

# UNITED STATES NUCLEAR REGULATORY COMMISSION REGION IV 611 RYAN PLAZA DRIVE, SUITE 400

611 RYAN PLAZA DRIVE, SUITE 400 Arlington, Texas 76011-4005

April 18, 2005

Scott Bump, Manager General Electric Company Vallecitos Nuclear Center 6705 Vallecitos Road Sunol, California 94586

SUBJECT: NRC INSPECTION REPORT 070-00754/05-001

Dear Mr. Bump:

An NRC inspection was conducted on March 29-31, 2005, at your Vallecitos Nuclear Center site. This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspection included an examination of selected procedures and representative records, observations of activities, and interviews with personnel. The enclosed report presents the results of that inspection.

During the inspection, two potential problems were identified with your air sample analysis program. The first involved the discovery of incorrect action levels being programmed into a computer program, and the second involved the timeliness of reporting action level exceedances to the radiation protection staff. Immediately following the onsite inspection, your staff elected to conduct an incident investigation to examine the problems identified. The investigation concluded that the air samples had been accurately analyzed and that a significant safety consequence did not exist. The investigation identified a number of corrective actions. The NRC will review the implementation of these corrective actions during a future inspection. Since no cited violations were identified, no response to this letter is required.

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 Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, please contact the undersigned at (817) 860-8191 or Robert Evans, Senior Health Physicist, at (817) 860-8234.

Sincerely,

/RA/

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

Docket No.: 070-00754 License No.: SNM-960

Enclosure:

NRC Inspection Report 070-00754/05-001

cc: w/enclosure:
Mr. David Turner, Manager
Regulatory Compliance and
Environmental Health and Safety
General Electric Company
Vallecitos Nuclear Center
6705 Vallecitos Road
Sunol, CA 94586

James D. Boyd, Commissioner California Energy Commission 1516 Ninth Street (MS 34) Sacramento, CA 95814

Ed Bailey, Radiation Control Program Director Radiologic Health Branch P.O. Box 997414 (MS 7610) Sacramento, CA 95899-7414

Helen Hubbard P.O. Box 563 Sunol, CA 94586

Ms. Marylia Kelley Executive Director, Tri-Valley CARES 2582 Old First St Livermore, CA 94551

Pleasanton Public Library Attn: Ms. Karol Sparks 400 Old Bernal Ave Pleasanton, CA 94566

Rene G. Steinhauer 5524 Oakmont Cir. Livermore, CA 94550 bcc w/enclosure (via e-mail distri.):

PKHolahan

CLCain

DBSpitzberg

MTAdams, NMSS/FCSS/FCFB

**EMGarcia** 

**RJEvans** 

KEGardin

**FCDB** 

RIV Materials Docket File - 5<sup>th</sup> Floor

SISP Review Completed: RJE

ADAMS: Yes 9No Initials: RJE

: Publicly Available 9Non-Publicly Available 9Sensitive : Non-Sensitive

DOCUMENT NAME: s:\DNMS\!Fcdb\!RJE\50075401.wpd final r:\dnms\

RIV:DNMS:FCDB	C:FCDB
RJEvans	DBSpitzberg
/RA/	/RA/
04/13/05	04/18/05

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

# **ENCLOSURE**

# U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket No.: 070-00754

License No.: SNM-960

Report No.: 070-00754/05-001

Licensee: General Electric Company

Facility: Vallecitos Nuclear Center

Location: Sunol, California

Dates: March 29-31, 2005

Inspector: Robert J. Evans, P.E., C.H.P., Senior Health Physicist

Fuel Cycle & Decommissioning Branch

Approved By: D. Blair Spitzberg, Ph.D., Chief

Fuel Cycle & Decommissioning Branch

Attachment: Supplemental Inspection Information

#### **EXECUTIVE SUMMARY**

Vallecitos Nuclear Center NRC Inspection Report 070-00754/05-001

This routine announced inspection included a review of operational safety, radiation protection, management organization and controls, operator training/retraining, maintenance and surveillance testing, emergency preparedness, and followup of previous inspection findings. Overall, the licensee had conducted site activities in compliance with regulatory and license requirements.

