



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4005**

February 3, 2006

Mr. John S. Keenan
Senior Vice President – Generation and Chief Nuclear Officer
Pacific Gas and Electric Company
PO Box 770000
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San Francisco, California 94177-0001

SUBJECT: NRC INSPECTION REPORT 050-00133/06-001

Dear Mr. Keenan:

An NRC inspection was conducted on January 9-12, 2006, at your Humboldt Bay Power Plant Unit 3 facility. This inspection was an examination of activities conducted under your license as they relate to safety and compliance of the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection included reviews of your organization, management, cost controls, safety reviews, spent fuel pool safety, maintenance, and decommissioning status. On January 12, 2006, at the conclusion of the site visit, an exit briefing was conducted with Mr. Roy Willis, Plant Manager, and other members of your staff. The enclosed report presents the scope and results of that inspection.

Based on the results of this inspection, the NRC has determined that four violations of NRC requirements occurred. One violation involved failure to notify the State of California and the NRC within 1 hour of the declaration of an Emergency Class (Unusual Event) following a June 14, 2005 tsunami warning. The State was notified a day later and the NRC about an hour and fifteen minutes after the declaration. Two violations involved failure to properly implement procedures related to the maintenance of a fire pump and the fourth violation involved failure to properly implement procedures related to clearance and jumper controls on the spent fuel pool bridge. These violations are being treated as a Non-Cited Violations (NCV) consistent with Section VI.A. of the Enforcement Policy. These violations are not being cited, in part, because your staff identified the violations and has entered the deficiencies into the corrective action system. The NCVs and the circumstances surrounding the violations are described in the subject inspection report. If you contest the violation or severity level of the NCV, you should provide a response within 30 days of the date of this inspection report with the basis for your denial to the U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, along with copies to the Regional Administrator, U. S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas, 76011; and the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/Adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Should you have any questions concerning this inspection, please contact the undersigned at (817) 860-8191 or Emilio M. Garcia at (530) 756-3910.

Sincerely,

/RA/

D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle and Decommissioning Branch

Docket No.: 050-00133
License No.: DPR-7

Enclosure:
NRC Inspection Report
050-00133/06-001

Pacific Gas and Electric Company

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Pacific Gas and Electric Company

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 050-00133

License No.: DPR-7

Report No.: 050-00133/06-001

Licensee: Pacific Gas and Electric Company (PG&E)

Facility: Humboldt Bay Power Plant (HBPP), Unit 3

Location: 1000 King Salmon Avenue
Eureka, California 95503

Dates: January 9-12, 2006

Inspectors: Emilio M. Garcia, Health Physicist,
Beth A. Schlapper, Health Physicist

Approved By: D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle and Decommissioning Branch

Attachments: 1) Supplemental Inspection Information
2) Partial List of Documents Reviewed

ADAMS Entry: IR 05000133-06-01, on 01/09-12/06; Pacific Gas & Electric Co.;
Humboldt Bay, Unit 3. No violations.

EXECUTIVE SUMMARY

Humboldt Bay Power Plant, Unit 3
NRC Inspection Report 050-00133/06-001

The Humboldt Bay Power Plant (HBPP), Unit 3 was shutdown in 1976. The facility has been in a SAFSTOR status since shutdown with minimal decommissioning activity.

Organization, Management and Cost Controls

- Pacific Gas and Electric Company (PG&E) announced the appointment of a new Chief Nuclear Officer. The licensee was revising their organization to support transition from SAFSTOR to active decommissioning. The new organization would be fully implemented by the end of the first calendar quarter 2006 (Section 1.1).
- The 2005 annual PG&E decommissioning funding report, when considered with a subsequent correction submitted included all the required information. PG&E projected that the HBPP trust, with the noted additional contributions, will be sufficient to ensure successful decommissioning and maintaining the spent fuel in an Independent Spent Fuel Storage Installation (Section 1.2).
- Changes to the Emergency Plan and associated procedures did not decrease the effectiveness of the emergency plan, and the Emergency Plan continued to meet requirements (Section 1.3).
- A non-cited violation of NRC requirements was identified involving failure to notify the State of California and the NRC within 1 hour of the declaration of the Emergency Class (Unusual Event) (Section 1.4).

Safety Reviews, Design Changes, and Modification

- The licensee's safety review program was determined to effectively meet the requirements of 10 CFR 50.59 (Section 2.0).
- The Plant Staff Review Committee (PSRC) meetings had been conducted in accordance with licensee requirements (Section 2.0).

Self-Assessment, Auditing, and Corrective Action

- The 2nd Period 2005 Quality Performance Assessment Report rated the site performance as "Yellow" meaning that it did not meet expectations in some aspects and the effectiveness of management actions to correct performance had not been fully developed. The site organization acknowledge the problem and provided a response with a plan of actions to correct their quality performance (Sections 3.1).
- Audits had been conducted for the required subject areas and required frequencies. The auditors were certified in accordance with licensee requirements and were independent of the areas audited (Sections 3.1).

- The corrective action program met regulatory requirements (Sections 3.2).

Spent Fuel Pool Safety

- The licensee had maintained the spent fuel pool water level and water quality in accordance with applicable technical specifications (Sections 4.1- 4.2).

