Diablo Canyon 2
3Q/2012 Plant Inspection Findings

Initiating Events

Significance: G Jun 22, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Procedure for the Control of Tools for Use on Stainless Steel
Inspectors identified a non-cited violation of Technical Specification 5.4.1.e, for the failure to follow procedures that ensured hand files and wire brushes designated for stainless steel weld preparation were stored and maintained separately from hand files and wire brushes used on carbon steel. Specifically, the inspectors determined that the licensee was not segregating tools as required by Procedure MA1.ID12, "Control of Tools for Use on Stainless Steel," Revision 1, because inspectors observed rust deposits on stainless steel components in the plant. This indicated that carbon steel contaminated tools may have been used on these systems. The licensee took corrective actions to segregate the stainless steel tools that were mixed with tools used on carbon steel. The licensee established segregated locations in tool rooms for the separation of abrasive tools, trained tool room attendants to properly store and mark abrasive tools designated for use on stainless steel and evaluated the systems with indications of rust deposits. This issue was entered into the licensee's corrective action program as Notifications 50475217 and 50475779.
Failure to assure that hand files and wire brushes designated for exclusive use on stainless steel were stored separately from tools used on other materials was a performance deficiency. This finding is more than minor because it is associated with the equipment performance attribute of the Initiating Events Cornerstone and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and, if left uncorrected, could become a more significant safety concern. Using Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," this finding was determined to be of very low safety significance because the issue would not result in exceeding the technical specification limit for identified reactor coolant system leakage or affect other mitigating systems resulting in a total loss of their safety function. This finding has a cross-cutting aspect in the area of human performance, work practices, in that the licensee failed to ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported.
Inspection Report# : 2012003 *(pdf)*

Significance: G Jun 22, 2012
Identified By: NRC
Item Type: FIN Finding
Feedwater System Weld Flaw
The inspectors identified a finding for failure to follow applicable ASME Code requirements prior to returning the feedwater system to service after code repairs for flow accelerated corrosion. The licensee failed to recognize a rejectable indication in feedwater piping weld 2K16-550-30 FW 33 observable in the original acceptance radiography film. The licensee entered the issue into their corrective action program as Notifications 50473769 and 50475897 and re-examined the radiographic films for welds performed during Refueling Outage 2R16. A random re-examination of other radiographic films will be completed at a later date.

This finding was more than minor because it is associated with the human performance attribute of the Initiating Events Cornerstone and directly affected the cornerstone objective of limiting events that challenge plant stability. Based on the results of the engineering evaluation that was performed when the flaw was recognized, the inspectors

determined that the structural integrity of the feedwater piping was not affected. Based on the results of a significance determination process Phase 1 evaluation, the finding was determined to be of very low safety significance (Green) because it did not contribute to the likelihood of a loss of coolant accident, did not contribute to a loss of mitigation equipment, and did not increase the likelihood of a fire or an internal/external flood. This finding has a cross-cutting aspect in the area of human performance, work practices, in that the licensee failed to ensure human error prevention techniques, such as self- and peer-checking were used so that work activities are performed safely.
Inspection Report# : 2012003 *(pdf)*

Mitigating Systems

Significance: G Jun 22, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Preferrd Offsite Power System Design Control
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” after plant engineers failed to adequately translate regulatory requirements and the design bases into the offsite power interface calculation on May 6, 2011. As a result, the licensee failed to demonstrate that the 230 kilo-Volt preferred offsite power source had adequate capacity and capability to supply the minimum required terminal voltage to plant engineering safety features following a limiting transmission system contingency. The licensee took corrective actions to limit the plant load that would automatically transfer to the preferred power source following a unit trip and entered the condition into the corrective action program as Notification 50492766.
The failure to ensure that the 230 kV power system had adequate capability and capability as defined in the current licensing basis requirements was a performance deficiency. This performance deficiency was more than minor because it was associated with the modification design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors concluded thisfinding was of very low safety significance because the duration of potential losses of a single offsite power source safety function was less than the technical specification allowed outage time, did not represent an actual loss of safety function of risk significant non-technical specification equipment, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. This finding has a cross-cutting aspect in the area of human performance, associated with the decision making component, because the licensee did not demonstrate that the proposed action was safe in order to proceed while assessing the CLB requirement during decision making.
Inspection Report# : 2012003 *(pdf)*