#### Operational Safety Review

• The licensee was conducting facility operations in accordance with license requirements. The criticality safety program was adequately administered including criticality reviews and audits. The amount of radioactive material in the licensee's possession was less than licensed limits. The licensee was maintaining good control of the radiologically restricted area, including postings, boundaries, and security (Section 1).

# Radiation Protection

- The radiation protection program was in compliance with regulatory requirements and license conditions. Areas reviewed and found to be acceptable included the annual program review, leak tests of sealed sources, and area radiological surveys.
   Occupational exposures and airborne releases were below regulatory limits (Section 2).
- An NRC Inspection Followup Item was identified to review the licensee's implementation
  of corrective actions for air sample analysis issues involving a computer software
  setpoint error and the timeliness of reporting air sample results to the radiation
  protection staff (Section 2).

#### Management Organization and Controls

• The licensee continued to staff management level positions as well as environmental health and safety positions with qualified individuals. The Vallecitos Technological Safety Council continued to function as required by the license (Section 3).

#### Operator Training/Retraining

• The license presented criticality, industrial, and radiation safety training during 2004 that met the intent of regulations and license conditions (Section 4).

# Maintenance and Surveillance Testing

 Testing of the criticality alarm system was performed in accordance with license requirements. The alarm setpoint was confirmed to be in compliance with regulatory requirements. The licensee was conducting instrument calibration checks in an acceptable manner (Section 5).

# Emergency Preparedness

• The licensee continued to maintain an emergency preparedness program as required by the license application. The program included procedures, training, exercises, designated response teams, and emergency response supplies (Section 6).

#### Followup

Two NRC Inspection Followup Items were reviewed and closed. The first item involved
the licensee's corrective actions for a previous failure to adhere to a criticality control
administrative limit, and the second item involved the reportability of a small spill that
occurred onsite during August 2004 (Section 7).

#### **Report Details**

# Summary of Plant Status

During the inspection, activities in progress included research of unirradiated and irradiated uranium reactor fuel and irradiated hardware. Since the previous inspection, the licensee returned the liquid waste evaporator to service, although the evaporator was not in operation during the inspection. Work planned for the near future included refurbishment of Hot Cell No. 5. This activity is expected to begin during May 2005 and is expected to last about a month.

#### 1 Operational Safety Review (IP 88020, IP 88055, and TI 2600/03)

#### 1.1 <u>Inspection Scope</u>

The inspector conducted a review of site operations to ensure that these activities were being conducted in accordance with license and regulatory requirements. Areas reviewed included criticality controls, plant operations, and fire protection controls.

# 1.2 Observations and Findings

The licensee is authorized to possess special nuclear material (SNM) for use in research and development analyses and for use in exploration and experimentation of licensed material. The possession limits are provided in Condition 6 of the license. The inspector conducted a review of the inventory records and confirmed that the licensee was not exceeding the licensed limits. The licensee did not receive, ship, or dispose of any SNM since the last inspection. In addition, the licensee did not possess any uranium-233 although allowed by Condition 6.E.

The licensee had established criticality limit areas to control the amount of SNM in any one area. The inspector compared the amount of SNM in each area to the licensee's procedural limits. Based on the inventory records, no criticality limit area contained SNM in quantities greater than allowed by procedure.

The inspector reviewed recent changes to the criticality limit areas. One temporary change was still in effect during the inspection. This change combined the two criticality limit areas in Cell 3 into one criticality limit area. The licensee provided sufficient justification for the change and approved the change as stipulated in Section 5.2 of Appendix A to the license application. The inspector confirmed that the actual amount of SNM in Cell 3 was less than the amount authorized by the temporary change.

During the inspection, the licensee was in the process of conducting a validation review of a revised criticality analysis. The analysis will update the SNM possession limits throughout the radioactive materials laboratory. When implemented, the updated criticality analysis will establish new mass limits for each cell and will supercede the temporary change to Cell 3.

