



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199
December 13, 1994

Report Nos.: 50-335/94-23 and 50-389/94-23

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 14-18, 1994

Inspector: Fred N. Wright 12/13/94
F. N. Wright, Senior Radiation Specialist Date Signed

Approved by: W. H. Rankin 12/13/94
W. H. Rankin, Chief Date Signed
Facilities Radiation Protection Section
Radiological Protection and Emergency Preparedness Branch
Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, announced inspection of the licensee's Radiation Protection program involved the review of occupational exposures. The review focused primarily on the areas of: audits and self-assessments; changes to the program; outage planning and preparation; external and internal exposure controls; control of radioactive materials, contamination surveys and monitoring; and maintaining occupational exposure As Low As Reasonably Achievable.

Results:

Based on interviews with licensee personnel, records review, and observation of work activities in progress, the inspector found the Radiation Protection program to be adequately managed. Internal and external exposure control programs were effectively implemented with all exposures within 10 CFR Part 20 limits.

9412280019 941213
PDR ADDCK 05000335
Q PDR

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *E. Benken, Operations
- *W. Bladow, Quality Manager
- *H. Buchanan, Health Physics Supervisor
- *C. Burton, Plant General Manager
 - R. Cox, Effluent Supervisor
- *J. Danek, Corporate Health Physics
- *B. Dawson, Licensing Manager
- *D. Denver, Engineering Manager
- *M. Dryden, Licensing
- *J. Dyer, Quality Control Supervisor
- *P. Fincher, Site Training Manager
 - B. Frechette, Chemistry Supervisor
- *J. Marchese, Maintenance Manager
- *R. McCullers, Health Physics Operations Supervisor
 - H. Mercer, Health Physics Technical Supervisor
 - K. Payne, ALARA Supervisor
 - L. Pugh, Instrument Supervisor
 - B. Robinson, Acting Senior Plant Technician
- *W. Sager, Plant Vice President
 - R. Somers, Radioactive Waste Supervisor
 - J. Voorhees, Quality Assurance Supervisor
 - J. Walls, Senior Quality Assurance Analyst
- *D. West, Technical Manager
- *C. Wood, Operations Supervisor

Other licensee employees contacted during this inspection included engineers, operators, mechanics, security force members, technicians, and administrative personnel.

Nuclear Regulatory Commission

- *R. Prevatte, Senior Resident Inspector
- *R. Schin, Project Engineer

*Attended exit interview

Abbreviations used throughout this report are defined in the last paragraph.

2. Audits, Appraisals and Effectiveness of Licensee Controls (83750)

Licensee activities, audits, and appraisals were reviewed to determine the adequacy of the licensee's identification and corrective action programs for deficiencies or weaknesses related to the control of radiation or radioactive material.

10 CFR 20.1101(c) requires that the licensee periodically review the RP program content and implementation at least annually.

Licensee TS 6.5.2.8 requires that audits of plant activities be performed under the cognizance of the Company Nuclear Review Board and that the audits encompass, in part, the conformance of plant operations to provisions contained within the TS and applicable licensee conditions at least once per 12 months.

The licensee revised methods for conducting program audits in 1994. The licensee titled the audit program changes the "Re-engineered QA Audit Program." The new audit plan included approximately 50 Functional Area Audits which would be supported with expanded performance monitoring activities titled PMONs. The Functional Area Audits would verify regulatory compliance and provide independent assessments of effectiveness for the functional area. Increased use of PMONs were planned to increase the observation of specific activities conducted within a functional area. The 50 Functional Area Audits would be conducted within a two year period and the next Functional Audit addressing Radiation Protection Program requirements was scheduled for 1995. The objectives of the licensee's "Re-engineered QA Audit Program" were good.

The performance monitoring audit reports addressed various PMONs conducted for various functional areas. For example, QSL-OPS-94-07 audit report included PMON reviews of the following activities: operator re-qualification training, refueling activities, welding, material control, 10 CFR 20 implementation and HP activities, reactor cavity/spent fuel pool excursion control, and freeze seals.

