical equipment was taken out of service, operators determined that the conditional surveillance was required but failed to complete the surveillance in the time allowed. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the Enforcement Policy. The licensee placed these items in the corrective action system as Nonconformance Reports N0002099 and N0002035, respectively. This closes LERs 1-97-014-00 and 1-99-004-00.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
03/06/1999	1999003	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 4B <b>Sec:</b> <b>Ter:</b>	<b>EDG 1-1 troubleshooting efforts following failure to achieve rated voltage within required time limit.</b>  Following the failure of Diesel Engine Generator 1-1 to reach rated voltage within its test acceptance criteria time limit, troubleshooting to determine the cause of the problem was generally thorough and identified a malfunctioning voltage regulator. Troubleshooting appropriately considered vendor recommendations; and collected data and the number and frequency of tests exceeded requirements.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
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03/03/1999	1999003-03	<b>Pri:</b> MAINT <b>Sec:</b>	Self	NCV	<b>Pri:</b> 2A <b>Sec:</b> 3B <b>Ter:</b>	<b>Inadequate maintenance procedure -loss of offsite power</b>  A noncited violation of Technical Specification 6.8.1a. was identified for failure to provide a procedure appropriate to the circumstances (AR A047924). The procedure used to restore the 500 kV offsite power source provided vague guidance for positioning the main turbine protective trip switches. In addition, lack of a questioning attitude on the part of operators restoring the 500 kV power contributed to the trip signal, partial loss of offsite power, and inadvertent diesel engine generator start. Operator response in restoring shutdown and spent fuel pool cooling following the loss of 500 kV power was good.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1						
02/26/1999	1999001	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> <b>Ter:</b>	<b>Effective program for issueing weld materials</b>  The licensee had established and implemented a program that was effectively administering and controlling the storage, issuance, and control of welding materials.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/26/1999	1999001	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> <b>Ter:</b>	<b>Welding Procedure Specifications</b>  The welding procedure specifications had been properly qualified and were in accordance with the applicable nonessential, essential, or supplementary essential variables specified in Section IX of the ASME Code.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/26/1999	1999001	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> 3A <b>Ter:</b>	<b>ISI examination observation</b>  The inservice inspection examinations were performed in accordance with the applicable procedures. Examination surface preparation was thorough and radiation protection personnel were sensitive to obtaining as-low-as-reasonably-achievable conditions for nondestructive examination personnel working in the containment building.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/26/1999	1999001	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> 3A <b>Ter:</b>	<b>Welding Program and observation of welding.</b>  The welding program was well established, well organized, and had very good instructions and guidance. The observed welding was performed in accordance with the specified welding procedure specifications, and there was no identified instance of failing to comply with ASME Code Section IX requirements.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/26/1999	1999001	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> 3A <b>Ter:</b> 3B	<b>Proficient ISI examination personnel.</b>  The personnel observed performing examination activities were knowledgeable and proficient. The inservice inspection program supervisor was frequently involved in the observation of field activities.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						



