



**Florida
Power**

CORPORATION
Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72

April 26, 2000
3F0400-01

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: 1999 Radioactive Effluent Release Report

Dear Sir:

Florida Power Corporation hereby submits the 1999 Radioactive Effluent Release Report for Crystal River Unit 3 (CR-3) in accordance with the CR-3 Improved Technical Specifications (ITS), Section 5.7.1.1(c). This report includes a summary of the quantities of radioactive liquid and gaseous effluents, and solid waste released from the CR-3 site during 1999. The material provided is consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM) and the Process Control Program (PCP), and is in conformance with 10 CFR 50, Appendix I, Section IV.B.1.

ITS 5.6.2.3.3 requires submittal of the licensee initiated changes to the ODCM as part of the Radioactive Effluent Release Report. The ODCM and the PCP were not revised during 1999.

If you have any questions regarding this submittal, please contact Mr. Sid Powell, Manager, Nuclear Licensing at (352) 563-4883.

Sincerely,

D. L. Roderick
Director, Nuclear Plant Operations

DLR/ff

Attachment

xc: NRR Project Manager
Regional Administrator, Region II
Senior Resident Inspector

RADIOACTIVE EFFLUENT

RELEASE REPORT

1999

FLORIDA POWER CORPORATION

CRYSTAL RIVER - UNIT 3

Facility Operating License No. DPR-72

Docket No. 50-302

Prepared By: Pete F. Ezell
Chemrad Specialist II

Approved By: Daniel O. DeBevoise
Manager, Nuclear Chemistry

Date: 4/24/00

CONTENTS

Introduction	1
Tabular Data Summaries	
Gaseous Effluents - Quarters 1 & 2	2
Gaseous Effluents - Quarters 3 & 4	4
Liquid Effluents - Quarters 1 & 2	6
Liquid Effluents - Quarters 3 & 4	9
Radwaste Shipments	12
Unplanned Releases	13
Radioactive Waste Treatment Systems	13
Annual Land Use Census	13
Effluent Monitor Instrument Operability	13
ODCM & PCP Changes	13
Emergency Feed Pump 2	13
Appendix I Dose Summary	14

INTRODUCTION

This report is submitted as required by the Offsite Dose Calculation Manual, section 6.5.

The scope of this report includes:

- A summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the plant.
- Quarterly and annual dose summaries.
- A list and description of unplanned releases to unrestricted areas.
- A description of any changes to the:
 - Process Control Program (PCP), and
 - Offsite Dose Calculation Manual (ODCM).
- Significant changes to any radioactive waste treatment system.
- A list of new dose calculation location changes identified by the annual land-use census.
- Information relating to effluent monitors or required supporting instrumentation being inoperable for 30 or more days.

TABLE 1
EFFLUENT AND WASTE DISPOSAL REPORT - 1999
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Unit	Quarter 1	Quarter 2	Est. Total Error %
------	--------------	--------------	-----------------------

A. Fission and activation gases

1. Total release	Ci	1.05E-01	2.15E+00	30
2. Average release rate for period	μ Ci/sec	1.35E-02	2.74E-01	
3. Percent of technical specification limit	%	8.74E-05	5.26E-03	

B. Iodines

1. Total Iodine-131	Ci	0.00E+00	0.00E+00	
2. Average release rate for period	μ Ci/sec	0.00E+00	0.00E+00	
3. Percent of technical specification limit	%	0.00E+00	0.00E+00	

C. Particulates*

1. Particulates with half-lives > 8 days	Ci	0.00E+00	5.94E-07	30
2. Average release rate for period	μ Ci/sec	0.00E+00	7.56E-08	
3. Percent of technical specification limit	%	0.00E+00	5.07E-03	
4. Gross alpha radioactivity	Ci	0.00E+00	0.00E+00	

D. Tritium

1. Total release	Ci	2.24E+00	1.53E+00	30
2. Average release rate for period	μ Ci/sec	2.89E-01	1.95E-01	
3. Percent of technical specification limit	%	7.18E-03	5.07E-03	

* The sum of the particulates reported on this page may be less than the sum from Table 2, as Table 2 includes all particulates, while this table includes only those with half-lives greater than 8 days.

