UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

DEC 31 1992

Report Nos: 50-335/92-22 and 50-389/92-22

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33102

Docket Nos.: 50-335 and 50-389 License Nos.: DPR-67 and NPF-16

Facility Name: St. Lucie 1 and 2

Inspection Conducted: November 30 - December 4, 1992

Inspector: _____ 31 December 1992
for R. P. Carrion, Radiation Specialist Date Signed

Approved by: _____ 31 DEC 1992
for T. R. Decker, Chief Date Signed
Radiological Effluents and Chemistry Section
Radiological Protection and Emergency Preparedness Branch
Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, unannounced inspection was conducted in the areas of the organization of the Chemistry Department and Radwaste Group, training and qualification of personnel, plant water chemistry, the Post Accident Sampling System (PASS), process and effluent monitors, effluent processing and monitoring, the Semiannual Radioactive Effluent Release Report, decommissioning planning records, and radioactive waste processing and transportation.

Results:

The licensee's organization of its Chemistry Department and Radwaste Group satisfied Technical Specification (TS) requirements (Paragraph 2).

The licensee's training Program was effective in maintaining a high skill level among the Chemistry technicians and Radiation Protection Men (Paragraph 3).

The licensee's plant water chemistry was maintained well within required TS limits (Paragraph 4).

The licensee's Post Accident Sampling System (PASS) was capable of fulfilling its intended sampling function (Paragraph 5).

The licensee's program for liquid and gaseous processing and monitoring was effectively implemented. In general, effluent processing and monitoring was adequate to assure that all TS requirements were met (Paragraph 6).

The Semiannual Radioactive Effluent Release Report met the requirements of the TSs (Paragraph 7).

The licensee had adequately addressed the issue of Decommissioning Planning Records (Paragraph 8).

Radwaste processing and shipping was conducted in a competent, professional manner (Paragraph 9).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*G. Boissy, Plant General Manager
*C. Burton, Operations Manager
*R. Cox, Chemistry Effluents Supervisor
*J. Dyer, Quality Control Supervisor
*R. Englmeier, Site Quality Manager
D. Faulkner, Primary Chemistry Supervisor
R. Frechette, Chemistry Supervisor
*J. Geiger, Vice President, Nuclear Assurance
*J. Holt, Licensing Engineer
*R. McCullers, Health Physics (HP) Operations Supervisor
*D. Sager, Plant Vice President
R. Somers, Radioactive Waste Supervisor
*T. Ware, Technical Training Supervisor

Other licensee employees contacted during this inspection included technicians and administrative personnel.

Nuclear Regulatory Commission

*R. Schin, Resident Inspector (Acting)
*M. Scott, Resident Inspector

*Attended exit interview

2. Organization (84750 and 86750)

Technical Specification (TS) 6.2 describes the licensee's organization.

The inspector reviewed the licensee's organization, staffing levels, and lines of authority as they related to the Chemistry Department and Radioactive Waste Group to verify that the licensee had not made organizational changes which would adversely affect the ability to control radiation exposures or radioactive material.

Although there had been no structural changes in the Chemistry Department, the normal periodic rotation of technicians (which was made to assure that the technicians maintain a high level of expertise in all areas within the Department) had taken place and one personnel change had been made since the previous inspection. One of the technicians had transferred to the Technical Training Department and his place had been taken by another technician who was going through the Initial Training Phase of the Training Program.

There had been no changes in the Radwaste Group since the last time this area was reviewed. (Refer to Inspection Reports (IRs) 50-335, -389/91-15, Paragraph 2.b.)

The inspector concluded that the licensee's organization in the areas of Chemistry and Radioactive Waste satisfied the requirements of the TS.

No violations or deviations were identified.

3. Training and Qualification (84650 and 86750)

TS 6.4.1 requires the licensee to maintain a training program for the plant staff to assure that the minimum education and experience requirements of Section 5.5 of ANSI/ANS-3.1-1978 and Appendix "A" of 10 CFR 55 and the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees are met before a person can be considered to be qualified to perform his duties independently. The program shall include familiarization with the relevant operational experience.

