



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

February 14, 2008

Mr. John T. Conway
Site Vice President and Chief Nuclear Officer
Pacific Gas and Electric Company
P.O. Box 3
Mail Code 104/6/601
Avila Beach, California 93424

SUBJECT: NRC INSPECTION REPORT 050-00133/08-001

Dear Mr. Conway:

An NRC inspection was conducted on January 14-17, 2008, 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 and management; safety reviews, design changes and modifications; self-assessment, auditing, and corrective action; spent fuel pool safety; maintenance and surveillance; decommissioning performance and status; and solid radioactive waste management and transportation of radioactive materials. At the conclusion of the onsite inspection, an exit briefing was conducted with Mr. Paul Roller, acting Plant Manager, and other members of your staff. The enclosed report presents the scope and results of that inspection.

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 Mr. Emilio Garcia, Health Physicist, at (530) 756-3910, or the undersigned at (817) 860-8197.

Sincerely,

/RA/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

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

Enclosure:

NRC Inspection Report 050-00133/08-001
(w/Attachments 1 & 2)

cc w/enclosure:

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MS-B File

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| EMGarcia | RJEvans | JEWhitten |
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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 050-00133
License No.: DPR-7
Report No.: 050-00133/08-001
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 14-17, 2008
Inspectors: Robert J. Evans, PE, CHP, Senior Health Physicist
Emilio M. Garcia, Health Physicist
Nuclear Materials Safety Branch B
Approved By: Jack E. Whitten, Chief
Nuclear Materials Safety Branch B
Attachments: Supplemental Inspection Information
Partial List of Documents Reviewed

Enclosure

EXECUTIVE SUMMARY

Humboldt Bay Power Plant, Unit 3 NRC Inspection Report 050-00133/08-001

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. This routine inspection was conducted to review the licensee's organization and management controls, safety reviews, design changes and modifications, audits, spent fuel safety, maintenance and surveillances, decommissioning performance, solid radioactive waste management and transportation of radioactive materials.

Organization, Management and Cost Controls

- The licensee had sufficient staff to conduct the work in progress, including an ample number of certified fuel handlers. The onsite and offsite review committees were functioning in accordance with quality assurance program requirements (Section 1).

Safety Reviews, Design Changes, and Modification

- The licensee's safety review program was conducted in compliance with 10 CFR 50.59 requirements. The licensee had established and implemented a non-conformance program that was in compliance with Quality Assurance Plan requirements (Section 2).

Self-Assessment, Auditing, and Corrective Action

- Audits had been conducted for the required subject areas at the required frequencies. The auditors were certified in accordance with licensee requirements and were independent of the areas audited (Section 3).

Spent Fuel Pool Safety

- The licensee was maintaining the Spent Fuel Pool in accordance with Technical Specifications, Defueled Safety Analysis Report, and procedure requirements (Section 4).

Maintenance and Surveillance

- The licensee had implemented a maintenance and surveillance program that met the requirements of the Maintenance Rule as provided in 10 CFR 50.65 (Section 5).

Decommissioning Performance and Status Review

- The licensee was conducting decommissioning activities with an emphasis on radiological safety. Radiation protection controls had been implemented including postings, boundaries, and labels. The licensee had established a plan for radiologically surveying the new generation construction area, and the plan was formulated in accordance with NRC regulatory guidance (Section 6).

Solid Radwaste Management & Transportation of Radioactive Materials

- The licensee had implemented and maintained a transportation program for radioactive materials and radioactive waste in accordance with NRC and U.S. Department of Transportation regulations (Section 7).

Report Details

Summary of Plant Status

Humboldt Bay Power Plant, Unit 3, is currently in decommissioning SAFSTOR status. Activities in progress during the inspection included the staffing and training of additional health physics personnel to support future work activities. In addition, the licensee was conducting limited radiological surveys of outdoor areas as part of its historical site assessment and for future classification of these areas for final status surveying. The licensee plans to commence with the controlled packaging and shipment of about 980 cubic feet of spent resin during March 2008. The licensee also plans to conduct demolition operations in the new generation construction area during July 2008, following receipt of all necessary State of California approvals.

