U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos. 50-206/88-18, 50-361/88-17 and 50-362/88-18

Docket Nos. 50-206, 50-361 and 50-362

License Nos. DPR-13, NPF-10 and NPF-15

Licensee: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Facility Name: San Onofre Nuclear Generating Station - Units 1, 2 and 3

Inspection at: San Onofre Nuclear Generating Station

Inspector: J. E. Russell, Radiation Specialist — 6-29-88 Date Signed

Inspector: S. Block, Health Physicist — 6-29-88 Date Signed

Approved by: G. P. Yuhas, Chief, Facilities Radiological Protection Section — 6/29/88 Date Signed

Summary:

Inspection on 2 May through 9 June 1988, Report Nos. 50-206/88-18, 50-361/88-17 and 50-362/88-18.

Areas Inspected:

This was a special, unannounced inspection of licensee action on items of non-compliance, unresolved and open items; in-office review of periodic and special reports; allegation follow-up; Units 1, 2 and 3 - maintaining exposures ALARA; and Unit 3 - occupational exposures during outages; and the inspection included tours of the licensee's facilities. Inspection procedures 30703, 83728, 83729, 90713, 92701 and 92702 were addressed.

Results:

In the areas inspected, the licensee's programs appeared adequate to accomplish their safety objectives. No violations or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Personnel

P. Knapp, Health Physics (HP) Manager
R. Warnock, Assistant HP Manager
J. Madigan, Operational HP Supervisor, units 2/3
S. Brooks, Radioactive Material Control (RMC) General Foreman
S. Jones, Quality Assurance (QA) Engineer
K. Helm, Effluent Engineer
M. Barr, Compliance Engineer

The above noted individuals were present at the exit interview on 9 June 1988. In addition to the individuals identified, the inspector met and held discussions with other members of the licensee's staff.

2. Licensee Action on Items of Non-compliance

Item 50-206/87-12-02 violation (Closed). The licensee failed to label some non-exempt check sources installed in radiation monitors. Some labels had become illegible due to weathering and aging. The inspector verified that action as indicated in the licensee's timely reply, to assure that more permanent labels had been installed on non-exempt sources and that procedure SO123-VII-9.1.2, Inventory and Leak Testing of Sealed Radioactive Sources, had been revised to regularly inspect monitor check source labels to assure their adequacy, was complete and appeared to be effective to prevent recurrence.

3. Licensee Action on Unresolved and Open Items

Item 50-362/87-12-01 (Closed). An unresolved item was reopened to determine the ability of the licensee's wholebody counting systems to detect Ce/Pr-144 (see Inspection Reports 50-362/88-06, 87-27, 87-20 and 87-12). Ce/Pr-144 are isotopes identified in fuel fragments with which SONGS has had contamination control problems.

Licensee representatives provided to the inspector calculations of the minimum detectable activities (MDAs) attainable by their wholebody counting systems in their various modes. The mobile "Quicky" counter had a MDA at the mesa of 139.5 nCi using the Flea matrix for a one minute count. The Central Processing Facility (CPF) "Quicky" had a MDA of 172 nCi using the Flea matrix and approximately 800 nCi using a "Scatter Factor" action point of 400 counts and the Standard matrix. As a result of the inspector's inquiry, the licensee has taken action to reduce the CPF "Quicky" scatter factor action point to 300 counts which will provide an MDA of approximately 500 nCi using the standard matrix for a one minute count. The "Laydown" counter had a MDA of 43.8 nCi using their updated software and an eight minute count. Lower MDAs are obtained using longer count times.

The maximum permissible lung burden for Ce/Pr-144 is 650 nCi and a single deposition of 40 MPC-hr would result in an uptake of approximately 38 nCi 24 hrs after exposure. SO123-VII-4.2.1, Operation of the Analytical Whole Body Counting System, and SO123-VII-4.2.1.2, Operation of Quicky Model III Whole Body Counter, were reviewed and found to have been revised to provide specific criteria for use of the Flea matrices when the possiblity for a Ce/Pr-144 intake exists. It was also found that, although the Flea matrices had been used only 14 times in the first 4 months of this year, they had been employed 35 times in May primarily for suspected intakes. Most wholebody counts at SONGS are made as entry and exit counts at the CPF using one minute count times and the standard matrix. The "Laydown" counter is used to determined whether an intake of radioactive material has occurred when that possibility is suspected.