The inspector interviewed the licensee's Technical Training Supervisor about the Training/Qualification Program, specifically in the areas of the Chemistry Department and Radioactive Waste. The supervisor explained that the program used at the plant was performance-based.

The inspector reviewed Administrative Procedures (APs) No. 0005743, Revision (Rev.) 5, "Chemistry Personnel Training Program," approved on October 16, 1992 and No. 2150000, Rev. 2, "Chemistry Technician Training Program Course Map," approved on October 5, 1992. The procedure outlined the requirements to be met for trainees in the program as well as the continuing training required for fully qualified technicians. In addition to General Employee Training (GET), trainees were required to complete the Orientation and Fundamentals Course, which included material in such areas as mathematics, heat transfer, fluid flow, nuclear physics, chemistry, and material science. The licensee also had provisions for granting exemptions from training. The inspector reviewed AP 0005742, Rev. 5, "Exemption From Training," approved on October 29, 1990, which emphasized that no applicable regulatory, licensing, or industry training be circumvented, but that previous experience/ training of an individual which met or exceeded the content of the training required by the licensee could be considered to have fulfilled that particular requirement. Exemptions were granted on a case-by-case bases only. The trainee was then required to complete a Qualification Checkoff Sheet, which listed the procedures with which the technician must be familiar before rotating into a given area (process monitors or effluents, for example). The trainee was then required to rotate for two-week periods between seven areas within the department, to gain "hands on" experience.

Re-qualification every two years was mandatory for each technician in eleven areas; including effluent sampling, releases and TSs, the Water Treatment Plant, the PASS (of each unit), emergency response, emergency dose assessment, etc. Re-qualification was successfully completed by self-study, passing a written examination, plus performing the task at issue to demonstrate knowledge and capacity.

The inspector reviewed one of the training modules, Module No. C2-22, "Test for Boron," approved on June 15, 1987. It was detailed and included performance objectives, enabling objectives, a self-test, etc. The corresponding Instructor Guide was reviewed by the inspector and found to contain a terminal objective, enabling objectives, performance guide, a list of materials to be supplied by the instructor, preferred testing method, etc. The inspector also reviewed Self-Study Text 2104301, "Lab Instrumentation," Rev. 1, reviewed October 9, 1990. It was divided into several parts, each of which included a performance objective, instructional information, a self-test, and answers to the self-test.

In the area of radioactive material handling, the inspector reviewed Lesson Plan DN #2402800, "Radioactive Material: HP Activities," which was a four-hour requalification lesson for Radiation Protection Men. It outlined the instructional material to be covered, the activities of the instructor, and activities of the students. The inspector also reviewed training module "Compact Radioactive Waste," Rev. 4 and found it to be detailed and complete, with clearly identified objectives, sample performance test, required materials, information on the compaction processes and techniques utilized at the plant, practice tasks, a job performance measure (for the evaluator), a performance checklist (for the evaluator), oral knowledge questions (for the evaluator), and verification of satisfactory completion.

At the end of the year, the Training Review Committee (TRC) meets with representatives of the various departments to evaluate the current year's training and to formulate a plan for the upcoming year's training based upon critical tasks, identified weaknesses, program deficiencies, etc. Special difficulties are reviewed and anticipated needs are planned for. Feedback from class participants is evaluated to improve training content and/or presentation. Scheduling of training sessions is tentatively set.

The inspector randomly-selected training/qualification records of two Chemistry technicians to review when they had completed their training of two randomly-selected modules. The records of both individuals were in order.

The inspector concluded that the training Program was effective in maintaining a high skill level among the Chemistry technicians and Radiation Protection Men.

No violations or deviations were identified.