In accordance with Appendix A, Section 5.0, of the license application, the licensee is required to conduct routine criticality control audits and management reviews. Operations in Building 102 are required to be inspected monthly. Other operational areas are required to be inspected annually. In practice, the licensee conducted audits of Building 102 on a monthly basis and other areas either quarterly or annually. The inspector confirmed that the licensee had conducted all required audits during calender year 2004. No criticality safety concerns were identified by the auditors.

Site tours were conducted to observe operational activities and radiological controls. The licensee was maintaining good control of the radioactive restricted areas. Postings, boundaries, and labels were clearly visible. Doors and gates to areas containing radioactive materials were found locked in all instances. The inspector observed process parameters, such as high efficiency particulate filter differential pressures and stack flow rates. All process parameters were within their normal operating range. The inspector also noted that portable fire extinguishers with the fire suppression media were available in strategic locations throughout the radioactive materials laboratory.

#### 1.3 Conclusions

The licensee was conducting facility operations in accordance with license requirements. The criticality safety program was adequately administered including criticality reviews and audits. The amount of radioactive material in the licensee's possession was less than licensed limits. The licensee was maintaining good control of the radiologically restricted area, including postings, boundaries, and security.

#### 2 Radiation Protection (83822)

# 2.1 <u>Inspection Scope</u>

The inspector reviewed the licensee's radiation protection program for compliance with the requirements of 10 CFR Part 20 and the license.

# 2.2 Observations and Findings

The inspector conducted a review of the licensee's exposure records for 2004 to ensure that no individual exceeded the regulatory limits specified in 10 CFR 20.1201. Exposure monitoring consisted of external and internal doses. Occupational doses included combined exposures obtained from radioactive materials licensed by both the NRC and the State of California, including the NRC's SNM and test reactor licenses.

During 2004, 178 site workers were monitored for exposure. The highest total effective dose equivalent exposure was 1.563 rems with a regulatory limit of 5 rems. This dose was assigned to a maintenance technician and was slightly higher than the highest dose for 2003 (1.167 rems). The licensee monitored 137 additional individuals, mostly short-term visitors, who received a combined total effective dose equivalent exposure of 1.364 rems. The highest extremity dose was 2.390 rems with a regulatory limit of 50 rems. This dose was assigned to a test reactor worker. This dose was below the

maximum extremity dose for 2003 (3.430 rems). The highest lens dose equivalent exposure was 1.569 rems with an annual regulatory limit of 15 rems.

All doses were from external sources only. There were no assigned committed effective dose equivalent exposures during 2004. Based on whole body counting results, no radioactive material was detected in site personnel in quantities approaching the investigation levels.

During the inspection, one female worker became a declared pregnancy worker. Regulation §20.1208 specifies an occupational dose equivalent limit of 0.5 rems to an embryo/fetus of a declared pregnant worker during the entire pregnancy. During 2004, this worker received 0.0 rems of occupational dose. The licensee had not received the dosimetry sample results for the first quarter of 2005; therefore, the worker's exposure for 2005 was unavailable during the inspection.

The inspector reviewed the implementation of the licensee's As Low As Reasonably Achievable (ALARA) program. During 2004, the total exposure goal for site workers was 17 rems. Actual exposures to site workers totaled 16.731 rems. The ALARA goal for 2005 was 18 rems. The two projects with the most potential for exposure during 2005 will be Cell 5 refurbishment and waste water evaporator heat exchanger clean-out.

Annual radiation protection program reviews are required by §20.1101(c). The annual program review for 2004 was completed during the first quarter of 2005 and was submitted to the Vallecitos Technological Safety Council for review. In addition, the licensee conducted internal audits of the radiation safety program on a biennial basis. The licensee continued to maintain an up-to-date status report of the audits and respective due dates.

Airborne effluents were monitored for compliance with the Constraint Rule requirements of §20.1101(d). This regulation places a constraint on air emissions of radioactive material to the environment, excluding radon-222 and its progeny, such that the individual member of the public likely to receive the highest dose will not be expected to receive a total effective dose equivalent in excess of 10 millirems per year from these emissions. The COMPLY computer code was used to determine the dose at the site boundary from calender year 2004 airborne effluents. The analysis was conducted during January 2005. Site releases totaled 1.2 millirems per year at the site boundary from all four operating emission stacks.

