Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

FPL

February 27, 2004

L-2004-050
10 CFR 50.36
10 CFR 50.36a

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
2003 Annual Radioactive Effluent Release Report

Attached is the 2003 Annual Radioactive Effluent Release Report for St. Lucie Units 1 and 2. This report is being sent pursuant to 10 CFR 50.36a(a)(2) and Technical Specification (TS) 6.9.1.7. The report is for the 12-month period beginning January 1, 2003 and ending December 31, 2003.

Attachment A of the report is a summary of the June 12, 2003 unplanned release of the Unit 2 gas decay tank 2C event. There were no revisions to the Offsite Dose Calculation Manual (ODCM). Therefore, the ODCM will not be included in this submittal.

Please contact us with any questions regarding this submittal.

Very truly yours,

William Jefferson, Jr.
Vice President
St. Lucie Plant

WJ/spt

Attachments

IE48

TABLE OF CONTENTS

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION

1. Regulatory Limits

1.1 For Liquid Waste Effluents

A. The concentration of radioactive material released from the site shall be limited to 10 times the concentrations specified in 10 CFR Part 20 Appendix B, Table 2, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2E-4 micro-Curies/ml total activity.

B. The dose or dose commitment to a MEMBER OF THE PUBLIC from radioactive material in liquid effluents released, from each reactor unit, to UNRESTRICTED AREAS shall be limited to:
During any calendar quarter to <= 1.5 mrems to the Total Body and
to <= 5 mrems to any organ, and
During any calendar year to <= 3 mrems to the Total Body and
to <= 10 mrems to any organ.

1.2 For Gaseous Waste Effluents:

A. The dose rate in UNRESTRICTED AREAS due to radioactive materials released in gaseous effluents from the site shall be limited to:
For Noble Gases: <= 500 mrems/yr to the total body and
<= 3000 mrems/yr to the skin, and
For Iodine-131, Iodine-133, Tritium, and all radionuclides in particulate form with half-lives greater than 8 days:
<= 1500 mrems/yr to any organ.

*B. The air dose due to noble gases released in gaseous effluents from each unit, to areas at and beyond the SITE BOUNDARY shall be limited to the following:
During any calendar quarter, to <= 5 mrads for gamma radiation, and
<= 10 mrads for beta radiation and,
during any calendar year, to <= 10 mrads for gamma radiation and
<= 20 mrads for beta radiation.

*C. The dose to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, Tritium, and all radionuclides in particulate form, with half-lives > 8 days in gaseous effluents released, from each unit to areas at and beyond the site boundary, shall be limited to the following:
During any calendar quarter to <= 7.5 mrem to any organ, and
During any calendar year to <= 15 mrem to any organ.

* The calculated doses contained in an annual report shall not apply to any ODCM Control. The reported values are based on actual release conditions instead of historical conditions that the ODCM Control dose calculations are based on. The ODCM Control dose limits are therefore included in Item 1 of the report, for information only.

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION (Continued)

2. Effluent Concentration Limits (ECL)

Water: Ten times the 10 CFR Part 20, Appendix B, Table 2, Column 2, except for entrained or dissolved noble gases as described in 1.1.A of this report.

Air: Release concentrations are limited to dose rate limits described in 1.2.A. of this report.

3. Average energy of fission and activation gases in gaseous effluents is not applicable.

4. Measurements and approximations of total radioactivity

Where alpha, tritium, and listed nuclides are shown as zero Curies released, this should be interpreted as "no activity was detected on the samples using the ODCM Control analyses techniques to achieve required Lower Limit of Detection (LLD) sensitivity for radioactive effluents."

A summary of liquid effluent accounting methods is described in Table 3.1.

A summary of gaseous effluent accounting methods is described in Table 3.2.

4.1 Estimate of Errors

	LIQUID		GASEOUS	
Error Topic	Avg %	Max %	Avg %	Max %
Release Point Mixing	2	5	NA	NA
Sampling	1	5	2	5
Sample Preparation	1	5	1	5
Sample Analysis	3	10	3	10
Release Volume	2	5	4	15
Total Percent	9	30	10	35

The predictability of error for radioactive releases can only be applied to nuclides that are predominant in sample spectrums. Nuclides that are near background relative to the predominant nuclides in a given sample could easily have errors greater than the above listed maximums.

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION (Continued)

4. Measurements and Approximations of Total Radioactivity (Cont.)

4.2 Methods of Analyses

TABLE 3.1

RADIOACTIVE LIQUID EFFLUENT SAMPLING AND ANALYSIS

Liquid Source	Sampling Frequency	Type of Analysis	Method of Analysis
Monitor Tank Releases	Each Batch	Principal Gamma Emitters	p.h.a.
	Monthly Composite	Tritium Gross Alpha	L.S. AIC
	Quarterly Composite	Sr-89, Sr-90, & Fe-55	C.S.
Continuous Releases	Daily Grab Samples	Principal Gamma Emitters & I-131 for 4/M Composite Analysis	p.h.a.
		Dissolved & Entrained Gases One Batch/ Month	p.h.a.
		Tritium Composite Monthly	L.S.
		Alpha Composite Monthly	AIC
		Sr-89, Sr-90, & Fe-55 Composite Quarterly	C.S.

p.h.a.- Gamma Spectrum Pulse Height Analysis using Germanium Detectors. All peaks are identified and quantified.
L.S.- Liquid Scintillation Counting
C.S.- Chemical Separation
AIC Air Ion Chamber
4/M - Four per Month

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION (Continued)

4. Measurements and Approximations of Total Radioactivity (Continued)

4.2 Methods of Analyses(Continued)

TABLE 3.2

RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS

Gaseous Source	Sampling Frequency	Type of Analysis	Method of Analysis
Waste Gas Decay Tank Releases	Each Batch	Principal Gamma Emitters	p.h.a.
Containment Purge Releases	Each Purge	Principal Gamma Emitters Tritium	p.h.a L.S.
Plant Vent	4/M	Principal Gamma Emitters Tritium	p.h.a. L.S.
	Weekly Analysis	Particulate Gross Alpha	AIC
	Quarterly Composite	Particulate Sr-89 & Sr-90	C.S.

p.h.a.- Gamma Spectrum Pulse Height Analysis using Germanium Detectors. All peaks are identified and quantified.
L.S.- Liquid Scintillation Counting
C.S.- Chemical Separation
AIC.- Air Ion Chamber
4/M - Four per Month

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1 & 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION (Continued)

5. Batch Releases

A. Liquid	Unit 1	Unit 2	Eng. Unit
1. Number of batch releases	35	34	
2. Total time period for batch releases	21,560	20,952	minutes
3. Maximum time period for a batch release	2,130	2,130	minutes
4. Average time period for a batch release	625	625	minutes
5. Minimum time period for a batch release	260	260	minutes
6. Average dilution stream flow during the period	971,367	971,367	gpm

All liquid releases are summarized in Tables

B. Gaseous	Unit 1	Unit 2	Eng. Unit
1. Number of batch releases	2	101	
2. Total time period for batch releases	205	17,810	minutes
3. Maximum time period for a batch release	156	7,790	minutes
4. Average time period for a batch release	103	178	minutes
5. Minimum time period for a batch release	49	30	minutes

All gaseous waste releases are
summarized in Tables

6. Unplanned Releases

A. Liquid	Unit 1	Unit 2	Eng. Unit
1. Number of releases	0	0	
2. Total activity of releases	0.00E+00	0.00E+00	Curies

B. Gaseous	Unit 1	Unit 2	Eng. Unit
1. Number of releases	0	1	
2. Total activity of releases	0.00E+00	8.77E-03	Curies

C. See Attachment - A for Unit 2 Unplanned Gas Release

1. A description of the event and equipment involved.
2. Cause(s) for the unplanned release.
3. Actions taken to prevent a recurrence.
4. Consequences of the unplanned release.