Maintenance and Surveillance

- Three Non-cited violations of NRC requirements were identified. Two of the violations involved failure to properly implement procedures related to the maintenance of a fire pump. The third violation involved failure to implement procedures related to clearance and jumper controls on the spent fuel pool bridge. These violations of low safety significance meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as Non-cited Violations (Section 5.0).

Decommissioning Performance and Status Review

- Radiological conditions of the facility were properly posted. Housekeeping and facility conditions were effectively controlled (Sections 6.0).

Report Details

Summary of Plant Status

Humboldt Bay Power Plant, Unit 3, is currently in decommissioning SAFSTOR status. Unit 3 received an operating license from the Atomic Energy Commission on August 28, 1962. On July 2, 1976, Unit 3 was shutdown for annual refueling and seismic modifications. This work was suspended in December 1980 and in June 1983, PG&E announced its intention to decommission the unit. Unit 3 has been essentially in SAFSTOR since July 1985. On July 19, 1988, NRC approved the licensee's SAFSTOR plan and amended the license to a possess-but-not-operate status. The license will expire on November 9, 2015. The facility has undergone minimal decommissioning activity since shutdown.

1.0 Organization, Management and Cost Controls (IP 36801)

1.1 Site Organization Qualifications

a. Inspection Scope

Changes and proposed changes to the site organization were reviewed to determine whether they were consistent with applicable requirements.

b. Observations and Findings

On January 5, 2006, the licensee formally announced the appointment of a new Chief Nuclear Officer for Pacific Gas and Electric Company. On December 21, 2005, the PG&E boards of directors elected Mr. John (Jack) S. Keenan as Senior Vice President of Generation and Chief Nuclear Officer. The position of Senior Vice President of Generation and Chief Nuclear Officer is described in the Humboldt Bay Power Plant, Unit 3, SAFSTOR Quality Assurance Plan (SAFSTOR QA Plan) as responsible for the design, construction, and operation of PG&E's nuclear facilities, including the safe and efficient decommissioning of HBPP, Unit 3.

The licensee was in the process of revising their organization to support transition from SAFSTOR to active decommissioning and to improve organizational effectiveness. The inspectors discussed these changes with the Plant Manager and review selected documents. The new organization was effective on January 1, 2006, but would not be fully implemented until the end of the first calendar quarter 2006. Major changes included the establishment of the position of SAFSTOR Manager to whom the engineering group and a dedicated Unit 3 Supervisor would report. Other functions reporting to the SAFSTOR Manager included the Independent Spent Fuel Storage Installation (ISFSI) Preparation Project Manager, the Training Coordinator, SAFSTOR Programs Coordinator, and the Fire/Safety Supervisor. This organization had been partially implemented by having these positions report to the Engineering Manager, pending selection of the SAFSTOR Manager.

One change that had occurred was the addition of the HBPP Quality Control Supervisor position. This individual reported directly to the Plant Manager. The position had been filled by the former Nuclear Quality Services Supervisor. This new position was identified in the revised SAFSTOR QA Plan as a member of the Plant Safety Review Committee. At the time of the inspection, the licensee was revising impacted documents but had not yet revised Procedure L-3, "Defueled Safety Analysis Report (DSAR)." The inspectors found that the HBPP Quality Control Supervisor met or exceeded the requirements contained in the DSAR for the Nuclear Quality Services Supervisor.

Another change was that the former Nuclear Quality Services (NQS) Department was renamed to Quality Verification Department to better reflect its function under the revised SAFSTOR QA Plan. The onsite representative of the Quality Verification Department was the HBPP Quality Assurance Supervisor. The Quality Verification Department was independent from the onsite organization and did not report to the Plant Manager. The HBPP Quality Assurance Supervisor reported to the Quality Verification Manager, who reported to the Vice President and General Manager, Diablo Canyon. The inspectors noted that individual qualifications of the HBPP Quality Assurance Supervisor had been reviewed and verified by the Quality Verification Manager.

Step 4.1.2 of procedure Humboldt Bay Administrative Procedure (HBAP) A-1, HBPP Organization and Staff Qualifications, requires an organization chart showing the various positions on the plant staff be maintained on the HBPP web page. The inspectors noted that the web page organization chart for the Operations Organization did not include three individuals that were reporting to this organization. The licensee initiated problem report SAPN 1237072 to correct this minor discrepancy.

c. Conclusion

Pacific Gas and Electric Company announced the appointment of a new Chief Nuclear Officer. The licensee was revising their organization to support transition from SAFSTOR to active decommissioning. The new organization would be fully implemented by the end of the first calendar quarter 2006.