License Condition S-3 requires that sealed plutonium sources be leak tested at 6-month intervals. The licensee possessed eight sealed plutonium sources. The inspector confirmed that the sealed sources had been leak tested within the time interval specified in the license. The sealed sources were leak checked during April and October 2004. The leak test results were below the licensed limit of 0.005 microcuries of removable alpha contamination.

Section 8.3.5 of Appendix A to the license application states that routine radiological surveys of occupied radiological work areas shall be conducted at least every week.

The licensee conducted and documented roughly 5000 radiological surveys a year. The inspector reviewed the area dose rate and contamination records for March 2005. No contamination control problems were identified.

Section 8.1 of Appendix A states that air samples be continuously collected in areas where dispersible SNM is handled and analyzed for gross alpha and gross beta-gamma activity. The inspector reviewed the licensee's air sample collection and analysis protocols. The licensee maintained a number of continuous air samplers in areas where dispersible SNM was handled. The sample filters were being exchanged and analyzed on a weekly basis. The licensee's sample collection process was determined to be in accordance with license requirements.

The inspector also reviewed the air filter sample analysis process. The licensee conducted 10-minute counts of the samples to obtain the gross alpha and gross beta activities. Two potential problems were identified. First, the sample analysis software program was observed to have the wrong action level "flags." Action levels are required by Nuclear Safety Procedure 4100, Revision 3, "Determination of Airborne Concentrations of Radioactive Materials from Fixed Air Samplers." The action level setpoints were too high for the alpha samples and too low for beta samples. Second, the laboratory staff was sending the sample results to the radiation protection staff for review on a monthly basis, although the intent of the applicable implementing procedure was to submit the sample results to the radiation protection staff in a timely manner.

In response to the NRC's findings, the licensee elected to conduct an incident investigation. The investigation commenced immediately after the conclusion of the onsite inspection. The investigation concluded that the wrong action levels for gross alpha and beta activities had been used since November 2001. As a consequence, the licensee had erroneously recounted too many samples because of perceived exceedances of beta activities and too few recounts of exceedances of alpha activities.

The investigation concluded that all samples required to be recounted had been recounted. The samples that should have been recounted because the gross alpha activities exceeded the action level were recounted because the sample result exceeded the gross beta activity action level. A possible cause for the setpoint error was a lack of process or procedure for verifying action levels in the counting laboratory software. Corrective actions suggested by the investigator included a detailed review of the software, controlling the ability to make future changes to software, and providing awareness training.

The investigator also determined that Procedure 4100 did not provide specific time intervals for reporting sample results to the radiation protection staff. As a result, during the summer of 2004, the laboratory staff commenced with monthly reporting. Corrective actions proposed included updating the applicable procedure to specify a time interval for timely reporting.

The investigation concluded that the software setpoint error and the delay in reporting sample results did not result in a significant safety consequence. An NRC Inspection

Followup Item (070-00754/0501-01) is being created to ensure NRC review of the licensee's implementation of corrective actions identified during the incident investigation.

# 2.3 Conclusions

The radiation protection program was in compliance with regulatory requirements and license conditions. Areas reviewed and found to be acceptable included the annual program review, leak tests of sealed sources, and area radiological surveys. Occupational exposures and airborne releases were below regulatory limits. An NRC Inspection Followup Item was identified to review the licensee's implementation of corrective actions for air sample analysis issues involving a computer software setpoint error and the timeliness of reporting air sample results to the radiation protection staff.

# 3 Management Organization and Controls (IP 88005)

# 3.1 Inspection Scope

The inspector reviewed records and interviewed licensee personnel to ascertain whether management systems contributed to the protection of public health and safety through the proper control, evaluation, and management of site activities.