The inspector reviewed the 1994 Audit and PMON schedule, audit checklist and results of PMONs reviewed and documented in the following audit reports:

- QSL-OPS-94-07, March, 1994
 - PMON 94-32, Implementation of New 10 CFR 20 Requirements
 - PMON 94-33, Postings and Radioactive Material Control
- QSL-OPS-94-16, June, 1994
 - PMON 94-74, HP Surveys and Samples
- QSL-OPS-94-19, July - August, 1994
 - PMON 94-42, Health Physics Technician Training
 - PMON 94-35, .GET (Radiation Worker)
- QSL-OPS-94-22, September, 1994
 - PMON 94-92, HP Department Measuring and Test Equipment

The inspector made the following observations of the documented reviews:

- PMON 94-32, was initiated to evaluate new 10 CFR 20 requirements implemented by the licensee January 1, 1994. The inspector noted and reported to the auditor that other significant changes to 10 CFR Part 20 requirements were not addressed in the licensee's review. Significant changes not discussed or reviewed included: Planned Special Exposures, Very High Radiation Areas, Declared Pregnant Women and Dose Limits for the Embryo/Fetus. The licensee planned to review the implementation of the other 10 CFR Part 20 changes in a future review.
- The inspector found the audit checklists for the performance monitoring in the HP areas were generally minimal, however, the checklist for PMON 94-74 was good.
- The inspector reviewed the qualification of the Functional Area Coordinator responsible for the HP, EP, and QC/Industrial Radiation Safety reviews. The individual's qualifications were adequate for the assigned responsibilities.
- For the limited findings reviewed, the responsible organization's proposed corrective actions were appropriately scrutinized by the QA staff and rejected when determined inadequate. Corrective action was verified prior to the findings closure.
- The audit report distribution appeared appropriate.

The inspector determined that four additional performance monitoring reviews in the radiation protection area were scheduled to be completed prior to the years end.

No violations or deviations were identified.

3. Changes (83750)

Changes in organization, personnel, facilities, equipment, programs, and procedures, from the previous inspection, were reviewed to assess their impact on the effective implementation of the occupational RP program. The last inspection was conducted February 28 - March 4, 1994, and documented in IR 50-335 and 389/94-07.

The most significant program change was the implementation of the licensee's Radiation Exposure Monitoring and Access Control System with alarming dosimeters to verify RCA access requirements and track personnel exposures measured with the alarming dosimeters. The licensee began using the system with the HP staff as a test group June 1, 1994 and on August 1, 1994 the licensee began using the system to track all onsite radiation exposures. The inspector observed plant personnel utilizing the system appropriately with little difficulty.

The licensee had moved three personnel from the Operations to Technical Sections of the Health Physics Department in first part of the year. The change was made to support increased work activities in the Technical Section. The inspector determined that the changes should not impact the licensee's ability to provide appropriate radiological controls.

No violations or deviations were identified.

4. Planning and Preparation (83750)

Licensee activities and documents were reviewed to determine the adequacy of management and staff efforts in planning and preparation of radiation work.

At the time of the inspection, the licensee was in days 20 through 24 of a planned 38 day RFO on Unit 1. The Unit 1 RFO began 5 days early on October 26, 1994, and was scheduled to be completed by December 2, 1994. The licensee was several hours ahead of schedule through the end of the inspection. Examples of RP staff planning and preparation for the Unit 1 RFO included: involvement of ALARA personnel in the early stages of the outage planning and increasing the RP staff by approximately 63 senior and 30 junior RPTs and 16 administrative contract persons. The RP staff also obtained, tested, and prepared radiological monitoring equipment such as remote video and dosimetry to improve radiological controls and reduce personal exposures. The RP supervisory and management personnel maintained 24 hour supervision of radiation protection activities to monitor implementation of the outage plan with three FP&L supervisors on each shift. The inspector determined that there was adequate management support for planning and implementing effective radiological control measures for the RFO.

No violations or deviations were identified.

5. External Exposure Control (83750)

This area was reviewed to determine whether personnel dosimetry, administrative controls, and records and reports of external radiation exposure met regulatory requirements.

10 CFR 20.1201(a) requires each licensee to control the occupational dose to individual adults, except for planned special exposures under 10 CFR 20.1206, to the following dose limits:

- (1) An annual limit, which is the more limiting of:
 - (i) The total effective dose equivalent being equal to 5 rems;
 - or
 - (ii) The sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 50 rems; and

- (2) The annual limits to the lens of the eye, to the skin, and to the extremities, which are:
- (i) An eye dose equivalent of 15 rems; and
 - (ii) A shallow-dose equivalent of 50 rems to the skin or to any extremity.

