UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

September 18, 2002

James Shetler, Assistant General Manager
Energy Supply
Sacramento Municipal Utility District
6201 'S' Street
P. O. Box 15830
Sacramento, California 95852

SUBJECT: NRC INSPECTION REPORT 50-312/2002-03; 72-11/2002-02

Dear Mr. Shetler:

An NRC inspection was conducted August 12-22, 2002, at your Rancho Seco nuclear reactor facility. The enclosed report presents the scope and results of that inspection.

The purpose of the inspection was to review compliance with federal regulations, your license and technical specifications concerning decommissioning activities, maintenance and surveillance, and safe storage of spent fuel. No violations of NRC regulations were identified during the inspection.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you provide one, 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 D. Blair Spitzberg, Ph.D. at (817) 860-8191 or Emilio M. Garcia at (530) 756-3910.

Sincerely,

/RA/

Dwight D. Chamberlain, Director
Division of Nuclear Materials Safety

Docket Nos.: 50-312; 72-11
License Nos.: DPR-54; SNM-2510

Enclosure:
NRC Inspection Report
50-312/2002-03;72-11/2002-02

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09/16/02	09/16/02	09/18/02

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.:	50-312; 72-11
License Nos.:	DPR-54; SNM-2510
Report No.:	50-312/2002-03; 72-11/2002-02
Licensee:	Sacramento Municipal Utility District
Facility:	Rancho Seco Nuclear Generating Station
Location:	14440 Twin Cities Road Herald, California
Dates:	August 12-22, 2002
Inspector:	Emilio M. Garcia, Health Physicist Fuel Cycle and Decommissioning Branch
Approved By:	D. Blair Spitzberg, Ph. D., Chief Fuel Cycle and Decommissioning Branch
ADAMS Entry :	IR 05000312-02-03/072000011-02-02; on 08/12-22/02; Sacramento Municipal Utility District; Rancho Seco Nuclear Generating Station. Decommissioning Report; No Violations.

EXECUTIVE SUMMARY

Rancho Seco Nuclear Generating Station
NRC Inspection Report 50-312/2002-03;72-11/2002-03

Movement of spent fuel to dry cask storage at the Independent Spent Fuel Storage Installation (ISFSI) was completed successfully. Twenty-one canisters containing a total of 493 fuel assemblies have been loaded and placed in the ISFSI. All spent fuel had been removed from the spent fuel pool and the spent fuel building was declared available for decommissioning. The licensee was continuing their dismantlement activities in the reactor and auxiliary buildings, and preparing to start dismantlement work in the spent fuel building. The licensee was conducting twice weekly waste shipments.

Safety Reviews

- The licensee had a program for conducting safety evaluations as permitted by 10 CFR 50.59 and 72.48 (Section 1).

- Safety evaluations appeared to have been performed as required by the licensee's procedures and the regulations (Section 1).

Maintenance and Surveillance

- Maintenance and surveillance activities were conducted as required by technical specifications and/or maintenance procedures (Section 2).

Operations of an Independent Spent Fuel Storage Installation

- The licensee had successfully loaded 21 canisters with spent fuel and placed them in the ISFSI. No significant problems had been encountered (Section 3).

- Review of records and observations made during the inspection found that technical specification requirements were being met (Section 3).

- An inspection follow-up item was identified related to an apparent inconsistency between management expectations for certain surveys performed during ISFSI loading and what the field staff performed (Section 3).

- An inspection follow-up item was identified related to the failure to properly update the procedure for the loss of the plant integrated computer system to include the ISFSI building (Section 3).

Decommissioning Performance and Status Review

- The licensee was continuing their dismantlement activities in the reactor and auxiliary buildings, and preparing to start dismantlement work in the spent fuel building (Section 4).

Solid RadWaste Management & Transportation of Radioactive Materials

- The licensee had implemented a transportation program for radioactive materials and radioactive waste in accordance with NRC and Department of Transportation (DOT) regulations (Section 5).

Follow-up

- Unresolved Item 50-312/0103-01 was closed. This item related to the adequacy of the Licensee's Safety Evaluation of Fuel Storage Building Walls. The licensee had removed all fuel from the Fuel Storage Building and declared that the building was no longer available for the storage of fuel. The Fuel Storage Building was declared available for decommissioning. (Section 6).