# 3.2 Observations and Findings

The general administrative requirements are provided in Section 4.0 of Appendix A to the license application. The organizational structure was reviewed to determine if the licensee had sufficient staff to provide oversight of criticality safety and radiation safety functions as required by Section 4.0. A review of the current organizational structure indicated that all managerial positions were filled with qualified individuals. Environmental health and safety positions were also filled with qualified individuals, including all radiation, criticality, and industrial safety positions.

Section 4.4 of Appendix A provides requirements for the Vallecitos Technological Safety Council. This Council is an independent review body and consists of at least five senior staff members. The Council is responsible for reviewing reportable incidents, the nuclear safety program, and major facility changes. The Council is required to meet quarterly. The inspector confirmed that the Council had met quarterly since the beginning of 2004 and that all meetings included a quorum of members.

#### 3.3 <u>Conclusions</u>

The licensee continued to staff management level positions as well as environmental health and safety positions with qualified individuals. The Vallecitos Technological Safety Council continued to function as required by the license.

# 4 Operator Training/Retraining (88010)

# 4.1 <u>Inspection Scope</u>

The inspection objectives were to determine whether the licensee was complying with regulations and license requirements related to training of employees and other personnel.

# 4.2 Observations and Findings

Regulation 10 CFR 19.12 provides requirements for instructions to workers. Further, radiation safety training is required by Section 7.3 of Appendix A to the license application. Indoctrination training was required for all new employees upon initial entry to the site. Within 30 days, these employees were required to attend new employee radiation safety orientation training. To obtain unescorted access to radiologically restricted areas, employees were required to attend an advanced radiological safety training course. Refresher training was provided annually. Department of Transportation awareness training was provided biennially.

The inspector reviewed the training matrix and confirmed that all required radiological safety training, including refresher training, had been presented during 2004. A review of the records indicated that current staff members had attended the applicable training classes. The training included written examinations as appropriate. Industrial safety and first aid training was also provided.

Criticality safety training was required by Section 5.8 of Appendix A of the license application. The inspector confirmed that the licensee presented criticality safety training to applicable workers during 2004. The training included a written examination.

#### 4.3 Conclusions

The license presented criticality, industrial, and radiation safety training during 2004 that met the intent of regulations and license conditions.

#### 5 Maintenance and Surveillance Testing

# 5.1 <u>Inspection Scope</u>

The inspection objectives were to determine whether general maintenance operations, surveillance tests, and calibrations were being conducted in accordance with license requirements and approved procedures.

# 5.2 Observations and Findings

#### a. <u>Criticality Alarm System</u>

A criticality accident monitoring system is required by 10 CFR 70.24(a)(1). This regulation states that the monitoring system shall be capable of detecting a criticality that produces an absorbed dose in soft tissue of 20 rads of combined neutron and gamma radiation at an unshielded distance of 2 meters from the reacting material within 1- minute. Criticality monitoring is also required by Section 5.9 of Appendix A to the license application. Details of the detection system are provided in Section 3.8.1 of Appendix B to the license application.

Two sets of three gamma radiation detectors are used by the licensee. The inspector observed the two areas that were being continuously monitored by criticality alarms. The inspector confirmed that the monitors were installed in the locations specified in the NRC-approved license application.

The licensee conducted monthly tests of the criticality alarms to verify operability. The licensee tested the monitors most recently on March 2, 2005. The monitors were documented as being fully functional at that time.

The monitors are calibrated to actuate if gamma radiation levels reach 20 millirems per hour. The inspector conducted a review of the alarm setpoint to ensure that it was consistent with the requirements of §70.24(a)(1). The alarm setpoint was verified using the information provided in ANSI N16.2-1978, Appendix B, "Calculations of Detector Radius of Coverage Versus Alarm Trip Point." The inspector concluded that the alarm setpoint of 20 millirems per hour was conservatively established and in compliance with §70.24(a)(1) requirements.

#### b. Survey Meter Operability Checks and Calibrations

Section 8.7 of Appendix A to the license application states that field check sources shall be available for use in functional response checks of portable radiation measuring instrumentation. The inspector observed the licensee conducting survey instrument operability checks. The licensee had radioactive check sources available for use with the different types of survey meters being used at the site, including gamma exposure, alpha particle, and beta particle detectors.