The inspector reviewed and discussed with licensee representatives 1994 external exposures for plant and contract personnel. The inspector determined that personnel radiation exposures assigned during the period were within 10 CFR Part 20 limits. The maximum doses for an individual radiation worker through November 16, 1994 were: TEDE, 3,323 mrem; Skin, 6,287 mrem; Eye, 3,347 mrem; and Extremity, 10,801 mrem.

The inspector reviewed selected RWPs for their work activity and determined that they appeared to prescribe adequate radiation protection requirements for the assigned task. The inspector observed personnel reviewing RWPs, interacting with RP personnel to determine adequate radiation and contamination controls for their assigned task and observed radiation workers properly using the EDC system.

The inspector observed RPTs in the plant monitor worker activities in their assigned locations, make radiation and contamination surveys, and advise workers on appropriate radiological protection procedures.

The licensee had obtained good agreement between the alarming dosimeters and TLDs used to monitor personnel radiation exposures. The licensee was using an automated alarming dosimeter calibrator to calibrate the alarming dosimeters and had been able to reduce calibration time from approximately 20 minutes to approximately 6 minutes. The licensee, however, was not able to use M&IE equipment to measure the intensity of the calibrator source. The Condenser R chambers could not be positioned appropriately in the calibrator. As a result, the licensee attempted to calibrate the calibrator with TLDs processed by an approved NVLAP TLD processor. The licensee was not satisfied with the results obtained utilizing TLDs. The alarming dosimeters were underresponding by approximately 10 to 15 percent. The licensee improved the accuracy of the calibration process utilizing a control set of alarming dosimeters that were calibrated by NIST. The licensee's efforts significantly improved the accuracy of the licensee's calibration process.

10 CFR Part 20, Subpart J - Precautionary Procedures, describes posting requirements for radiation, high radiation, very high radiation, airborne radioactivity areas and radioactive material use and storage areas. During tours of the auxiliary, containment, and selected outside radioactive material storage areas, the inspector noted that the licensee's posting and control of radiation areas, high radiation areas, airborne radioactivity areas, contamination areas, radioactive material areas, were generally adequate. All signs were conspicuous and legible. The inspector also conducted random independent radiation surveys in the

Unit 1 Containment Building and noted no problems with observed radiation levels and their associated postings.

The inspector observed the RP staff preparations and interface with licensee work groups planning the reactor head seal inspection and the replacement of the reactor head. The inspector observed good radiation protection practices, ALARA measures, and work controls with the task. The inspector also observed the use and advantages of remote video monitoring, remote tracking, and monitoring of real time dose for workers near the reactor head and vessel, wireless communication equipment, and direct management involvement and oversight in implementing radiation protection controls. The inspector observed an orderly and controlled process from the time the reactor vessel head was lifted until it was set in place over the reactor vessel.

From a review of records and discussions with licensee representatives, the inspector noted that radiological controls and radiation worker dose in general appeared to be under control.

No violations or deviations were identified.

6. Internal Exposure Control (83750)

This area was reviewed to determine the adequacy of the licensee's use of process and engineering controls to limit exposures to airborne radioactivity, adequacy of respiratory protection program, licensee's administrative controls for assessing the total effective dose equivalent in radiation and airborne radioactive materials areas, assessments of individual intakes of radioactive material and records of internal exposure measurements and assessments.

10 CFR 20.1502(b) requires each licensee to monitor the occupational intake of radioactive material by and assess the committed effective dose equivalent to:

- (1) Adults likely to receive, in one year, an intake in excess of 10 percent of the applicable Annual Limit of Intake in Table 1, Columns 1 and 2 of Appendix B to 10 CFR 20.1001-20.2401; and
- (2) Minors and declared pregnant women likely to receive, in one year, a committed effective dose equivalent in excess of 0.05 rem.

10 CFR 20.1204(a) states that for the purposes of assessing dose used to determine compliance with occupational dose equivalent limits, each licensee shall, when required under 10 CFR 20.1502, take suitable and timely measurements of:

- (1) Concentrations of radioactive materials in air in work areas; or
- (2) Quantities of radionuclides in the body; or
- (3) Quantities of radionuclides excreted from the body; or
- (4) Combinations of these measurements.

The use of process and engineering controls to limit airborne radioactivity concentrations in the plant were discussed with licensee representatives and the use of such controls were observed during tours of the plant. The licensee continued to use the portable HEPA units in more applications.