Construction of the Independent Spent Fuel Storage Installation (ISFSI) support equipment was in progress during the inspection. In the near future, the licensee will commence with its dry-run testing of ISFSI fuel handling operations. The licensee plans to begin fuel movement and cannister loading operations in late-March 2008.

1.0 Organization, Management, and Cost Controls (36801)

1.1 Inspection Scope

The inspectors reviewed site staffing and the onsite and offsite safety review committees for compliance with regulatory requirements, site procedures, and licensee commitments.

1.2 Observations and Findings

a. Site Organization

Technical Specifications 5.2.1 provides the requirements for the onsite and offsite organizations necessary for the safe storage of irradiated fuel. The onsite nuclear organization chart was provided in site procedure Humboldt Bay Administrative Procedure (HBAP) A-1, "HBPP Organization and Staff Qualifications," Appendix 6.3, Revision 27. This procedure was last revised effective November 8, 2007. Effective January 7, 2008, the responsibility of Chief Nuclear Officer, was assigned to Mr. John T. Conway. Mr. Conway was also the Site Vice President at Diablo Canyon. Mr. John S. Keenan, formerly the Senior Vice President–Generation and Chief Nuclear Officer, had assumed the position of Chief Operating Officer for PG&E.

The inspectors compared the actual structure in place at the time of the inspection to the procedure requirements. All staff positions had been filled. The position of Decommissioning Manager was filled on December 18, 2007, and the position of Unit 3 Operations and Maintenance Manager was filled on October 15, 2007. The licensee had verified and documented that the assigned individuals to these two positions met the minimum qualifications provided in American National Standards Institute (ANSI) N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel."

Section 5.2.2 of Technical Specifications states that at least one certified fuel handler (CFH) shall be onsite when fuel is in the spent fuel pool (SFP). As of January 15, 2008, there were 15 CFHs employed by the licensee. The licensee stated that this staffing level permitted it to meet Technical Specifications requirements.

b. Onsite and Offsite Review Committees

The Quality Assurance Plan, Revision 21, provided the requirements for the Plant Staff Review Committee (PSRC) and the Nuclear Safety Oversight Committee (NSOC). The inspectors reviewed the implementation of the committees to ensure compliance with quality assurance program requirements.

The PSRC was the licensee's onsite group that reviewed proposed changes, tests and experiments, plant modifications, procedure revisions, and other issues having nuclear safety significance. As of January 16, 2008, the PSRC had met 45 times during 2007 and three times during 2008. The inspectors reviewed the PSRC meeting minutes from June 2007 to January 2008. Minutes of the PSRC documented that the quorum requirements had been met and provided a list of all subjects reviewed. The committee reviewed and approved, as appropriate, proposed procedure changes, temporary procedures, plant modifications, negative trends, and nonconformances. Reasons were documented when proposed changes or procedures were rejected by the committee.

The NSOC provided high level review and oversight of site activities including the PSRC. Humboldt Bay Administrative Procedure HBAP A-6, "Nuclear Safety Oversight Committee," described the organization and charter of the NSOC, including its authorities, responsibilities, and duties. The Chair of the NSOC was appointed by the Chief Nuclear Officer who is the Manager of Quality Verification. The Plant Manager and the Engineering Manager were the two plant personnel who were members of the NSOC. The NSOC was required to meet at least twice per year. During calendar year (CY) 2007, the NSOC met on October 2 and December 18.

1.3 Conclusions

The licensee had sufficient staff to conduct the work in progress, including an ample number of certified fuel handlers. The onsite and offsite review committees were functioning in accordance with quality assurance program requirements.

