

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

April 13, 2007

Richard M. Rosenblum Chief Nuclear Officer Southern California Edison Company San Onofre Nuclear Generating Station P.O. Box 128 San Clemente, CA 92674-0128

## SUBJECT: NRC INSPECTION REPORT 050-00206/07-007

Dear Mr. Rosenblum:

This refers to the inspection conducted on January 29 - February 1, 2007, at Southern California Edison Company's San Onofre Nuclear Generating Station, Unit 1 facility. This inspection was an examination of decommissioning 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.

A preliminary exit briefing was presented to your staff at the conclusion of the onsite inspection, and a final briefing was presented telephonically to members of your staff on March 27, 2007, following the receipt of sediment, concrete, and biota sample results on March 23, 2007. These samples were split with your staff during the inspection. The enclosed report presents the results of the split samples and the overall results of the inspection. In summary, the inspection determined that you were conducting decommissioning activities in compliance with regulatory and license requirements.

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

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

Sincerely,

## /RA/

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

#### Southern California Edison Co.

Docket No.: 050-00206 License No.: DPR-13 Enclosure: NRC Inspection Report 050-00206/07-007

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## **ENCLOSURE**

# U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket No:	050-00206
License No:	DPR-13
Report No:	050-00206/07-007
Licensee:	Southern California Edison Co. P.O. Box 128 San Clemente, California 92674
Facility:	San Onofre Nuclear Generating Station, Unit 1
Location:	San Clemente, California
Dates:	January 29 - March 27, 2007
Inspectors:	Robert J. Evans, P.E., C.H.P., Senior Health Physicist Fuel Cycle & Decommissioning Branch
	Janine F. Katanic, Ph.D., Health Physicist Nuclear Materials Inspection Branch
Approved By:	D. Blair Spitzberg, Ph.D., Chief Fuel Cycle & Decommissioning Branch
Attachment:	Supplemental Inspection Information
ADAMS Entry:	IR05000206-07-007 on 01/29/2007 - 02/01/2007; Southern California Edison Co., San Onofre Nuclear Generating Station; Unit 1. Decommissioning Report. No VIOs.

## EXECUTIVE SUMMARY

### San Onofre Nuclear Generating Station, Unit 1 NRC Inspection Report 050-00206/07-007

This inspection was a routine, announced inspection of decommissioning activities being conducted at the San Onofre Nuclear Generating Station, Unit 1 facility. Areas inspected include maintenance and surveillance; radioactive waste management and transportation of radioactive material; decommissioning performance and status review; organization, management and cost controls; and inspection of final surveys. The inspection determined that the licensee was conducting decommissioning activities in compliance with regulatory and license requirements.

### Maintenance and Surveillance at Permanently Shutdown Reactors

• The last remaining radiation monitor in the Unit 1 industrial area was being maintained by the licensee in accordance with Offsite Dose Calculation Manual and surveillance procedure requirements (Section 1).

### Solid Radioactive Waste Management and Transportation of Radioactive Materials

• The licensee was conducting radioactive waste shipments in accordance with site procedures and regulatory requirements (Section 2).

#### Decommissioning Performance and Status Review at Permanently Shutdown Reactors

- The licensee was conducting demolition work with an emphasis on industrial and radiological safety. Radiation protection controls had been implemented including postings, boundaries, and labels. The licensee was conducting subsurface dewatering activities in a controlled manner, and the liquid effluent was being monitored for radioactivity prior to release (Section 3).
- The inspectors conducted a confirmatory survey of selected items about to be freereleased by the licensee. The survey did not identify contamination that was distinguishable from background levels suggesting that the items could be released by the licensee (Section 3).

## Organization, Management, and Cost Controls

• The licensee's organizational structure was in compliance with Unit 1 Technical Specifications and quality assurance program requirements (Section 4).

#### Inspection of Final Surveys at Permanently Shutdown Reactors

• The inspectors conducted a confirmatory survey of the on-shore portion of the former circulating water system. The survey included measurement of ambient gamma exposure rates and surface contamination levels. Radioactive material was not identified in concentrations that were distinguishable from background levels

(Section 5.2.a).