The inspector reviewed licensee reports that indicated significant reductions in the use of respirators during recent RFOs. The number of full face respirators utilized during the Unit 2 RFO, earlier in the year, was approximately 58. In the on-going Unit 1 RFO the licensee had utilized approximately 30 full face respirators.

The licensee's procedures required a TEDE/ALARA Evaluation be documented for tasks which could result in an individual receiving a dose of 500 mrem. In the on-going RFO the licensee had only identified 4 tasks that would meet the licensee's threshold and all were tasks associated with steam generator work that required bubble hoods. The inspector reviewed a personnel exposure report dated November 16, 1994, and noted the highest accumulated exposure was 1.0 DAC hour. The inspector reviewed and discussed the licensee's program for monitoring internal dose. The licensee utilized a stand-up WBC for screening and a WBC Chair with NaI detectors for quantifying indicated intakes. The inspector concluded that the licensee's program for monitoring, assessing, and controlling internal exposures was conducted in accordance with regulatory and procedural requirements with no exposures in excess of 10 CFR Part 20 limits identified.

No violations or deviations were identified.

7. Control of Radioactive Materials and Contamination, Surveys, and Monitoring (83750)

This program area was reviewed to determine whether survey and monitoring activities were performed as required and control of radioactive materials and contamination met requirements.

10 CFR 20.1501(a) requires each licensee to make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations and (2) are reasonable under the circumstances to evaluate the extent of radioactive hazards that may be present.

During tours of the plant, the inspector noted that portable radiation detectors, air samplers, and friskers and contamination monitors had up-to-date calibration stickers and had been source-checked as required.

The inspector reviewed selected records of routine and special radiation and contamination surveys performed during the current RFO and discussed the survey results with licensee representatives. During tours of the plant, the inspector observed HPTs performing radiation and

contamination surveys. The inspector independently verified radiation levels in portions of the Containment Building. No concerns with the adequacy or frequency of the radiological survey activities were identified.

The inspector reviewed the licensee's PCEs to date since the last inspection and discussed those records with licensee representatives. For the year, through November 15, 1994, the licensee had documented approximately 68 personnel contaminations. This compared with 76 documented for 1993. Of the 68 PCEs, approximately 20 were from hot particles. The inspector noted that nearly all of the hot particle contaminations occurred in the containment buildings. The inspector observed the implementation of hot particle controls in the Unit 1 Containment Building. No concerns with control of radioactive material or contamination were identified. The anticipated increase in PCEs for 1994 was due to the two scheduled RFOs in the year.

<u>Year</u>	<u>Skin</u>	<u>Clothing</u>	<u>Both</u>	<u>Actual</u>	<u>Goal</u>
1991	49	21	4	74	146
1992	55	26	6	87	77
1993	54	19	3	76	98
1994*	46	19	3	68	150

* Through November 14, 1994

No violations or deviations were identified.

8. Program for Maintaining Exposures As Low As Reasonably Achievable (83750)

10 CFR 20.1101(b) requires that each licensee use, to the extent practicable, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are ALARA.

This program area was reviewed to determine the involvement of ALARA program. Areas reviewed included organization support, goals and objectives, radiation source reduction, worker awareness and involvement, ALARA plans, and ALARA results in the implementation of the licensee's ALARA program.

The site's collective dose goal for 1994 was set at 600.0 person-rem. The licensee had completed a Unit 2 RFO and was approximately half way through the Unit 1 RFO when the inspection was made. A summary of licensee dose (person-rem) per outage and recent years is shown below. The licensee has generally met collective and outage dose goals and has compared well with similar facilities. At the time of the inspection the licensee's 1994 collective dose of 223.2 person-rem was significantly below the projected and estimated dose of 470 person-rem for that time period.