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

2.1 Inspection Scope

The inspectors conducted reviews of the licensee's design change and nonconformance programs to ensure compliance with the requirements of 10 CFR 50.59 and Quality Assurance Plan requirements.

2.2 Observations and Findings

a. Design Change Process

Licensee procedure HBAP C-19, "Licensing Basis Impact Evaluation (LBIE)," Revision 23, establishes the requirements established by the licensee for evaluating potential effects on licensing basis documents from proposed changes to the facility, procedures, test or experiments. This procedure was used by the licensee to determine if 10 CFR 50.59 evaluations were required and whether prior NRC approval was required before implementing the changes. One 10 CFR 50.59 evaluation had been performed since this area was last inspected in July 2007. Additionally, there had been 21 design change packages generated since this area was last inspected in July 2007. The inspectors reviewed the package supported by the full 10 CFR 50.59 evaluation and the eleven other design change notices. Each package reviewed was supported by a safety screen that included consideration of the requirements specified in 10 CFR 50.59. Other attributes considered in the review packages included impacts on decommissioning and whether changes were required to be implemented in licensing basis documents, site procedures, and site drawings. All safety screens made by the licensee were complete.

One change, DCP HB3-C-648, Installation and Testing of the Davit Crane, involved a full safety evaluation. The evaluation conducted by the licensee concluded that the proposed changes did not require a licensee amendment nor prior NRC approval. The 10 CFR 50.59 evaluation was reviewed by the PSRC during their January 16, 2008, meeting. All the design change notices reviewed provided sufficient detail to explain what was being changed. The safety screens had been prepared and reviewed by individuals qualified to perform these functions.

b. Nonconformance Reports

Section 3.1.4 of the Quality Assurance Plan states that measures shall be established for documenting, reviewing, and dispositioning of quality problems and non-conformances. During CY 2006, four non-conformance reports (NCRs) were opened. The NCRs were discussed in Inspection Reports 050-00133/06-003 and 050-00133/07-003. No additional NCRs had been opened. At the time of this inspection, all of the 2006 NCRs had been closed.

2.3 Conclusions

The licensee's safety review program was conducted in compliance with 10 CFR 50.59 requirements. The licensee had established and implemented a non-conformance program that was in compliance with Quality Assurance Plan requirements.

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

3.1 Inspection Scope

The inspectors reviewed the licensee's quality assurance audit organization, staffing, and qualifications for compliance with regulatory requirements.

3.2 Observations and Findings

The licensee's Nuclear Quality Verification Organization was based at Diablo Canyon. The Supervisor HBPP Quality Assurance was located at Humboldt Bay and reported to the Manager-Nuclear Verification who in turn reported directly to the Senior Vice President-Generation and Chief Nuclear Officer. A new Supervisor HBPP Quality Assurance assumed responsibilities for this position in mid-November 2007. This individual was noted as being qualified for his technical responsibilities in the licensee's training tracking system.

Licensee's Quality Assurance SAFTOR procedure (QASP)-8, "Audit Program," Revision 10, described the licensee's system for conducting and documenting audits to verify compliance with the Quality Assurance Program. Attachment 5.1 of this procedure specified the 14 audit subject areas and the 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 two years. The inspectors reviewed records of audit reports issued since this area was last inspected in mid-March 2006. The licensee had issued six audit reports covering the following audit areas: Quality Assurance, Fire Protection and Loss Prevention, Emergency Plan, Radiological Effluents and Radiological Environmental Monitoring, Fitness for Duty and Unescorted Access Control. The licensee concluded that each of the programs audited had been effectively implemented. The audits appeared to be thorough and comprehensive. Areas of good performance and areas for improvement were normally identified in each of the licensee's audits. The frequency of the audits met the timeliness requirements of Procedure QASP-8, "Audit Program." Problems that were identified by the licensee during the audits had been entered into the HBPP corrective action system as a Corrective Action Program Report (SAPN), as required by Section 2.3 of Procedure QASP-5, "Corrective Action Program," Revision 10.