4. Plant Water Chemistry (84750)

During the inspection, St. Lucie Units 1 and 2 were operating at one hundred percent and zero percent power, respectively. Unit 1 was in its eleventh fuel cycle and Unit 2 was in its seventh fuel cycle. Refueling outages were scheduled to begin in March 1993 (for Unit 1) and Autumn 1993 (for Unit 2).

The inspector reviewed the plant chemistry controls and operational controls affecting plant water chemistry since the last inspection in this area. TS 3.4.7 specifies that the concentrations of dissolved oxygen (DO), chloride, and fluoride in the Reactor Coolant System (RCS) be maintained below 0.10 parts per million (ppm), 0.15 ppm, and 0.15 ppm, respectively. TS 3.4.8 specifies that the specific activity of the primary coolant be limited to less than or equal to 1.0 microcuries/gram (uCi/g) dose equivalent iodine (DEI).

These parameters are related to corrosion resistance and fuel integrity. The oxygen parameter is established to maintain levels sufficiently low to prevent general and localized corrosion. The chloride and fluoride parameters are based on providing protection from halide stress corrosion. The activity parameter is based on minimizing personnel radiation exposure during operation and maintenance.

Pursuant to these requirements, the inspector reviewed daily summaries for both units which correlated reactor power output to chloride, fluoride, and dissolved oxygen concentrations, and specific activity of the reactor coolant for the period of October 1, 1992 through November 30, 1992, and determined that the parameters were maintained well below TS limits. Typical values for DO, chloride, and fluoride were less than five parts per billion (ppb), five ppb, and eight ppb, respectively. Typical DEI values at steady-state conditions ranged from 7.94E-3 uCi/g to 1.19E-2 uCi/g for Unit 1 and from 7.20E-3 uCi/g to 1.21E-2 uCi/g for Unit 2. Neither unit had shown any evidence of leaking fuel.

The inspector concluded that the Plant Water Chemistry was maintained well within the TS requirements.

No violations or deviations were identified.

5. Post Accident Sampling System (PASS) (84750)

NUREG-0737 requires that the licensee be able to obtain a sample of the reactor coolant and containment atmosphere. Furthermore, the sample must be promptly obtained and analyzed (within three hours total) under accident conditions without incurring a radiation exposure to any individual in excess of 3 and 18 3/4 rem to the whole body and/or extremities, respectively.

TS 6.8.4.e requires that a program be established, implemented, and maintained to ensure the capability to obtain and analyze, under accident conditions, reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples. The PASS should provide these capabilities and should enable the licensee to obtain information critical to the efforts to assess and control the course and effects of an accident.

The inspector reviewed the most recent PASS operability log sheets for both units and discussed the results with the Primary Chemistry Supervisor. The operability tests had been performed within the required six-month time limits. A comparison of six parameters (pH, boron, dissolved oxygen, and dissolved hydrogen concentrations, gross activity, and I-131 activity) of the daily-analyzed RCS sample to the readings taken from the PASS satisfied the acceptance criteria of both units. Unit 2 calibrations of hydrogen, oxygen, boron, and pH were also reviewed and found to be acceptable.

The inspector walked down the PASS of both units to become familiar with their physical location in the plant and to observe their state of maintenance and operability. Both systems were found to be well-maintained and operable. The inspector noted that the Unit 2 PASS was more complex than that of Unit 1. This was due to the fact that the design of the system had changed during the period of time between the startups of Units 1 and 2.

The inspector also reviewed Chemistry Procedures 1-C-112, Rev. 11, "Operation and Calibration of the Milton Roy Post Accident Sampling System," and 2-C-113, Rev. 14, "Operation of the Combustion Engineering (CE) Post-Accident Sampling System." The inspector noted that both procedures detailed and included Purpose, Limits and Precautions, Related System Status, References, Records Required, and Instructions.