TABLE 2
EFFLUENT AND WASTE DISPOSAL REPORT - 1999
GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 1	Quarter 2	Quarter 1	Quarter 2

A. Fission gases

Argon-41	Ci				
Krypton-85	Ci				6.33E-02
Krypton-85m	Ci				
Krypton-87	Ci				
Krypton-88	Ci				
Xenon-131m	Ci				7.30E-03
Xenon-133	Ci		2.68E-07	1.05E-01	4.25E-01
Xenon-133m	Ci				2.42E-03
Xenon-135	Ci		1.65E+00		1.73E-03
Xenon-135m	Ci				
Xenon-138	Ci				
Total for period	Ci	0.00E+00	1.65E+00	1.05E-01	5.00E-01

B. Iodines

Iodine-131	Ci				
Iodine-132	Ci				
Iodine-133	Ci				
Iodine-135	Ci				
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

C. Particulates

Zinc-72	Ci		9.84E-08		
Cobalt-57	Ci				
Cobalt-60	Ci				
Strontium-89*	Ci		2.98E-07		
Strontium-90*	Ci		1.30E-07		
Niobium-95m	Ci		7.11E-07		
Technicium-99m	Ci				
Tellurium-132	Ci				
Cesium-134	Ci				
Cesium-137	Ci				
Cesium-138	Ci				
Barium-139	Ci				
Lanthanum-142	Ci				
Cerium-141*	Ci		1.66E-07		
Cerium-143	Ci	5.44E-07			
Rhenium-188	Ci				
Total for period	Ci	5.44E-07	1.40E-06	0.00E+00	0.00E+00

* Quantified with > 8 day half-life

TABLE 3

EFFLUENT AND WASTE DISPOSAL REPORT - 1999
 GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	Quarter 3	Quarter 4	Est. Total Error %
A. Fission and activation gases				
1. Total release	Ci	1.58E+01	5.04E+01	30
2. Average release rate for period	μCi/sec	1.99E+00	6.35E+00	
3. Percent of technical specification limit	%	2.02E-02	4.51E-02	

B. Iodines				
1. Total Iodine-131	Ci	2.39E-07	7.41E-06	30
2. Average release rate for period	μCi/sec	3.00E-08	9.32E-07	
3. Percent of technical specification limit	%	1.09E-02	7.91E-02	

C. Particulates*				
1. Particulates with half-lives > 8 days	Ci	2.47E-06	5.20E-06	30
2. Average release rate for period	μCi/sec	3.10E-07	6.54E-07	
3. Percent of technical specification limit	%	1.09E-02	7.91E-02	
4. Gross alpha radioactivity	Ci	0.00E+00	0.00E+00	

D. Tritium				
1. Total release	Ci	2.78E+00	5.08E+00	30
2. Average release rate for period	μCi/sec	3.49E-01	6.40E-01	
3. Percent of technical specification limit	%	1.09E-02	7.91E-02	

* The sum of the particulates reported on this page may be less than the sum from Table 4, as Table 4 includes all particulates, while this table includes only those with half-lives greater than 8 days.

TABLE 4
EFFLUENT AND WASTE DISPOSAL REPORT - 1999
GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 3	Quarter 4	Quarter 3	Quarter 4

A. Fission gases

Argon-41	Ci				
Krypton-85	Ci			1.46E-01	2.42E+00
Krypton-85m	Ci		3.36E-07		3.49E-04
Krypton-87	Ci				
Krypton-88	Ci				
Xenon-131m	Ci				3.06E-01
Xenon-133	Ci	7.40E+00	4.10E+01	3.65E+00	5.07E+00
Xenon-133m	Ci		4.65E-01	4.37E-03	3.81E-02
Xenon-135	Ci	4.49E+00	1.04E+00	1.14E-01	5.77E-02
Xenon-135m	Ci				
Xenon-138	Ci				
Total for period	Ci	1.19E+01	4.25E+01	3.92E+00	7.90E+00