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- The inspectors conducted split sampling of material collected by the licensee in the offshore portion of the circulating water system. The samples were analyzed by Oak Ridge Institute for Science and Education (ORISE) on behalf of the NRC. The sample results were less than the licensee's draft site-specific derived concentration guideline levels. The licensee plans to submit a license amendment request for a partial site release of this area at a later date (Section 5.2.b).
- The split sample results indicate agreement between ORISE and the licensee's laboratory. Accordingly, the licensee's laboratory was determined to be technically capable of accurately detecting and quantifying radioactive material in the samples (Section 5.2.b).

#### **Report Details**

#### Summary of Plant Status

San Onofre Nuclear Generating Station, Unit 1 was permanently shut down during November 1992 and was permanently defueled by March 1993. The unit remained in SAFSTOR until June 1999 when decommissioning was initiated. At the time of this inspection, the licensee was conducting decommissioning activities under the DECON option as stated in its Post Shutdown Decommissioning Activities Report dated December 15, 1998. DECON is defined as the immediate removal and disposal of all radioactivity in excess of levels which would permit the release of the facility for unrestricted use.

Plant equipment permanently removed from service since the previous inspection included the containment area fan, fuel handling building fan, plant stack, stack particulate radiation monitor, saltwater pump, old yard sump, plant instrumentation monitoring system, dilution pump, and several electrical load centers. The newly constructed north industrial area yard sump was placed into service. The liquid effluent radiation monitor from the old yard sump was removed from service, and a new monitor was placed into service at the new yard sump. The remaining equipment still in service included the intake sump pumps and the north construction load center. The balance of plant equipment (fire water, cathodic protection and power supplies) have been converted to Units 2/3 facilities equipment.

Work in progress during the inspection included removal of the steel containment sphere wall and demolition of the concrete spent fuel building walls. The contaminated debris was being packaged for transport to an out-of-state disposal site. Final status surveys were being conducted in the former circulating water intake and discharge structures. The licensee plans to complete the above-ground phase of decommissioning by late 2008.

#### 1 Maintenance and Surveillance at Permanently Shutdown Reactors (62801)

#### 1.1 Inspection Scope

The inspectors reviewed the status of selected maintenance and surveillance activities to verify if structures, systems, and components were being maintained in compliance with Offsite Dose Calculation Manual (ODCM) and procedural requirements.

#### 1.2 Observations and Findings

Since the previous inspection, the licensee placed the north industrial area yard sump into service with a new liquid radiation monitor R-2101. The inspectors conducted a review of the new monitor's setpoint calculations and surveillance records to ensure that the monitor was being operated and maintained in accordance with ODCM requirements.

Radiation monitor R-2101 was designed to monitor the sump effluent flow for presence of radioactive material. The monitor was expected to alarm and to trip the operating sump pumps if the concentration of radioactive material in the effluent flow exceeded a predetermined setpoint. Through a records review and interviews with personnel, the

inspectors confirmed that the monitor's setpoint had been established and implemented as required by the ODCM.

The inspectors also confirmed that radiation monitor R-2101 was being routinely checked for operability. Surveillance Operating Instruction SO23-3-3.21.1, "Radiation Monitoring and Common Daily Surveillances - All Modes," verified that monitor R-2101 was operable through the performance of daily channel and plant computer system checks.

#### 1.3 <u>Conclusions</u>

The last remaining radiation monitor in the Unit 1 industrial area was being maintained by the licensee in accordance with ODCM and surveillance procedure requirements.

## 2 Solid Radioactive Waste Management and Transportation of Radioactive Material (86750)

#### 2.1 Inspection Scope

The purposes of this portion of the inspection effort were to determine whether the licensee properly processed, packaged, stored, and shipped radioactive wastes and to determine whether transportation activities were being conducted in compliance with applicable NRC and U.S. Department of Transportation (DOT) regulations.

### 2.2 Observations and Findings

During the inspection, the licensee was in the process of dismantling the Unit 1 containment sphere. The inspectors observed personnel cutting the metal plates using gasoline and welding torches. Health physics staff conducted surveys of the metal plates as they were being loaded into the intermodal containers. When the intermodal containers were filled to approximately 40-percent volume, the containers were moved to a different area of the Unit 1 industrial area for surveying pending shipment to an out-of-state disposal site.