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION (Continued)

7. Assessment of radiation dose from radioactive effluents to MEMBERS OF THE PUBLIC due to their activities inside the SITE BOUNDARY assumes the VISITOR onsite for 6 hours per day for 312 days per year at a distance of 1.6 kilometers in the South East Sector. The VISITOR received exposure from each of the two reactors on the site. Actual Met Data was used to calculate *Visitor Dose for Calendar Year 2003.*

   VISITOR DOSE RESULTS FOR CALENDAR YEAR 2003 were:

NOBLE GAS	DOSE mrad	Gas Particulate & Iodine Dose	Dose mrem
Gamma Air Dose	5.08E-04	Bone	1.06E-05
Beta Air Dose	2.65E-04	Liver	5.01E-04
		Thyroid	5.94E-04
		Kidney	5.00E-04
		Lung	4.99E-04
		GI-LLI	5.00E-04
		Total Body	5.02E-04

8. Offsite Dose Calculation Manual(ODCM) Revision(s):

   There were no revisions made during the reporting interval.

9. Solid Waste and Irradiated Fuel Shipments:
   No irradiated fuel shipments were made from the site.

   Common solid waste from St. Lucie Units 1 and 2 were shipped jointly. A tabulated summation of these shipments is provided in this report as Table 3.9.

10. Process Control Program (PCP) Revisions:

    There were no changes during the reporting interval.

11. Major Changes to Radioactive Liquid, Gaseous and Solid Waste Treatment Systems:

    There were no changes during the reporting interval.

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.3-1 LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	UNIT	QTR#1	QTR#2
A. Fission and Activation Products			
1. Total Release - (Not including Tritium, Gases, and Alpha)	Ci	1.46E-02	1.98E-02
2. Average Diluted Concentration During Period	uCi/ml	2.90E-11	4.92E-11
B. Tritium			
1. Total Release	Ci	2.84E+02	1.45E+02
2. Average Diluted Concentration During Period	uCi/ml	5.65E-07	3.61E-07
C. Dissolved and Entrained Gases			
1. Total Release	Ci	2.40E-03	2.26E-02
2. Average Diluted Concentration During Period	uCi/ml	4.76E-12	5.62E-11
D. Gross Alpha Radioactivity			
1. Total Release	Ci	0.00E+00	0.00E+00
E. Volume of Waste Released (Prior to Dilution)	Liters	6.95E+05	(a) 2.78E+07
F. Volume of Dilution Water Used During Period	Liters	5.03E+11	4.02E+11

(a) - Denotes this value includes 2.51E+07 Liters from one settling pond release from the site (for hurricane preparations).

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.3-1 LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES (Continued)

	UNIT	QTR#3	QTR#4
A. Fission and Activation Products			
1. Total Release - (Not including Tritium, Gases, and Alpha)	Ci	4.38E-03	7.47E-03
2. Average Diluted Concentration During Period	uCi/ml	8.52E-12	1.45E-11
B. Tritium			
1. Total Release	Ci	4.73E+01	7.55E+01
2. Average Diluted Concentration During Period	uCi/ml	9.19E-08	1.47E-07
C. Dissolved and Entrained Gases			
1. Total Release	Ci	3.89E-04	5.93E-03
2. Average Diluted Concentration During Period	uCi/ml	7.56E-13	1.15E-11
D. Gross Alpha Radioactivity			
1. Total Release	Ci	0.00E+00	0.00E+00
E. Volume of Waste Released (Prior to Dilution)	Liters	3.90E+05	6.57E+05
F. Volume of Dilution Water Used During Period	Liters	5.14E+11	5.15E+11

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.3-2 LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	UNIT	QTR#1	QTR#2
A. Fission and Activation Products			
1. Total Release - (Not including Tritium, Gases, and Alpha)	Ci	1.46E-02	1.98E-02
2. Average Diluted Concentration During Period	uCi/ml	2.90E-11	4.92E-11
B. Tritium			
1. Total Release	Ci	2.84E+02	1.45E+02
2. Average Diluted Concentration During Period	uCi/ml	5.65E-07	3.61E-07
C. Dissolved and Entrained Gases			
1. Total Release	Ci	2.40E-03	2.26E-02
2. Average Diluted Concentration During Period	uCi/ml	4.76E-12	5.62E-11
D. Gross Alpha Radioactivity			
1. Total Release	Ci	0.00E+00	0.00E+00
E. Volume of Waste Released (Prior to Dilution)	Liters	6.95E+05	1.37E+06
F. Volume of Dilution Water Used During Period	Liters	5.03E+11	4.02E+11

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.3-2 LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES (Continued)

	UNIT	QTR#3	QTR#4
A. Fission and Activation Products			
1. Total Release - (Not including Tritium, Gases, and Alpha)	Ci	4.38E-03	7.47E-03
2. Average Diluted Concentration During Period	uCi/ml	8.52E-12	1.45E-11
B. Tritium			
1. Total Release	Ci	4.73E+01	7.55E+01
2. Average Diluted Concentration During Period	uCi/ml	9.19E-08	1.47E-07
C. Dissolved and Entrained Gases			
1. Total Release	Ci	3.89E-04	5.93E-03
2. Average Diluted Concentration During Period	uCi/ml	7.56E-13	1.15E-11
D. Gross Alpha Radioactivity			
1. Total Release	Ci	0.00E+00	0.00E+00
E. Volume of Waste Released (Prior to Dilution)	Liters	3.90E+05	6.57E+05
F. Volume of Dilution Water Used During Period	Liters	5.14E+11	5.15E+11