Procedure TQ1.NQ1, "Auditor Qualification and Certification," Revision 8, 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.

3.3 Conclusions

Audits had been conducted for the required subject areas at the required frequencies. The auditors were certified in accordance with licensee requirements and were independent of the areas audited.

4.0 **Spent Fuel Pool Safety (60801)**

4.1 Inspection Scope

The inspectors reviewed the licensee's control of the SFP to ensure compliance with Technical Specifications requirements and Defueled Safety Analysis Report (DSAR) commitments.

4.2 Observations and Findings

Technical Specifications 3.1.1 states that the SFP water level shall be maintained at an elevation greater than 10.5 feet. The licensee has dual indications of SFP water level in the control room including a recorder and a level indicator. At the time of the inspection, the water level was 10.88-10.97 feet, depending on the display used. In addition, the licensee measured the SFP water level locally. The local level indicator displayed SFP in units of inches water column. The SFP level was found to be within limits specified in the Technical Specification during the inspection.

Technical Specifications 3.1.3 states that the SFP liner water level shall be maintained at an elevation less than +9 inches (+0.75 feet). The licensee has three indicators of liner level: a recorder, a remote indicator, and a local indicator. At the time of the inspection, liner water level was at -0.14 to -0.2 feet, depending on the indicator. The inspectors confirmed that the licensee was monitoring and recording the SFP pool water and liner water levels at the frequencies established in Technical Specifications surveillance requirements.

Section 2.3.1.1 of the DSAR states that two sources of makeup water will be maintained for the SFP. The DSAR also specifies that a minimum of 2,000 gallons shall be maintained in the demineralized water tank. The inspectors interviewed operations staff personnel and determined that the two primary water sources of makeup water were the demineralized water storage tank and the fire water system. During the inspection, the demineralized water tank contained approximately 3550 gallons of water. In addition to the two makeup water supplies, the fire water system was also available for emergency supply of water. Alternate sources of water, if needed by the licensee, included the domestic water system and seawater via a portable pump.

The licensee continued to use the SFP demineralizer to help maintain water quality. Table 5.2 of the DSAR provides the limits for SFP water chemistry and radioactivity levels. Detailed instructions for the implementation of this requirement were documented in site procedure STP 3.6.5, "Monthly Spent Fuel Pool Water Quality Check," Revision 44. Procedure STP 3.6.5 requires that the pool water be sampled monthly for pH, conductivity, and cesium-137 activity. The inspectors reviewed the SFP water quality records for March 2006 through January 2008. The licensee had collected the pool water samples on a monthly frequency and had analyzed the samples for the required chemical constituents. Since March 2006, all water quality parameters remained within the limits specified in DSAR Table 5.2.

4.3 Conclusions

The licensee was maintaining the SFP in accordance with Technical Specifications, DSAR, and procedure requirements.

5.0 Maintenance and Surveillance (IP 62801)

5.1 Inspection Scope

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

5.2 Observations and Findings

The inspectors observed the licensee's performance of several surveillance test procedures that are required by Technical Specifications or the DSAR. The inspectors observed the performance of the following procedures:

- "Spent Fuel Pool Level Monitor Verification," STP 3.6.2, Revision 35
- "Source Check Area Monitors," Procedure 3.16.2, Revision 42
- "Stack Gas Monitor and Annunciator Repeater Test," STP 3.16.4, Revision 33
- "Weekly Radioactive Liquid Effluent Monitor Checks," STP 3.21.3, Revision 46A

The inspectors confirmed that the test results obtained by the licensee were consistent with procedure requirements. Test problems, if encountered, had been entered into the licensee's plant corrective action program. The inspectors also confirmed that past surveillance procedures had been performed in accordance with required test frequencies. The inspectors also reviewed the following procedures but did not witness test performance:

- "Spent Fuel Pool Liner Gap Pump Operability Verification," Procedure STP 3.6.1, Revision 36C
- "Quarterly Refueling Building Ventilation System Test," Procedure STP 3.7.1, Revision 46A

The inspectors conducted a review of the acceptance criteria provided in these six procedures. The acceptance criteria was compared to the associated requirements specified in the DSAR and/or Offsite Dose Calculation Manual. The inspectors confirmed that the acceptance criteria were in agreement with DSAR and Offsite Dose Calculation Manual requirements.