The inspectors observed the licensee loading one spine car for shipment of intermodal containers by rail to the disposal site. A spine car is a rail car designed to hold up to eight intermodals for transport. Licensee staff inspected the unloaded spine car for physical damage and conducted a radiological survey prior to loading six intermodal containers onto the car. The licensee's staff reconfirmed the exposure rate measurements for each intermodal prior to loading onto the spine car. Licensee staff also verified that each intermodal had the correct markings, was placarded if appropriate, and was sealed with tamper-evident security seals. Photographs of each prepared intermodal were obtained by licensee staff.

The shipments were consigned to be maintained as exclusive use in accordance with DOT requirements. Accordingly, instructions were provided to the carrier for maintaining these exclusive use shipment controls.

The inspectors reviewed selected shipment documentation including bills of lading, radioactive waste manifests, emergency response information, final radiation survey data, intermodal container contents logs, and radionuclide analyses. The licensee's shipping documentation was compared to requirements provided in Procedure SO123-VII-8.1.4, revision 11, "Solid Radioactive Waste Packaging for Class A Unstable Waste," and Procedure SO123-VII-8.2.12, "Shipment of Radioactive Waste for Land Disposal at the Envirocare Bulk Waste Disposal and Treatment Facilities in Clive, Utah." Documentation reviewed by the inspectors was thorough and was in compliance with site procedures.

The inspectors also reviewed four recent licensee audits of the radioactive waste transportation program. The audits were conducted under the licensee's Leadership Observation Program. The audit findings included minor errors in documentation that were determined to not affect the offsite shipments but had to be corrected for completeness. The licensee implemented corrective actions to address the audit findings including increased oversight of shipping documentation.

#### 2.3 Conclusions

The licensee was conducting radioactive waste shipments in accordance with site procedures and regulatory requirements.

## 3 Decommissioning Performance and Status Review at Permanently Shutdown Reactors (71801)

#### 3.1 Inspection Scope

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

#### 3.2 Observations and Findings

During site tours, the inspectors observed decommissioning work in progress. The decommissioning work included demolition of the former spent fuel building and the containment sphere wall. Industrial safety and radiation protection controls were evident in all areas of Unit 1. Safety representatives were continuously present during work activities. The inspectors also observed the movement and handling of radioactive material and concluded that radiological controls and postings met regulatory requirements.

The licensee continued to conduct dewatering operations to support subsurface excavations into the groundwater table. At the time of the inspection, the licensee was operating nine dewatering pumps. Eight of the pump wells were located in a ring around containment, and the ninth well was located in the south yard area. The discharge of the wells was being routed to the north industrial area yard sump. The total flow rate was being maintained at 2,200 gallons per minute to minimize the unnecessary cycling of the secondary yard sump pump.

The licensee was not required by license condition or site procedures to collect water samples from the individual dewatering wells because the sump discharge was being monitored by an ODCM-controlled radiation monitor (R-2101). However, the licensee voluntarily collected water samples from the dewatering wells on a routine basis. The inspectors reviewed the results of water samples collected in previous months. The licensee analyzed the water samples for total gamma-emitting radionuclide activity and for tritium (hydrogen-3) concentrations. Radioactivity was not identified in any water sample in concentrations above the minimum detectable activity of the measuring equipment.

The licensee recently installed a new dewatering well near the rail yard at the southern end of the Unit 1 industrial area. This 90-foot deep well is intended to support subsurface excavations in this area of the site. The licensee plans to start using this dewatering well during March 2007.

As part of the DECON decommissioning process, the licensee conducted radiological surveys of equipment prior to free-release from the site. To verify that the equipment had been properly surveyed by the licensee, the inspectors randomly selected ten components for a confirmatory radiological survey. The confirmatory survey measured beta-particulate radioactivity using an Eberline E-600 count rate meter (NRC No. 063473, calibration due date of 11/21/07) coupled to a SHP380 alpha-beta particulate probe.

Prior to the survey, the inspectors collected background measurements and calculated a lower limit of detection for the instrument. The inspectors measured the contamination on wood boards, hoses, electrical wire, ventilation filters, and furniture. The inspectors also scanned selected equipment with a second survey meter, a Ludlum Model 2401-P survey meter (NRC No. 21190G, calibration due date of 09/25/2007). In summary, no radioactive material above background levels was identified; therefore, the material could be free-released as originally planned by the licensee.