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-1 LIQUID EFFLUENTS

NUCLIDES		Continuous Mode		Batch Mode	
RELEASED	UNIT	QTR#1	QTR#2	QTR#1	QTR#2
Na-24	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cr-51	Ci	0.00E 00	0.00E 00	4.00E-04	8.15E-04
Mn-54	Ci	0.00E 00	0.00E 00	9.45E-05	1.10E-04
Fe-55	Ci	0.00E 00	0.00E 00	1.00E-02	8.25E-03
Mn-56	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Co-57	Ci	0.00E 00	0.00E 00	0.00E+00	1.17E-05
Co-58	Ci	0.00E 00	0.00E 00	1.26E-03	2.89E-03
Fe-59	Ci	0.00E 00	0.00E 00	1.48E-04	0.00E+00
Co-60	Ci	0.00E 00	0.00E 00	8.96E-04	2.15E-03
Zn-65	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ni-65	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Br-82	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Rb-88	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Sr-89	Ci	0.00E 00	0.00E 00	9.74E-06	0.00E+00
Sr-90	Ci	0.00E 00	0.00E 00	0.00E+00	1.13E-04
Y-90	Ci	0.00E 00	0.00E 00	0.00E+00	1.13E-04
Sr-91	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Sr-92	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Y-92	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Zr-95	Ci	0.00E 00	0.00E 00	5.80E-05	7.37E-05
Nb-95	Ci	0.00E 00	0.00E 00	1.50E-04	2.12E-04
Zr-97	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Nb-97	Ci	0.00E 00	0.00E 00	8.80E-06	3.39E-04
Tc-99m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Mo-99	Ci	0.00E 00	0.00E 00	0.00E+00	6.54E-04
Ru-103	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ag-110	Ci	0.00E 00	0.00E 00	0.00E+00	1.86E-04
Sn-113	Ci	0.00E 00	0.00E 00	6.48E-05	1.20E-05
Sb-122	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Sb-124	Ci	0.00E 00	0.00E 00	0.00E+00	1.86E-04
Sb-125	Ci	0.00E 00	0.00E 00	1.39E-03	3.38E-03

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-1 LIQUID EFFLUENTS (Continued)

NUCLIDES RELEASED	UNIT	Continuous Mode QTR#1	Continuous Mode QTR#2	Batch Mode QTR#1	Batch Mode QTR#2
Te-129	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Te-129m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-130	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Te-132	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-132	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-133	Ci	0.00E 00	0.00E 00	0.00E+00	1.05E-05
I-134	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cs-134	Ci	0.00E 00	0.00E 00	4.87E-05	9.80E-06
I-135	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cs-136	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cs-137	Ci	0.00E 00	0.00E 00	7.84E-05	1.99E-04
Cs-138	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ba-140	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
La-140	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ce-141	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ce-144	Ci	0.00E 00	0.00E 00	0.00E+00	4.78E-05
Pr-144	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
W-187	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Np-239	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	Ci	0.00E+00	0.00E+00	1.46E-02	1.98E-02
Ar-41	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-85m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Xe-133m	Ci	0.00E 00	0.00E 00	0.00E+00	1.41E-04
Xe-133	Ci	0.00E 00	0.00E 00	2.40E-03	2.24E-02
Xe-135m	Ci	0.00E 00	0.00E 00	0.00E+00	1.95E-05
Xe-135	Ci	0.00E 00	0.00E 00	0.00E+00	1.34E-05

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-1 LIQUID EFFLUENTS (Continued)

NUCLIDES		Continuous Mode		Batch Mode	
RELEASED	UNIT	QTR#3	QTR#4	QTR#3	QTR#4
Na-24	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cr-51	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Mn-54	Ci	0.00E 00	0.00E 00	2.26E-05	1.57E-05
Fe-55	Ci	0.00E 00	0.00E 00	2.08E-03	4.05E-03
Mn-56	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Co-57	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Co-58	Ci	0.00E 00	0.00E 00	4.55E-04	1.45E-04
Fe-59	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Co-60	Ci	0.00E 00	0.00E 00	3.81E-04	9.29E-04
Zn-65	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ni-65	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Br-82	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Rb-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sr-89	Ci	0.00E 00	0.00E 00	8.20E-06	4.60E-06
Sr-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Y-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sr-91	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sr-92	Ci	0.00E 00	0.00E 00	9.65E-05	1.57E-04
Y-92	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Zr-95	Ci	0.00E 00	0.00E 00	4.02E-05	2.47E-05
Nb-95	Ci	0.00E 00	0.00E 00	3.65E-05	2.79E-05
Zr-97	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Nb-97	Ci	0.00E 00	0.00E 00	2.14E-05	3.02E-05
Tc-99m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Mo-99	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ru-103	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ag-110	Ci	0.00E 00	0.00E 00	5.86E-05	0.00E 00
Sn-113	Ci	0.00E 00	0.00E 00	2.02E-05	0.00E 00
Sb-122	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sb-124	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sb-125	Ci	0.00E 00	0.00E 00	1.03E-03	1.83E-03

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-1 LIQUID EFFLUENTS (Continued)

NUCLIDES		Continuous Mode		Batch Mode	
RELEASED	UNIT	QTR#3	QTR#4	QTR#3	QTR#4
Te-129	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Te-129m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-130	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-131	Ci	0.00E 00	0.00E 00	0.00E 00	1.31E-05
Te-132	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-132	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-133	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-134	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cs-134	Ci	0.00E 00	0.00E 00	0.00E 00	4.44E-05
I-135	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cs-136	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cs-137	Ci	0.00E 00	0.00E 00	1.31E-04	2.02E-04
Cs-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ba-140	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
La-140	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ce-141	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ce-144	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Pr-144	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
W-187	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Np-239	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
TOTAL FOR PERIOD	Ci	0.00E+00	0.00E+00	4.38E-03	7.47E-03
Ar-41	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133m	Ci	0.00E 00	0.00E 00	5.55E-06	0.00E 00
Xe-133	Ci	0.00E 00	0.00E 00	3.74E-04	5.93E-03
Xe-135m	Ci	0.00E 00	0.00E 00	9.20E-06	5.28E-06
Xe-135	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-2 LIQUID EFFLUENTS

NUCLIDES		Continuous Mode		Batch Mode	
RELEASED	UNIT	QTR#1	QTR#2	QTR#1	QTR#2
Na-24	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cr-51	Ci	0.00E 00	0.00E 00	4.00E-04	8.15E-04
Mn-54	Ci	0.00E 00	0.00E 00	9.45E-05	1.10E-04
Fe-55	Ci	0.00E 00	0.00E 00	1.00E-02	8.25E-03
Mn-56	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Co-57	Ci	0.00E 00	0.00E 00	0.00E+00	1.17E-05
Co-58	Ci	0.00E 00	0.00E 00	1.26E-03	2.89E-03
Fe-59	Ci	0.00E 00	0.00E 00	1.48E-04	0.00E+00
Co-60	Ci	0.00E 00	0.00E 00	8.96E-04	2.15E-03
Zn-65	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ni-65	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Br-82	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Rb-88	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Sr-89	Ci	0.00E 00	0.00E 00	9.74E-06	0.00E+00
Sr-90	Ci	0.00E 00	0.00E 00	0.00E+00	1.13E-04
Y-90	Ci	0.00E 00	0.00E 00	0.00E+00	1.13E-04
Sr-91	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Sr-92	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Y-92	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Zr-95	Ci	0.00E 00	0.00E 00	5.80E-05	7.37E-05
Nb-95	Ci	0.00E 00	0.00E 00	1.50E-04	2.12E-04
Zr-97	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Nb-97	Ci	0.00E 00	0.00E 00	8.80E-06	3.39E-04
Tc-99m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Mo-99	Ci	0.00E 00	0.00E 00	0.00E+00	6.54E-04
Ru-103	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ag-110	Ci	0.00E 00	0.00E 00	0.00E+00	1.86E-04
Sn-113	Ci	0.00E 00	0.00E 00	6.48E-05	1.20E-05
Sb-122	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Sb-124	Ci	0.00E 00	0.00E 00	0.00E+00	1.86E-04
Sb-125	Ci	0.00E 00	0.00E 00	1.39E-03	3.38E-03