B. Iodines

Iodine-131	Ci	5.96E-08	7.05E-06	1.79E-07	3.55E-07
Iodine-132	Ci				
Iodine-133	Ci			6.31E-08	6.12E-08
Iodine-135	Ci				
Total for period	Ci	5.96E-08	7.05E-06	2.42E-07	4.16E-07

C. Particulates

Zinc-72	Ci	3.04E-09	3.90E-08		
Cobalt-58*	Ci	8.25E-07	2.94E-06	3.00E-08	7.17E-08
Chromium-51*	Ci	5.24E-07	4.43E-07		
Strontium-89*	Ci	6.10E-07			
Strontium-90*	Ci	2.65E-07			
Niobium-95m	Ci	7.56E-07			
Tin-113	Ci				
Indium-113m	Ci				
Tellurium-132	Ci				
Cesium-137*	Ci	2.08E-07	1.10E-06		4.98E-08
Cesium-138	Ci				
Barium-139	Ci				
Lanthanum-142	Ci				
Cerium-141*	Ci	5.13E-09	6.59E-08		
Cerium-144	Ci		5.25E-07		
Rhenium-188	Ci		2.01E-07		
Total for period	Ci	3.20E-06	5.32E-06	3.00E-08	1.21E-07

* Quantified with > 8 day half-life

TABLE 5
EFFLUENT AND WASTE DISPOSAL REPORT - 1999
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	Quarter 1	Quarter 2	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	4.44E-03	4.89E-02	25
2. Average diluted concentration during period	μ Ci/ml	8.53E-12	8.32E-11	
3. Percent of applicable limit	%	4.54E-04	7.99E-03	
B. Tritium				
1. Total release	Ci	7.02E+01	2.70E+02	30
2. Average diluted concentration during period	μ Ci/ml	1.35E-07	4.60E-07	
3. Percent of applicable limit	%	1.12E-01	4.79E-01	
C. Dissolved and entrained gases				
1. Total release	Ci	3.88E-03	2.10E-02	25
2. Average diluted concentration during period	μ Ci/ml	7.46E-12	3.57E-11	
3. Percent of applicable limit	%	3.10E-04	1.86E-03	
D. Gross alpha radioactivity				
1. Total release	Ci	0.00E+00	3.59E-05	30
E. Volume of waste released (prior to dilution)				
1. Batch and continuous modes	Liters	6.49E+06	5.14E+06	10
F. Volume of dilution water used during period				
1. Batch and continuous modes	Liters	5.21E+11	5.88E+11	10