Significance: G Jun 22, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform a 50.59 Evaluation
The inspectors identified a non-cited violation of 10 CFR 50.59, “Changes, Tests, and Experiments,” because the licensee failed to document an evaluation providing a basis that changes made to the facility and associated changes to Procedure OP J-2:VIII, “Guidelines for Reliable Transmission Service for DCPP,” did not require prior NRC approval. When a 50.59 review was performed, the licensee incorrectly concluded that only a screening was needed. Plant operators use Procedure OP J-2:VIII to determine the operability of the preferred offsite power system for various transmission system configurations. This change accepted a reduction in the preferred offsite power capacity and capability, below the minimum specified by the current licensing basis, due to local service area load growth. This condition would have likely required prior NRC approval had a 50.59 evaluation been performed. The licensee

entered this finding into the corrective action program as Notification 50492767.
The failure to perform a 50.59 evaluation was also a performance deficiency. The inspectors concluded that this issue involved traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. This performance deficiency is more than minor because it was associated with modification design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors concluded this finding was of very low safety significance because the duration of potential losses of a single offsite power source safety function was less than the technical specification allowed outage time, did not represent an actual loss of safety function of risk significant non-technical specification equipment, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. This finding has a cross-cutting aspect in the area of human performance, associated with the decision making component, because the licensee did not use conservative assumptions to adopt the licensing basis requirement during decision making.
Inspection Report# : 2012003 *(pdf)*

Significance: G Mar 23, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate OperabilityDetermination
The inspectors identified a non-cited violation of 10 CFR, Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," after operations personnel declared diesel generator 2-3 operable after failing to meet all surveillance test acceptance criterion. On December 22, 2011, diesel generator 2-3 did not meet frequency acceptance criteria during technical specification surveillance testing. Plant operators declared the diesel operable after applying an engineering evaluation. The inspectors identified that the evaluation was not appropriate to the conditions of the failed test. The licensee's corrective actions included corrective maintenance, re-performance of the surveillance test, and entering the condition into the corrective action program as Notifications 50449027 and 50449504.

The failure of operations personnel to recognize that diesel generator surveillance results indicated that the system was not fully operable was a performance deficiency. This finding was more than minor because the licensee's engineering evaluation created a reasonable doubt that the system was operable, similar to Example 3.k in Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues." The inspectors concluded that the finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not result in the loss of operability or functionality of a single train for greater than the technical specification outage time, did not represent an actual loss of safety function, and was not potentially risk significant due to a seismic, flooding, or severe weather event. The most significant contributor to this performance deficiency was that operators did not review and understand the diesel generator surveillance results sufficiently to recognize that the condition did not match the previously-evaluated condition that was used to conclude the diesel generator remained operable. Therefore, this finding had a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program component [P.1(c)].
Inspection Report# : 2012002 *(pdf)*

Significance: G Dec 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Operability Determination for New Seismic Information
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criteria V, "Instructions, Procedures, and Drawings," after Pacific Gas and Electric failed to evaluate the affect of new seismic information on the operability of plant structures, systems and components. On January 7, 2011, the licensee completed and submitted to the NRC a report to the detailing the results of a deterministic reevaluation of the local seismology. This report concluded that an earthquake on three local faults could produce greater vibratory ground motion than bound by the

safe shutdown earthquake as described in the Final Safety Evaluation Report Update. Quality Procedure OM7.ID12, "Operability Determinations," required plant operators to assess the impact of nonconforming conditions for the affect on plant structures, systems and components without delay. On June 22, 2011, the licensee entered the condition into the corrective action program as Notification 50410266 and completed an operability determination on June 24, 2011.

The inspectors determined that the licensee's failure to evaluate the new seismic information against the plant design and licensing bases was a performance deficiency. The finding was more than minor because the performance deficiency was associated with the Mitigating Systems Cornerstone initial design control attribute and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The senior reactor analyst evaluated the significance of the finding using a Phase 3 analysis because the inspectors were unable to confirm that the operability of plant systems was not impacted. The senior reactor analyst concluded that the finding was of very low risk significance (Green) because no significant change in overall core damage frequency resulted from the new seismic hazards. This finding had a crosscutting aspect in the area of human performance associated with the decision-making component because the licensee used non-conservative assumptions in deciding not to evaluate the new seismic information against the current plant design and licensing bases (H.1.b).