5.3 Conclusions

The licensee had implemented a maintenance and surveillance program that met the requirements of the Maintenance Rule as provided in 10 CFR 50.65.

6.0 Decommissioning Performance and Status Review (IP 71801)

6.1 Inspection Scope

The inspectors evaluated whether the licensee and its contracted workforce were conducting SAFSTOR decommissioning activities in accordance with license and regulatory requirements.

6.2 Observations and Findings

a. Site Tours

The inspectors toured the fuel handling building, Unit 3 control room, and other areas of the facility. Radiological postings were visible, and the postings met the requirements of 10 CFR Part 20. Housekeeping and facility conditions were effectively controlled in the radiologically restricted area. Most areas in the facility were free of radiological contamination and were accessible without the need for protective clothing.

During site tours, the inspectors conducted radiological surveys to measure ambient gamma exposure rates. The surveys were conducted using two Ludlum Model 2401-P survey meters (NRC No. 016296G with a calibration due date of 11/30/2008, and NRC No. 21175G with a calibration due date of 07/10/2008). The surveys were conducted, in part, to verify area radiation postings.

During site tours, the inspectors observed the transfer of radioactive liquid between two water tanks. The work area was posted as a radiation area, both inside and outside of the building. A radiation protection technician provided direct oversight of the transfer process. In addition, the licensee conducted air particulate, alpha, and ambient gamma exposure rate monitoring. The inspectors concluded that the licensee had established good radiological protection controls for the work in progress.

The inspectors observed plant operating parameters including system pressures, flow rates, and tank levels. All observed parameters were within the limits specified in site procedures and licensing documents. In summary, the inspectors determined that the licensee was conducting plant operations in accordance with license and procedural requirements.

b. Review of Site Decommissioning Activities

The inspectors conducted a review of the licensee's planned decommissioning activities to ensure compliance with NRC requirements. By letter dated August 31, 2007, the licensee provided a description and schedule of future decommissioning activities. The licensee plans to commence with decommissioning of Unit 3 balance-of-plant equipment (turbine, generator, condenser, and feedwater pumps) during mid- to late-2008. Equipment that is decommissioned is expected to be packaged as Class A wastes and shipped to an out-of-state disposal site. Following this decommissioning activity, the licensee plans to construct a radwaste processing facility at this location.

The inspectors also reviewed the licensee's plans for reclamation of a tract of land located adjacent to the three operating units. The licensee plans to dismantle all site structures and to demolish the asphalt and concrete slabs in this 5.5-acre area. Once the area has been cleared of all structures and final surveyed, the licensee plans to construct new power generation facilities at this location. Building demolition has been scheduled by the licensee for July 2008, pending receipt of State of California approval.

In support of this decommissioning project, the licensee developed a site characterization plan, conducted walk-over surveys to measure the ambient gamma radiation levels, and collected 14 soil samples for analysis. The radiological surveys and samplings were conducted, in part, to determine the classification of the area for future final status surveying and for use as input into a historical site assessment. The licensee has preliminarily classified the new generation construction area as a Class 3 area in accordance with guidance provided in NUREG-1575, Revision 1, Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM).

The inspectors conducted a detailed review of the licensee's site characterization plan. Overall, the plan was consistent with MARSSIM guidance. The inspectors discussed the radionuclides of concern, tritium sampling of surface soils, the derived concentration guideline levels, and the process for changing MARSSIM classifications with the licensee. The licensee elected to add these subjects to its SAPN tracking database for formal review and consideration.