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-2 LIQUID EFFLUENTS (Continued)

NUCLIDES RELEASED	UNIT	Continuous Mode QTR#1	Continuous Mode QTR#2	Batch Mode QTR#1	Batch Mode QTR#2
Te-129	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Te-129m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-130	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-131	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Te-132	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-132	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
I-133	Ci	0.00E 00	0.00E 00	0.00E+00	1.05E-05
I-134	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cs-134	Ci	0.00E 00	0.00E 00	4.87E-05	9.80E-06
I-135	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cs-136	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Cs-137	Ci	0.00E 00	0.00E 00	7.84E-05	1.99E-04
Cs-138	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ba-140	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
La-140	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ce-141	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Ce-144	Ci	0.00E 00	0.00E 00	0.00E+00	4.78E-05
Pr-144	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
W-187	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Np-239	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	Ci	0.00E+00	0.00E+00	1.46E-02	1.98E-02
Ar-41	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-85m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E+00	0.00E+00
Xe-133m	Ci	0.00E 00	0.00E 00	0.00E+00	1.41E-04
Xe-133	Ci	0.00E 00	0.00E 00	2.40E-03	2.24E-02
Xe-135m	Ci	0.00E 00	0.00E 00	0.00E+00	1.95E-05
Xe-135	Ci	0.00E 00	0.00E 00	0.00E+00	1.34E-05

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-2 LIQUID EFFLUENTS (Continued)

NUCLIDES		Continuous Mode		Batch Mode	
RELEASED	UNIT	QTR#3	QTR#4	QTR#3	QTR#4
Na-24	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cr-51	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Mn-54	Ci	0.00E 00	0.00E 00	2.26E-05	1.57E-05
Fe-55	Ci	0.00E 00	0.00E 00	2.08E-03	4.05E-03
Mn-56	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Co-57	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Co-58	Ci	0.00E 00	0.00E 00	4.55E-04	1.45E-04
Fe-59	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Co-60	Ci	0.00E 00	0.00E 00	3.81E-04	9.29E-04
Zn-65	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ni-65	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Br-82	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Rb-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sr-89	Ci	0.00E 00	0.00E 00	8.20E-06	4.60E-06
Sr-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Y-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sr-91	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sr-92	Ci	0.00E 00	0.00E 00	9.65E-05	1.57E-04
Y-92	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Zr-95	Ci	0.00E 00	0.00E 00	4.02E-05	2.47E-05
Nb-95	Ci	0.00E 00	0.00E 00	3.65E-05	2.79E-05
Zr-97	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Nb-97	Ci	0.00E 00	0.00E 00	2.14E-05	3.02E-05
Tc-99m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Mo-99	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ru-103	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ag-110	Ci	0.00E 00	0.00E 00	5.86E-05	0.00E 00
Sn-113	Ci	0.00E 00	0.00E 00	2.02E-05	0.00E 00
Sb-122	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sb-124	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Sb-125	Ci	0.00E 00	0.00E 00	1.03E-03	1.83E-03

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.4-2 LIQUID EFFLUENTS (Continued)

NUCLIDES		Continuous Mode		Batch Mode	
RELEASED	UNIT	QTR#3	QTR#4	QTR#3	QTR#4
Te-129	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Te-129m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-130	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-131	Ci	0.00E 00	0.00E 00	0.00E 00	1.31E-05
Te-132	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-132	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-133	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
I-134	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cs-134	Ci	0.00E 00	0.00E 00	0.00E 00	4.44E-05
I-135	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cs-136	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Cs-137	Ci	0.00E 00	0.00E 00	1.31E-04	2.02E-04
Cs-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ba-140	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
La-140	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ce-141	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Ce-144	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Pr-144	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
W-187	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Np-239	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
TOTAL FOR PERIOD	Ci	0.00E+00	0.00E+00	4.38E-03	7.47E-03
Ar-41	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133m	Ci	0.00E 00	0.00E 00	5.55E-06	0.00E 00
Xe-133	Ci	0.00E 00	0.00E 00	3.74E-04	5.93E-03
Xe-135m	Ci	0.00E 00	0.00E 00	9.20E-06	5.28E-06
Xe-135	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.5-1
LIQUID EFFLUENTS - DOSE SUMMATION

AGE GROUP: ADULT LOCATION: ANY ADULT

FISH AND SHELLFISH

ORGAN	DOSE mrem
Bone	1.25E-02
Liver	5.61E-02
Thyroid	9.45E-04
Kidney	9.58E-04
Lung	6.53E-02
GI-LLI	2.75E-02
Total Body	1.55E-02

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.5-2
LIQUID EFFLUENTS - DOSE SUMMATION

AGE GROUP: ADULT LOCATION: ANY ADULT

FISH AND SHELLFISH

ORGAN	DOSE mrem
Bone	1.25E-02
Liver	5.61E-02
Thyroid	9.45E-04
Kidney	9.58E-04
Lung	6.53E-02
GI-LLI	2.75E-02
Total Body	1.55E-02

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.6-1 GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNIT	QTR#1	QTR#2
A. Fission and Activation Gases			
1. Total Release	Ci	2.17E-02	0.00E+00
2. Average Release Rate For Period	uCi/sec	2.76E-03	0.00E+00
B. Iodines			
1. Total Iodine-131	Ci	0.00E 00	0.00E 00
2. Average Release Rate For Period	uCi/sec	0.00E+00	0.00E+00
C. Particulates			
1. Particulates (Half Life > 8 days)	Ci	1.63E-06	0.00E+00
2. Average Release Rate For Period	uCi/sec	2.07E-07	0.00E+00
3. Gross Alpha Radioactivity	Ci	3.78E-07	3.33E-07
D. Tritium			
1. Total Release	Ci	1.00E+01	0.00E+00
2. Average Release Rate For Period	uCi/sec	1.27E+00	0.00E+00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.6-1 GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES (Continued)

	UNIT	QTR#3	QTR#4
A. Fission and Activation Gases			
1. Total Release	Ci	0.00E+00	0.00E+00
2. Average Release Rate For Period	uCi/sec	0.00E+00	0.00E+00
B. Iodines			
1. Total Iodine-131	Ci	0.00E 00	0.00E 00
2. Average Release Rate For Period	uCi/sec	0.00E+00	0.00E+00
C. Particulates			
1. Particulates (Half Life > 8 days)	Ci	8.98E-06	1.96E-06
2. Average Release Rate For Period	uCi/sec	1.14E-06	2.49E-07
3. Gross Alpha Radioactivity	Ci	6.27E-07	2.96E-07
D. Tritium			
1. Total Release	Ci	0.00E+00	9.60E+00
2. Average Release Rate For Period	uCi/sec	0.00E+00	1.22E+00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.6-2 GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNIT	QTR#1	QTR#2
A. Fission and Activation Gases			
1. Total Release	Ci	4.10E-01	1.38E+00
2. Average Release Rate For Period	uCi/sec	5.22E-02	1.75E-01
B. Iodines			
1. Total Iodine-131	Ci	0.00E 00	1.72E-05
2. Average Release Rate For Period	uCi/sec	0.00E+00	2.19E-06
C. Particulates			
1. Particulates (Half Life > 8 days)	Ci	2.91E-06	3.54E-07
2. Average Release Rate For Period	uCi/sec	3.70E-07	4.50E-08
3. Gross Alpha Radioactivity	Ci	3.12E-07	7.16E-07
D. Tritium			
1. Total Release	Ci	2.43E-02	1.93E-01
2. Average Release Rate For Period	uCi/sec	3.09E-03	2.46E-02