In practice, the licensee's staff conducted two types of instrument checks, either a comparison to a predetermined value or observation of meter deflection. The gamma exposure rate meters were compared to a known value during the source check, and if the instrument reading fell within a certain range, the instrument was assumed to be operable. The alpha and beta particle detectors were source checked only to demonstrate that the meter indicator responded to the radiation field. Unlike the gamma exposure rate meters, the readings on the alpha and beta particle meters were not required to fall within a predetermined range. The inspector concluded that both methods met the intent of Section 8.7 of Appendix A.

The inspector observed the collection of swipe samples from a shipping container being transported offsite and from floors and walls in Building 102. The sample results were being recorded in counts per minute on licensee-approved data forms. The inspector noted that the forms provided default efficiency factors for converting the count rate to a disintegrations per minute value. The default values were pre-printed on all survey records. The default conversion factor of 10-percent was used for alpha detecting meters, and a default conversion factor of 20-percent was used for beta-gamma detecting meters.

At the request of the inspector, the licensee conducted four instrument calibration checks to confirm the accuracy of the default efficiency factors. The efficiencies of the three alpha meters varied from 12 to 18-percent. The beta survey meter was 36-percent efficient. Therefore, the licensee's default efficiency factors were more conservative than actual efficiency factors.

Section 4.5 of Appendix A to the license application states that the licensee will establish standard operating procedures. The inspector reviewed selected instrument operating procedures to ensure that the workers were conducting operations in accordance with approved procedures. Nuclear Safety Procedure 5174 described the operation of the Eberline Model PAC-1SA alpha survey meter. The inspector noted that the licensee's staff was not adhering to the procedure requirements for conduct of instrument checks and conversions of counts per minute to disintegrations per minute. This procedure required the technician to conduct an operability check similar to the method used for gamma radiation survey meters, and to convert the counts per minute value to a disintegrations per minute value using actual efficiency factors, not default efficiency factors.

The licensee's failure to adhere to the procedure requirements was a violation of the license. However, this failure constitutes a violation of minor significance and is not subject to formal enforcement action. The licensee's method for conducting instrument checks was in accordance with the license application, and the method for conducting the data conversions was conservative. The licensee stated during the inspection that it would review the survey meter operating procedures and update or adhere to the procedures as appropriate.

#### 5.3 Conclusions

Testing of the criticality alarm system was performed in accordance with license requirements. The alarm setpoint was confirmed to be in compliance with regulatory requirements. The licensee was conducting instrument calibration checks in an acceptable manner.

# 6 Emergency Preparedness (88050)

# 6.1 <u>Inspection Scope</u>

The objectives of this portion of the inspection was to ascertain whether the licensee's emergency preparedness program was being maintained in a state of operational readiness.

# 6.2 Observations and Findings

Although the licensee is not required by 10 CFR 70.22(I) to maintain a radiological emergency plan for SNM activities, the licensee committed in Section 4.5 of Appendix A to License SNM-960 to establish and maintain site emergency procedures. The inspector reviewed the licensee's emergency preparedness program to ensure that the program was being maintained in a state of operational readiness. The inspector confirmed that the licensee had implemented site procedures for emergency preparedness. The licensee maintained a fire team and a spill team with assigned individuals.

Three emergency preparedness training courses were conducted during 2004. All employees were provided with general emergency response training. Emergency support/emergency operations coordinator training was provided to site managers and selected designees. Emergency support/building emergency teams training was provided for each building emergency response team. The licensee also conducted periodic exercises to ensure operational readiness. During calender year 2004, the licensee conducted six discrete building exercises.

An internal audit of the radiological emergency plan and site emergency procedures was conducted during December 2004. No findings or changes were determined to be necessary except that the emergency team rosters and call lists required updating. These updates have since been incorporated.