<u>Year</u>	<u>Outage</u>	<u>Actual*</u>	<u>Target</u>	<u>Outage Dates</u>	<u>Collective</u>	<u>Goal</u>
1991	U1-RFO	484.5	361.0	10/19-12/20	451.6	438.6
1992	U2-RFO	224.8	168.0	04/21-06/23	244.5	250.0
	U1-SNOW	15.9	NA	09/14-09/23		
	U2-SNOW	6.7	NA	11/24-12/11		
1993	U2-SNOW	70.5	NA	01/13-03/31	460.5	477.0
	U1-RFO	387.4	443.7	03/29-05/29		
	U1-SNOW	55.4	NA	05/30-06/11		
1994	U2-RFO	168.0	187.0	02/14-04/26	223.2**	600.0
	U1-RFO	160.9**	361.0	10/26-		

*The reported dose for outages were higher than the associated dose assigned from TLD measurements. The outage dose was obtained from self reading pocket dosimeters that typically overresponded to exposures by approximately 20-25 percent.

**Dose through November 14, 1994.

The inspector discussed initiatives, for both immediate and long term dose savings, that recently had been completed or were planned for implementation. The licensee connected temporary cooling systems to the Unit 1 Containment Building cooling system to reduce the containment temperatures during the on-going Unit 1 RFO. The use of additional containment air conditioning equipment was considered an ALARA measure and last used in the Unit 1 RFO during the summer of 1988. The licensee monitored three indicators during the 1988 RFO including personnel contaminations, stay times and heat stress. The licensee observed improvements in all three areas. However, the licensee had experienced some problems with the air conditioning method utilized in the 1988 RFO and containment air conditioning was not utilized again until the on-going Unit 1 RFO. The licensee had not quantified or assessed the benefits of the air conditioning project but reported worker efficiency appeared to be improved and as a result dose savings had been made with it's use.

The installation of a permanent Reactor Cavity Seal was the most significant ALARA activity for the Unit 1 RFO. The seal had been proposed for several years. The licensee anticipated a dose savings of approximately 7 to 10 person-rem for future Unit 1 RFOs.

The licensee was aggressively evaluating and utilizing technological improvements in remote radiation monitoring equipment, dosimetry, visual monitoring and communication equipment to better control and assess radiological conditions and lower personnel exposures. During the inspection, the inspector discussed the use and possible uses of the equipment with licensee representatives and observed the use of telemetric electronic dosimetry, video monitoring and communication

equipment for several outage task. The licensee's radiation protection staff appeared to be ahead of most nuclear power radiation protection programs in effective use of such equipment.

The licensee was anticipating a steam generator replacement project for 1998. The inspector determined that the ALARA staff had visited another reactor site to observe and evaluate ALARA activities for steam generator replacement.

During the inspection, the inspector observed ALARA considerations in pre-job briefings and communications between RPTs and radiation workers. The licensee's ALARA program appeared to have appropriate management support and was effective in maintaining personnel exposures ALARA. No concerns with the licensee's ALARA program were identified.

No violations or deviations were identified.

9. Refueling Water Tank Repair

The inspector reviewed the licensee's radiation surveys made for RWT modifications in progress during the on-going RFO. The RWT was designed to provide 500,000 gallons of borated water as a backup source for reactor coolant makeup and reactivity control during plant operation. In the summer of 1993, the licensee discovered that the RWT had been leaking radioactive water into the underground water table. On June 15, 1993 operations personnel noted a decreasing trend in Unit 1 RWT level of about 1 inch per day. The leakage rate was estimated at approximately 1.5 gpm. The licensee began searching for the source of the leakage which included independent alignment checks, isolation of lengths of piping, and walk-downs of interconnecting systems. However, the search failed to identify the source of the RWT leak and the tank level continued to decrease. On July 6, 1993, the licensee sampled monitoring wells in the vicinity of the RWT for boron and tritium. The wells were part of a system of monitoring and recovery wells on the site that were originally established to monitor an earlier diesel fuel leak on site. The analysis indicated the RWT was leaking into the ground water. The licensee employed numerous techniques to identify and locate the RWT leak including: camera-equipped submersibles, interior and exterior acoustic analysis and divers. A single 3/16 inch corrosion pit on the tank floor was identified as the leak location and divers made a temporary epoxy repair. Additional acoustic test of the RWT on July 17, 1993, did not identify any additional leaks and RWT level stabilized. The licensee planned to make a permanent repair during the 1994 U1 RFO with the tank fully drained.