The inspector reviewed the training records of the Chemistry Department personnel to determine how many technicians were qualified to operate the PASS. Fifteen (of sixteen) technicians were qualified and would be undergoing continuing training during the next calendar year. The exception was a technician who was new to the department and still in the initial training phase of qualifications. The inspector noted that training for the PASS of each unit was distinct due to the differences in design of the systems. Training for the Unit 1 PASS required the technicians to perform a simulation of system operation whereas on the Unit 2 PASS, a written exam was required in addition to the simulation.

The licensee was preparing a request of the NRC to review the Combustion Engineering Owners Group (CEOG) Topical Report CEN-415, Rev. 1, "Modification of Post Accident Sampling System Requirements." The report examined NUREG-0737, II.B.3, "Clarification of TMI Action Plan Requirements," and how those requirements were met by the PASS. Furthermore, the report identified alternative methods of meeting the intent of those requirements. The proposed alternative methods would employ existing safety-grade equipment and take credit for analyses performed in the FSAR. It was noted that many of the required functions were done in a more timely manner by the safety-grade systems than by the PASS. (For example, the reactor vessel level monitoring system and vessel head vent provided the operator with the capability to monitor the reactor vessel water level on a real-time basis and a means of ensuring that the core remained covered during and after an accident.) The use of those systems formed the basis for meeting several of the requirements of NUREG-0737, II.B.3 while de-emphasizing the use of the

PASS. The report addressed numerous elements of the PASS (RCS pH, containment hydrogen, RCS hydrogen/total gas, RCS oxygen, etc.), and reviewed their specific requirements, purpose, the proposed modification, and the justification for the modification. The report concluded that adoption of the proposed modifications not only met the intent of the NUREG, but would provide improved accuracy of some parameters (e.g. the RCS hydrogen and core damage assessment via the containment atmosphere). In addition, a reduction in worker dose would be realized due to the diminished maintenance requirements of the PASS as increased reliance on plant instrumentation became the standard.

The inspector concluded that the PASS was capable of fulfilling its intended sampling function.

No violations or deviations were identified.

6. Effluent Processing and Monitoring (84750)

a. Release Permit Review

TSs 3.11.1 and 3.11.2 define the requirements for liquid and gaseous effluent concentrations, doses and dose rates, and waste treatments released to Unrestricted Areas. These requirements are intended to ensure that the limits of 10 CFR 20 and 10 CFR 50 are satisfied. TSs 4.11.1 and 4.11.2 define the surveillance requirements for the sampling and analysis program. The inspector reviewed seven randomly-selected Liquid Release Permits (1-92-77, 1-92-82, 1-92-89, 1-92-98, 1-92-99, 1-92-104, and 1-92-108) and eight randomly-selected Gaseous Release Permits (1-92-52, 1-92-53, 1-92-54, 1-92-55, 1-92-56, 2-92-119, 2-92-123C, and 2-92-124) to verify compliance. Permits from both units were included, from the period since the last inspection in July 1992. The permits included both release information and projected dose calculations and were found to be complete, including the identification of the source of the release, the activity released (identified by isotope), and the volume of the effluent discharged.

b. Observation of Liquid Release

The inspector observed the activities associated with Liquid Release Permit No. 92-134, from the "B" Waste Monitor Tank (WMT). After recirculating the tank volume as required by procedure, a sample was taken for analysis by a technician. The inspector observed the technician as he obtained the sample and noted that he used good technique. The technician took the sample directly to the laboratory to be analyzed. The analysis showed that the sample's activity was low enough to allow the tank's contents to be released to an Unrestricted Area. The technician filled out the pre-release data and completed pre-release calculations, including establishing the setpoints for the Liquid Radiation Waste Monitor (RM-26-4) and the maximum release rate. The technician also did a source check of the Liquid Radiation Waste

Monitor. The technician conducted his activities in a competent, professional manner. The Release Permit was then turned over to Operations to actually make the release and coordinate other plant activities. The inspector requested a copy of the completed release permit. A copy of the release was provided to the inspector the next day and showed that 35830 gallons were released with an activity of 1.29E+3 uCi.