Report Details

Summary of Facility Status

The Rancho Seco facility was undergoing active decommissioning with dismantlement work in the auxiliary and reactor buildings. The licensee was actively planning for the decommissioning of the spent fuel building. In addition, the licensee removed all 493 spent fuel assemblies from the spent fuel pool. Twenty-one canisters had been loaded with spent fuel and transferred to the ISFSI.

Overall, site decommissioning work was progressing safely with significant work completed since the last NRC inspection. Good radiological controls by the health physics personnel in the reactor building were observed during the tours of work activities. The amount of material awaiting removal from the work areas was adequately controlled with no backlog of scrap observed that would present a safety hazard to workers in the area.

1 Safety Reviews (37801)

1.1 Inspection Scope

The inspector interviewed cognizant licensee personnel and reviewed safety evaluations performed in 2002 through July.

1.2 Observations and Findings

The licensee's safety review program for compliance with 10 CFRs 50.59 and 72.48 remained as described in inspection report 50-312/2002-03. The Rancho Seco Annual Report for the period May 7, 2001, to May 6, 2002, listed the six 10 CFR 50.59(b) safety evaluations that had been approved in that period. The inspector reviewed the minutes of the Plant Review Committee (PRC) meetings for June and July, and noted that an additional five 10 CFR 50.59(b) safety evaluations and four 10 CFR 72.48 safety evaluations had been approved during that period.

The inspector's review of completed safety evaluations indicated that safety evaluations had been performed as required by the licensee's procedures and the regulations.

1.3 Conclusion

The licensee had a program for conducting safety evaluations as permitted by 10 CFRs 50.59 and 72.48. Safety evaluations were being performed as required by the licensee's procedures and the regulations.

2 Maintenance and Surveillance (62801)

2.1 Inspection Scope

The inspector reviewed selected records of maintenance and surveillance activities, interviewed cognizant personnel and observed a surveillance being performed.

2.2 Observations and Findings

The inspector reviewed the August 8, 2002, weekly memorandum of scheduled surveillances and routine tests. No surveillance or routine test was overdue. The inspector reviewed selected records of quarterly spent fuel area radiation monitor (R-15028) and the monthly spent fuel area radiation monitor tests. These surveillances had been conducted at the required frequency and no problems had been identified.

Technical Specification 5.5.3.1 requires daily horizontal storage module (HSM) roof concrete temperature measurements to verify that temperatures have not risen by more than 80°F and that they are less than 225°F. Technical Specification (TS) 5.5.3.3 requires daily visual inspection of the air vents to ensure that the HSM air vents are not blocked for more than 40 hours. The licensee used surveillance procedure SP.10, ISFSI Daily Surveillance, to fulfill these TS requirements. On August 22, 2002, the inspector observed the performance of surveillance SP-10 by an auxiliary operator (AO). The air vents were not blocked. The highest daily temperature rise for any HSM was 11.4 F (recently loaded HSM 21) and the maximum temperature for any HSM was 121°F. The licensee was meeting the requirements of TSs 5.5.3.1 and 5.5.3.3.

The inspector discussed with the nuclear operations superintendent the annual inspection and tests of cask lifting components used for lifts of the transportation cask and dry storage cask (DSC). The inspector also reviewed selected records of these inspections and tests. These inspections and tests had been successfully completed on time. The cask lifting yoke, cask lifting yoke extension, and yoke-to-sling link inspections and tests were completed on July 30, 2002. Other ISFSI related sling inspections were completed on July 3, 2002.

2.3 Conclusion

Maintenance and surveillance activities were conducted as required by technical specifications and/or maintenance procedures.

3 Operation of an Independent Spent Fuel Storage Installation (ISFSI) (60855)

3.1 Inspection Scope

The inspector reviewed the status of canister loading storage activities and compliance with selected ISFSI license technical specifications.

3.2 Observations and Findings

a. Technical Specification Compliance

The inspector reviewed the licensee's compliance with several technical specification requirements related to ISFSI operations.