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.6-2 GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES (Continued)

	UNIT	QTR#3	QTR#4
A. Fission and Activation Gases			
1. Total Release	Ci	3.85E-01	2.30E-01
2. Average Release Rate For Period	uCi/sec	4.89E-02	2.93E-02
B. Iodines			
1. Total Iodine-131	Ci	0.00E 00	0.00E 00
2. Average Release Rate For Period	uCi/sec	0.00E+00	0.00E+00
C. Particulates			
1. Particulates (Half Life > 8 days)	Ci	1.03E-05	7.86E-07
2. Average Release Rate For Period	uCi/sec	1.31E-06	1.00E-07
3. Gross Alpha Radioactivity	Ci	4.54E-07	6.29E-07
D. Tritium			
1. Total Release	Ci	1.63E-01	6.15E+00
2. Average Release Rate For Period	uCi/sec	2.07E-02	7.82E-01

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-1 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

Nuclides Released	Unit	Continuous Mode QTR#1	Continuous Mode QTR#2	Batch Mode QTR#1	Batch Mode QTR#2
1. Fission Gases					
Ar-41	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Kr-85m	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Kr-85	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Kr-87	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Kr-88	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Kr-89	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Kr-90	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Xe-127	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Xe-131m	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Xe-133m	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Xe-133	Ci	0.00E+00	0.00E 00	1.90E-02	0.00E 00
Xe-135m	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Xe-135	Ci	0.00E+00	0.00E 00	2.69E-03	0.00E 00
Xe-137	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Xe-138	Ci	0.00E+00	0.00E 00	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00	2.17E-02	0.00E+00
2. Iodines					
I-131	Ci	0.00E 00	0.00E 00		
I-132	Ci	0.00E 00	0.00E 00		
I-133	Ci	0.00E+00	0.00E 00		
I-134	Ci	0.00E 00	0.00E 00		
I-135	Ci	0.00E 00	0.00E 00		
Total for Period	Ci	0.00E+00	0.00E+00		
3. Particulates (> 8 Days)					
Cr-51	Ci	0.00E 00	0.00E 00		
Mn-54	Ci	0.00E 00	0.00E 00		
Fe-55	Ci	0.00E 00	0.00E 00		
Co-57	Ci	0.00E 00	0.00E 00		
Co-58	Ci	0.00E 00	0.00E 00		
Fe-59	Ci	0.00E 00	0.00E 00		
Co-60	Ci	0.00E 00	0.00E 00		
Zn-65	Ci	0.00E 00	0.00E 00		
Zr-95	Ci	0.00E 00	0.00E 00		
Nb-95	Ci	0.00E 00	0.00E 00		

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-1 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES (Continued)

		Continuous Mode	
Nuclides Released	Unit	QTR#1	QTR#2
3. Particulates (> 8 Days) (continued)			
Sr-89	Ci	1.63E-06	0.00E 00
Sr-90	Ci	0.00E 00	0.00E 00
Y-90	Ci	0.00E 00	0.00E 00
Ru-103	Ci	0.00E 00	0.00E 00
Ag-110	Ci	0.00E 00	0.00E 00
Sn-113	Ci	0.00E 00	0.00E 00
Sb-124	Ci	0.00E 00	0.00E 00
Sb-125	Ci	0.00E 00	0.00E 00
Te-129m	Ci	0.00E 00	0.00E 00
Cs-134	Ci	0.00E 00	0.00E 00
Cs-136	Ci	0.00E 00	0.00E 00
Cs-137	Ci	0.00E 00	0.00E 00
Ba-140	Ci	0.00E 00	0.00E 00
Ce-141	Ci	0.00E 00	0.00E 00
Ce-144	Ci	0.00E 00	0.00E 00
Total for Period	Ci	1.63E-06	0.00E+00
4. Particulates (< 8 Days)			
Mn-56	Ci	0.00E 00	0.00E 00
Ni-65	Ci	0.00E 00	0.00E 00
Br-82	Ci	0.00E 00	0.00E 00
Rb-88	Ci	0.00E 00	0.00E 00
Rb-89	Ci	0.00E 00	0.00E 00
Sr-91	Ci	0.00E 00	0.00E 00
Sr-92	Ci	0.00E 00	0.00E 00
Y-92	Ci	0.00E 00	0.00E 00
Zr-97	Ci	0.00E 00	0.00E 00
Nb-97	Ci	0.00E 00	0.00E 00
Tc-99m	Ci	0.00E 00	0.00E 00
Mo-99	Ci	0.00E 00	0.00E 00
Sb-122	Ci	0.00E 00	0.00E 00
Te-129	Ci	0.00E 00	0.00E 00
Te-132	Ci	0.00E 00	0.00E 00
Cs-138	Ci	0.00E 00	0.00E 00
La-140	Ci	0.00E 00	0.00E 00
Pr-144	Ci	0.00E 00	0.00E 00
W-187	Ci	0.00E 00	0.00E 00
Np-239	Ci	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-1 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES (Continued)

Nuclides Released	Unit	Continuous Mode QTR#3	Continuous Mode QTR#4	Batch Mode QTR#3	Batch Mode QTR#4
1. Fission Gases					
Ar-41	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-89	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-127	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-135m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-135	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-137	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2. Iodines					
I-131	Ci	0.00E 00	0.00E 00		
I-132	Ci	0.00E 00	0.00E 00		
I-133	Ci	0.00E 00	0.00E 00		
I-134	Ci	0.00E 00	0.00E 00		
I-135	Ci	0.00E 00	0.00E 00		
Total for Period	Ci	0.00E+00	0.00E+00		
3. Particulates (> 8 Days)					
Cr-51	Ci	0.00E 00	0.00E 00		
Mn-54	Ci	0.00E 00	0.00E 00		
Fe-55	Ci	0.00E 00	0.00E 00		
Co-57	Ci	0.00E 00	0.00E 00		
Co-58	Ci	0.00E 00	0.00E 00		
Fe-59	Ci	0.00E 00	0.00E 00		
Co-60	Ci	0.00E 00	0.00E 00		
Zn-65	Ci	0.00E 00	0.00E 00		
Zr-95	Ci	0.00E 00	0.00E 00		
Nb-95	Ci	0.00E 00	0.00E 00		
Sr-89	Ci	8.98E-06	0.00E 00		
Sr-90	Ci	0.00E 00	4.83E-07		