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02/26/1999	1999001	<b>Pri:</b> MAINT <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> 3A <b>Ter:</b> 3B	<b>Welder qualification and certification program.</b>  The licensee had established a welder qualification/certification program that was in compliance with Section IX of the ASME Code. The records of all selected welders were reviewed and were found to meet the required welder variables established in the ASME Code. The observed welders performed in accordance with the requirements of the applicable welding procedure specifications.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/25/1999	1999003-01	<b>Pri:</b> MAINT <b>Sec:</b>	Self	NCV	<b>Pri:</b> 2A <b>Sec:</b> 3B <b>Ter:</b> 1A	<b>Failure to follow procedure for a trouble alarm and failure to properly preplan relay replacement</b>  The first example of a noncited violation of Technical Specification 6.8.1.a. for failure to properly implement a procedure, involved the draindown to midloop (AR A0479457). The "Mid Loop Trouble" alarm was not enabled to alert operators of reactor vessel refueling level high or low, as required.  A noncited violation of Technical Specification 6.8.1.a. was identified for failure to properly preplan maintenance associated with replacement of a relay providing Phase A containment isolation capability (AR A0478430). The relay was removed without adequate precautions or consideration for the effect on plant equipment. As a result, the operating spent fuel pool cooling pump tripped from service without operator knowledge.
02/11/1999	1999003-02	<b>Pri:</b> MAINT <b>Sec:</b> PLTSUP	NRC	NCV	<b>Pri:</b> 2A <b>Sec:</b> 3B <b>Ter:</b> 1C	<b>Reactor level perturbation AND introduction of chlorides into RCS.</b>  A licensee-identified noncited violation of Technical Specification 6.8.1.a. was identified for failure of operators to properly preplan the clearance for maintenance during the initial draindown of the Unit 1 reactor to midloop (AR A0476823). Isolation of the nitrogen overpressure for the primary relief tank resulted in reactor vessel level perturbations.  A noncited violation of Technical Specification 6.8.1.a resulted when personnel failed to sample chemical and volume control system demineralizer prior to placing in service as specified by procedures (NCR N0002084). This error resulted in a significant chloride intrusion into the reactor coolant system that cause the Equipment Control Guideline limit to be exceeded. In addition, the controls for purchasing and control, and dedication of resins for nonsafety-related applications were deficient. The licensee performed a detailed root cause analysis and corrective actions addressed the issues appropriately.
12/25/1999	1999018	<b>Pri:</b> ENG <b>Sec:</b>	NRC	POS	<b>Pri:</b> 4A <b>Sec:</b> <b>Ter:</b>	<b>Good engineering work in design change packages</b>  System engineering performed an inadequate operability assessment that did not take into account the Technical Specifications requirements for operability. Hydrogen Recombiner 1-2 was declared operable despite temperature instrumentation being inoperable that was required by Technical Specification 4.6.4.2(b)1. The recombinder was returned to service prior to expiration of the 30-day shutdown action statement.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
12/02/1999	1999018	<b>Pri:</b> ENG <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 4B <b>Sec:</b> <b>Ter:</b>	<b>Inadequate operability assessment</b>  System engineering performed an inadequate operability assessment that did not take into account the Technical Specifications requirements for operability. Hydrogen Recombiner 1-2 was declared operable despite temperature instrumentation being inoperable that was required by Technical Specification 4.6.4.2(b)1. The recombinder was returned to service prior to expiration of the 30-day shutdown action statement.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
10/09/1999	1999014-06	Pri: ENG Sec:	NRC	NCV	Pri: 4A Sec: Ter:	<b>Failure to implement design controls for class 1E/non Clas 1E interface</b>  A violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," occurred because Design Change DC2-SE-50149 did not provide adequate isolation between non-Class 1E loads and Class 1E inverters. The design failed to ensure that malfunctions on the non-Class 1E circuits would not cause failure of Class 1E equipment. The failure to recognize and include inverter current limiting characteristics in design criteria documents contributed to this deficiency. However, this Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the Enforcement Policy. The licensee modified the design and placed this item in the corrective action system as Action Requests A049073, A0491436, and A0494173.
<b>Dockets Discussed:</b> 05000323 Diablo Canyon 2						
07/15/1999	1999012-04	Pri: ENG Sec:	NRC	NCV	Pri: 4B Sec: Ter:	<b>failure to perform a safety evaluation upon modifying the ASW drain lines</b>  A violation (EA 99-219) of 10 CFR 50.59 was identified for failure to perform a safety evaluation for a change to the facility. Specifically, in March 1999, the licensee modified the auxiliary saltwater pump vault drain lines, as described in Final Safety Analysis Report Update Drawing 3-17, but did not perform a written safety evaluation to determine if an unreviewed safety question existed. The licensee installed y-strainers and low point drains upstream of the auxiliary saltwater vault drain line check valves, which had the safety function of mitigating the consequences of a design basis tsunami. The licensee subsequently performed a safety evaluation that demonstrated that an unreviewed safety question did not exist. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the Enforcement Policy. This item is in the corrective action program as Action Request A0487899.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/14/1999	1999007	Pri: ENG Sec:	NRC	NEG	Pri: 5C Sec: 5A Ter:	<b>Licensee missed several opportunities to identify the cause and provide corrective action</b>  The licensee missed several opportunities to identify the cause and provide corrective action to prevent recurrence for significant voiding that included: review of NRC and industry communications, previous incidences of significant voiding, and corrective actions for previous nonconformances.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/14/1999	1999007-02	Pri: ENG Sec:	NRC	NCV	Pri: 5C Sec: 5A Ter:	<b>Failure to implement TS 3.5.2 and 3.0.3</b>  A noncited violation of Technical Specifications 3.5.2 and 3.0.3 (EA 99-178) was identified for failing, in March 1998, to take action to shut down Unit 2 within 1 hour. This was required when both trains of the emergency core cooling system were inoperable. The licensee identified a 2.2-cubic foot void on the suction of the Unit 2 safety injection pumps and centrifugal charging pumps, which exceeded the 0.44-cubic foot operability limit. This void would have rendered both trains of safety injection pumps or centrifugal charging pumps inoperable because of gas binding for the recirculation phase of accident mitigation. The licensee allowed this condition to exist for 6 days until the gas was vented. The failure to take prompt action to remove the void in the Unit 2 emergency core cooling system piping partially resulted from the 1991 failure to implement the appropriate acceptance criterion into instructions or procedures
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