The inspector concluded that it appeared the licensee has developed the capability for detecting Ce/Pr-144 intakes and has provided criteria for use of that capability sufficient to meet the requirements of 10 CFR 20.103, Exposure of individuals to concentrations of radioactive materials in air in restricted areas, and the intent of ANSI N343-1978, American National Standard for Internal Dosimetry for Mixed Fission and activation products.

Item 50-206/88-04-01 (Closed). Problems were identified in the performance of surveys to release thermoluminescent dosimeters (TLDs) from the restricted area. The inspector verified that actions had been completed to instruct personnel in the proper methods to be used to release TLDs from the restricted area and that procedure SO123-VII-7.3.2, Release of Potentially Contaminated Items from the Restricted Area, had been appropriately revised. These actions appeared sufficient to prevent recurrence.

Item 50-206/88-04-02 (Closed). Problems were identified in the survey and posting of radiation areas due to the difference in height of individuals performing them. The inspector verified that procedure SO123-VII-7.2, Radiation Surveys, had been revised to consider individual height differences when surveying and posting areas. This action appeared sufficient to prevent recurrence.

Item 50-361/87-32-01 (Closed). Problems were identified in the implementation of contamination controls during work in the Hot Machine Shop, when numerous personnel contaminations occurred during reactor coolant pump seal work. The inspector verified that action had been taken to identify specific HP controls to be implemented during select jobs and evolutions which pose a greater than normal challenge to routine radiological control. This action took the form of a new procedure, SO123-VII-1.5, Health Physics Work Controls Planning, which allows special consideration be given to work involving increased radiological hazards. This action appeared sufficient to alleviate the potential for recurrence.

Item 50-362/87-32-01 (Closed). A problem was identified in the reporting of Process Control Program changes in the Semiannual Effluent Release Report (SERR) in that such changes were not being documented to confirm

appropriate review and acceptability in the format specified by Technical Specification (TS) 6.13.2.1. The inspector verified that the SERR for July-December 1987 provided a correction to that of January-June 1987 to appropriately document a noted change. Additionally, it had been previously confirmed that action had been taken to assure responsible personnel were aware of the TS requirements. These actions appeared sufficient to prevent recurrence.

Item 50-206/02-22-88 (Closed). The licensee's annual Report of Leaking Radioactive Sources, dated 22 February 1988, identified that three Ba-133 sources had been found to be leaking in excess of the TS 4.12.C (unit 1) and TS 3.7.7 (units 2/3) limit of 0.005 microcurie. The report noted that the sources had been appropriately dispositioned. The inspector determined that the sources had been damaged during a calibration procedure when a piece of tape inadvertently contacted the mylar covers of the sources. The sources were promptly taken to the operational HP organization for control and survey. This appeared to be an isolated occurrence warranting no specific corrective action.

Item 50-361/88-01-LO (Closed). The licensee reported the occurrence of a spurious Control Room Isolation System actuation when radiation monitor RT-7824A1 momentarily failed. The inspector verified that the actions indicated in the licensee's report, to clean the circuit card connectors during 18 month calibrations and to upgrade all appropriate monitor card connectors to gold, had been initiated and appeared appropriate to prevent recurrence.

4. Followup of Allegation RV-88-A-0023 (Closed).

An allegation was received by the Region V office that personnel entering the SONGS unit 3 containment were being exposed to high levels of airborne Iodine-131 and that these exposures were not being tracked. The inspector reviewed HP procedures SO123-VII-4.1 and 4.2, Personnel Monitoring Records and Internal Dosimetry Program, respectively. General area and job specific air sampling results for May 1988 were reviewed as well as select Top 100 MPC-hr Reports and Individual MPC-hr Tracking Cards (IMTCs). Containment general area I-131 levels were found to have increased significantly after the removal of Steam Generator (SG) manways and again at the beginning of core alterations, up to 22% and 50% of a MPC, respectively.

The inspector interviewed cognizant HP engineering and dosimetry personnel and inquired generally into the implementation of the internal dosimetry program for the unit 3 outage. At the time of the inspection, they were in the midst of efforts to refine airborne exposure tracking by performance of more job specific air samples in lieu of using general area airborne sampling results. The SONGS Automated Access Control System automatically provides input to the SONGS Radiological Control (SRC) exposure tracking system which calculates airborne exposures for all individuals entering the controlled area based on their entry and exit times, their job location as indicated by their Radiation Exposure Permit (REP) and general area airborne radioactivity samples.