On August 12, 2002, the inspector observed the performance of a portion of the standard test procedure (STP) 1357, Alternate Fuel Handling Equipment, Revision 2, effective July 24. 2002. This test was used to verify that the alternate fuel handling equipment was as designed and performed as intended in loading damaged fuel assemblies into the damage fuel canister. Immediately after completing the test the licensee began loading damaged fuel assemblies into the 21st canister. The inspector also observed loading of the first two of 13 damaged fuel assemblies into the 21st canister. Each fuel assembly was loaded inside an inner box. On August 21, 2002, the inspector observed the licensee loading the 21st canister into the ISFSI. The inspector confirmed the serial number of the canister as FF13P-R21, and that it was loaded in HSM 21.

Technical Specification 2.1.1a establishes the limits for intact spent fuel assemblies stored at each HSM to be as characterized in Table 1 below:

Table 1
Rancho Seco ISFSI
Technical Specification 2.1.1a Limits

CHARACTERISTIC	VALUE
Fuel Design	B&W 15x15
Minimum Cooling Time after Discharge	7 years
Maximum Decay Heat per cannister	13.5 Kilowatt (Kw)
Maximum Enrichment	3.43 percent
Maximum Burn-up	38,268 megawatt-days (MWd)/Metric Ton Uranium (MTU)
Cladding Material	Zircaloy-4

At Rancho Seco all fuel used was B&W 15x15 with Zircaloy-4 cladding material. The reactor last operated in 1989, so all fuel exceeded the minimum 7-year cooling. Therefore, the only variables for each canister were the maximum decay heat, maximum enrichment and the maximum burn-up rate. To ensure that these limits were not exceeded, the licensee used procedure RSAP-0238, Control and Accountability of

Special Nuclear Material(ISFSI) and Calculation No. Z-SFC-M2557, Decay Heat Value of Spent Fuel and Control Components (December 31, 1989, through December 31, 2012). The engineering superintendent provided the inspector with a summary sheet of these values for each canister. A summary of the spent fuel characteristics for the canisters currently loaded at Rancho Seco is included as Attachment 3 to this report. All 21 canisters have been loaded with spent fuel that met the requirements of Technical Specification 2.1.1a.

Technical Specification 3.1.1 requires that the Dry Storage Cask (DSC) Vacuum Pressure during drying shall be $\leq$3 Torr for at least 30 minutes. Technical Specification 3.1.2 requires that the DSC Helium leakage rate of the primary inner seal weld shall be $\leq 10^{-5}$ std-cc/sec. Technical Specification (TS) 3.1.3 requires DSC helium backfill pressure shall be 0 to 2.5 psig. The licensee used procedure DFC-001, ISFSI Loading, in part to verify and document that the TS requirements were met. The inspector reviewed portions of the DFC-001 data sheets for canisters FC24P-P07 through FC24P-P13 and confirmed that the TS requirements had been met.

Technical Specification 5.5.3.2 requires the air temperature difference between the ambient temperature and the roof vent temperature to be measured 24 hours after canister insertion into the HSM and again 7 days after insertion. If the air temperature difference exceeds 100°F, the air inlets and exits should be checked for blockage. The fulfillment of this TS requirement is documented in Attachment 5, HSM Temperature Monitoring, to procedure DFC-001, ISFSI Loading. The inspector reviewed these records and noted that the temperature differences were measured with calibrated instruments, and at the approximate required time. Table 2 below summarizes the results of these surveillances for the Canisters 13-21. On August 22, 2002, the inspector observed the licensee's performance of a portion of Attachment 5, HSM Temperature Monitoring, to procedure DFC-001, ISFSI Loading, the temperature measurements 24 hours after canister insertion into the HSM 21.

Table 2
Surveillance Results
to Demonstrate Compliance with
Rancho Seco ISFSI
Technical Specification 5.5.3.2

DSC (canister) SERIAL #	HSM #	24 hour Temperature Difference ° F	7 day Temperature Difference ° F
FO24P-P13	5	31.5	26.4
FC24P-P14	7	11	14
FC24P-P15	9	25.2	24.3
FC24P-P16	11	11.5	11
FC24P-P17	13	29.3	27.1
FC24P-P18	15	15.5	28
FC24P-P19	17	21.1	29.6

DSC (canister) SERIAL #	HSM #	24 hour Temperature Difference ° F	7 day Temperature Difference ° F
FC24P-P20	19	20	15
FF13P-R21	21	11.4	7

The first 20 HSMs loaded met the 24-hour and 7-day ambient to roof vent temperature difference requirement. Subsequent to the inspection, the inspector was informed of the results of the 7-day temperature difference for HSM 21.