TABLE 6
EFFLUENT AND WASTE DISPOSAL REPORT - 1999
LIQUID EFFLUENTS

Fission and activation products	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 1	Quarter 2	Quarter 1	Quarter 2
Sodium-24	Ci			3.19E-07	2.71E-06
Chromium-51	Ci				2.91E-04
Manganese-54	Ci			2.08E-05	3.03E-04
Manganese-56	Ci				
Iron-55	Ci			1.74E-03	3.26E-03
Iron-59	Ci				
Cobalt-57	Ci			5.97E-08	4.57E-05
Cobalt-58	Ci			1.51E-04	1.63E-02
Cobalt-60	Ci			1.24E-03	9.56E-03
Zinc-72	Ci			9.23E-06	
Strontium-85	Ci			1.05E-05	
Strontium-89	Ci				3.46E-05
Strontium-90	Ci				8.75E-06
Strontium-92	Ci				
Yttrium-92	Ci				
Yttrium-93	Ci			1.90E-06	
Niobium-95	Ci			1.07E-05	4.81E-04
Niobium-95m	Ci			1.48E-05	
Zirconium-95	Ci				2.68E-04
Zirconium-97	Ci			5.54E-06	1.90E-04
Molybdenum-99	Ci				8.06E-05
Technetium-99m	Ci			1.75E-05	7.61E-04
Technetium-101	Ci			1.55E-04	
Ruthenium-103	Ci			4.91E-06	1.01E-06
Ruthenium-106	Ci				4.51E-04
Silver-110m	Ci			2.76E-04	3.83E-03
Tin-113	Ci				8.38E-05
Indium-113m	Ci				4.77E-04
Antimony-122	Ci			1.83E-07	
Antimony-124	Ci				1.16E-04
Antimony-125	Ci			5.08E-04	4.17E-03
Tellurium-129	Ci				
Tellurium-132	Ci				2.72E-06
Iodine-131	Ci			1.78E-04	5.80E-03
Iodine-132	Ci				
Iodine-133	Ci			3.26E-06	1.72E-03
Cesium-134	Ci			4.19E-06	1.68E-05
Cesium-137	Ci			7.03E-05	3.79E-04
Cesium-138	Ci				
Barium-139	Ci				5.03E-07
Barium-140	Ci				
Lanthanum-140	Ci				2.11E-04
Cerium-143	Ci			1.97E-05	
Cerium-144	Ci				1.02E-06
Rhenium-188	Ci				
Neodymium-147	Ci				5.75E-06
Total for period	Ci	0.00E+00	0.00E+00	4.44E-03	4.89E-02

TABLE 6 (CONTINUED)

EFFLUENT AND WASTE DISPOSAL REPORT - 1999

LIQUID EFFLUENTS

Dissolved and entrained gases	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 1	Quarter 2	Quarter 1	Quarter 2
Argon-41	Ci				
Krypton-85	Ci			2.46E-03	
Krypton-85m	Ci				4.24E-06
Krypton-87	Ci				
Krypton-88	Ci				
Xenon-131m	Ci				
Xenon-133	Ci			1.32E-03	1.75E-02
Xenon-133m	Ci			1.66E-05	3.83E-04
Xenon-135	Ci			8.64E-05	3.07E-03
Xenon-135m	Ci				
Total for period	Ci	0.00E+00	0.00E+00	3.88E-03	2.10E-02

Tritium	Ci	0.00E+00	0.00E+00	7.02E+01	2.70E+02
---------	----	----------	----------	----------	----------

TABLE 7

EFFLUENT AND WASTE DISPOSAL REPORT - 1999
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

Unit	Quarter 3	Quarter 4	Est. Total Error %
------	--------------	--------------	-----------------------

A. Fission and activation products

1. Total release (not including tritium, gases, alpha)	Ci	8.45E-02	3.19E-02	25
2. Average diluted concentration during period	μCi/ml	1.33E-10	7.11E-11	
3. Percent of applicable limit	%	2.31E-02	1.27E-01	

B. Tritium

1. Total release	Ci	1.73E+02	3.83+01	30
2. Average diluted concentration during period	μCi/ml	2.71E-07	8.53E-08	
3. Percent of applicable limit	%	3.02E-01	5.00E-02	

C. Dissolved and entrained gases

1. Total release	Ci	4.83E-02	3.95E-02	25
2. Average diluted concentration during period	μCi/ml	7.59E-11	8.81E-11	
3. Percent of applicable limit	%	4.22E-03	2.58E-03	

D. Gross alpha radioactivity

1. Total release	Ci	6.16E-06	1.28E-05	30
------------------	----	----------	----------	----

E. Volume of waste released (prior to dilution)

1. Batch and continuous modes	Liters	7.00E+06	1.11E+07	10
-------------------------------	--------	----------	----------	----

F. Volume of dilution water used during period

1. Batch and continuous modes	Liters	6.36E+11	4.49E+11	10
-------------------------------	--------	----------	----------	----