Inspection Report# : 2011005 *(pdf)*

Barrier Integrity

Significance: G Mar 23, 2012
Identified By: NRC
Item Type: VIO Violation
Incomplete and Inaccurate Information Provided to the NRC in Response to Generic Letter 2003-01, "Control Room Habitability"
The inspectors identified a Green finding and Severity Level III violation of 10 CFR 50.9, "Completeness and Accuracy of Information," after Pacific Gas and Electric failed to submitted complete and accurate information in response to Generic Letter 2003-01, "Control Room Habitability." Generic Letter 2003-01 requested that the licensee submit information demonstrating that the control room habitability system was in compliance with the current licensing and design bases. The licensee was specifically requested to verify that the most limiting unfiltered in-leakage into the control room envelope was no more than the value assumed in the design basis radiological analyses for control room habitability. On April 22, 2005, the licensee reported to the NRC that testing performed in the most limiting configuration for operator dose demonstrated that there was no unfiltered in-leakage into the control room envelope. This was material because the NRC used this information to close out Generic Letter 2003-01. In September 2011, the inspectors identified that the control room test results were greater than the value assumed in the design basis radiological analysis and that the licensee's testing was not performed in the most limiting configuration for operator dose. Using the actual control room in-leakage rates, the inspectors concluded that the resultant operator dose could have exceeded the limit established by current licensing and design bases during an accident.

The inspectors concluded that the failure of Pacific Gas and Electric to provide complete and accurate information in response to Generic Letter 2003-01 was a performance deficiency. The finding was more than minor because the information was material to the NRC's decision making processes. The inspectors screened the issue through the Reactor Oversight Process because the finding included a performance deficiency that was reasonably within the licensee's ability to control. The inspectors concluded that the finding was of very low safety significance (Green) because only the radiological barrier function of the control room was affected. The inspectors also screened the issue through the traditional enforcement process because the violation impacted the regulatory process. The inspectors

concluded that the violation was a Severity Level III because had the licensee provided complete and accurate information in their letter dated April 22, 2005, the NRC would have likely reconsidered a regulatory position or undertaken a substantial further inquiry. The inspectors did not identify a cross-cutting aspect because the performance deficiency was not reflective of present performance.
Inspection Report# : 2012002 *(pdf)*

Significance: G Dec 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Less than Adequate Evaluation of a Nonconforming Control Room Habitability Train
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criteria V, "Instructions, Procedures, and Drawings," after operations personnel failed to adequately evaluate the operability and extent of condition of a nonconforming control room habitability train. Beginning on August 30, 2011, the inspectors identified several nonconforming conditions associated with the habitability system, including disconnected ductwork, two 12 inch diameter openings in the envelope boundary, and less than adequate control room envelope pressurization and tracer gas surveillance tests. On November 7, 2011, the licensee re-performed the tracer gas test and observed gross unfiltered in-leakage into the control room envelope. Plant operators declared the habitability system inoperable. The licensee restored system operability after implementing a series of compensatory measures. The licensee entered the finding into the corrective action program as Notification 50425114 and plans to restore the system to the current licensing basis condition.

The inspectors concluded that the failure of plant operators to adequately evaluate the operability and extent of a nonconforming condition was a performance deficiency. This finding was more than minor because the licensee's operability evaluation created a reasonable doubt that the system was capable of performing the specified safety function, similar to Example 3.k in Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues." The inspectors concluded that the finding was of very low safety significance because only the radiological barrier function of the control room was affected. This finding had a crosscutting aspect in the area of problem identification and resolution, associated with the corrective action program component, because the licensee did not thoroughly evaluate the degraded control room ventilation train for operability and extent of condition [P.1(c)].

Inspection Report# : 2011005 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 24, 2012
Identified By: NRC
Item Type: FIN Finding
Problem Identification and Resolution
The inspection team concluded that the implementation of the corrective action program and overall performance related to identifying, evaluating, and resolving problems at Diablo Canyon was generally effective. Licensee identified problems were entered into the corrective action program at an appropriately low threshold. Problems were effectively prioritized and evaluated commensurate with the safety significance of the problems. Corrective actions were effectively implemented in a timely manner commensurate with their importance to safety and addressed the identified causes of problems. Lessons learned from industry operating experience were effectively reviewed and applied when appropriate. Audits and self-assessments were effectively used to identify problems and appropriate actions. Finally, Diablo Canyon effectively established and maintained a Safety Conscious Work Environment.
Inspection Report# : 2012007 *(pdf)*

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