Section 10.3.12 of the Rancho Seco ISFSI Final Safety Analysis Report (FSAR) states that the dose rates at the following locations shall be limited to levels that are less than or equal to:

a. 400 mrem/hr at 3 feet from the HSM surface.

b. 100 mrem/hr outside of the HSM door on center line of DSC.

c. 20 mrem/hr at end shield wall exterior.

The objective of these limits are to ensure that the cask (DSC) has not been inadvertently loaded with fuel not meeting the operating limits in Technical Specification 2.1.1; to maintain dose rates as low as reasonably achievable (ALARA); and to reduce offsite exposures during storage.

The licensee intended to document that these requirements were met by noting these applicable dose rate values under Step 22.17.26 of procedure DFC-001, ISFSI Loading. On August 21, 2002, during the loading operation of HSM 21, the inspector learned that the data recorded as the dose rate at 3 feet from the HSM surface was probably not the maximum dose rate at the HSM surface. During interviews with the health physics technicians and the assistant fuel team leader, the inspector learned that the dose rate recorded was 3 feet from the centerline of the HSM door. The highest dose rates were observed above the bird screens on the roof of the HSM. Since the individuals interviewed had been involved in most HSM loadings, it is probable that this data for the other HSMs similarly does not reflect the maximum dose rates at the HSM surface. The inspector discussed this matter with the Radiation Protection/Chemistry Superintendent and NUMANCO Health Physics Site Coordinator and they agreed that the wrong data had been recorded and initiated Potential Deviation from Quality (PDQ) 02-0068 to follow-up for corrective action. Other surveys that the health physics technicians had conducted demonstrated that the limit for maximum dose at 3 feet from the HSM surface had not been exceeded. The resolution of the apparent inconsistency between management expectations under Step 22.17.26 of procedure DFC-001, ISFSI Loading, and what the field staff performed will be reviewed during a future inspection and will be tracked as an Inspection Follow-up Item (IFI 72-11/0202-01)

On August 19, 2002, in preparation for transferring systems monitoring responsibilities from the control room (CR) to the secondary alarm station (SAS), the licensee disabled the plant integrated computer system (PICS). Since the PICS provided safety related information to the shift staff, the licensee had procedure OP-C.39A, Loss of PICS, as a compensatory means of providing the information needed. Enclosure 5.2 to OP-C.39A, Corrective Action Check Sheet for Loss of PICS, included a requirement that if any PICS alarms associated with the Fire Protection System cannot be accessed, then an hourly fire watch shall be established on the fire zones for which alarms are no longer available. This check sheet included ISFSI building and Fire Protection Zone 111. The actual line on the check sheet for the ISFSI Building was marked as (Future) and the place for initials indicating that the hourly fire watch had been performed was marked as "N/A." The ISFSI has been operational including the ISFSI building since April 2, 2001. OP-C.39A had last been reviewed and approved on April 29, 2002. Even though this was a full procedure review, the operational status of the ISFSI building was not noted and the procedure was not updated for this item. When this matter was brought to the nuclear operations superintendent, he arranged for PDQ 02-0069 to be initiated.

The inspector noted that the only functions that the ISFSI building provided was to house the local readout and telemetry for the HSM concrete temperature thermocouples. A significant raise in the HSM concrete temperature is an indication of blockage of the HSM air vents. The plant manager indicated that this building was not a vital building, and that other means could be used to monitor the HSM air vent blockage and that the fire protection system had been placed in the ISFSI only for property protection. The root cause evaluation for the failure to properly update procedure OP-C.39A to include the ISFSI building will be reviewed during a future inspection and will be tracked as an Inspection Follow-up Item (IFI 72-11/0202-02).