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07/14/1999	1999007-03	<b>Pri:</b> ENG <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 3B <b>Sec:</b> <b>Ter:</b>	<b>Change FSAR - initiate cold leg recirculation</b>  A noncited violation of 10 CFR 50.59 in accordance with Appendix C of the Enforcement Policy was identified for failure to perform a formal safety evaluation. Specifically, a revision to the procedure for identifying voids in the emergency core cooling system piping directed operators to caution tag closed the emergency core cooling system crossover piping isolation valves; however, the Final Safety Analysis Report update, Section 6.3, required the valves to be opened when operators manually aligned the emergency core cooling system for the recirculation phase of accident mitigation. This violation is in the corrective action program as Nonconformance Report N0002095 and Action Request A0482378 (Section E3.1).
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/10/1999	1999010-02	<b>Pri:</b> ENG <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 4B <b>Sec:</b> 1C <b>Ter:</b>	<b>Failure to provide adequate emergency procedures for containment spray</b>  Prior to 1991, Emergency Operating Procedure E-1.3, "Transfer to Cold Leg Recirculation," was inadequate to ensure initiation of containment spray during cold leg recirculation in violation of Technical Specification 6.8.1.a. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the Enforcement Policy. Even though the licensee later demonstrated that core cooling could have been maintained and that containment spray was not needed, the inadequate procedure could have complicated recovery actions. This violation is documented in the licensee's corrective action program as Nonconformance Report N0002050
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/10/1999	1999010-03	<b>Pri:</b> ENG <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 4B <b>Sec:</b> 1C <b>Ter:</b>	<b>Failure to establish an approp. preventive maintenance program for safety-related expansion joints</b>  A noncited violation of Technical Specification 6.8.1.a, in accordance with Appendix C of the Enforcement Policy, was identified because the licensee failed to establish an appropriate frequency for preventive maintenance of safety-related expansion joints. This violation is in the licensee's corrective action program in Action Request A0472447 (Closed Unresolved Item 275; 323/98020-01) The inspectors concluded that vendor information provided to ensure acceptable installation and maintenance of elastomeric expansion joints was not properly implemented into the maintenance program. The licensee's failure to replace expansion joints in a timely manner led to failure of two joints and caused partial flooding of the intake structure and loss of a circulating water pump. These failures required operators to quickly reduce power to preclude a reactor trip. The operability assessment supporting the operability of the safety-related expansion joints failed to reference vendor recommendations on replacement frequency and seismic interactions. As a result, the licensee did not identify an inoperable elastomeric joint, until challenged by the inspector.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
05/29/1999	1999006	<b>Pri:</b> ENG <b>Sec:</b>	NRC	POS	<b>Pri:</b> 4A <b>Sec:</b> <b>Ter:</b>	<b>Good quality engineering package</b>  The design change package associated with the auxiliary saltwater vault drain system was an example of sound engineering and was designed to improve the reliability of the associated check valves. The licensee installed y-strainers and low-point drains to help remove foreign material from the drain system to minimize fouling of the check valve seating surfaces
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
05/29/1999	1999006-01	<b>Pri:</b> ENG <b>Sec:</b>	Licensee	NCV	<b>Pri:</b> 2B <b>Sec:</b> <b>Ter:</b>	<b>Failure to properly implement the inservice testing Program</b>  A noncited violation in accordance with Section VII.B.1 of the enforcement policy was identified for failure to implement Technical Specifications 4.0.5 and 3.7.3.1. Specifically, on July 15, 1997, the licensee used pump curves instead of the required reference values in development of acceptance criteria for inservice testing of the component cooling water pumps. The licensee subsequently submitted a relief request to correct this violation.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1						

# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
04/04/1999	1999004	<b>Pri:</b> ENG <b>Sec:</b>	NRC	POS	<b>Pri:</b> 4B <b>Sec:</b> <b>Ter:</b>	<b>Appropriateness of Technical Specification Interpretations</b>  Because of previous problems with the appropriateness of Technical Specification interpretations, the inspectors assessed a sample of five Technical Specification interpretations. The inspectors concluded that the licensee properly implemented NRC guidance for license amendment submittals and use of interim administrative controls when performing Technical Specification interpretations.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
03/06/1999	1999003-04	<b>Pri:</b> ENG <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 4B <b>Sec:</b> <b>Ter:</b>	<b>failure to submit license amend changes to 230kV</b>  On January, 14, 1998, a violation of 10 CFR 50.59 resulted because the licensee implemented a design change and failed to submit a license amendment for a change to the facility that involved an unreviewed safety question. However, the NRC is exercising enforcement discretion in accordance with Section VII.B.6 of the enforcement policy and is refraining from issuing a Notice of Violation. The licensee changed the configuration of the 230 kV offsite power source from dependence on Morro Bay for operability to dependence on load tap changing transformers and capacitor banks. Corrective actions for previous 10 CFR 50.59 violations sufficiently addressed this issue. The design change improved the reliability of the 230 kV system.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/20/1999	1999003	<b>Pri:</b> ENG <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 4B <b>Sec:</b> 5B <b>Ter:</b>	<b>Untimely Prompt Operability Assessment for containment recirculation sumps.</b>  The prompt operability assessment associated with fibrous material in five stops in containment in both units, while technically sound, was not timely given the potential safety significance of inoperable containment recirculation sumps. The operability question of the containment recirculation sumps was identified in October 1998. However, the prompt operability assessment was not completed until February 1999. The inspectors identified a deficiency in the operability process, specifically, the "issue needing validation to determine the impact on operability," portion. The licensee had missed two opportunities to perform a prompt operability assessment in December 1998 when forced outages had occurred in each unit.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/28/1999	1998020-04	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	VIO IV	<b>Pri:</b> 1C <b>Sec:</b> <b>Ter:</b>	<b>Failure to obtain transient combustible permit for compressed gas cylinders containing hydrogen</b>  The inspectors noted that the licensee had inappropriately stored compressed gas cylinders in the auxiliary building. Contrary to plant procedures personnel had not obtained a transient combustible permit, as required for storing flammable material, which resulted in a violation of Technical Specification 6.8.1.h. The licensee demonstrated that this instance involved low likelihood of a fire involving hydrogen gas. The licensee determined the cause of the violation, identified other examples, and took appropriate corrective actions; therefore, no response was required.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/22/1999	1999016	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 3B <b>Sec:</b> 3C <b>Ter:</b>	<b>External exposure control program met regulatory requirements</b>  The external exposure control program met regulatory requirements. Appropriate radiological controlled area access controls were maintained. Radiation, contamination, high, and locked high radiation areas were properly controlled and posted. The personnel dosimetry program was properly maintained. Personnel contamination events during the 2R9 refueling outage showed a 50 percent reduction from the number experienced during the previous 1R9 refueling outage. Radiation protection job coverage of work observed, including the removal of the steam generator nozzle dams, was appropriate and professionally conducted. The total dose for the nozzle dam installation and removal of 7.3 man-rems was 3.2 man-rems less than the estimated 10.5 man-rems for the total job.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
10/22/1999	1999016	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 3B <b>Sec:</b> 3C <b>Ter:</b>	<b>Effective internal exposure control program was implemented</b>  An effective internal exposure control program was implemented. The use and positioning of air sampling equipment within the Unit 2 radiological controlled areas were appropriate for monitoring radiological airborne conditions. Proper total effective dose equivalent/as low as is reasonably achievable evaluations for respirator use were performed. Whole body counting systems were calibrated and performance checked in accordance with station procedures. Internal dose assessments were performed in accordance with station procedures.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/22/1999	1999016	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 3B <b>Sec:</b> 3C <b>Ter:</b>	<b>Challenging outage dose goal of 120-person-rems established</b>  The 2R9 refueling outage dose goal of 120 person-rems was challenging and the lowest outage dose goal ever established in the operating history of the station. The collective outage dose status were tracked and trended daily for each radiation work permit and station organization. As of October 20, 1999, the 2R9 refueling outage collective dose was under the projected outage dose goal by approximately 2 person-rems. Effective chemistry reactor shutdown plans and controls were implemented significantly reducing the outage source term and personnel exposure. Temporary shielding installed during the outage reduced personnel exposure approximately 30 - 50 person-rems. The hot spot reduction program was properly monitored
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/22/1999	1999016	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 5A <b>Sec:</b> <b>Ter:</b>	<b>Effective nuclear assessment program was implemented</b>  An effective nuclear quality assessment program was implemented. The nuclear quality assessments provided management with a good overall evaluation of the station's performance during the 2R9 refueling outage and specifically the observed improvement in radiation worker practices and implementation of the ALARA program