Only specific jobs, where the potential for the production of increased levels of airborne radioactivity is likely, require the use of IMTCs. Their use provides job specific information which allows for more accurate airborne exposure calculations. It was noted that the use of IMTC data frequently results in a reduction from the SRC calculated MPC-hr exposure, due to the use of more appropriate exposure times in the calculations, rather than the controlled area entry and exit times used by the SRC.

The largest airborne exposure noted in the Top 100 MPC-hr log was 31.6 MPC-hr which was revised to 1.95 MPC-hr when job specific data was entered from the IMTC. No exposure in excess of 40 MPC-hr was noted although air samples of up to 4 MPC of I-131 were recorded. Internal Dose Assessment Forms (Form 214s), which are completed for all airborne exposures in excess of 30 MPC-hr, were also reviewed. These frequently had attached a wholebody count which documented the lack of internally deposited radioactivity.

It appeared that the exposure of personnel to airborne radioactivity was being adequately tracked in accordance with the above referenced procedures and the requirements of 10 CFR 20.103, Exposure of individuals to concentrations of radioactive materials in air in restricted areas.

The allegation was not substantiated.

5. Annual Environmental Operating Report

An in-office review of the 1987 Annual Environmental Operating Report was performed. The report showed that SONGS has provided data and analyses of radiological environmental samples and measurements, made during the period, in accordance with the program described in TS 3.18 and 4.18, unit 1, and TS 3/4.12, units 2/3. Comparison with preoperational data and previous environmental surveillance reports supports their conclusion that; airborne radioactivity, direct radiation and food crops, among other dose pathways from the environment to man; did not significantly impact on plant environs. Although the presence of plant related activity was found in indicator samples which in some cases; e.g. soil, kelp and marine species; exceeded the levels of activity in control samples; their dose impact was negligible and there seemed to be no indication of build-up. All reported sample results were below regulatory limits.

The annual report included maps and results of licensee participation in the interlaboratory comparison program. Achievement of LLDs at or below the levels required by the TS were noted. There were no major anomalies in the sampling program protocol. The land use census noted one area as having changed from the 1986 report.

The licensee seemed to be maintaining their previous level of performance in this area and their program appeared adequate to accomplish its safety objectives. No violations or deviations were identified.

Semiannual Effluent Release Report

The inspector performed an in-office review of the timely July-December 1987 Semiannual Effluent Release Report submitted in accordance with the requirements of TSs 6.9.1.8 and 6.9.1.9. Radioactive releases and resulting doses for the period appeared to be below the TS limits of paragraphs 3.15, 3.16 and 3.17 for unit 1 and 3/4.11 for units 2/3. Quarterly summaries of hourly meteorological data, providing a listing of wind speed and wind direction by stability class, were supplied in the report. The assessment of doses to offsite members of the public appeared to be performed in accordance with the methodology specified in the Offsite Dose Calculation Manual (ODCM).

The licensee seemed to be maintaining their previous level of performance in this area and their program appeared adequate to accomplish its safety objectives. No violations or deviations were identified.

6. ALARA

The inspector interviewed the ALARA group supervisor and select members of the ALARA engineering group to determine their involvement in unit 3 outage planning in particular and the current state of program implementation as to ALARA engineering input to operational decisions in general. The following current procedures were reviewed:

SO123-VII-3	Alara Job Review
SO123-VII-3.3	Methods for Establishing Alara Goals
SO123-VII-3.5	Alara Program

Outage exposure goals by job and by work group were reviewed as well as the exposures expended to date. The issuance of weekly and quarterly exposure reports were also reviewed. An outage exposure goal of 215 person-rem had been established for the unit 3 outage and all catagories of collective exposure were appropriately under their respective exposure goals at the time of the inspection.

The record reviews revealed that the above noted procedures were being followed and plant and contractor personnel interviewed during tours appeared cognizant of the need to minimize exposure and observe ALARA requirements.