3.3 Conclusion

The licensee had successfully loaded 21 canisters with 493 spent fuel assemblies and placed them in the ISFSI. No significant problems had been encountered. Review of records and observations made during the inspection found that technical specification requirements were being met An inspection follow-up item was identified related to an apparent inconsistency between management expectations for certain surveys performed during ISFSI loading and what the field staff performed. An inspection follow-up item was also identified related to the failure to properly update the procedure for the loss of the plant integrated computer system to include the ISFSI building.

4 Decommissioning Performance and Status Review (71801)

4.1 Inspection Scope

The licensee's dismantlement activities were reviewed. Tours of the site were conducted to observe work activities underway, including observation of housekeeping, safety practices, fire loading and radiological controls.

4.2 Observations and Findings

Tours of the reactor (containment) building and interim onsite storage building and the spent fuel building were conducted. Radiological postings, fire loading, housekeeping and safety practices were found to be acceptable. Radiation survey instruments used were within their calibration interval and operable. The licensee had removed the reactor coolant Pumps A and B from the building. Using the Tri-Tool, they had cut reactor coolant Pump C and were cutting reactor coolant Pump D. The licensee was continuing dismantlement and removal of equipment from the reactor and auxiliary buildings, including electrical equipment, piping, ventilation ducting and other miscellaneous equipment. The inspector sat in on a planning meeting for starting work on the spent fuel building. The licensee was projecting to start working on the spent fuel building decommissioning about mid-September 2002.

4.3 Conclusion

The licensee was continuing dismantlement activities in the reactor and auxiliary buildings in a safe manner, and was preparing to start dismantlement work in the spent fuel building.

5 Solid RadWaste Management & Transportation of Radioactive Materials (86750)

5.1 Inspection Scope

The inspector reviewed the licensee's radioactive waste management and transportation of radioactive materials, including organization, training, certification, licenses of recipients, emergency notification, radiological surveys and waste manifests. The inspector interviewed personnel, toured facilities, conducted independent radiological surveys and observed dispatch of a waste shipment.

5.2 Observations and Findings

The licensee's solid radioactive waste and transportation of radioactive material organization was lead by the radioactive waste superintendent who reports to the decommissioning project manager, who in turn reports to the manager, plant closure and decommissioning. Twelve individuals reported to the radioactive waste superintendent. These included the radioactive waste supervisor, the radioactive waste engineer, and the radioactive waste technical analyst. Also reporting to the radioactive waste superintendent were four radiation protection technicians and four radioactive waste handlers lead by a senior radioactive waste handler.

The inspector discussed the personnel training requirements with the radioactive waste superintendent and the radioactive waste engineer, and reviewed training records for selected personnel. The radioactive waste engineer conducted most of the technical training of the staff as it relates to NRC and DOT requirements. Records reviewed indicated that the radioactive waste personnel involved with shipments were current with their 3-year HAZMAT training as required by 49 CFR 172, Subpart H. The licensee identified four individuals with signature authority to certify shipments of radioactive waste, as required by 10 CFR Part 20, Appendix G. All four individuals had documented

radioactive waste packaging and transportation training that met the DOT requirements in 49 CFR 172, Subpart H.

10 CFR 30.41(c) requires in part that before transferring byproduct material to another licensee, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form and quantity of by-product material to be transferred. The inspector noted that before each shipment, the licensee procedurally required that a copy of the transferee's license be available. The inspector confirmed that the licensee maintained copies of each transferee's license. However, according to the radioactive waste superintendent and the radioactive waste engineer, the licensee relied on the waste acceptance guidelines or waste acceptance criteria, documents generated by the waste recipients, to assure that Rancho Seco was not transferring material that the recipient was not authorized to receive. The inspector concluded that this practice was achieving the required performance.

On August 15, 2002, the inspector observed final preparations and the dispatch of a waste shipment. Radiological confirmatory surveys conducted by the inspector were consistent with the survey records attached to the shipping documents. The inspector noted that a representative of the quality assurance department was present during the dispatch and was reviewing the shipping manifest and associated documents. The manifest for radioactive waste shipment contained the information required by 49 CFR 172, Subpart C. The shipping records reviewed indicated that the licensee met the transportation requirements contained in 49 CFR 173.427 for the respective low specific activity (LSA) or surface contaminated object (SCO) materials. The emergency response telephone number used by the licensee was located in the control room. The on-duty shift supervisor provided adequate information regarding his responsibilities in the event of an emergency telephone call, to satisfactorily meet 49 CFR 172.604 for responding to an emergency.