1.2 Decommissioning Funding

a. Inspection Scope

The inspectors reviewed the status of Decommissioning Funding to determine compliance with applicable requirements.

b. Observations and Findings

10 CFR 50.75(f)(1) requires in part that each power reactor licensee shall report annually the status of its decommissioning funding. This report is due by March 31 of the applicable year. On March 31, 2005, the licensee submitted their most current report. On April 25, 2005, the licensee issued a correction to the March 31, 2005,

report. The correction was to provide escalation factors for labor and waste burial that had been inadvertently omitted from the original report. The combined information in these two reports included the information required by 10 CFR 50.75(f)(1). The report states that although the market value of the HBPP trust is lower than the minimum amount of the NRC decommissioning estimate, PG&E is confident the HBPP trust, with the noted additional contributions, will be sufficient to ensure successful decommissioning and maintaining the spent fuel in an Independent Spent Fuel Storage Installation (ISFSI). This confidence was based on the difference between the minimum rated power for which the NRC estimate is based and the site-specific cost estimate prepared by the licensee's consultant and the California Public Utilities Commission Decision on this matter.

c. Conclusion

The 2005 annual PG&E decommissioning funding report, when considered with a subsequent correction submitted included all the required information. PG&E projected that the HBPP trust, with the noted additional contributions, will be sufficient to ensure successful decommissioning and maintaining the spent fuel in an Independent Spent Fuel Storage Installation

1.3 Emergency Plan Updates

a. Inspection Scope

The inspectors reviewed changes to emergency plan and emergency procedures.

b. Observations and Findings

Four revisions to the licensee's emergency plan had been implemented since this area was last inspected in January, 2004. Revisions 41, 42, 43, and 44 involved minor changes. As required by 10 CFR 50.54(q), the licensee reported each of these revisions to the NRC within 30 days of their effective date. The inspectors reviewed the changes and discussed them with the program coordinator who was the cognizant licensee representative for the emergency plan. The inspectors concluded that these changes did not decrease the effectiveness of the emergency plan, and the emergency plan continued to meet the requirements of 10 CFR Part 50, Appendix E.

The licensee continued to use 11 emergency plan implementing procedures (EIPs); namely, 10 emergency operating procedures (EOPs) and 1 emergency contingency procedure (ECP) to support the emergency plan. Since March 2003, the licensee had revised 10 of the 11 EIPs, and 7 of the 10 EOPs. Some of these procedures had been revised multiple times. The inspectors reviewed selected revisions and concluded that they did not decrease the effectiveness of the emergency plan. The emergency plan continued to meet the requirements of 10 CFR Part 50, Appendix E.

c. Conclusion

Changes to the Emergency Plan and associated procedures did not decrease the effectiveness of the emergency plan and the emergency plan continued to meet requirements.

1.4 Emergency Plan Activation

a. Inspection Scope

The inspectors reviewed the licensee's response to a Tsunami warning issued on June 14, 2005.

b. Observations and Findings

On June 14, 2005, a Richter magnitude 7.2 earthquake occurred approximately 97 miles WNW from HBPP in the off-shore region of northern California. Shortly after the earthquake, the West Coast and Alaska Tsunami Warning Center issued a Tsunami Warning for all coastal areas of the west coast of the United States. HBPP received the Warning and an Unusual Event was declared and all plant personnel were evacuated to higher ground within the owner control area.

As a consequence of the evacuation, the Unit 3 control room which is required by the Physical Security Plan to be continually staffed by Technical Specification 5.2.2 and some security posts, respectively, were left un-staffed for approximately 1 hour. These actions were taken to protect the lives of licensee personnel in the event of an actual tsunami impact. The licensee invoked the provisions of 10 CFR 50.54(x) which permit the licensee to take reasonable actions that departs from license condition or technical specification in an emergency when this action is immediately needed to protect the public health and safety. As required by 10 CFR 50.72(b)(1), the licensee informed NRC of the deviation from the technical specifications when they notified NRC of the Unusual Event declaration.

The licensee did not notify the State within 1 hour of the declaration of the Emergency Class as required by 10 CFR 50.72(a)(3), and, due to overloading of the local communications system, the NRC was not notified within 1 hour as required by 10 CFR 50.72(a)(3). The State of California was notified of the Unusual Event declaration and termination on June 15, 2005, the day after the event. The failure to notify the State was in part due to the shift foreman not having the "Required Notification Call List" from procedure EPIP R-7 available at the evacuation site.

As required by 10 CFR 50.73(a)(2)(i)(C) and 10 CFR 50.73(a)(2)(iii), the licensee issued Licensee Event Report (LER) 2005-002-00, on August 12, 2005.

The LER identified four corrective actions:

1. Request revision of technical specification to permit leaving the control room under specific and rare circumstances.

2. Request revision of the Physical Security Plan to modify the requirements for manning security posts.
3. Revise procedure EPIP R-7 to clarify those agencies that must be contacted when an event is declared; when further degradation in the level of safety or worsening plant conditions; and when the event is terminated.
4. Provide training to emergency response personnel regarding adherence to procedure EPIP R-7, which required notification of the State for declaration and termination of an Unusual Event.

Corrective actions 3 and 4 had been completed and subsequent to the site visit on January 19, 2005, the licensee submitted a license amendment request to allow leaving the Unit 3 control room temporarily unmanned during emergency conditions requiring personnel to evacuate occupied buildings for their safety. The licensee was preparing a license amendment request to revise the Physical Security Plan to modify the manning requirements under specific and rare circumstances.