c. Status of Monitors

TSs 3/4.3.3.1, 3/4.3.3.8, 3/4.3.3.9, and 3/4.3.3.10 define the operation and surveillance requirements for monitors of radioactive (or potentially radioactive) streams. This instrumentation is provided to monitor and control the releases of radioactive materials during normal and abnormal plant conditions as well as in effluents during effluent releases. The alarm/trip setpoints for the effluent monitors are calculated in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR 20. The alarm/trip setpoints for the process monitors are specified by the TSs.

The inspector walked down eleven TS radiation monitors to become familiar with their physical location in the plant and to observe their state of maintenance and operability. The following monitors were included: RIM-26-13, RIM-26-90, and RM26-4 of Unit 1 and RIM-26-71, RIM-26-72, RM-26-2, RM-26-5, RM-26-6, RM-26-18, RM-26-25, and RM-26-26 of Unit 2. All of these monitors were found to be well-maintained and operable.

The inspector reviewed the calibration records for the Unit 1 Containment Process Radiation Monitor and the Unit 1 Component Cooling Water Radiation Monitor. The licensee had used Ba-133 and Cs-137 sources to calibrate the monitors. The energy curves had been properly plotted and the calibrations had been done within the time limits specified in the TSs.

The inspector concluded that the program for maintaining the plant's process and effluent monitors was being successfully implemented.

d. Availability of Process Monitors

The inspector reviewed licensee records about availability of process monitoring equipment. The records showed that since the last inspection, no TS-required monitors had been out of service for more than a thirty-day period. However, two other non-TS required monitors had been out-of-service for an extended (several months) period. They were the Unit 2 PASS Dissolved Oxygen Flow Rate Meter, which reads less than its check tolerance, and the 2B Steam Generator Conductivity Monitor, which was reading high. The

Instrumentation and Controls (I&C) Department was reviewing the PASS and a Plant Work Order (PWO) had been written for the Conductivity Meter.

In general, the licensee had maintained an availability exceeding 98 percent for all (TS- and non-TS-required) processing monitoring equipment.

The inspector concluded that the licensee's program for liquid and gaseous processing and monitoring was being effectively implemented.

No violations or deviations were identified.

7. Semiannual Radioactive Effluent Release Report (84750)

TS 6.9.1.7 requires the licensee to submit a Semiannual Radiological Effluent Release Report within specified time periods covering the operation of the facility during the previous six months of operation.

The inspector reviewed the semiannual radioactive effluent release report for the first half of 1992. This review included an examination of the liquid and gaseous effluents for that period as compared to those of full years 1990 and 1991 and first-half 1992 results. The data for those years are summarized below.

St. Lucie Radioactive Effluent Release Summary

		1990	1991	1992*
Activity Released (curies)				
a.	Liquid			
1.	Fission and Activation Products	1.59E+0	1.28E+0	6.80E-1
2.	Tritium	5.67E+2	1.25E+3	3.09E+2
3.	Gross Alpha	5.22E-5	3.10E-5	3.27E-5
b.	Gaseous			
1.	Fission and Activation Products	1.15E+3	4.24E+3	6.74E+2
2.	Iodines	1.41E-2	1.43E-2	3.62E-3
3.	Particulates	8.05E-5	2.96E-4	3.00E-6
4.	Tritium	1.06E+2	1.74E+2	5.33E+1

*First half of 1992 only.

A comparison of the listed data for 1990, 1991, and the first half of 1992 showed no significant changes.

For the first half of 1992, St. Lucie liquid, gaseous, and particulate effluents were well within TS, 10 CFR 20, and 10 CFR 50 effluent limitations.

No Unplanned Releases were identified in the Report.

No revisions were made to the Offsite Dose Calculation Manual (ODCM) during the first half of 1992.