The quality assurance department representative asked the radioactive waste engineer if the emergency response telephone listed on the shipping papers would change or if the telephone would be relocated once the control room closed. The radioactive waste engineer stated that he was not sure, but regardless, a telephone that would be staffed at all times during transport would be used. The inspector later confirmed that the licensee had relocated the emergency response telephone to the secondary alarm station (SAS). The SAS will be staffed around the clock.

5.3 Conclusion

The licensee implemented a transportation program for radioactive materials and radioactive waste in accordance with NRC and Department of Transportation (DOT) regulations.

6 Open Items (92701)

6.1 (Closed) URI 50-312/0103-01: Adequacy of the Licensee's Safety Evaluation of Fuel Storage Building Walls: The licensee had continued their evaluation of the fuel storage building walls to determine if the movement of the walls indicated that unusual stresses were occurring on the walls. The licensee used a routine test RT-PBS-004, Spent Fuel Building Wall and Crane Rail Monthly Visual Inspection, to conduct the collection of data related to the stresses on the walls. The procedure called for initially marking the ends of any cracks identified, and on subsequent tests, noting if the crack had grown from the previous examination. The inspector reviewed records of the examinations conducted since the last inspection. The licensee had conducted this procedure on April 24, June 3, June 27, and July 29, 2002. All the test records indicated that the cracks that had been identified during the original inspection had not grown beyond the original mark and the overhead crane rails remained properly aligned. On August 21, 2002, the licensee determined that the fuel storage building was no longer required since all the spent fuel had been removed from the building. The licensee declared the building abandoned and available for decommissioning. This item is considered closed since the fuel storage building no longer was used to store fuel and no longer being maintained by the licensee.

6.2 (Discussed) IFI 50-312/0202-01: Resolution of the Emergency Preparedness issues identified from the March 28, 2002 medical emergency. On March 28, 2002, an individual suffered a fatal heart attack while working in the reactor building. On April 3, 2002, an internal memorandum from the radiation protection/chemistry department to the manager, plant closure and decommissioning discussed a number of areas to be reviewed for possible improvement. Following up on actions taken as a result of the memorandum's recommendations, the inspector interviewed the radiation protection/chemistry superintendent and the emergency preparedness specialist who had signed the memorandum. Although the commitment tracking for this item had been assigned to the radiation protection/chemistry department, many of the recommendations were under the direction and control of other groups. At the time of the inspection, not all follow-up actions had been determined or completed. This item will remain open.

7 Exit Meeting

The inspector presented the inspection results to members of the licensee's management at the conclusion of the onsite inspection on August 22, 2002. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspector.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Sacramento Municipal Utility District

M. Braun, Quality Assurance
J. Briggs, Emergency Preparedness Specialist
M. Bua, Radiation Protection/Chemistry Superintendent
J. Delezenski, Nuclear Quality Assurance/Licensing/Administrative Superintendent
T. Devine, Safety Officer
J. Fields, Technical Services Superintendent
D. Gardner, Decommissioning Project Manager
M. Hieronimus, Nuclear Operations Superintendent
S. Porterfield, Health Physics
S. Redeker, Manager, Plant Closure and Decommissioning
M. Snyder, Radioactive Waste Superintendent
N. Zimmerman, Operations Engineer

Contractors

R. Snyder, Sr. Radiological Engineer, Bartlett
M. Steinbacher, Health Physics Site Coordinator, NUMANCO

INSPECTION PROCEDURES USED

37801	Safety Reviews
62801	Maintenance and Surveillance
60855	Operations of an Independent Spent Fuel Storage Installation
71801	Decommissioning Performance and Status Review
86750	Solid RadWaste Management & Transportation of Radioactive Materials
92701	Follow-up

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

IFI 72-11/0202-01	Resolution of the apparent inconsistency between management expectations for certain surveys performed during ISFSI loading and what the field staff performed
IFI 72-11/0202-02	Root cause evaluation for the failure to properly update procedure OP-C.39A to include the ISFSI building.