10 CFR 50.72(a)(3) requires the licensee to notify the NRC Operations Center of the declaration of an Unusual Event immediately after notification of the appropriate State or local agencies and no later than 1 hour after the point in time that the licensee declares one of the Emergency Classes. Contrary to this, on June 14, 2005, the licensee declared an Unusual Event and did not notify the State of California nor the NRC within 1 hour of the declaration of the Emergency Class. This violation was self-identified by the licensee and entered into the licensee's corrective action program as NCR HB3-05-QC-N001 and SAPN 1233675. This Severity Level IV violation is being treated as a Non-Cited Violation consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-133/0601-01).

c. Conclusions

A non-cited violation of NRC requirements was identified involving failure to notify the State of California nor the NRC within 1 hour of the declaration of the Emergency Class.

2.0 Safety Reviews, Design Changes, and Modifications (IP 37801)

a. Inspection Scope

The inspectors reviewed the licensee's safety review program, including selected requirements of the Plant Staff Review Committee (PSRC).

b. Observations and Findings

The instructions for conducting 10 CFR 50.59 safety reviews and the screening tool remained as previously described in inspection report 50-133/2005-03 and are contained in licensee Procedure HBAP C-19, "Licensing Bases Impact Evaluation (LBIE)."

From September 14, 2005, through January 12, 2006, the licensee had approved 1 modification and 43 procedure changes that required a LBIE screen. The inspectors reviewed the safety screen reviews associated with the modification and selected 4 safety screen reviews from the licensee procedure changes. The inspectors found that the safety screen reviews for all of the aforementioned documents were in compliance with regulatory requirements. Additionally, the PSRC meeting minutes were found to document review and approval of the safety screen reviews for the modification package. The licensee reported that no 10 CFR 50.59 safety evaluations had been performed since September 2005.

Attachment 7.1 of Procedure HBAP A-2 requires that the PSRC meet at least once per quarter and that each meeting consists of a quorum of at least four regular members or three regular alternate members. Reviews indicated that the PSRC had met a total of 16 times from September 8 to December 20, 2005. PSRC meeting minutes were reviewed and indicated that a quorum of PSRC members were present at each meeting.

NRC Inspection Report 50-133/2005-003 noted that although the licensee was providing reports of PSRC investigations of Technical Specification violations to the Senior Vice President, Generation/Chief Nuclear Officer and to the Nuclear Safety Oversight Committee as required the Quality Assurance Plan, the method by which these reports were provided was not clearly stated in the implementing procedures. The licensee decided to initiate a Systems Application and Processes Notification (SAPN) to evaluate if the wording in the requirement needed to be revised to more accurately reflect the method of documenting PSRC evaluation and recommendations. During this inspection the inspectors reviewed SAPN 1235189 and procedure HBAP A-2, Plant Staff Review Committee (PSRC). This procedure had been revised to state that the Plant Staff Review Committee shall investigate any violations of Technical Specifications and prepare and forward a report in the form of an NCR, LER, PSRC Minutes or other appropriate format to the Chief Nuclear Officer, the Senior Director, Power Generation, and to the Nuclear Oversight Committee (NSOC) covering their evaluation and recommendations to prevent recurrence. This mater was consider closed.

c. Conclusions

The licensee's safety review program was determined to effectively meet the requirements of 10 CFR 50.59.

The Plant Staff Review Committee (PSRC) meetings had been conducted in accordance with licensee requirements.

3.0 Self-Assessment, Auditing, and Corrective Action (IP 40801)

3.1 Quality Assurance Audits and Surveillances

a. Inspection Scope

The inspectors reviewed the licensee's quality assurance audits conducted since the last inspection of this area for compliance with regulatory requirements.

b. Observations and Findings

On November 18, 2005, the Quality Verification function had issued the Quality Performance Assessment Report (QPAR) for the 2nd Period 2005, June 1 through September 30. This report summarizes the Quality Verification independent evaluation of quality performance achieved at the site. The QPAR described the overall performance at Humboldt Bay during the period of evaluation as "yellow." This rating means that HBPP had demonstrated behaviors and had events that indicated performance was not meeting expectations in some aspects, and the effectiveness of management actions to correct performance had not fully developed. The report identified three functional areas that were identified as "red," that is, the overall performance and/or plans were not meeting expectations, and where significant or chronic performance problems existed and management efforts had been ineffective at identifying and correcting performance. These areas were work control process, procedural compliance, and organizational effectiveness. Six other areas were identified as "yellow," namely, Operations, Maintenance, Fitness for Duty/Access, Emergency Preparedness, Decommissioning Projects, and Corrective Actions. This report also stated the need for HBPP to be more of a "learning organization."

On December 19, 2005, the Director and Plant Manager responded to the 2nd Period 2005 QPAR. The response acknowledges the findings in the 2nd Period 2005 QPAR, and describes the numerous actions taken and planned to address the quality performance issues.

Licensee Procedure QASP-8, "Audit Program," described the licensee's system for conducting and documenting audits to verify compliance with the licensee Quality Assurance Program. Attachment 5.1 of this procedure specified the 12 audit subject areas and required audit frequencies. Records maintained by the licensee documented that audits in the applicable subject areas had been conducted at the required frequency over the last 2 years. The inspectors reviewed records of audits conducted since this area was last inspected in September 2005. The licensee had completed two additional audits covering three audit areas, namely, Security, Radiological Effluents and Radiological Environmental Monitoring Programs. The licensee had concluded that overall each of the programs had been effectively implemented. The audits appeared to be thorough and comprehensive. Areas of good performance and areas for improvement were normally present in each of the licensee audits. The frequency of the audits reviewed met the timeliness requirements that were contained in Procedure QASP-8, "Audit Program." Documentation was provided that problems identified during the audit had been entered into the HBPP corrective action system as a SAP

Notification (SAPN), as required by Section 4.4.2 of Procedure QASP-2.