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-1 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES (Continued)

		Continuous Mode	
Nuclides Released	Unit	QTR#3	QTR#4
3. Particulates (> 8 Days) (continued)			
Y-90	Ci	0.00E 00	4.83E-07
Ru-103	Ci	0.00E 00	0.00E 00
Ag-110	Ci	0.00E 00	0.00E 00
Sn-113	Ci	0.00E 00	0.00E 00
Sb-124	Ci	0.00E 00	0.00E 00
Sb-125	Ci	0.00E 00	0.00E 00
Te-129m	Ci	0.00E 00	0.00E 00
Cs-134	Ci	0.00E 00	0.00E 00
Cs-136	Ci	0.00E 00	0.00E 00
Cs-137	Ci	0.00E 00	9.92E-07
Ba-140	Ci	0.00E 00	0.00E 00
Ce-141	Ci	0.00E 00	0.00E 00
Ce-144	Ci	0.00E 00	0.00E 00
Total for Period	Ci	8.98E-06	1.96E-06
4. Particulates (< 8 Days)			
Mn-56	Ci	0.00E 00	0.00E 00
Ni-65	Ci	0.00E 00	0.00E 00
Br-82	Ci	0.00E 00	0.00E 00
Rb-88	Ci	0.00E 00	0.00E 00
Rb-89	Ci	0.00E 00	0.00E 00
Sr-91	Ci	0.00E 00	0.00E 00
Sr-92	Ci	0.00E 00	0.00E 00
Y-92	Ci	0.00E 00	0.00E 00
Zr-97	Ci	0.00E 00	0.00E 00
Nb-97	Ci	0.00E 00	0.00E 00
Tc-99m	Ci	0.00E 00	0.00E 00
Mo-99	Ci	0.00E 00	0.00E 00
Sb-122	Ci	0.00E 00	0.00E 00
Te-129	Ci	0.00E 00	0.00E 00
Te-132	Ci	0.00E 00	0.00E 00
Cs-138	Ci	0.00E 00	0.00E 00
La-140	Ci	0.00E 00	0.00E 00
Pr-144	Ci	0.00E 00	0.00E 00
W-187	Ci	0.00E 00	0.00E 00
Np-239	Ci	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-2 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

Nuclides Released	Unit	Continuous Mode QTR#1	Continuous Mode QTR#2	Batch Mode QTR#1	Batch Mode QTR#2
1. Fission Gases					
Ar-41	Ci	0.00E 00	0.00E 00	2.67E-01	3.41E-01
Kr-85m	Ci	0.00E 00	0.00E 00	2.48E-04	0.00E 00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-89	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-127	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133m	Ci	0.00E 00	8.52E-01	1.27E-03	1.15E-03
Xe-133	Ci	0.00E 00	0.00E 00	1.38E-01	1.80E-01
Xe-135m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-135	Ci	0.00E 00	0.00E 00	3.72E-03	5.83E-03
Xe-137	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	8.52E-01	4.10E-01	5.27E-01
2. Iodines					
I-131	Ci	0.00E 00	1.72E-05		
I-132	Ci	0.00E 00	0.00E 00		
I-133	Ci	0.00E 00	8.37E-05		
I-134	Ci	0.00E 00	0.00E 00		
I-135	Ci	0.00E 00	0.00E 00		
Total for Period	Ci	0.00E+00	1.01E-04		
3. Particulates (> 8 Days)					
Cr-51	Ci	0.00E 00	0.00E 00		
Mn-54	Ci	0.00E 00	0.00E 00		
Fe-55	Ci	0.00E 00	0.00E 00		
Co-57	Ci	0.00E 00	0.00E 00		
Co-58	Ci	0.00E 00	0.00E 00		
Fe-59	Ci	0.00E 00	0.00E 00		
Co-60	Ci	0.00E 00	0.00E 00		
Zn-65	Ci	0.00E 00	0.00E 00		
Zr-95	Ci	0.00E 00	0.00E 00		
Nb-95	Ci	0.00E 00	0.00E 00		

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-2 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES (Continued)

		Continuous Mode	
Nuclides Released	Unit	QTR#1	QTR#2
3. Particulates (> 8 Days) (continued)			
Sr-89	Ci	1.91E-06	0.00E 00
Sr-90	Ci	0.00E 00	1.77E-07
Y-90	Ci	0.00E 00	1.77E-07
Ru-103	Ci	0.00E 00	0.00E 00
Ag-110	Ci	0.00E 00	0.00E 00
Sn-113	Ci	0.00E 00	0.00E 00
Sb-124	Ci	0.00E 00	0.00E 00
Sb-125	Ci	0.00E 00	0.00E 00
Te-129m	Ci	0.00E 00	0.00E 00
Cs-134	Ci	0.00E 00	0.00E 00
Cs-136	Ci	0.00E 00	0.00E 00
Cs-137	Ci	1.00E-06	0.00E 00
Ba-140	Ci	0.00E 00	0.00E 00
Ce-141	Ci	0.00E 00	0.00E 00
Ce-144	Ci	0.00E 00	0.00E 00
Total for Period	Ci	2.91E-06	3.54E-07
4. Particulates (< 8 Days)			
Mn-56	Ci	0.00E 00	0.00E 00
Ni-65	Ci	0.00E 00	0.00E 00
Br-82	Ci	0.00E 00	0.00E 00
Rb-88	Ci	0.00E 00	0.00E 00
Rb-89	Ci	0.00E 00	0.00E 00
Sr-91	Ci	0.00E 00	0.00E 00
Sr-92	Ci	0.00E 00	0.00E 00
Y-92	Ci	0.00E 00	0.00E 00
Zr-97	Ci	0.00E 00	0.00E 00
Nb-97	Ci	0.00E 00	0.00E 00
Tc-99m	Ci	0.00E 00	0.00E 00
Mo-99	Ci	0.00E 00	0.00E 00
Sb-122	Ci	0.00E 00	0.00E 00
Te-129	Ci	0.00E 00	0.00E 00
Te-132	Ci	0.00E 00	0.00E 00
Cs-138	Ci	0.00E 00	0.00E 00
La-140	Ci	0.00E 00	0.00E 00
Pr-144	Ci	0.00E 00	0.00E 00
W-187	Ci	0.00E 00	0.00E 00
Np-239	Ci	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-2 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES (Continued)