TABLE 8
EFFLUENT AND WASTE DISPOSAL REPORT - 1999
LIQUID EFFLUENTS

Fission and activation products	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 3	Quarter 4	Quarter 3	Quarter 4
Sodium-24	Ci			9.61E-08	
Chromium-51	Ci			1.19E-02	1.20E-05
Manganese-54	Ci			1.14E-03	1.57E-04
Manganese-56	Ci				2.54E-07
Iron-55	Ci			9.69E-03	1.78E-02
Iron-59	Ci			1.98E-04	
Cobalt-57	Ci			3.72E-05	
Cobalt-58	Ci		9.43E-05	2.13E-02	2.32E-03
Cobalt-60	Ci			2.05E-02	6.34E-04
Zinc-65	Ci				
Zinc-72	Ci			1.13E-05	6.48E-06
Strontium-85	Ci				2.75E-06
Strontium-89	Ci			9.87E-05	
Strontium-90	Ci				
Strontium-92	Ci				
Yttrium-91	Ci				
Yttrium-93	Ci				
Rubidium-88	Ci				2.87E-04
Niobium-95	Ci			4.00E-03	5.28E-04
Zirconium-95	Ci			3.52E-03	3.05E-04
Zirconium-97	Ci			1.97E-04	1.02E-05
Molybdenum-99	Ci			2.34E-05	5.12E-06
Technetium-99m	Ci			1.67E-04	
Ruthenium-103	Ci				1.27E-06
Ruthenium-106	Ci			4.43E-04	1.44E-05
Silver-110m	Ci			2.41E-03	2.33E-04
Tin-113	Ci			1.71E-04	9.23E-07
Indium-113m	Ci			2.61E-04	1.43E-06
Antimony-122	Ci				3.85E-05
Antimony-124	Ci				2.96E-04
Antimony-125	Ci			2.02E-03	1.18E-03
Tellurium-129	Ci				2.46E-05
Tellurium-132	Ci			2.66E-05	1.78E-06
Iodine-131	Ci			3.52E-03	1.23E-03
Iodine-132	Ci				
Iodine-133	Ci			1.24E-03	4.38E-05
Cesium-134	Ci			7.55E-06	3.46E-03
Cesium-136	Ci				2.17E-04
Cesium-137	Ci			3.41E-04	2.25E-03
Barium-140	Ci			1.81E-04	
Lanthanum-140	Ci			1.11E-03	
Cerium-141	Ci			1.91E-05	1.09E-05
Cerium-144	Ci				1.54E-06
Praseodymium-144	Ci				5.83E-04
Neodymium-147	Ci			9.18E-06	
Rhenium-188	Ci				1.05E-04
Total for period	Ci	0.00E+00	9.43E-05	8.45E-02	3.18E-02

TABLE 8 (CONTINUED)

EFFLUENT AND WASTE DISPOSAL REPORT - 1999

LIQUID EFFLUENTS

Dissolved and entrained gases	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 3	Quarter 4	Quarter 3	Quarter 4
Argon-41	Ci			3.86E-05	
Krypton-85	Ci				6.43E-04
Krypton-85m	Ci				
Krypton-87	Ci				
Krypton-88	Ci				
Xenon-131m	Ci			4.87E-04	3.04E-03
Xenon-133	Ci	1.20E-05	2.18E-04	3.92E-02	3.41E-02
Xenon-133m	Ci			6.80E-04	2.75E-04
Xenon-135	Ci		1.11E-04	7.85E-03	5.40E-04
Xenon-135m	Ci		6.10E-04		
Total for period	Ci	1.20E-05	9.39E-04	4.83E-02	3.86E-02

Tritium	Ci	3.90E-03	1.90E-01	1.73E+02	3.81E+01
---------	----	----------	----------	----------	----------

TABLE 9

EFFLUENT AND WASTE DISPOSAL REPORT - 1999
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFFSITE FOR PROCESSING OR BURIAL (Non-irradiated fuel)