Procedure TQ1.NQ1, "Auditor Qualification and Certification," provided the requirements for the qualification and certification of quality auditors. A review of auditor qualification records indicated that the individuals conducting these audits had been certified.

The licensee had a program of self assessments ongoing. During 2005, the licensee had conducted and documented self assessments on 28 topics.

c. Conclusion

The 2nd Period 2005 Quality Performance Assessment Report rated the site performance as "Yellow" meaning that it did not meet expectations in some aspects and the effectiveness of management actions to correct performance had not fully developed. The site organization acknowledged the problem and provided a response with planned actions to correct their performance. Audits had been conducted for the required subject areas and required frequencies. The auditors were certified in accordance with licensee requirements and were independent of the areas audited.

3.2 Corrective Action Program

a. Inspection Scope

The inspectors reviewed the licensee's corrective action program for compliance with regulatory requirements.

b. Observations and Findings

The licensee's corrective action program was described in Procedure HBAP C-12, "Problem Identification and Resolution." The program utilized a SAP Notification (SAPN) for the identification of equipment, material, procedural, and quality-related problems and nonconformances at HBPP. The licensee had initiated a total of 373 individual SAPNs and 2 new nonconformance reports (NCRs) since September 14, 2005. The inspectors selected a sample of 7 SAPNs to review. The SAPNs were found to identify the problem, document the evaluation, recommend corrective actions and document closure of the issue. The SAPNs reviewed met the licensee procedural requirements.

The two new NCRs were identified on January 6, 2005, and technical review groups had initial meetings to define the problem statements. The technical review groups were to reconvene to complete the problem evaluations and develop corrective actions. One problem was the apparent spent fuel pool water loss exceeding normal evaporation rates during the period of October 2 to 27, 2005. Cause appears to be a partially open valve that was assumed fully closed. This is a Plant Manager discretion NCR due to not timely identification into the corrective action program of a problem related to spent fuel pool water inventory.

The second NCR dealt with slight increase levels of cesium-137 noted in the radioactive waste processing system on January 6, 2006. The source for the increase levels was not immediately clear.

The PSRC was required to evaluate and concur with the NCR root cause and corrective actions to prevent recurrence. Records indicated that three other NCRs remained open. These three NCRs had received PSRC concurrence, but were open remaining completion of some of the corrective actions.

During a PSRC meeting of January 12, 2006, the PSRC discussed their management of SAPN (problems reports). The licensee had a five level category for SAPNs with 1 being the lowest significance to 5 being the highest. The trend had been an increasing number of open severity 2 to 5 SAPN that were over ninety days old. On January 12, 2006, this number was 66 with a total number of 148.

c. Conclusion

The corrective action program met regulatory requirements.

4.0 Spent Fuel Pool Safety (IP 60801)

4.1 SFP and SFP Liner Water Levels

a. Inspection Scope

The surveillances for the spent fuel pool (SFP) water level and liner water level were reviewed for compliance with technical specifications requirements. A tour of the spent fuel pool area and the Unit 3 control room was conducted.

b. Observations and Findings

The SFP water level requirements had been last inspected in September 2005. Technical Specification 3.1.1 required that the SFP water level be maintained at an elevation greater than 10.5 feet. Technical Specification 3.1.3, required the SFP liner water level be at an elevation of less than +9 inches. Surveillance Requirements 3.1.1.1 and 3.1.3.1 required that the SFP water levels be verified every 24 hours.

Control room personnel were responsible for recording the water levels of the SFP and the SFP liner approximately every 2 hours. This information was documented on Procedure A-2, Attachment 5.1, "Operational Log Sheets and Daily Water Inventory Report." During tours of the refueling building the inspectors noted that the SFP level met the technical specification requirement.

Section 5.4.2 of the Defueled Safety Analysis Report (DSAR) required that the SFP level monitors be calibrated and have their alarm set points verified annually. The licensee had two independent level monitors that provided an indication of water level and initiated an alarm when the water level dropped below a specified elevation of 10 feet-8 inches. Surveillance Test Procedure, STP 3.6.3, "Calibration and Alarm Set Point

Verification,” was used to calibrate the SFP water level monitors and to verify the SFP low level alarms setpoints were correct. Documentation was available that indicated these instruments had been maintained in current calibration, since the last inspection performed during September 2005.

The licensee performed Surveillance Test Procedure, STP 3.6.2, “SFP Level Monitor Verification,” on a monthly basis to compare the reported values between the two level monitor instruments. Additionally, STP 3.6.2 verified that the instrument readings were within the required accuracy range by comparing the readings to the actual measurements taken at the pool. With the exception of September 2005, when the chart recorder was declared inoperable, the records indicated that STP 3.6.2 had been performed at the required frequency, since the last time this area had been inspected. The licensee had open SAPN 1235152 to address the instrument problem. The inspectors observed the new chart recorders that had been installed.

c. Conclusion

The licensee had maintained the spent fuel pool water level requirements in accordance with applicable technical specifications.