Closed

URI 50-312/0103-01 Adequacy of the Licensee's Safety Evaluation of Fuel Storage Building Walls

Discussed

IFI 50-312/0202-01 Resolution of the Emergency Preparedness issues identified from the March 28, 2002 medical emergency.

LIST OF ACRONYMS

AO	auxiliary operator
DSC	Dry Storage Cask
FSAR	Final Safety Analysis Report
HSM	horizontal storage module
IFI	Inspection Follow-up Item
ISFSI	Independent Spent Fuel Storage Installation
MWd/MTU	Megawatt-days/metric ton Uranium
PDQ	Potential Deviation from Quality
SAS	Secondary alarm station
STP	standard test procedure
TS	Technical Specification
URI	Unresolved Item

ATTACHMENT 2

PARTIAL LIST OF DOCUMENTS REVIEWED

Correspondence

- Letter MPC&D 02-039 dated May 6, 2001 (sic), from Manager, Plant Closure and Decommissioning to U.S. Nuclear Regulatory Commission Document Control Desk. Subject: Rancho Seco Annual Report.

Internal Memorandums

- To: AJTF #02-105, Rev.0, from D. Brown, Exposure Totals for Dry Shielded Cannister #21, August 22, 2002.
- PRC 02-017 dated June 3, 2002, from PRC Coordinator to Manager, Plant Closure and Decommissioning, Subject: Minutes PRC Meeting No. 2393 held on June 3, 2002.
- PRC 02-018 dated June 12, 2002, from PRC Coordinator to Manager, Plant Closure and Decommissioning, Subject: Minutes PRC Meeting No. 2394 held on June 6, 2002.
- PRC 02-020 dated July 11, 2002, from PRC Coordinator to Manager, Plant Closure and Decommissioning, Subject: Minutes PRC Meeting No. 2395 held on July 11, 2002.
- PRC 02-021 dated July 11, 2002, from PRC Coordinator to Manager, Plant Closure and Decommissioning, Subject: Minutes PRC Meeting No. 2396 held on July 11, 2002.
- PRC 02-023 dated July 30, 2002, from PRC Coordinator to Manager, Plant Closure and Decommissioning, Subject: Minutes PRC Meeting No. 2397 held on July 30, 2002.
- NQA 02-057 dated July 17, 2002, from Nuclear Quality Assurance PRC Representative to PRC, Subject: Meeting No. 2396 Minority Position (MEL Log 02-04; SFB Downgrade to QA Class 4).
- CMRG Meeting Agenda August 21, 2002
- RPC 02-019, dated April 3, 2002, from the Emergency Preparedness Specialist to the Manager, Plant Closure and Decommissioning, titled “Review of the Medical Emergency on March 28, 2002,” dated April 3, 2002.
- Memorandum dated July 30, 2002, from the Emergency Preparedness Specialist to file CTS # 53341, Subject: Review of Medical Emergency on March 28, 2002.
- Memorandum dated August 8, 2002, from the Neil W. Zimmerman to Surveillance Scheduler, Subject: Surveillance and RT Schedule.
- Memorandum dated August 21, 2002, from the Safety Health and Environmental Specialist to file CTS # 53341, Subject: Additional Information referencing Review of Medical Emergency on March 28, 2002 (cross-referencing letter dated July 30, 2002 from Jeff Briggs)

Procedures and Data Sheets

- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P13.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P14.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P15.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P16.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P17.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P18.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P19.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P20.
- Dry Fuel Casking Manual procedure DFC-001, “ISFSI Loading,” Revision 7 for DSC FC24P-P21.
- EPIP-5330, Transportation of Contaminated Injured Personnel, Revision 5, page 3
- OP-C.39A, Loss of PICS, Revision 2, effective April 29, 2002.
    - Enclosure 5.2, Corrective Action Check Sheet for Loss of PICS, dated August 22, 2002.
    - Procedure Change Request and Approval for procedure OP-C.39A, approved April 29, 2002.
- Routine Test Procedure Manual, RT-PBS-004, Spent Fuel Building Wall and Crane Rail Monthly Visual Inspection, Revision 0, effective January 15, 2002.
    - Data Sheet for test conducted on April 24, 2002.
    - Data Sheet for test conducted on June 3, 2002.
    - Data Sheet for test conducted on June 27, 2002.
    - Data Sheet for test conducted on July 29, 2002.