The inspector specifically reviewed the input of ALARA considerations into operational and maintenance decisions. Specifically, it was noted that the ALARA group routinely begins participation in outage planning several months in advance and may begin planning for critical jobs for even longer periods. Input is also provided as to the need for mockup training for work that has previously required large exposure expenditures. For the current nozzle dam installation, ALARA has made contributions in the redesign of the dam construction, the use of mockup training and the performance of the work by a different craft more suited to the difficulties of the job. In the case of the planned pressurizer heater replacement during this outage, it was noted that this job had been planned for the 1985 cycle 2 outage but that those plans had been cancelled due to the large expected exposure, 79 man-rem, and because

ALARA engineering had had insufficient time to plan specific dose reduction methods. Subsequently, The ALARA group has tracked similar work at another facility, developed specialized shielding for the work, developed special contamination control requirements and specified special pressurizer draining methods. The ALARA group has also provided input to refueling operations in the development of specialized shielding for the fuel alignment plate modification stand.

The licensee seemed to be maintaining their previous level of performance in the area and their program appeared fully capable of accomplishing its safety objectives. No violations or deviations were identified.

7. Occupational Exposures During the Unit 3 Outage

SCE Quality Assurance Audit Report SCES-052-87 was reviewed as well as answered Corrective Action Requests (CARs) and Problem Review Reports (PRRs) issued as a result of the Audit. The audit covered compliance with HP procedure SO123-VII-9.9, Radiation Exposure Permit Program, and involved areas of external and internal exposure control, control of radioactive material and ALARA for the period of October through December 1987. Corrective Action Requests were issued to the HP organization as a result of the audit for failure to implement controls on quality affecting software, problems with the recording of airborne radioactivity exposures, problems with the performance of routine surveys, problems with the performance of ALARA reviews and failure to perform surveys to validate REPs. Numerous Problem Review Reports were also issued to document minor discrepancies.

The inspector interviewed the units 2/3 HP supervisor, HP foremen, various HP technicians and Dosimetry personnel. The inspector reviewed records including select Radiation Exposure Permits (REPs), area and job specific surveys, daily Radiation Exposure Monitoring Summary (REMS) Reports, External Dosimetry Investigations, administrative exposure extension requests, the current monthly Summary of Personnel Contaminations and a summary of hot particle contaminations. Reviewed records covered the period of the inspection except for the dosimetry investigations and hot particle contaminations which covered the period of January 1988 to present. No exposures in excess of 10 CFR 20.101, Radiation dose standards for individuals in restricted areas, limits were noted.

The inspector observed that a HP Planning and Performance group had been instituted to provide HP services as part of the Maintenance Order (MO) process. This included providing HP man-loading and comments for all outage MOs and coordinating HP support during the outage. The institution of this group was a result of a Radiological Work Process Task Force which provided a critique of the unit 2 cycle 4 outage. The Planning and Performance group operation is not yet proceduralized but is intended to be a parallel organization with Operational HP and RMC under a future Operational Assistant HP Manager. The HP Engineering and Dosimetry organizations would then be under a Technical Assistant HP Manager. These specific organizational changes had not been instituted at the time of the inspection.

The inspector observed work in the unit 3 containment, the units 2/3 radwaste building, penetration building and safety equipment building and noted personnel in the various areas were wearing personnal dosimetry. Interviewed workers were generally aware of the requirements of the REP's under which they were working, their personal exposure totals and limits and the need to perform work such that radiation exposures are as low as reasonably achievable (ALARA).

Radiation and high radiation areas in the areas toured were posted in accordance with 10 CFR 20.203, Caution signs, labels, signals and controls, and licensee HP procedure SO123-VII-7.4, Posting and Access Control.

The inspector discussed the unit 3 fuel reconstitution, plans for the unit 1 fuel transhipment, and the Combustion Engineering evaluation of SCE fuel problems with the Nuclear Fuel Services Group Supervisor. The supervisor attributed the lack of significant contamination control problems during the current refueling and reconstitution to the extensive preparations which had been made to alleviate these and to the dedication and team work of the involved personnel.

The inspector held discussions with the Dosimetry Supervisor, various Dosimetry personnel and technicians, and other licensee personnel. The inspector reviewed the Top 100 MPC-hr log, airborne radioactivity surveys, the placement of air sampling equipment, select internal dose assessments (SONGS form 214), select IMTCs, whole-body counts, and release permits. These appeared to have been completed in compliance with program requirements as specified in:

SO123-VII-4.2	Internal Dosimetry Program
SO123-VII-4.2.1	Operation of the Analytical Whole Body Counting System
SO123-VII-4.2.1.2	Operation of Quicky Model III Whole Body Counter

No overexposures to airborne radioactive material were noted and a Dosimetry representative stated that there had been no exposures to greater than 40 MPC-hr in any week during the outage. Program implementation appeared to be in compliance with the requirements of 10 CFR 20.103, Exposure of individuals to concentrations of radioactive materials in air in restricted areas.