4.2 SFP Water Quality

a. Inspection Scope

The SFP water quality sampling and analysis program was reviewed.

b. Observations and Findings

Table 5-2 of the DSAR specified the limits for spent fuel storage pool water chemistry and activity during SAFSTOR. Procedure STP 3.6.5, “Monthly Spent Fuel Pool Water Quality Check,” was used to sample and analyze the SFP water on a monthly basis. The inspectors reviewed Attachment 8.1, “Spent Fuel Pool Water Quality Data Sheet,” of STP 3.6.5 that was maintained in the Unit 3 Control Room. Data sheets were available for four water samples that had been collected and analyzed by the licensee since this area was last inspected in September 2005. All the test results were within the DSAR specified limits. During the previous inspection the inspectors noted that the demineralizer resin used to maintain water quality needed to be replaced, however the licensee had experienced difficulties transferring the resin from the tank. The licensee had not yet replaced the used resin but they had been able to maintain water quality. The licensee had several contingency plans to maintain water quality at acceptable levels, should the problems with the resin transfer persist. If the water quality exceeded the specified limits and the licensee was not able to restore the water quality to specified chemistry limits within 30 days, Section 5.2 of the DSAR required that a report be submitted to the NRC.

c. Conclusion

The licensee had maintained the spent fuel pool water quality in accordance with applicable technical specifications.

5.0 Maintenance and Surveillance (IP 62801)

a. Inspection Scope

The licensee's maintenance and surveillance program was reviewed for compliance with the Maintenance Rule requirements contained in 10 CFR 50.65.

b. Observations and Findings

Three maintenance related events had been identified by the licensee since the previous inspection. Two of the events related to problems with the maintenance of a fire pump, SAPN 1234160 and SAPN 1235473. The other event, SAPN 1235357, related to the removal of spalling concrete at the side of the spent fuel pool. The licensee entered each event into their corrective action program and assigned each a separate SAPN (problem report) number. Each event was evaluated by a technical review group. The technical review groups identified the causes, determined appropriate corrective actions and assigned task for correcting the problems.

HBPP Technical Specification 5.5.1.b. required in part, that written procedures shall be established, implemented and maintained for fire protection program implementation. Contrary to this, on July 17, 2005, the licensee did not properly implement maintenance procedure (MP) M-108, Overhaul and Inspection of No. 1 and No. 2 Fire Pumps, when measurement and test equipment used for equipment alignment was not calibrated. This procedural violation was self-identified by the licensee, entered into the licensee's corrective action program as SAPN 1234160, and the alignment was subsequently verified with calibrated equipment. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-133/0601-02).

HBPP Technical Specification 5.5.1.a. required in part, that written procedures shall be established, implemented and maintained for the safe storage of irradiated fuel recommended in Appendix "A" of Regulatory Guide 1.33, February 1978. Appendix A to Regulatory Guide 1.33, February 1978, recommends, among others, administrative procedures for equipment control (e.g. locking and tagging) and bypass of Safety Functions and Jumper Control. Contrary to this, some time between August 11, and October 7, 2005, the licensee did not implement administrative procedures HBAP C-6, Clearances, and HBAP C-4, Bypass of Safety Functions and Controls of Jumpers, when the limit switch actuator blocks for the spent fuel pool bridge were removed without authorization, without taking a clearance on the bridge, and without documenting their removal, and the bridge was moved two times and energized several other times after

the blocks were removed. This procedural violation was self-identified by the licensee, entered into the licensee's corrective action program as SAPN 1235357. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-133/0601-03).

HBPP Technical Specification 5.5.1.b. required in part, that written procedures shall be established, implemented and maintained for fire protection program implementation. Contrary to this, on October 7, 2005, the licensee did not properly implement maintenance procedure (MP) M-108, Overhaul and Inspection of No. 1 and No. 2 Fire Pumps, when coupling alignment, vibration check, and documentation of measurement and test equipment used were not performed. This procedural violation was self-identified by the licensee, entered into the licensee's corrective action program as SAPN 1235473. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-133/0601-04).

The three violations identified by the licensee are of low significance and meet the criteria of Section VI of the NRC Enforcement Policy, NUREEG-1600, for being dispositioned as Non-Cited Violations.

c. Conclusions

Three violations of NRC requirements were identified. Two of the violations involving failure to properly implement procedures related to the maintenance of a fire pump. The third violation involve failure to implement procedures related to clearance and jumper controls on the spent fuel pool bridge. These violations of low safety significance meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as Non-cited Violations.

6.0 Decommissioning Performance and Status Review (IP 71801)

a. Inspection Scope

Inspectors conducted tours of the site to evaluate whether the facility conditions were being effectively controlled during SAFSTOR.

b. Observations and Findings

The inspectors toured the fuel handling building, the Unit 3 control room, and other areas of the facility. Radiological postings were easily visible and met the requirements of 10 CFR Part 20. Housekeeping and facility conditions were effectively controlled. The inspectors observed that selected portable fire extinguishers, in place throughout the facility, were fully charged and inspection stickers were present that noted the extinguishers were within their calibration interval. Most of the areas in the facility were free of radiological contamination and were accessible without the need of protective clothing. No safety concerns were observed during the tours. The control room indicators associated with monitoring spent fuel pool level and spent fuel pool liner level were confirmed to be functional.