Nuclides Released	Unit	Continuous Mode QTR#3	Continuous Mode QTR#4	Batch Mode QTR#3	Batch Mode QTR#4
1. Fission Gases					
Ar-41	Ci	0.00E 00	0.00E 00	2.31E-01	1.85E-01
Kr-85m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-85	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-87	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-88	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-89	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Kr-90	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-127	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-131m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-133	Ci	0.00E 00	0.00E 00	1.48E-01	4.52E-02
Xe-135m	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-135	Ci	0.00E 00	0.00E 00	6.01E-03	8.68E-05
Xe-137	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Xe-138	Ci	0.00E 00	0.00E 00	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00	3.85E-01	2.30E-01
2. Iodines					
I-131	Ci	0.00E 00	0.00E 00		
I-132	Ci	0.00E 00	0.00E 00		
I-133	Ci	0.00E 00	0.00E 00		
I-134	Ci	0.00E 00	0.00E 00		
I-135	Ci	0.00E 00	0.00E 00		
Total for Period	Ci	0.00E+00	0.00E+00		
3. Particulates (> 8 Days)					
Cr-51	Ci	0.00E 00	0.00E 00		
Mn-54	Ci	0.00E 00	0.00E 00		
Fe-55	Ci	0.00E 00	0.00E 00		
Co-57	Ci	0.00E 00	0.00E 00		
Co-58	Ci	0.00E 00	0.00E 00		
Fe-59	Ci	0.00E 00	0.00E 00		
Co-60	Ci	0.00E 00	0.00E 00		
Zn-65	Ci	0.00E 00	0.00E 00		
Zr-95	Ci	0.00E 00	0.00E 00		
Nb-95	Ci	0.00E 00	0.00E 00		

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.7-2 GASEOUS EFFLUENTS - GROUND LEVEL RELEASES (Continued)

		Continuous Mode	
Nuclides Released	Unit	QTR#3	QTR#4
3. Particulates (> 8 Days) (continued)			
Sr-89	Ci	1.03E-05	0.00E 00
Sr-90	Ci	0.00E 00	3.93E-07
Y-90	Ci	0.00E 00	3.93E-07
Ru-103	Ci	0.00E 00	0.00E 00
Ag-110	Ci	0.00E 00	0.00E 00
Sn-113	Ci	0.00E 00	0.00E 00
Sb-124	Ci	0.00E 00	0.00E 00
Sb-125	Ci	0.00E 00	0.00E 00
Te-129m	Ci	0.00E 00	0.00E 00
Cs-134	Ci	0.00E 00	0.00E 00
Cs-136	Ci	0.00E 00	0.00E 00
Cs-137	Ci	0.00E 00	0.00E 00
Ba-140	Ci	0.00E 00	0.00E 00
Ce-141	Ci	0.00E 00	0.00E 00
Ce-144	Ci	0.00E 00	0.00E 00
Total for Period	Ci	1.03E-05	7.86E-07
4. Particulates (< 8 Days)			
Mn-56	Ci	0.00E 00	0.00E 00
Ni-65	Ci	0.00E 00	0.00E 00
Br-82	Ci	0.00E 00	0.00E 00
Rb-88	Ci	0.00E 00	0.00E 00
Rb-89	Ci	0.00E 00	0.00E 00
Sr-91	Ci	0.00E 00	0.00E 00
Sr-92	Ci	0.00E 00	0.00E 00
Y-92	Ci	0.00E 00	0.00E 00
Zr-97	Ci	0.00E 00	0.00E 00
Nb-97	Ci	0.00E 00	0.00E 00
Tc-99m	Ci	0.00E 00	0.00E 00
Mo-99	Ci	0.00E 00	0.00E 00
Sb-122	Ci	0.00E 00	0.00E 00
Te-129	Ci	0.00E 00	0.00E 00
Te-132	Ci	0.00E 00	0.00E 00
Cs-138	Ci	0.00E 00	0.00E 00
La-140	Ci	0.00E 00	0.00E 00
Pr-144	Ci	0.00E 00	0.00E 00
W-187	Ci	0.00E 00	0.00E 00
Np-239	Ci	0.00E 00	0.00E 00
Total for Period	Ci	0.00E+00	0.00E+00

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.8-1
GASEOUS EFFLUENTS - DOSE SUMMATION

AGE GROUP: ADULT

Dose Pathway	Bone mrem	Liver mrem	Thyroid mrem	Kidney mrem
Inhalation	9.01E-04	3.94E-04	3.94E-04	3.94E-04
Grass-Goat-Milk	9.48E-04	1.25E-04	1.24E-04	1.25E-04
Ground Plane	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Garden	8.15E-04	2.51E-05	2.51E-05	2.51E-05
Meat	1.20E-04	2.58E-05	2.58E-05	2.58E-05
Total Dose	2.78E-03	5.70E-04	5.70E-04	5.70E-04

Dose Pathway	Lung mrem	GI-LLI mrem	Total Body mrem
Inhalation	4.82E-04	4.01E-04	4.50E-04
Grass-Goat-Milk	1.24E-04	1.37E-04	3.56E-04
Ground Plane	0.00E+00	0.00E+00	9.72E-07
Garden	2.51E-05	4.57E-05	2.24E-04
Meat	2.58E-05	3.97E-05	5.51E-05
Total Dose	6.57E-04	6.24E-04	1.09E-03

(a) Sector : SE	Range:	1.5	miles
(b) Sector : WSW	Range:	4.25	miles

Noble Gases	mrad
Gamma Air Dose	6.02E-07
Beta Air Dose	1.35E-06

Sector: SE Range: 1.5 miles

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

TABLE 3.8-2
GASEOUS EFFLUENTS - DOSE SUMMATION

AGE GROUP: ADULT

Dose Pathway	Bone mrem	Liver mrem	Thyroid mrem	Kidney mrem
Inhalation	1.16E-06	1.31E-04	1.40E-04	1.31E-04
Grass-Goat-Milk	2.43E-06	4.22E-05	1.01E-04	4.19E-05
Ground Plane	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Garden	1.66E-06	8.43E-06	2.20E-05	8.44E-06
Meat	2.36E-07	8.62E-06	1.03E-05	8.61E-06
Total Dose	5.49E-06	1.91E-04	2.73E-04	1.90E-04

Dose Pathway	Lung mrem	GI-LLI mrem	Total Body mrem
Inhalation	1.32E-04	1.31E-04	1.31E-04
Grass-Goat-Milk	4.15E-05	4.16E-05	4.22E-05
Ground Plane	0.00E+00	0.00E+00	2.15E-07
Garden	8.36E-06	8.50E-06	8.65E-06
Meat	8.59E-06	8.62E-06	8.64E-06
Total Dose	1.90E-04	1.90E-04	1.91E-04

(a) Sector : SE	Range:	1.5	miles
(b) Sector : WSW	Range:	4.25	miles

Noble Gases	mrad
Gamma Air Dose	5.08E-04
Beta Air Dose	2.64E-04

Sector: SE Range: 1.5 miles

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31,2003
UNITS 1 AND 2, TABLE 3.9

A. Solid Waste Shipped Off-Site for Burial or Disposal

1. Type of Waste	Unit	12 Mo. Period	Error %
a. Spent Resin,	M3	0	
Process Filters	Ci	0	N/A*
b. Dry Compressible	M3	4.35E+1	
Waste (Note 5)	Ci	1.06E+0	2.0 E+1
c. Irradiated	M3	0	
Components	Ci	0	N/A*
d. Other	M3	0	
	Ci	0	N/A*

2.Estimate of Major Nuclide Composition (By Waste Type)

Category	Nuclides	%
a.	N/A*	N/A*
b.	Fe 55	4.21E+1
	Co 60	1.46E+1
	Ni 63	1.39E+1
	Cs 137	1.20E+1
	Co 58	5.60E+0
	Cs 134	2.48E+0
	Mn 54	2.15E+0
	H 3	1.72E+0
	Ce 144	1.60E+0
	C 14	1.22E+0
	Cr 51	6.20E-1
	Sb 125	5.40E-1
	Zr 95	5.30E-1
c.	N/A*	N/A*
d.	N/A*	N/A*