The licensee seemed to be maintaining their previous level of performance in this area and their program appeared adequate to accomplish its safety objectives. No violations or deviations were identified.

8. SG Leakage Rate Determination

Problems were identified in determining the primary to secondary leakage rate at unit 2 after a significant leak developed in SG E088 on 1 March 1988. The leak was evinced by significantly increase air ejector activity levels but was not easily quantified due to the variability in the calculational methodologies from discrepancies between the various radioisotopes used to perform these calculations.

Discussions with licensee Chemistry personnel and a Memorandum for File from an Assistant Technical Manager, revealed that the leak rate determination calculation from SG blowdown sampling using numerous isotopes (including I-131, I-133, Na-24, Cs-137 and Cs-138) provided values that differed by up to a factor of 5 due the phenomenon of "hideout." This being the selective adsorption of the isotope from the secondary water which provides an additional removal mechanism, other than decay and SG blowdown. Hideout complicates the assumption of equilibrium necessary to perform the leakage rate calculation. For example, discussions indicated that the first day of the event, the leakage rate calculated from Cs-138 was significantly higher than that calculated from I-131; but by the third day the I-131 based leakrate was significantly higher than that based on Cs-138. By 9 March the I-131 based rate was a factor of 5 higher than the Cs-138 based rate.

Recognizing the inaccuracies in these isotopic determinations, additional information was sought from leak rate determinations based on condenser air ejector monitor readings and grab samples and Reactor Coolant System (RCS) inventory balance. Monitor readings and grab samples again showed a wide variability between noble gas based calculations but these were, on average, a factor of 8 higher than the SG sample isotopic based calculations. The RCS inventory balance was considered a very accurate measure of total system leakage at steady state conditions and provided demonstrable evidence that the TS limit of 720 gpd was not being exceeded. However, it was not sufficient to quantify the SG tube leak rate as unidentified RCS leakage was known to be significant.

Tritium was not normally used at units 2/3 to quantify SG leakrate, as the blowdown flow is reprocessed and returned to the secondary system. This made the equilibrium calculation dependent on the normally unquantified makeup rate for system leakage. Tritium was recognized as a more ideal isotope for leakrate determination as it is not subject to hideout, as are the previous isotopic methods, or to gas flow rate dependencies and partitioning effects between the liquid and gas phase, as are the air ejector based estimates. However, an accurate knowledge of the makeup rate is necessary to perform an accurate calculation. On 11 March the licensee elected to adjust system operational paramenters to direct SG blowdown to the outfall in order to determine a tritium based leakrate from the estimated makeup rate. By 13 March the secondary system tritium concentration appeared to have equilibrated but the lack of accurate knowledge of the makeup rate still provided a wide range to the leakrate determination. By 16 March, with blowdown directed to the outfall, the tritium based leakrate was calculated as 508 gpd, the air ejector based calculation provided an estimated 459 gpd and the RCS inventory balance gave a maximum possible leakrate of 498 gpd. Although wide variability was still evident in all estimates, the congruence between these figures prompted the decision to shutdown the unit for tube plugging.

This event prompted significant reconsideration by the licensee of their leakrate determination procedures. Changes were initiated to SO123-III-2.22.1, Unit 1 Steam Generator Tube Leak Procedure, and SO123-III-2.22.23, Units 2/3 Steam Generator Tube Leak Procedure. These changes recognized the uncertainties in the methodologies, including the

phenomenon of hideout in blowdown sampling, and noted the utility of air ejector monitor readings for detecting step increases in leakrate, of the use of tritium to quantify the leakrate when feedwater makeup rate can be accurately determined and of the RCS inventory balance in providing an upper limit to the determination.

The licensee seemed to be maintaining their previous level of performance in the area and their program appeared fully capable of accomplishing its safety objectives. No violations or deviations were identified.

9. Gaseous Waste

Compilations of licensee effluent data performed in the Region V office indicated that SONGS noble gas, radioiodine and particulate releases were larger by an order of magnitude than other plants in the region over the last few years. Although these releases have not been in excess of regulatory limits, an inquiry was begun to determine if any particular operational or plant characteristics were impacting on gaseous releases.