#### 3.3 Conclusions

The licensee was conducting demolition work with an emphasis on industrial and radiological safety. Radiation protection controls had been implemented including postings, boundaries, and labels. The licensee was conducting subsurface dewatering activities in a controlled manner, and the liquid effluent was being monitored for radioactivity prior to release.

The inspectors conducted a confirmatory survey of selected items about to be freereleased by the licensee. The survey did not identify contamination that was distinguishable from background levels suggesting that the items could be released by the licensee.

## 4 Organization, Management, and Cost Controls at Permanently Shutdown

#### Reactors (36801)

#### 4.1 Inspection Scope

The inspectors reviewed the licensee's organizational structure to ensure that the licensee had sufficient staff and managerial oversight for the work in progress.

#### 4.2 Observations and Findings

The organizational structure requirements are provided in the Unit 1 Technical Specifications, Defueled Safety Analysis Report, and Topical Quality Assurance Manual. Figures 4.2 and 4.3 of the Defueled Safety Analysis Report provide the organizational structure requirements for the licensee's decommissioning programs. The responsible corporate official was the vice president - nuclear engineering & technical services. Reporting to this vice president was the Unit 1 decommissioning manager. Reporting to the decommissioning manager were the various supervisors and managers for engineering support, project controls, construction, health physics, low level radioactive waste, project scheduling, and related projects.

The inspectors compared the actual organizational structure to Figures 4.2 and 4.3, and the inspectors concluded that all management positions had been filled. In addition, the inspectors concluded that sufficient staff was available for the work in progress, including health physics staff.

Figures 17.2-1a and 17.2-1b from the Topical Quality Assurance Manual provide the organizational quality program requirements for Unit 1 decommissioning. The organizational requirements were consistent with the actual structure in place at the time of the inspection.

## 4.3 <u>Conclusions</u>

The licensee's organizational structure was in compliance with Unit 1 Technical Specifications and quality assurance program requirements.

#### 5 Inspection of Final Surveys at Permanently Shutdown Reactors (83801)

#### 5.1 Inspection Scope

An NRC confirmatory survey was conducted in the intake and outfall structures of the on-shore portion of the Unit 1 circulating water system to independently measure the radiological condition of the structures. In addition, the inspectors split nine concrete, sediment, and biological samples previously collected by the licensee in the off-shore portions of the circulating water systems.

#### 5.2 Observations and Findings

The Unit 1 circulating water system was being final status surveyed in phases by the licensee. The phases included the on-shore portion (Phase II) and the offshore portion (Phase III). The inspectors conducted a confirmatory survey of the on-shore portion of the system. The offshore portion was inaccessible, but the inspectors split samples previously collected by the licensee for off-site analysis. Split sampling was conducted, in part, to compare the licensee's laboratory results to the NRC's laboratory results.

#### a. Confirmatory Survey of On-Shore Portion of Circulating Water System

Site procedure S01-XXVIII-6.2.5, "Comprehensive Ground Record Program for SONGS 1 Decommissioning Project," provides the guidance for generating, processing, storage and retrieval of records documenting the radiological and environmental condition of the SONGS 1 site to support future termination of both the NRC license and site easement agreements. The licensee conducted final status surveys of the on-shore portion of the circulating water system, in part, to document the as-left condition of these areas for future evaluation. In the near future, the licensee plans to fill the structure's void spaces with a concrete slurry.

The inspectors conducted a confirmatory survey while the licensee's final status survey was still in progress. The areas surveyed included the north intake conduit, south intake conduit, discharge conduit, and stop gate structure areas. Most surfaces surveyed were constructed of concrete. These areas had been classified as MARSSIM (Multi-Agency Radiation Survey and Site Investigation Manual, NUREG-1575, Revision 1) Class 3 areas. Class 3 areas are defined as any impacted areas that are not expected to contain any residual radioactivity, or are expected to contain levels of residual radioactivity at a small fraction of the derived concentration guideline level, based on site operating history and previous radiological surveys. Since the areas had been previously characterization surveyed and remediated, the areas were expected to be free of residual radioactivity.