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
10/03/1999	1999014-07	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 1C <b>Sec:</b> <b>Ter:</b>	<b>Two examples of high rad area entry violations</b>  A violation of Technical Specification 6.12.1.b with two examples was identified for failures to meet the requirements for high radiation area entries. In the first example, an experienced engineer entered a high radiation area without obtaining the required radiation protection briefing of the area dose rates because of unfamiliarity with the high radiation area controls. In the second example, two contractors entered a high radiation area without being familiar with the area dose rates. These individuals incorrectly believed that a high radiation area radiation work permit authorized entry into any high radiation area. Similar violations of high radiation controls had occurred during Refueling Outage 1R9; however, licensee response to these issues was appropriate to the circumstances. This Severity Level IV violation is being treated as a noncited violation in accordance with Appendix C of the Enforcement Policy. These items are in the licensee's corrective action system as Action Requests A0492245 and A0492922
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/24/1999	1999015	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Higher than average collective dose</b>  Because of unexpectedly high source term during the Unit 1 outage, the licensee exceeded its outage goal. The licensee projected that this, combined with the fact that the licensee will conduct two refueling outages in 1999, will probably cause the licensee's 1999 3-year, person-rem average to exceed the national average for pressurized water reactors.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
09/24/1999	1999015	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Good Outage Preparation</b>  The licensee prepared well for Refueling Outage 2R9. A comprehensive shutdown chemistry plan to reduce potential radiological hazards was developed. Measures to address a self-identified trend involving poor radiation worker practices during the previous outage (1R9) were implemented. Radiation work packages generally provided radiation workers with sufficient information on radiological working conditions and on means to maintain radiation doses ALARA. The radiation protection staff was supplemented satisfactorily with qualified personnel, even though the number of temporary, additional personnel hired was less than planned.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/24/1999	1999015-01	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Failure to control high radiation areas correctly</b>  A violation of Technical Specification 6.12 was identified by the licensee because workers entered high radiation areas incorrectly on two occasions during Refueling Outage 1R9. One worker entered a high radiation area without an alarming, electronic dosimeter; another entered without knowing the radiological conditions. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. The examples of the violation are in the licensee's corrective action program as Action Requests A0478984 and A0480044.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
09/24/1999	1999015-02	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Failure to use correctly-sized respirators</b>  A violation of 10 CFR 20.1703(a)(3)(iv) and Procedure RP1.ID3, Section 4.2.1.d. was identified by the licensee because two workers wore respirators that were differently-sized than the those worn during fit testing. The violation was similar to examples identified previously by the NRC and Nuclear Quality Services. previously This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. The examples of the violation are in the licensee's corrective action program as Action Requests A0491442 and A0491443.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
08/06/1999	1999012	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 1C <b>Sec:</b> 5C <b>Ter:</b>	<b>County emergency sirens inoperable</b>  Because of inadequate communications among offsite licensee personnel, the county emergency sirens were inoperable for an excessive period of time. The computer that initiates the emergency warning system failed but was not restored to operable status immediately. The alarm signifying that the computer failed annunciated in the emergency operations facility but was not fully communicated to repair personnel for 1½ hours. The licensee appropriately investigated and dispositioned this issue.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
08/06/1999	1999013	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	STR	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>good implementation of solid radioactive waste management program</b>  The licensee implemented a good solid radioactive waste management program. Radioactive material was correctly stored and controlled. Radioactive waste was correctly sampled, classified, and stabilized for burial. Waste manifests were prepared in accordance with regulatory requirements
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
08/06/1999	1999013	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	STR	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>good program for packaging and shipping radioactive waste</b>  The licensee maintained a good program for packaging and shipping radioactive materials and radioactive waste. Shipments were correctly categorized, packaged, and surveyed. Associated hazards were correctly communicated through shipping documentation, driver briefings, package marking, labeling, and vehicle placarding
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