The licensee Effluent Engineerings provided the following breakdown of gaseous releases for 1986 to date and were requested to provide a similar breakdown for 1984 and 1985:

Noble Gas Releases Units 2/3 (Unit 1) in Ci

	WGDT	PVS	CAE	CP
1986	427 (184)	6838 (225)	107	884
1987	315 (212)	14990 (771)	418	6511
1st Qt 1988	9 (267)	1980 (693)	176	274

WGDT = Waste Gas Decay Tanks
PVS = Plant Vent Stacks
CAE = Condenser Air Ejectors
CP = Containment Purges

Iodine Releases Units 2/3 (Unit 1) in Ci

	PVS	CAE	CP
1986	1E-2 (2E-4)	2E-5	5E-2
1987	1E-2 (4E-4)	1E-4	3E-1
1st QT 1988	3E-2 (1E-3)	4E-3	6E-3

Particulate Releases Units 2/3 (Unit 1) in Ci

	PVS	CAE	CP
1986	1E-1 (5E-5)	1E-5	3E-3
1987	1E-1 (3E-3)	1E-2	9E-2
1st Qt 1988	2E-3 (7E-4)	2E-3	2E-2

The inspector interviewed the senior Radwaste operator from 1983 through 1986 and the head of the Noble Gas Task Force. The Task Force was instituted in 1983 and 1984 to deal with the large quantaties of noble gas being produced when significant fuel degradation problems became evident shortly after the start-up of unit 3. Efforts in early 1984 were directed at maximizing the use of the WGDTs, eliminating various system leaks, adjusting monitor alarm setpoints, determining the sources of the gas, developing the Degas system and taking economically feasible actions to mitigate the problem. Several actions were taken in 1984 to reduce leakage from primary systems, sampling systems and the waste gas system. The Task Force was essentially discontinued in mid 1984 after adressing the above noted problems with the consideration that noble gas problems were expected to decrease as problems with fuel integrity were adressed.

The above data indicate that the primary source of gaseous effluents has been the PVS. The normal holdup time in the WGDTs has been and is now greater than 30 days. Sources of activity released via the PVS were identified as the positive displacement charging pumps, the coolant radwaste primary tanks, miscellaneous waste tank, chemical waste tank, and normal gaseous losses during the processing of radioactive liquid waste. Also, it was identified that there was a period in 1987 when both gas stripping pumps were out of service which could have contributed to the PVS releases as well as there being the need to process large quantities of coolant during that year.

Further information is necessary to determine completely the distribution of gaseous activity releases over the period 1984 to date and the sources thereof. This will be reviewed further during a subsequent inspection. **This matter is considered an open item (50-362/88-18-01).**

10. Transportation

In a letter dated 22 April 1988 from the Bureau of Regulatory Health Services, the State of Nevada advised SCE of violations of 49 CFR requirements noted on a 7 April 1988 radioactive waste shipment from SONGS to Beatty, NV. The shipment had arrived at the burial site without an adequate placard on the passenger side of the trailer, contrary to the requirements of 49 CFR 172.516 (c). The condition had been noted by the State inspector at the site.

SCE responded to the notification in a letter dated 6 May 1988 and specified corrective actions to assure that future shipments are adequately placarded upon arrival at the site. This response was

accepted by the State and that acceptance was documented in a letter to SCE dated 1 June 1988.

10 CFR 71.5 (a), Transportation of licensed material, reads:

> Each licensee who transports licensed material outside of the confines of its plant or other place of use, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the regulations appropriate to the mode of transport of DOT in 49 CFR Parts 170 through 189.

The inadequate placarding of the radioactive waste shipment, contrary to the requirements of 49 CFR 172.516 (c), would normally be considered a violation of 10 CFR 71.5 (a) and a Notice of Violation could be issued. The inspector reviewed the referenced correspondence and procedures S0123-VII-8.2, Shipment of Radioactive Waste, and S0123-VII-8.2.2, Shipment of Radioactive Waste for Disposal. It was noted that these procedures had been revised as indicated in the 6 May letter and these changes appeared to adequately address the problem and should be effective to prevent recurrence. As SCE was issued a violation by the State of Nevada, corrective actions were submitted to the State and were accepted and as these actions appeared effective to prevent recurrence; no Notice of Violation is proposed for this event.

11. Exit Interview

The inspector met with the licensee representatives, denoted in paragraph 1, at the conclusion of the inspection. The scope and findings of the inspection were summarized.