The confirmatory survey consisted of measurement of ambient gamma radiation exposure rates and surface contamination levels. The ambient gamma exposure rates were measured using a Ludlum Ludlum Model 2401-P survey meter (NRC No. 21190G, calibration due date of 09/25/2007). The ambient gamma exposure rates were measured to locate areas of elevated radioactivity for additional sampling and review. The ambient gamma exposure rates ranged from 0.01 to 0.02 millirems per hour. These exposure rates were comparable to background levels.

The inspectors conducted measurements of surface beta particulate contamination for identification of radioactive material. The survey was conducted using an Eberline E-600 count rate meter (NRC No. 063473, calibration due date of 11/21/07) coupled to a SHP380 alpha-beta particulate probe. The inspectors first conducted background measurements of concrete surfaces at the same locations used by the licensee for its background measurements. The inspectors then calculated a lower limit of detection for the survey meter.

During the survey, the inspectors conducted limited area survey scans and 50 fixed point measurements. Since pockets of elevated radioactivity had not been identified

during the ambient gamma radiation surveys, the locations for the fixed point measurements were randomly selected. The gross count rate measurements ranged from 176-280 counts per minute with an average background of 247 counts per minute. All measurements were less than the calculated lower limit of detection of the survey meter and were comparable to background measurements. In summary, radioactive material was not identified in these on-shore structures in concentrations that were distinguishable from background levels.

## b. Split Sampling of Material Collected in Off-Shore Portion of Circulating Water Structure

The licensee was contemplating a partial site release of the off-shore portion of the circulating water system structures. These areas were generally inaccessible because they were located underwater. Similar to the on-shore structures, the off-shore structures were classified as MARSSIM Class 3 areas.

Divers were utilized to collect samples from the intake and discharge structures. The samples were collected, in part, to demonstrate that the areas were sufficiently free of radioactive material for a partial site release. The samples included concrete, sediment, wall scrapings, and biological material from inside the structures. The primary radionuclides of concern were cobalt-60 and cesium-137.

The inspectors split nine previously collected samples with the licensee. The split samples included six sediment samples, two biological samples, and one concrete sample. Three sediment samples were collected in the intake structure, and the remainder of the samples were collected in the outfall structure. The samples were analyzed by both the licensee's contract laboratory and Oak Ridge Institute for Science and Education (ORISE) on behalf of the NRC.

The two sets of samples were analyzed for gamma-emitting radionuclides. Selected samples were also analyzed for tritium (hydrogen-3) concentrations. The NRC's and licensee's split sample results are presented below, in units of picocuries per gram (pCi/g):

Sample Description	NRC's Results (pCi/g)		Licensee's Results (pCi/g)	
Intake-CL-09 Sediment	cesium-137	0.16 ± 0.04	cesium-137	0.133 ± 0.026
	cobalt-60	0.02 ± 0.03	cobalt-60	0.015 ± 0.013
	tritium	-1.5 ± 2.8	tritium	-0.5 ± 1.0
Intake-CL-13 Sediment	cesium-137	0.14 ± 0.05	cesium-137	0.16 ± 0.019
	cobalt-60	0.04 ± 0.04	cobalt-60	0.019 ± 0.011
	tritium	-0.2 ± 2.7	tritium	-0.6 ± 1.2
Intake-CL-18 Sediment	cesium-137	0.18 ± 0.05	cesium-137	0.147 ± .02