3. Solid Waste Disposition.

Number of Shipments	Mode of Transportation	Destination
17	Sole Use Truck	Duratek, Oak Ridge, TN

8. Irradiated Fuel Shipments

Number of Shipments	Mode of Transportation	Destination
0	N/A*	N/A*

*N/A = Not Applicable

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003
UNITS 1 AND 2, TABLE 3.9 (CONTINUED)

Waste Class	Total Volume Cubic Feet	Total Curies (Note 1)	Principal Radionuclides (Notes 1 and 2)	Type of Waste (Note 3)	Category Reg. Guide 1.21	Type of Container (Note 4)	Solidification Agent
Class A	1536.96	1.06E+0	N/A	PWR Compressible Waste (note 5)	1.b.	Non-Specification Strong Tight Package	None

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003
UNITS 1 AND 2, TABLE 3.9 (CONTINUED)

SOLID WASTE SUPPLEMENT

NOTE 1: The total radionuclide activity and composition of solid waste shipped from the St. Lucie Plant, Units 1 and 2 are determined using a combination of qualitative techniques. In general, the St. Lucie Plant follows the guidelines outlined in the Low Level Waste Branch Technical Position (BTP) on Radioactive Waste Classification (5/11/83) for these determinations. The most frequently used techniques for determining the total activity in a package are the "Dose–to-Curie" method and "Concentration Times Volume or Mass" calculations. Where appropriate, engineering type activation analyses may be applied. Since each of the above methodologies involve, to some extent, qualitative parameters, the total activity is considered to be an estimate.

The composition of radionuclides in the waste is determined by both on-site analyses for principal gamma emitters and periodic off-site analyses for other radionuclides. The on-site analyses are performed either on a batch basis or on a routine basis using reasonably representative samples as appropriate for the waste type. Off-site analyses are used to establish scaling factors or other estimates for radionuclides such as H3, C14, Fe55, Sr90, Tc99, I129, Pu238, Pu239/240, Pu241, Am241, Cm242 and Cm243/244.

NOTE 2: "Principal Radionuclides" refer to those radionuclides contained in the waste in concentrations greater than 0.01 times the concentration of nuclides listed in Table 1 or 0.01 times the smallest concentration of nuclides listed in Table 2 of 10 CFR 61.

NOTE 3: "Type of Waste" is generally specified as described in NUREG 0782, Draft Environmental Impact Statement on 10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste".

NOTE 4: "Type of Container" refers to the transport package.

NOTE 5: The volume and activity listed for "Dry Compressible Waste" represent the quantity of material that during the reporting period was sent to the licensed disposal facilities. Some of this material was shipped to a contract vendor for volume reduction or recycle prior to final disposal at the licensed disposal facilities. During the reporting period, seventeen (17) shipments of dry active waste, non-compressible waste, and resins (27,971 cubic feet, 1.05E+0 curies) were made from the St. Lucie Plant to the volume reduction facility. These materials were shipped via "Sole Use Truck" in non-specification, strong tight containers.

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1 & 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

ATTACHMENT - A
(Page 1 of 2)
Unplanned Release of Unit 2 Gas Decay Tank 2C

Description of the event:
On 6/12/03 prior to criticality, the Unit 2 waste gas system was realigned from the plant stack to the 2C gas decay tank (GDT) utilizing the 2B gas compressor and the gas surge tank (GST). During the time the system was aligned to the 2C GDT, the tank pressure dropped 23 psig. This constitutes an unplanned release per C-200 ODCM (Offsite Dose Calculation Manual).

Apparent Cause

After placing the waste gas system in service, the on-shift unlicensed operator observed that the GST pressure had increased (exact value not known) and the "C" GDT pressure dropped with the "B" gas compressor in service. He notified the control room that the waste gas system was realigned back to the plant stack. Chemistry was notified of this system re-alignment. The drop in GDT gas pressure was due to the "2B" waste gas compressor was not working properly after return to service following maintenance and the auto gas analyzer was lined up to take a sample from the "C" GDT per Operating Procedure 2-0530020 "Waste Gas System Operation." The gas was directed back to the GST from the in service "C" GDT. While the auto gas analyzer was in service, the in service GDT provided a continuous sample flow being removed from it.

The GST design pressure is 40 psig. The GST relief valve V6778 setpoint is 20 psig per TEDB. Based on calculating the tank volumes, the pressure got high enough to open relief valve V6778 which goes to the relief valve collection header. Once the waste gas system was realigned to the plant stack, the gas in the gas surge tank and the vent gas collection header was discharged to the plant stack. This constitutes an unplanned, but monitored release. No plant or site radioactive release limits were exceeded during this event.

Corrective Actions
1. The waste gas system operating procedure was revised to add steps to vent the waste gas compressor head oiling system prior to placing a waste gas compressor in service following maintenance. Additional guidance was added to enhance awareness of the waste gas system operation during re-alignment activities to prevent possible unplanned releases.
2. The waste gas system surveillance procedures were revised to ensure operators drain the waste gas compressor accumulators weekly.

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT # 1 & 2
ANNUAL REPORT
JANUARY 1, 2003 THROUGH DECEMBER 31, 2003

ATTACHMENT - A
(Page 2 of 2)

Consequences of the unplanned release:

Gas Decay Tank 2C UNPLANNED RELEASE DATA

Nuclide Symbol	Sample uCi/cc	Release Curies
Ar-41	0.00E+00	0.00E+00
Kr-85m	0.00E+00	0.00E+00
Kr-87	0.00E+00	0.00E+00
Kr-88	0.00E+00	0.00E+00
Xe-133m	1.81E-04	3.29E-03
Xe-133	5.16E-04	1.16E-03
Xe-135m	0.00E+00	0.00E+00
Xe-135	6.69E-04	4.27E-03
Xe-137	0.00E+00	0.00E+00
Xe-138	0.00E+00	0.00E+00
Gas Total	1.37E-03	8.72E-03

Release Start Date	6/12/2003	
Release End Date	6/12/2003	
Release Minutes	6.00E+01	minutes
Release Volume	6.38E+06	cc.s
Total Body Dose Rate	3.99E-03	mRem/yr
Total Body Dose Rate	2.80E-03	percent site limit
Skin Dose Rate	9.25E-03	mRem/yr
Skin Dose Rate	1.08E-03	percent site limit
Release Rate	3.76E+00	ft3/minute
Gamma Air Dose	4.94E-07	mrad
Gamma Air Dose	1.00E-05	percent annual limit
Beta Air Dose	7.95E-07	mrad
Beta Air Dose	1.00E-05	percent annual limit

Tritium | 1.00E-06 | 6.38E-06 | dose contribution was negligible

Particulates - None detected in Gas Decay Tank 2C

Iodines - None detected in Gas Decay Tank 2C

No Site Release Rate, Quarterly, or Annual Dose Limit(s) were exceeded.