However, the Process Control Program (PCP) was revised during the reporting period to authorize the use of the dewatering system of a vendor. The principal reasons for the change to permit the use of this alternative resin transfer/drying/dewatering system included:

- The production of a waste form that met the criteria of both 10 CFR 61 and the disposal facility.
- The greater flexibility that the licensee would have with respect to vendors of disposal liners and/or transport packaging.
- The reduction of the time required to dewater/dry resins.
- The securing of an alternative method of drying spent resins that would produce a waste form that could be recovered and/or reprocessed, as necessary, to meet future disposal site waste form criteria.

The revisions were reviewed by the Facility Review Group (FRG) on June 9, 1992, and approved by the St. Lucie Plant General Manager on June 12, 1992.

The following table summarizes solid radwaste shipments for burial or disposal for the previous three years. These shipments typically include spent resins, filter sludges, dry compressible waste, and contaminated equipment.

St. Lucie Solid Radwaste Shipments

	1990	1991	1992*
Number of Waste Disposal Shipments	58	23	15
Volume (cubic meters)	222.8	182.1	115.3
Activity (curies)	5886.4	825.7	241.6

*First half of 1992 only.

To date, December 3, 1992, the licensee had made twenty-four radwaste shipments, including six to Scientific Ecology Group, Incorporated (SEG), eleven to Quadrex, and seven to the disposal facility.

For solid radwaste, no significant changes were noted for the period reviewed.

The inspector concluded that the Semiannual Radioactive Effluent Release Report was complete and satisfied TS requirements.

No violations or deviations were identified.

8. Decommissioning Planning Records (84750)

10 CFR 50.75(g) requires, in part, that licensees maintain "records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the Commission." Furthermore, information considered important by the Commission for decommissioning is identified as "records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site" and that the records "must include any known information on identification of involved nuclides, quantities, forms, and concentrations." Also identified are "as-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination."

During the previous inspection (refer to IRs 50-335, -389/92-15, Paragraph 14), the inspector requested the licensee's decommissioning records to verify compliance with the regulations. The inspector determined that while the subject information was in the licensee's document control area, in the form of microfiche and drawings, it was not segregated into one readily identifiable area nor was a listing identifying such documents available. Timely retrieval and proper classification of existing documentation was less than certain. Discussions with the licensee at that time concluded with a verbal agreement by the licensee to revise HP Procedure HP-101, "Identification and Reporting of Radiological Events," to address these issues.

The inspector discussed the status of the revision to HP-101. The revisions had been worked up and tracked as NRC Open Item (NOI) 92-080, issued on September 4, 1992. Coincidently, the revisions (Rev. 10) to the procedure were being reviewed the week of the inspection by the FRG and were approved on December 3, 1992. The Plant Manager's signature was expected within a week or two, whereupon controlled copies of the revision would be issued for implementation.

The inspector concluded that the licensee would have an adequate system in place to satisfy the requirements of 10 CFR 50.75(g)(1) and (2) upon the implementation of the latest revision to HP-101.

No violations or deviations were identified.

9. Radwaste Processing and Transportation (86750)

10 CFR 71.5 (a) requires each licensee who transfers 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 the Department of Transportation (DOT) in 49 CFR, Parts 170 through 189.

Pursuant to these requirements, the inspector reviewed the licensee's activities affiliated with these requirements, to determine whether the licensee effectively packages, stores, and ships radioactive solid materials.