## **Table: Split Sampling Results**

Sediment

Sample Description	NRC's Results (pCi/g)		Licensee's Results (pCi/g)	
	cobalt-60	0.02 ± 0.05	cobalt-60	0.025 ± 0.013
	tritium	0.2 ± 2.8	tritium	-0.8 ± 1.0
Discharge-CC-06 Concrete	cesium-137	0.07 ± 0.04	cesium-137	0.056 ± 0.015
	cobalt-60	0.05 ± 0.03	cobalt-60	0.086 ± 0.012
	tritium	-1.5 ± 2.7	tritium	not measured
Discharge-BIO-5 Biological	cesium-137	0.00 ± 0.03	cesium-137	0.036 ± 0.038
	cobalt-60	0.05 ± 0.03	cobalt-60	0.012 ± 0.033
	tritium	2 ± 19	tritium	not measured
Discharge-BIO-1	cesium-137	0.03 ± 0.08	cesium-137	0.0 ± 0.011
Biological	cobalt-60	-0.04 ± 0.12	cobalt-60	0.003 ± 0.012
	tritium	-17 ± 13	tritium	0.5 ± 1.3
Discharge-CL-08 Sediment	cesium-137	5.03 ± 0.24	cesium-137	4.606 ± 0.083
	cobalt-60	4.20 ± 0.22	cobalt-60	3.537 ± 0.061
	tritium	0.1 ± 2.8	tritium	not measured
Discharge-CL-13 Sediment	cesium-137	11.68 ± 0.43	cesium-137	12.67 ± 0.15
	cobalt-60	15.97 ± 0.54	cobalt-60	17.04 ± 0.14
	tritium	0.4 ± 2.9	tritium	-0.4 ± 1.1
Discharge-CL-18 Sediment	cesium-137	13.14 ± 0.49	cesium-137	15.06 ± 0.18
	cobalt-60	16.22 ± 0.57	cobalt-60	19.06 ± 0.16
	tritium	-1.0 ± 3.1	tritium	not measured

The licensee is contemplating the use of site-specific criteria to demonstrate compliance with 10 CFR Part 20, Subpart E. The inspectors compared the split sample results to the draft site-specific criteria, and the sample results were below the licensee's proposed release criteria. The licensee plans to formally submit a license amendment request for the partial site release to the NRC by September 2007. This request should include the proposed site-specific derived concentration guideline levels.

Finally, the sample results indicate agreement between ORISE and the licensee's laboratories. Accordingly, the licensee's laboratory was determined to be technically capable of accurately detecting and quantifying radioactive material in site samples.

5.3 <u>Conclusions</u>

The inspectors conducted a confirmatory survey of the on-shore portion of the former circulating water system. The survey included measurement of ambient gamma exposure rates and surface contamination levels. Radioactive material was not identified in concentrations that were distinguishable from background levels.

The inspectors conducted split sampling of material collected by the licensee in the offshore portion of the circulating water system. The samples were analyzed by ORISE on behalf of the NRC. The sample results were less than the licensee's draft site-specific derived concentration guideline levels. The licensee plans to submit a license amendment request for a partial site release of this area at a later date.

The split sample results indicate agreement between ORISE and the licensee's laboratory. Accordingly, the licensee's laboratory was determined to be technically capable of accurately detecting and quantifying radioactive material in the samples.

#### 6 Exit Meeting Summary

The inspectors presented the preliminary inspection results to members of licensee management at the exit meeting on February 1, 2007. A final exit briefing was held telephonically with the licensee on March 27, 2007, following receipt of the split sample results on March 23, 2007. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

## **ATTACHMENT**

## PARTIAL LIST OF PERSONS CONTACTED

#### **Licensee**

- S. Enright, Project Manager, Unit 1 Health Physics
- J. Morales, Manager, Unit 1 Decommissioning
- A. Scherer, Manager, Nuclear Regulatory Affairs
- J. Scott, Licensing, Nuclear Regulatory Affairs
- C. Williams, Compliance Manager
- K. Yhip, Licensing Engineer, Nuclear Regulatory Affairs

## INSPECTION PROCEDURES USED

- IP 36801 Organization, Management, and Cost Controls at Permanently Shutdown Reactors
- IP 62801 Maintenance and Surveillance at Permanently Shutdown Reactors
- IP 71801 Decommissioning Performance and Status Review at Permanently Shutdown Reactors
- IP 86750 Solid Radioactive Waste Management and Transportation of Radioactive Materials
- IP 83801 Inspection of Final Surveys at Permanently Shutdown Reactors

## ITEMS OPENED AND CLOSED

<u>Opened</u>

None

<u>Closed</u>

None

**Discussed** 

None

## LIST OF ACRONYMS

DOT	U.S. Department of Transportation
IP	NRC Inspection Procedure
LSA	low specific activity
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual (NUREG-1575)
ODCM	Offsite Dose Calculation Manual
ORISE	Oak Ridge Institute for Science and Education