The NRC reviewed the licensee's draft survey results for the soil samples collected in the new generation construction area. Measurable quantities of cesium-137 were identified in selected soil samples. The cesium-137 concentration in the soil samples was determined by the licensee to be less than 1 picocurie per gram. Although the licensee has not established cleanup criteria for this project, the cesium-137 concentrations were well below the NRC's generic screening criteria provided in Table B.2, "Screening Values of Common Radionuclides for Soil Surface Contamination Levels," from NUREG-1757, Volume 1, Revision 2, Consolidated Decommissioning Guidance.

6.3 Conclusions

The licensee was conducting decommissioning activities with an emphasis on radiological safety. Radiation protection controls had been implemented including postings, boundaries, and labels. The licensee had established a plan for radiologically surveying the new generation construction area, and the plan was formulated in accordance with NRC regulatory guidance.

7.0 **Solid Radioactive Waste Management and Transportation (86750)**

7.1 Inspection Scope

The inspectors reviewed the licensee's solid radwaste management and transportation of radioactive materials program to ensure compliance with NRC and U.S. Department of Transportation (DOT) regulations.

7.2 Observations and Findings

a. Audits and Assessments

There had been no audits of the solid radioactive waste management and transportation activities since this area was last inspected in March 2007. There had been 26 Quality Control Inspections Plans (QCIPs) associated with radiative waste shipments in 2007, including 19 since the last inspection of this program area. The inspectors reviewed these 19 QCIPs, conducted since June 6, 2007. Several of these QCIPs identified some quality problems with the shipments. Corrective Action Program Reports (SAPNs) were opened for each of the problems identified by the licensee. All of these SAPNs had been reviewed and closed, and corrective actions implemented.

b. Changes

The licensee had assigned one radiation protection technician to be dedicated to solid radwaste management and transportation. The licensee continued to use the services of radioactive waste management and transporting contractor to provide training and to prepare radioactive waste shipment manifests. Three radiation control procedures related to the solid radwaste management and transportation of radioactive materials program had been revised and had received PSRC review and approval.

Radiation Control Procedure RCP-6I, "Collection, Labeling, Packaging, Storage and Accountability of Radioactive Material," had been substantially revised in Revision 45 to change the survey and accountability documentation and the methodology to facilitate radioactive material shipment calculations, package contents accountability, and waste stream segregation. This procedure was revised to include the Package Inventory Log. The log documents the specific items that are placed in each package. This information is used for waste characterization and assuring that burial site waste acceptance criteria is met. A new form added to the procedure was the Radioactive Waste Container ID Worksheet. This sheet identifies each waste container with a unique number. This sheet also documented contents, container inspection, and radiation survey. The Package Inventory Log provides the details of contents.

On July 11, 2007, three trucks carrying radioactive waste shipments were found by the licensee to be overloaded. The licensee determined that the cause of this problem was the use of a scale that was not calibrated, and the licensee revised Procedure RCP-61 to require the use of calibrated scale for weighing shipments of radioactive waste.

Radiation Control Procedure RCP-6E, "Radioactive Material/Waste Curie Content Calculations," was revised to provide a method to verify calculated curie content when the gamma spectroscopy analysis does not have a isotopic library for the counting geometry used.

Radiation Control Procedure RCP-6C, "Shipment of Solid Radioactive Waste," was revised to specify that a copy of the signed acknowledgment manifest for radioactive waste receipt by the disposal site be sent to the record management system (RMS).