During a tour of the condensate demineralizer pipe gallery the inspectors noted that a new radiation area had been posted but this change in radiological conditions were not reflected in the radiation survey map posted in the room. The Radiation Protection Manager stated that in the past the map that was posted in the room was generated for other purposes and that it was not necessarily updated when conditions changed. The licensee initiated a SAPN to change the procedure to update the maps posted in the areas when radiological conditions change and generated a revised map for the condensate demineralizer pipe gallery. During the PSRC meeting of January 12, 2006, the revised procedure RCP-7G, Routine Survey Program, was brought for review and approval.

The inspectors conducted confirmatory radiation surveys using Ludlum Model 2401-P survey instrument, serial number 195724, due for calibration on September 23, 2006. The inspectors surveys results were comparable to those performed by the licensee.

c. Conclusions

Radiological conditions of the facility were properly posted. Housekeeping and facility conditions were effectively controlled.

7.0 Follow-up (IP 92701)

Discussed IFI 50-133/0503-02 Review licensee's evaluation of August 3, 2005, SFP Demineralizer system gasket failure that resulted in spill of radiologically contaminated resin.

The inspectors were briefed by the licensee on the progress on this matter. The used demineralizer resin had not yet been removed from the SFP demineralizer. The resin continued to effectively control spent fuel pool water quality. The licensee was considering methods to tap into the drain line to remove the resin. Due to the multiple problems that had resulted from this event, the licensee considered it to be a significant breakdown in the implementation of their quality assurance program and had added it to NCR HB3-05-QC-N002 which already included the stop work order that had been issued during the initial work effort to identify missing fuel segments. The licensee's effort in this area will be reviewed during a future inspection.

8.0 Exit Meeting

On January 12, 2006, at the conclusion of the site visit, the inspectors presented to the plant manager and other licensee staff members, the preliminary results on areas inspected. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT 1

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

J. Albers, Radiation Protection Manager
M. Antony, Decontamination Technician
J. Chadwick, Radiation Protection Engineer
J. Davis, Radiation Protection Engineer
M. Grossman, Operations Supervisor
V. Jensen, Quality Control Supervisor
J. Mason, Quality Assurance Supervisor
G. McKinnon, Control Operator
R. Parker, Senior Radiation Protection Engineer
L. Pulley, ISFSI Project Manager
J. Rasmussen, Certified Fuel Handler
M. Stich, ECP Lead Investigator - Diablo Canyon
M. Smith, Engineering Manager
D. Sokolsky, Supervisor of Licensing
R. Sorensen, Programs Coordinator
R. Willis, Plant Manager

INSPECTION PROCEDURES USED

IP 36801	Organization, Management and Cost Controls
IP 37801	Safety Reviews, Design Changes, and Modifications
IP 40801	Self-Assessment, Auditing, and Corrective Action
IP 60801	Spent Fuel Pool Safety
IP 62801	Maintenance and Surveillance
IP 71801	Decommissioning Performance and Status Review

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-133/0601-01	NCV	Failure to notify the State of California and the NRC within one hour of the declaration of the Emergency Class.
50-133/0601-02	NCV	Failure to implement maintenance procedure (MP) M-108, Overhaul and Inspection of No. 1 and No. 2 Fire Pumps by not using calibrated measurement and test equipment when required.
50-133/0601-03	NCV	Failure to implement administrative procedures HBAP C-6, Clearances, and HBAP C-4, Bypass of Safety Functions and Controls of Jumpers, when the limit switch actuator blocks for the spent fuel pool bridge were removed without authorization, without taking a clearance on the bridge, and without documenting their removal, and the bridge was moved two times and energized several other times after the blocks were removed.

50-133/0601-04 NCV Failure to implement maintenance procedure (MP) M-108, Overhaul and Inspection of No. 1 and No. 2 Fire Pumps by not conducting pump and motor alignment, vibration check, and documentation of measurement and test equipment used when required.

Closed

50-133/0601-01 NCV Failure to notify the State of California and the NRC within one hour of the declaration of the Emergency Class.

50-133/0601-02 NCV Failure to implement maintenance procedure (MP) M-108, Overhaul and Inspection of No. 1 and No. 2 Fire Pumps by not using calibrated measurement and test equipment when required.

50-133/0601-03 NCV Failure to implement administrative procedures HBAP C-6, Clearances, and HBAP C-4, Bypass of Safety Functions and Controls of Jumpers, when the limit switch actuator blocks for the spent fuel pool bridge were removed without authorization, without taking a clearance on the bridge, and without documenting their removal, and the bridge was moved two times and energized several other times after the blocks were removed.

50-133/0601-04 NCV Failure to implement maintenance procedure (MP) M-108, Overhaul and Inspection of No. 1 and No. 2 Fire Pumps by not conducting pump and motor alignment, vibration check, and documentation of measurement and test equipment used when required.

Discussed

50-133/0503-02 IFI Review licensee's evaluation of August 3, 2005, SFP Demineralizer system gasket failure that resulted in spill of radiologically contaminated resin.