08/06/1999	IR 99013	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 5A <b>Sec:</b> <b>Ter:</b>	<b>good oversight of solid rad waste mgm and rad matl transportation programs</b>  There was good oversight of the solid radioactive waste management and radioactive material transportation programs. Nuclear Quality Services conducted thorough audits and frequent assessments using auditors with practical experience.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/14/1999	1999011	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 5A <b>Sec:</b> <b>Ter:</b>	<b>QA conducted good reviews of radiation protection</b>  Nuclear Quality Services conducted good reviews of radiation protection activities in 1998 and during the 1999 Unit 1 refueling outage. The 1998 audit scope was broad enough to provide an overview view of program performance. Audit team members were correctly qualified. The audit findings indicated that the reviews were of sufficient depth to identify potential problems. The licensee identified a decline in radiation worker practices during Refueling Outage 1R9.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/14/1999	1999011	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	STR	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Rad control effective during routine operatios</b>  Radiological controls were effective during routine operations. The licensee posted and controlled radiation areas and high radiation areas according to regulatory requirements. The licensee's revised radiation work permit format was easy to read and understand. Lessons-learned were satisfactorily identified through post-job reviews and perpetuated through radiation protection scripts or work plans. Radioactive material controls worked effectively during routine operations. Contaminated tools and equipment were maintained in designated storage areas. Radiation protection performance in support of a high activity resin transferral was good. Planning, worker instruction, area controls, and resource assignment were commensurate with the hazard involved with the work activity.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/14/1999	1999011-01	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 5C <b>Sec:</b> <b>Ter:</b>	<b>Workers wearing incorrect sized respirators</b>  The licensee identified that some radiation workers wore incorrectly sized respirators. This was a violation of 10 CFR 20.1703(a)(3)(iv) and Procedure RP1.ID3. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. The examples of the violation are in the licensee's corrective action program as Action Requests A0466871 and A0477470. The licensee also identified that several steps in the site corrective action program did not perform as expected.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/10/1999	1999010-04	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NCV	<b>Pri:</b> 4A <b>Sec:</b> 1C <b>Ter:</b>	<b>Failure to maintain TS 6.8.4.g program limits for vent noble gas monitors</b>  Because of improper calibration, the control room indication for the plant vent noble gas radiation monitors was nonconservative from 1993 to 1998 in violation of Technical Specification 6.8.4.g program limits for noble gas release rates. This licensee-identified Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the Enforcement Policy. Actual counts from the associated detectors, which would be used to calculate release information during a declared emergency, were correct. This violation is in the licensee's corrective action program in Nonconformance Report N0002063
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/02/1999	1999008	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 5A <b>Sec:</b> <b>Ter:</b>	<b>Performance and implementation of rad eneiron. and meteorological monitoring programs</b>  A comprehensive, performance-based biennial audit, performed by qualified and experienced auditors, effectively evaluated the performance and implementation of the radiological environmental monitoring and meteorological monitoring programs. A thorough assessment was performed of the licensee's corporate Technical and Ecological Services Laboratory's performance. Action requests identified issues at the proper threshold to provide management with an overview of the radiological environmental and meteorological monitoring programs.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
07/02/1999	1999008	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	STR	<b>Pri:</b> 3B <b>Sec:</b> 3C <b>Ter:</b>	<b>Radiological environmental monitoring program</b>  Overall, the radiological environmental monitoring program was effectively implemented in accordance with the Technical Specifications and station procedures. Sample collection, shipment, and analyses records were meticulously maintained. All required environmental sampling and analyses were properly performed. Appropriate changes were made to the environmental sample locations described in the environmental radiological monitoring procedure as a result of the annual land use census. The operation of the station resulted in no measured radiological impact on the environment.  Sufficient supplies and spare environmental sampling equipment were available and properly maintained. Environmental media sampling stations were properly maintained with operable and calibrated equipment. The corporate Technical and Ecological Services Laboratory radiochemistry analytical instruments were calibrated and properly maintained.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
07/02/1999	1999008	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	STR	<b>Pri:</b> 3B <b>Sec:</b> 3C <b>Ter:</b>	<b>Meteorological monitoring program</b>  An effective meteorological monitoring program was implemented. The performance of the meteorological monitoring program agreed with the guidance contained in Regulatory Guide 1.23 and the commitments in the Updated Final Safety Analysis Report and met the requirements in the Technical Specifications. The meteorological towers and monitoring instruments were operational, inspected, maintained, and calibrated. Data recovery for 1998 and first quarter of 1999 was greater than 99 percent, indicating an excellent meteorological program.  Changes to the radiological environmental monitoring program procedures did not result in a decrease of the effectiveness of the program. Descriptive radiological environmental monitoring program implementing procedures were maintained.  The knowledge and performance of the environmental program's management and technical staff were excellent. Trained, experienced, and qualified senior engineering environmental technicians effectively conducted the radiological environmental monitoring program.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
05/20/1999	1999009	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	NEG	<b>Pri:</b> 2A <b>Sec:</b> 4A <b>Ter:</b>	<b>Vulnerabilities in detection zones</b>  During tests, one detection zone was defeated, and vulnerabilities in several other zones were identified.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
05/20/1999	1999009	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2B <b>Sec:</b> <b>Ter:</b>	<b>Good security test and maintenance program</b>  An good test and maintenance program was implemented that ensured security systems were maintained at maximum effectiveness.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						