The licensee had also developed an informational spreadsheet called Radwaste Log. This spreadsheet provided information about each package including the location and the shipment number that it had been shipped under.

c. Shipments

Records indicated that 57 shipments of radioactive material had been completed in CY 2007. Twenty of these shipments involved radioactive wastes. Seven records were selected and reviewed by the inspectors: RMS-07-020, RMS-07-021, RMS-07-025, RMS-07-026, RMS-07-042, RMS-07-052 and RMS-07-057. All of these shipments contained radioactive waste shipped to an out-of-state low level radioactive waste disposal site. The records reviewed by the inspector were determined to be in compliance with the applicable requirements of Title 49 of the Code of Federal Regulation. The emergency response telephone number listed on the shipping paper was confirmed as a telephone number staffed 24 hours a day. Documents that required shipper certification were signed by a contractor designated as radiological engineer. Training records of the individuals who signed or otherwise performed functions related to the transport of hazardous material were reviewed. The individuals involved with these shipments had received appropriate training as required by 49 CFR 172, Subpart H.

The Radioactive Waste Supervisor stated that the licensee had not received any notices of non-compliance from DOT or competent State authorities. The licensee had access to electronic copies NRC, DOT, and applicable States regulations and had copies of the licenses of the designated recipients.

7.3 Conclusions

The licensee had implemented and maintained a transportation program for radioactive materials and radioactive waste in accordance with NRC and DOT regulations.

8.0 Exit Meeting

On January 17, 2008, at the conclusion of the site visit, the inspectors presented to the acting plant manager and other licensee staff members the preliminary results of the inspection. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

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C. Caldwell, Unit 3 Supervisor
J. Chadwick, Senior Radiation Protection Engineer
J. Dillion, Radiation Protection Technician
Z. Easley, Security Supervisor
J. Galle, Sr. Design Engineer
V. Jensen, Quality Control Supervisor
L. Pulley, ISFSI Manager
R. Snyder, Radioactive Waste Supervisor
M. Smith, Engineering Manager
D. Sokolsky, Licensing Supervisor
R. Sorensen, Programs Coordinator

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 Surveillances |
| IP 71801 | Decommissioning Performance and Status Review |
| IP 86750 | Solid Radwaste Management & Transportation of Radioactive Materials |

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS

| | |
|---------|---|
| CFH | Certified Fuel Handler |
| CFR | Code of Federal Regulations |
| CY | calender year |
| DOT | U. S. Department of Transportation |
| DSAR | Defueled Safety Analysis Report |
| HBPP | Humboldt Bay Power Plant |
| IP | Inspection Procedure |
| ISFSI | Independent Spent Fuel Storage Installation |
| LBIE | Licensing Basis Impact Evaluation |
| MARSSIM | Multi-Agency Radiation Survey and Site Investigation Manual |
| NCRs | Non-Conformance Reports |
| NSOC | Nuclear Safety Oversight Committee |
| QASP | Quality Assurance SAFTOR Procedure |
| QCIPs | Quality Control Inspections Plans |
| PSRC | Plant Staff Review Committee |
| RMS | Radioactive Materials Shipments |
| RCP | Radiation Control Procedure |
| SAPN | Corrective Action Program Reports |
| SFP | Spent Fuel Pool |

PARTIAL LIST OF DOCUMENTS REVIEWED

Audits and Appraisals

- Quality Control Inspection Plan (QCIP) Number 2007-08, Package and ship low-level soil and other waste material to Envirocare (RMS 07-020 and 21), June 6, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-09, Package and ship low-level soil and other waste material to Envirocare (RMS 07-025), July 11, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-10, Package and ship low-level soil and other waste material to Envirocare (RMS 07-026), July 11, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-11, Package and ship low-level soil and other waste material to Envirocare (RMS 07-027), July 11, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-12, Package and ship low-level soil and other waste material to Envirocare (RMS 07-028), July 11, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-13, Package and ship low-level soil and other waste material to Envirocare (RMS 07-031), August 22, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-14, Package and ship low-level soil and other waste material to Envirocare (RMS 07-032), August 22, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-15, Package and ship low-level soil and other waste material to Envirocare (RMS 07-036), August 27, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-16, Package and ship low-level soil and other waste material to Envirocare (RMS 07-037), August 27, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-17, Package and ship low-level soil and other waste material to Envirocare (RMS 07-041), September 6, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-18, Package and ship low-level soil and other waste material to Envirocare (RMS 07-042), September 6, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-19, Package and ship low-level soil and other waste material to Envirocare (RMS 07-043), September 18, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-20, Package and ship low-level soil and other waste material to Envirocare (RMS 07-044), September 20, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-21, Package and ship low-level soil and other waste material to Envirocare (RMS 07-046), September 25, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-22, Package and ship low-level soil and other waste material to Envirocare (RMS 07-047), October 4, 2007