Attachment B, "Unplanned Liquid Release," of the 1993 January through June Semi-Annual Radioactive Effluent Release Report; identified the leak as an unplanned continuous liquid release of radioactivity during the period of June 15, and July 18, 1993. The release volume reported was 55,000 gallons. The licensee estimated the release to be approximately 6.5 curies of tritium and 0.037 curies of gamma emitting solids in that report. The licensee provided additional radiological

information concerning the release in the 1993 July through December 1993, Semi-Annual Radioactive Effluent Release Report. Attachment A, "Quantification of an Unplanned Liquid Release from Refueling Water Storage Tank 1A," of the second report, stated that 6.59 curies had been released. Approximately 6.51 of the 6.59 curies released was attributed to tritium.

An NRC Radiological Effluents and Chemistry inspection was made during the radiological release in the period of July 12 through 16, 1993, and the findings were documented NRC IR 50-335, 389/93-17. The inspector reviewed a draft hydrogeology report for the site indicating the general groundwater flow at the plant site was toward the intake canal. The report also stated that the groundwater was considered to be brackish and there was no source of potable water or irrigation on Hutchinson Island and all potable water was transported to the island via pipeline from the mainland. The inspector concluded the licensee had acted expeditiously in identifying the source of the RWT leak and that the public health and safety was not jeopardized by the RWT release. The status of the RWT and leak migration was also reviewed by NRC inspectors and documented in IRs 50-335, 389/93-27, inspection conducted November 15-19, 1993; and 50-335, 389/94-16, inspection conducted July 18-22, 1994. The reports stated the licensee had been adequately monitoring the migration of the liquid radiological release through the monitoring and recovery wells on site. The radiological analysis showed the radioactivity concentrations, in general, were decreasing. The second Semi-Annual Radioactive Effluent Release Report for 1993 stated that the calculated whole body and organ dose to a member of the public from the radioactive materials released from Unit 1, including the RWT release, in 1993 were less than the quarterly and annual dose limits (WB - 1.5 mrem/qtr and 10 mrem/year and Organ - 5.0 mrem/qtr and 10 mrem/year).

The licensee drained the tank during the on-going Unit 1 RFO and made modifications that effectively gave the tank a new bottom. The inspector reviewed the radiological surveys associated with the repairs to the Unit 1 RWT. Radiological surveys of the tank floor, made October 24, 1994, showed radiation levels up to 350 mrem/hr at the leak repair site. The tank was drained and remaining solids dried and vacuumed. The dose rates following vacuuming were generally 5 to 10 mrem/hr, with a contact reading of approximately 250 mrem/hr at the temporary patch. The licensee applied a decontamination coating to the floor that reduced the smearable contamination from a maximum 45 mrad/hr to a maximum approximately 30,000 dpm/100 cm². The tank was sandblasted and vacuumed and smearable contamination was reduced to approximately 4,000 dpm/100 cm². The contact radiation level at the welded plate covering the leak in the tank floor was 150 mrem/hr on contact after the

application of the primer coat. The licensee was then able to complete the repairs to tank and was able to refill the tank during the inspection. The inspector found the surveys were adequate for the work activities within the RWT.

No violations or deviations were identified.

10. Exit Meeting

On November 18, 1994, an exit meeting was held with those licensee representatives denoted in Paragraph 1 of this report. The inspector summarized the scope and findings of the inspection and indicated that no violations or deviations were identified. The licensee did not indicate any of the information provided to the inspectors during the inspection as proprietary in nature and no dissenting comments were received from the licensee.

11. Index of Abbreviations Used in this Report

ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
CM	Centimeter
DAC	Derived Air Concentration
DPM	Disintegration Per Minute
EDC	Electronic Dose Capture
EP	Emergency Preparedness
FP&L	Florida Power and Light
HEPA	High Efficiency Particulate Air-filter
HPT	Health Physics Technician
HRA	High Radiation Area
IR	Inspection Report
mrad	Milli-Radiation Absorbed Dose
mrem	Milli-Roentgen Equivalent Man
M&TE	Measuring and Test Equipment
NaI	Sodium Iodine
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
NVLAP	National Voluntary Laboratory Accreditation Program
PCE	Personal Contamination Events
PMON	Performance Monitoring
QA	Quality Assurance
QC	Quality Control
QTR	Quarter
RCA	Radiologically Controlled Area
RFO	Re-Fueling Outage
RP	Radiation Protection
RPT	Radiation Protection Technician
RWP	Radiation Work Permit
RWT	Refueling Water Tank
SNOW	Short Notice Outage Work
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter

TS	Technical Specification
U1	Unit 1
U2	Unit 2
WB	Whole Body
WBC	Whole Body Count