# United States Nuclear Regulatory Commission

## PLANT ISSUE MATRIX

By Primary Functional Area

Region IV  
DIABLO CANYON

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
05/20/1999	1999009	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 3B <b>Sec:</b> <b>Ter:</b>	<b>Alarm Station Manning</b> The alarm stations were redundant, well protected, and the operators were alert, well trained, and efficient.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
05/20/1999	1999009-01	<b>Pri:</b> PLTSUP <b>Sec:</b>	Licensee	NCV	<b>Pri:</b> 3A <b>Sec:</b> <b>Ter:</b>	<b>Failure to terminate access within 24 Hr.</b> A violation of Paragraph 5.10 of Security Procedure OM11.ID1, Revision 8, DCPD Site Access Process, was identified for failure to terminate protected and vital area access of terminated employees. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. Specific incidents are in the licensee's corrective action program as Action Requests A0481313, A0481000, A0479894, A0479888, A04479869, and A0476097.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
04/17/1999	1999004	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 2A <b>Sec:</b> <b>Ter:</b>	<b>Excellent level of housekeeping during 1R9</b> A high level of attention to plant housekeeping in Unit 1, following Refueling Outage 1R9, resulted in an excellent level of housekeeping being maintained throughout safety-related areas in both units.
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						
02/27/1999	1999004	<b>Pri:</b> PLTSUP <b>Sec:</b>	NRC	POS	<b>Pri:</b> 5B <b>Sec:</b> <b>Ter:</b>	<b>Thorough licensee investigation into hot particle exposure</b> Licensee investigation of the circumstances that led to an individual receiving a hot particle exposure was thorough and appropriate to the circumstances. The licensee determined that personnel had input an incorrect geometry configuration into the multichannel analyzer. This resulted in the estimated dose (160 rem) exceeding regulatory limits. However, the estimated dose significantly improved (14 rem) using the correct geometry. The individual's exposure to the skin did not exceed regulatory limits and no violations of NRC requirements were identified .
<b>Dockets Discussed:</b> 05000275 Diablo Canyon 1 05000323 Diablo Canyon 2						

United States Nuclear Regulatory Commission  
PLANT ISSUE MATRIX  
By Primary Functional Area

Legend

Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LIC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCV	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
OTHR	Other
P21	Part 21
POS	Positive
SGI	Safeguard Event Report
STR	Strength
URI	Unresolved item
VIO	Violation
WK	Weakness

Template Codes:

1A	Normal Operations
1B	Operations During Transients
1C	Programs and Processes
2A	Equipment Condition
2B	Programs and Processes
3A	Work Performance
3B	KSA
3C	Work Environment
4A	Design
4B	Engineering Support
4C	Programs and Processes
5A	Identification
5B	Analysis
5C	Resolution

ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

Functional Areas:

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

**DIABLO CANYON**  
**Inspection / Activity Plan**  
**04/02/2000 - 03/31/2001**

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start End	Inspection Type
	<b>PBE#20 - DRILL EVALUATION</b>		<b>2</b>			
1, 2	IP 7111406	Drill Evaluation		2	04/02/2000 07/01/2000	Baseline Inspections
	<b>PBE#19 - TEMPORARY PLANT MODIFICATIONS</b>		<b>2</b>			
1, 2	IP 7111123	Temporary Plant Modifications		2	04/02/2000 03/30/2001	Baseline Inspections
	<b>EMB - FIRE PROTECTION</b>		<b>6</b>			
1, 2	IP 7111105Q	Fire Protection		3	04/03/2000 04/07/2000	Baseline Inspections
	<b>OB-EXAMS - RO/SRO EXAMS</b>		<b>3</b>			
1	X02028	DC1/INITIAL EXAMS		2	04/10/2000 04/21/2000	Not Applicable
2	X02029	DC2/INITIAL EXAMS		2	04/10/2000 04/21/2000	Not Applicable
	<b>PBE#23 - EQUIPMENT ALIGNMENT</b>		<b>2</b>			
1, 2	IP 7111104	Equipment Alignment		2	05/07/2000 06/24/2000	Baseline Inspections
	<b>PSB-EP1 - DRILL/EXERCISE PERFORMANCE</b>		<b>2</b>			
1, 2	IP 7111401	Exercise Evaluation		2	05/08/2000 05/12/2000	Baseline Inspections
	<b>PBE-TI - TI-144, PI DATA REVIEW</b>		<b>1</b>			
1, 2	IP 2515/144	Performance Indicator Data Collecting and Reporting Process Review		1	05/14/2000 08/05/2000	Safety Issues
	<b>EMB - SAFETY SYSTEM DESIGN &amp; PERF CAPABILITY</b>		<b>6</b>			
1, 2	IP 7111121	Safety System Design and Performance Capability		4	07/24/2000 07/28/2000	Baseline Inspections
1, 2	IP 7111121	Safety System Design and Performance Capability		4	08/07/2000 08/11/2000	Baseline Inspections
	<b>PSB-RP1 - RAD MATERIAL PROCESSING/SHIPPING</b>		<b>1</b>			
1, 2	IP 7112202	Radioactive Material Processing and Transportation		1	08/21/2000 08/25/2000	Baseline Inspections
	<b>PBE#10 - ADVERSE WEATHER - HIGH OCEAN SWELLS</b>		<b>2</b>			
1, 2	IP 7111101	Adverse Weather Protection		2	09/24/2000 11/04/2000	Baseline Inspections
	<b>PBE#26 - DRILL EVALUATION</b>		<b>2</b>			
1, 2	IP 7111406	Drill Evaluation		2	10/01/2000 12/30/2000	Baseline Inspections
	<b>EMB - ISI</b>		<b>1</b>			
1, 2	IP 7111108	Inservice Inspection Activities		1	10/23/2000 10/27/2000	Baseline Inspections
	<b>PBE#24 - EQUIPMENT ALIGNMENT</b>		<b>2</b>			
1, 2	IP 7111104	Equipment Alignment		2	11/05/2000 12/23/2000	Baseline Inspections
	<b>PSB-RP7 - ENVIRONMENTAL MONITORING</b>		<b>1</b>			
1, 2	IP 7112203	Radiological Environmental Monitoring Program		1	11/13/2000 11/17/2000	Baseline Inspections
	<b>PSB-S1 - ACCESS AUTH/CONTROL, SEC PLAN, AND PIV</b>		<b>1</b>			
1, 2	IP 7113001	Access Authorization Program (Behavior Observation Only)		1	12/04/2000 12/08/2000	Baseline Inspections
1, 2	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification an		1	12/04/2000 12/08/2000	Baseline Inspections
1, 2	IP 7113004	Security Plan Changes		1	12/04/2000 12/08/2000	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		1	12/04/2000 12/08/2000	Baseline Inspections

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

**DIABLO CANYON**  
**Inspection / Activity Plan**  
**04/02/2000 - 03/31/2001**

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start End	Inspection Type
	<b>PSB-RP2</b>	<b>- ACCESS TO RAD SIGN AREAS AND PIV</b>	<b>1</b>			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		1	01/08/2001 01/12/2001	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		1	01/08/2001 01/12/2001	Baseline Inspections
	<b>PSB-RP3</b>	<b>- ALARA PLANNING/CONTROL 1</b>	<b>1</b>			
1, 2	IP 7112102	ALARA Planning and Controls		1	01/08/2001 01/12/2001	Baseline Inspections
	<b>EMB</b>	<b>- 50.59, HEAT SINK PERF, MAINT RULE IMPLEM</b>	<b>3</b>			
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		3	01/22/2001 01/26/2001	Baseline Inspections
1, 2	IP 7111107B	Heat Sink Performance		3	01/22/2001 01/26/2001	Baseline Inspections
1, 2	IP 7111112B	Maintenance Rule Implementation		3	01/22/2001 01/26/2001	Baseline Inspections
	<b>OB-PIR</b>	<b>- PIR-INSPECT</b>	<b>5</b>			
1, 2	IP 71152	Identification and Resolution of Problems		2	01/29/2001 02/03/2001	Baseline Inspections
	<b>PSB-EP2</b>	<b>- A&amp;N, ERO, EAL/EP, PIV, AND PI&amp;R</b>	<b>2</b>			
1, 2	IP 7111402	Alert and Notification System Testing		2	02/05/2001 02/09/2001	Baseline Inspections
1, 2	IP 7111403	Emergency Response Organization Augmentation Testing		2	02/05/2001 02/09/2001	Baseline Inspections
1, 2	IP 7111404	Emergency Action Level and Emergency Plan Changes		2	02/05/2001 02/09/2001	Baseline Inspections
1, 2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		2	02/05/2001 02/09/2001	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		2	02/05/2001 02/09/2001	Baseline Inspections
	<b>PSB-RP5</b>	<b>- RAD MONITORING INSTR</b>	<b>1</b>			
1, 2	IP 7112103	Radiation Monitoring Instrumentation		1	02/12/2001 02/16/2001	Baseline Inspections
	<b>PSB-RP6</b>	<b>- EFFLUENTS</b>	<b>1</b>			
1, 2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		1	02/12/2001 02/16/2001	Baseline Inspections