LIST OF ACRONYMS

CFR	Code of Federal Regulations
DSAR	Defueled Safety Analysis Report
ECP	Emergency Contingency Procedure
EDOI	Equipment Description and Operating Instruction
EIPs	Emergency Plan Implementing Procedures
EOPs	Emergency Operating Procedures
HBAP	Humboldt Bay Administrative Procedure
HBPP	Humboldt Bay Power Plant
IFI	Inspection Follow-up Item
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
LBIE	Licensing Bases Impact Evaluation
NCV	Non-cited Violation
NQS	Nuclear Quality Services
PG&E	Pacific Gas and Electric Company
PSRC	Plant Staff Review Committee
QPAR	Quality Performance Assessment Report
SAPN	Systems Application and Processes Notification (Problem report)
SFP	Spent Fuel Pool
STP	Surveillance Test Procedure

ATTACHMENT 2

PARTIAL LIST OF DOCUMENTS REVIEWED

Audits and Self-Assessments

- Audit 052420003, HBPP 2005 Radiological Effluent and Radiological Environmental Monitoring Program (REMP) Audit, dated October 13, 2005.
- PML-05-68, Response to audit finding HBPP 2005 Radiological Effluent and Radiological Environmental Monitoring Program Audit. . Dated December 16, 2005.
- Audit 052850011, HBPP 2005 Unescorted Access Authorization Program.
- Maintenance of Lead Auditor's Proficiency Records for selected auditors.

Corrective Action Program Documents (SAPN & Nonconformance Reports)

- HBPP Nonconformance Report, HB3-05-QC-N001, Revision 0, June 17, 2005.
- HBPP Nonconformance Report, HB3-05-QC-N002, Revision 0, August 10, 2005.
- SAPN 1230900, No. 1 Fire Pump oil leak, initiated January 17, 2005.
- SAPN 1232888, SFP bridge travel trips due to concrete, initiated May 5, 2005.
- SAPN 1234011, Plant Fire System declared inoperable, initiated July 3, 2005.
- SAPN 1234043, Replace worn out shaft coupling, initiated July 7, 2005.
- SAPN 1234160, Performed alignment with non Q indicator, initiated July 13, 2005.
- SAPN 1234701, #1 FP failed insurance req. - overhaul, initiated August 24, 2005.
- SAPN 1235098, Rusted Rebar in refueling building, initiated September 15, 2005.
- SAPN 1235189, Evaluate PSRC Reporting requirement, initiated September 22, 2005.
- SAPN 1235357, Spent Fuel Pool Bridge Crane Limit Switch Blocks Removed, initiated October 12, 2005.
- SAPN 1235473, Work instructions not followed, initiated October 12, 2005.
- SAPN 1236050, SFP Crane missing end stops, initiated November 14, 2005.

Licensing Bases Impact Evaluation Screens

- Reference Document DCP-HB3-E-576, Replace Unit 3 Main & HVAC Annunciators, final approval October 5, 2005.

- Reference Document HBAP A-6, Nuclear Safety Oversight Committee, final approval November 9, 2005.
- Reference Document STP 3.6.3, Spent Fuel Pool Level Monitor Calibration and Alarm Set Point Verification, final approval October 13, 2005.
- Reference Document EDOI G-5, Annunciator System, final approval December 8, 2005.

Procedures

- Humboldt Bay Administrative Procedure (HBAP) A-2, Plant Staff Review Committee (PSRC), Revision 25, effective December 1, 2005.
- Humboldt Bay Administrative Procedure (HBAP) C-4, Bypass of Safety Functions and Control of Jumpers, Revision 2A, effective March 10, 2005.
- Humboldt Bay Administrative Procedure (HBAP) C-6, Clearances, Revision 18A, effective September 15, 2005.
- Radiation Protection Procedure, RCP-7G, Routine Survey Program, Revision 7, effective January 26, 2006.

Data Sheets

- STP 3.6.2 Attachment 10.1, July 8, 2005 through December 20, 2005.
- STP 3.6.5 Attachment 8.1, January 5, 2005 through January 5, 2006.

Reports and other Correspondance

- HBL-04-011, Letter from Plant Manager to US NRC Document Control Desk, titled Report of Changes to the Emergency Plan (Revision 41), dated April 30, 2004
- HBL-04-018, Letter from Plant Manager to US NRC Document Control Desk, titled Report of Changes to the Emergency Plan (Revision 42), dated July 2, 2004.
- HBL-04-021, Letter from Plant Manager to US NRC Document Control Desk, titled Report of Changes to the Emergency Plan (Revision 43), dated July 29, 2004.
- HBL-05-021, Letter from Plant Manager to US NRC Document Control Desk, titled Report of Changes to the Emergency Plan (Revision 44), dated July 15, 2005
- HBL-05-022, Letter from Vice President, Nuclear Services, to US NRC Document Control Desk, titled Licensee Event Report 2005-002-00 Tsunami Warning and Pant Evacuation, dated August 12, 2005

- HBL-06-002, Letter from Senior Vice President Generation & Chief Nuclear Officer, to US NRC Document Control Desk, titled License Amendment Request 06-01, Revision to Technical Specification Section 3.1.2, "Spent Fuel Pool Load Restrictions," and Section 5.2.2, "Facility Staff," dated January 19, 2006.