- Quality Control Inspection Plan (QCIP) Number 2007-23, Package and ship low-level soil and other waste material to Envirocare (RMS 07-050), October 30, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-24, Package and ship low-level soil and other waste material to Envirocare (RMS 07-051), November 11, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-25, Package and ship low-level soil and other waste material to Envirocare (RMS 07-052), November 11, 2007
- Quality Control Inspection Plan (QCIP) Number 2007-26, Package and ship low-level soil and other waste material to Envirocare (RMS 07-057), November 11, 2007

Corrective Action Program Documents (SAPN & Nonconformance Reports)

- Corrective Action Program Report SAPN 1243531, Radwaste Shipment Problems
- Corrective Action Program Report SAPN 1243826, Over loaded radwaste shipment
- Corrective Action Program Report SAPN 1244640, Transcription Error on Shipping Packages HBPP Quality Problem
- Corrective Action Program Report SAPN 1244826, Average Dose Rate Calc
- Corrective Action Program Report SAPN 1244827, Package Item Descriptions

Procedures

- Humboldt Bay Administrative Procedure (HBAP) A-1, HBPP Organization and Staff Qualifications, Revision 27, effective November 8, 2007
- Humboldt Bay Administrative Procedure HBAP A-6, Nuclear Safety Oversight Committee, Revision 6, effective September 7, 2007
- Humboldt Bay Administrative Procedure HBAP C-19, "Licensing Basis Impact Evaluation (LBIE)," Revision 23, effective December 13, 2007
- Quality Assurance SAFSTOR Procedure QASP-1, SAFSTOR Quality Assurance Plan and Manual, Revision 17, effective March 15, 2007
- Radiation Control Procedure RCP-4F, Control of Access to High and High-High Radiation Areas, Revision 10, effective April 6, 2006
- Radiation Control Procedure RCP-7G, Routine Survey Program, Revision 46, effective January 26, 2006
- Radiation Control Procedure RCP-7G, Routine Survey Program, Revision 47, effective January 18, 2008

Plant Staff Review Committee Minutes

- PSRC 07-18, June 14, 2007
- PSRC 07-19, June 28, 2007
- PSRC 07-20, July 9, 2007
- PSRC 07-21, July 12, 2007
- PSRC 07-22, July 25, 2007
- PSRC 07-23, August 2, 2007
- PSRC 07-24, August 9, 2007
- PSRC 07-25, August 20, 2007
- PSRC 07-26, August 30, 2007
- PSRC 07-27, August 23, 2007
- PSRC 07-28, September 6, 2007
- PSRC 07-29, September 13, 2007
- PSRC 07-30, September 27-28, 2007
- PSRC 07-31, October 3, 2007
- PSRC 07-32, October 11, 2007
- PSRC 07-33, October 25, 2007
- PSRC 07-34, November 2, 2007
- PSRC 07-35, November 8, 2007
- PSRC 07-36, November 13, 2007
- PSRC 07-37, November 29, 2007
- PSRC 07-38, December 6, 2007
- PSRC 07-39, December 13, 2007
- PSRC 07-40, December 10, 2007
- PSRC 07-41, December 20, 2007

- PSRC 07-42, December 14, 2007
- PSRC 07-43, December 17, 2007
- PSRC 07-44, December 19, 2007
- PSRC 07-41, December 21, 2007
- PSRC 08-01, January 4, 2008
- PSRC 08-02, January 10, 2008
- PSRC 08-03, January 16, 2008