- Surveillance Procedure Manual, SP.412A, Monthly Spent Fuel Area Radiation Monitor Test, Revision 3, effective May 27, 1998.
    - Data Sheet for test conducted on July 9, 2002
    - Data Sheet for test conducted on August 6, 2002
- Surveillance Procedure Manual, SP.413E, Quarterly Spent Fuel Area Radiation Monitor Calibration, Revision 6, June 28, 2000.
    - Data Sheet for test conducted on July 23, 2002
- Special Test Procedure, STP.1357, Alternate Fuel Handling Equipment, Revision 2, effective July 24. 2002.

Potential Deviation from Quality Initiating Report # 02-0068

Potential Deviation from Quality Initiating Report # 02-0069

D-FPPM, Decommissioning Fire Protection Plan Manual, Revision 6, Pages, 2, 15, 27 and 28.

ATTACHMENT 3
LOADED NUHOMS CANISTERS AT THE RANCHO SECO ISFSI

LOADING ORDER	DSC (canister) SERIAL #	HSM #	DATE ON PAD	HEAT LOAD (Kw)	BURNUP MWd/mMTU	MAXIMUM FUEL ENRICHMENT	PERSON-HOURS TO LOAD	PERSON-REM DOSE
1	FO24P-P01	20	04/19/01	9.005	35,200	3.43 %	Not Available	0.601
2	FC24P-P03	18	07/19/01	8.145	37,911	3.43 %	1639	0.418
3	FC24P-P04	16	08/28/01	8.268	36,290	3.43 %	1557	0.552
4	FC24P-P05	14	09/26/01	8.149	37,911	3.43 %	1559	0.464
5	FO24P-P02	12	10/10/01	8.774	37,550	3.26 %	1555	0.361
6	FC24P-P06	10	11/20/01	8.152	36,707	3.43 %	1485	0.513
7	FC24P-P07	8	12/12/01	8.161	37,911	3.43 %	1512	0.461
8	FC24P-P08	6	01/07/02	8.151	36,707	3.43 %	1436	0.517
9	FC24P-P09	4	01/23/02	8.146	38,268	3.43 %	1713	0.472
10	FC24P-P10	2	02/07/02	8.137	38,268	3.43 %	1488	0.605
11	FC24P-P11	1	02/27/02	8.139	38,268	3.43 %	1514	0.290
12	FC24P-P12	3	03/13/02	8.162	37,827	3.43 %	1456	0.385
13	FC24P-P13	5	04/03/02	8.157	37,911	3.43 %	1422	0.402
14	FC24P-P14	7	04/17/02	8,139	37,911	3.43 %	1437	0.466
15	FC24P-P15	9	05/08/02	8,147	36,707	3.43 %	1415	0.390
16	FC24P-P16	11	05/22/02	8,156	36,290	3.43 %	1406	0.323
17	FC24P-P17	13	06/12/02	8,132	36,290	3.43 %	1420	0.371
18	FC24P-P18	15	06/26/02	8,141	37,911	3.43 %	1416	0.410
19	FC24P-P19	17	07/17/02	8,144	37,550	3.43 %	1444	0.343
20	FC24P-P20	19	07/31/02	8,127	37,827	3.43 %	1444	0.433
21	FF13P-R21	21	08/21/02	4,642	34,403	3.43 %	1425	0.442

Notes:
- Heat Load (kw) is the sum of the heat load values for all spent fuel assemblies in the cask based on 1999 decay
- Burnup is the value for the spent fuel assembly with the highest individual discharge burnup
- Fuel Enrichment is the spent fuel assembly with the highest individual enrichment per cent of U-235
- HSM is the concrete horizontal storage module located at the ISFSI that holds the cask
- Person-hours to load does not include cannister preparation. Clock starts when cannister placed in Spent Fuel Pool