Emergency supplies are required by Section 3.6 of Appendix B to the license application. The licensee maintained 11 emergency supply cabinets across the site. The inspector randomly chose one cabinet and inspected the contents of the cabinet against the procedure inventory list. Survey meters were being stored in the cabinet. The inspector noted that all meters were within the required calibration intervals. All required supplies were stored in the cabinet except one spare radiological survey meter probe. The licensee replaced this missing item immediately. This finding was not safety significant because the licensee had other survey meters and probes available onsite in case of a real emergency situation.

#### 6.3 Conclusions

The licensee continued to maintain an emergency preparedness program as required by the license application. The program included procedures, training, exercises, designated response teams, and emergency response supplies.

# 7 Followup (92701)

7.1 (Closed) Inspection Followup Item 070-00754/0302-01: Review licensee's incident report and corrective actions for exceedance of administrative limit

During a previous inspection, a Non-Cited Violation was identified related to storage of SNM in the dry storage pit in quantities in excess of the administrative limit. During this inspection, the inspector discussed the status of open corrective actions with licensee staff. Open corrective actions included implementation of a revised criticality analysis. The licensee had completed the revised criticality analysis but had not implemented the analysis. The analysis was in the final stages of verification during this inspection. The licensee used the computerized Audit Tracking System to keep track of open commitments and corrective actions. The inspector confirmed that the remaining corrective actions were listed in the licensee's tracking system. Implementation of the revised criticality analysis will be reviewed during a future inspection.

7.2 (Closed) Inspection Followup Item 070-00754/0402-01: Review licensee's incident report and corrective actions for spill of fluid from onsite tank

During August 2004, the licensee experienced a minor spill of contaminated water from an onsite tank. Approximately 5-10 gallons of liquid spilled from the top vent of a 30,000-gallon tank located adjacent to the evaporator equipment. Immediate corrective actions included cleanup of the spilled fluid. Longer term actions included installation of hardware to capture any future tank overflow. The licensee elected to conduct a formal review of the incident in accordance with its incident investigation program. The licensee concluded that the incident was not reportable to the NRC. The inspector reviewed the incident investigation report and discussed the incident with licensee personnel. The inspector agreed that the incident did not meet the reportability requirements of either 10 CFR 20.2202, Notification of Incidents, or 10 CFR 70.50, Reporting Requirements.

# 8 Exit Meeting Summary

The inspector presented the preliminary inspection results to members of licensee management on March 31, 2005. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspector.

# **ATTACHMENT**

#### PARTIAL LIST OF PERSONS CONTACTED

- J. Ayala, Radiation Monitoring Specialist
- C. Basset, Manager, Facilities Maintenance and Quality Assurance
- R. Begley, Area Manager
- S. Bump, Manager, Vallecitos Nuclear Center
- C. Hill, Supervisor, Materials Laboratory Operation
- D. Lutz, Senior Engineer
- R. Pomares, Manager, Engineering and Materials Services
- H. Stuart, Radiological Engineering
- D. Turner, Manager, Regulatory Compliance and Environmental Health and Safety

#### **INSPECTION PROCEDURES USED**

IΡ	83822	Radiation	Protection

IP 88005, Management Organization and Controls

IP 88010, Operator Training/Retraining

IP 88020, Regional Criticality Safety Inspection Program

IP 88025, Maintenance and Surveillance Testing

IP 88050, Emergency Preparedness

IP 88055, Fire Protection

IP 92701, Followup

TI 2600/03, Operational Safety Review

#### ITEMS OPENED, CLOSED OR DISCUSSED

#### Opened

70-754/0501-01	IFI	Review of licensee's corrective actions for a computer software
		setpoint error and timeliness of reporting sample results to radiation protection staff.

#### Closed

·		
70-754/0302-01	IFI	Review licensee's incident report and corrective actions for exceedance of administrative limit.
70-754/0402-01	IFI	Review licensee's incident report and corrective actions for spill of fluid from onsite tank.

#### Discussed

None.

# LIST OF ACRONYMS USED

ALARA As Low As Reasonably Achievable

CFR Code of Federal Regulations
IFI Inspection Followup Item
IP NRC Inspection Procedure
SNM Special Nuclear Material
TI Temporary Instruction