The licensee's program for the packaging and transportation of radioactive materials, including solid radwaste, was conducted by the Radioactive Waste Group within the HP Department. Radwaste was processed and packaged (including the preparation of shipping documentation) by the Radwaste Group, with the assistance of Radiation Protection Men on loan from the HP Operations Department to complete specific tasks, such as loading a shipment or compacting contaminated material.

a. Radioactive Material Shipping Documentation Packages

Sixty-nine shipments of radioactive materials had been made as of December 3, 1992 for the calendar year. The inspector reviewed documentation packages for four radioactive material shipments made since Inspection 92-15. They were Radioactive Material Shipment Nos. 92-45, 92-62, 92-68, and 92-69, and included three Low Specific Activity (LSA), Type A shipments, destined for decontamination facilities and/or incineration or compaction before final disposal, and one Limited Quantity shipment to a laboratory for analysis. The packages contained thorough documentation about the shipments and included items such as unique shipment and shipping container numbers, waste content and volume, total activity, analytical summary and breakdown of isotopes with a half-life greater than five years, special comments, etc. The radiation and contamination survey results were within the 49 CFR requirements and the shipping documents were being maintained as required.

b. Observation of Radioactive Material Shipment

The inspector observed the final phase of the loading of a radioactive material shipment (Shipment No. 92-69) and its associated activities to evaluate the effectiveness of training, activities and attitudes of personnel, adequacy of procedures, etc. The shipment was a small LSA package containing a pump impeller for repair and eventual return to the site destined for the Westinghouse facility in Spartanburg, South Carolina. No irregularities were noted. The work proceeded well; each member of the work detail handled his responsibilities in an efficient, professional manner. The technicians took a radiation survey at the surface of the package and blocked and braced it to assure

compliance with regulatory requirements. Placarding of the vehicle was reviewed by the technicians after loading had been completed.

Before the truck left the site, the inspector reviewed the final survey records of the shipment and concluded that the survey was properly done and well-documented. Placarding was done in accordance to the DOT regulations.

c. Information Notice (IN) 92-62

The inspector discussed IN 92-62, "Emergency Response Information Requirements For Radioactive Material Shipments," with cognizant licensee personnel to be sure that the licensee had received it and that the staff was aware of it and its implications. The IN emphasizes that all emergency response information required by DOT regulations must be accurately provided on shipment papers or other documents and that the licensee must be prepared to respond immediately with the information, as needed. Furthermore, the IN gives guidance which indicates responders will expect "immediate access" to a person knowledgeable about a specific shipment within fifteen minutes.

The licensee was very familiar with the IN and had no plans for modifying its shipping procedures because they believed their procedures to be adequate to ensure that the DOT regulations were satisfied.

The inspector concluded that the licensee had good programs in place for the handling and shipping of radioactive material and that they were effectively implemented.

No violations or deviations were identified.

10. Exit Interview

The inspection scope and results were summarized on December 4, 1992, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed the inspection results, including likely informational content of the inspection report with regard to documents and/or processes reviewed during the inspection. The licensee did not identify any such documents or processes as proprietary. Dissenting comments were not received from the licensee.

11. Acronyms and Initialisms

ANS - American National Standard
ANSI - American National Standards Institute, Inc.
AP - Administrative Procedure
CE - Combustion Engineering, Inc.
CEOG - Combustion Engineering Owners Group
CFR - Code of Federal Regulations

DEI - Dose Equivalent Iodine
DO - Dissolved Oxygen
DOT - Department of Transportation
FPL - Florida Power and Light
FRG - Facility Review Group
FSAR - Final Safety Analysis Report
g - gram
GET - General Employee Training
HP - Health Physics
I&C - Instrumentation and Controls
IN - Information Notice
IR - Inspection Report
LSA - Low Specific Activity
uCi - micro-Curie (1.0E-6 Ci)
No. - Number
NOI - NRC Open Item
NRC - Nuclear Regulatory Commission
NRR - Nuclear Reactor Regulation
ODCM - Off-site Dose Calculation Manual
PASS - Post Accident Sampling System
PCP - Process Control Program
ppb - parts per billion
ppm - parts per million
PWO - Plant Work Order
RCS - Reactor Coolant System
Rev - Revision
RPM - Radiation Protection Man
SEG - Scientific Ecology Group, Incorporated
TMI - Three Mile Island
TRC - Training Review Committee
TS - Technical Specification
WMT - Waste Monitor Tank