1. Type of waste	Unit	12 month period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m3 Ci	6.32E+01 8.86E+01	25
b. Dry compressible waste, contaminated equipment, etc.	m3 Ci	6.01E+02 5.55E+00	25
c. Irradiated components, control rods, etc.	m3 Ci	0.00E+00 0.00E+00	
d. Other (describe): Sump sludge, LP Turbine scrap, sewage sludge	m3 Ci	1.23E+02 1.25E+01	25
2. Estimate of major nuclide composition (by type of waste in %)*			
a.	Cs-137 43.1 Ni-63 22.4 Co-60 16.1	Fe-55 8.6 Cs-134 7.9	
b.	Fe-55 27.0 Co-58 17.7 Cs-137 14.6	Ni-63 14.1 Co-60 9.7 C-14 3.7	Nb-95 3.1 Zr-95 3.0 Cs-134 2.1
c.			
d.	Fe-55 79.0 Ni-63 11.0 Co-60 5.9	Co-58 2.0	

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
2	Exclusive use truck	Alaron Corp (Wampum, PA)
2	Exclusive use truck	Allied Technology (Richland, WA)
2	Exclusive use truck	Barnwell Waste Mngmt (SC)
3	Exclusive use truck	Envirocare (Clive, UT)
15	Exclusive use truck	GTS Duratek (Oakridge, TN)
1	Exclusive use truck	GTS Duratek (Oakridge, TN)

B. IRRADIATED FUEL SHIPMENTS (Disposition)

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

* Curie values and principle radionuclides are estimates based on a combination of direct and indirect methods.

Unplanned Releases

One unplanned gaseous release occurred on October 12, 1999. During performance of a surveillance procedure on waste gas decay tank explosive gas monitoring equipment a sample valve was not shut. The open sample valve resulted in the release of approximately 0.02 Curies of noble gases from Waste Gas Decay Tank B over a period of approximately 12 hours. It was determined that a procedural deficiency, stemming from a procedure revision made during June 1999, led to this release. The procedural deficiency was immediately corrected. This event was documented under Precursor Card 99-3648.

Radioactive Waste Treatment Systems

There were no significant changes to the radioactive waste treatment systems.

Annual Land Use Census

The June 1999 land-use census did not identify any new dose calculation locations.

Effluent Monitor Instrument Operability

Required effluent monitor instrumentation was not out of service for more than 30 days during 1999.

ODCM & PCP Changes

The PCP was not revised during 1999.

The ODCM was not revised during 1999.

Emergency Feed Pump 2

Emergency Feed Pump 2 (EFP-2) overspeed testing is performed quarterly using steam from CR-3's steam generators. Due to a small primary to secondary leak, an evaluation was performed to estimate the quantity of radioactive material which was released during 1999 due to operation of this pump. The results of this evaluation are given below in units of Curies/year.

Xe-133	7.50E-07	I-131	6.00E-08	Cs-137	2.30E-08
Xe-135	7.50E-07	I-133	3.00E-07	H-3	7.50E-06

These values are not included in Tables 1 through 4.

1999 Appendix I Dose Summary

Maximum Hypothetical Individual

Liquid Effluent Dose Limits

Total Body: 1.5 mrem/quarter, 3 mrem/year
Any Organ: 5 mrem/quarter, 10 mrem/year

Liquid Effluent Dose Summary

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual Total
Total Body Dose (mrem)	4.11E-06	2.35E-05	3.54E-05	4.47E-04	5.11E-04
Maximum Organ Dose (mrem)	2.27E-05	3.99E-04	1.15E-03	6.36E-03	7.93E-03
Maximum Organ was GI					

Gaseous Effluent Dose Limits

Gamma Air Dose: 5 mrad/quarter, 10 mrad/year
Beta Air Dose: 10 mrad/quarter, 20 mrad/year

Any Organ: 7.5 mrem/quarter, 15 mrem/year

Gaseous Release Dose Summary

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual Total
Gamma Air Dose (mrad)	2.94E-06	2.63E-04	1.01E-03	1.47E-03	2.75E-03
Beta Air Dose (mrad)	8.74E-06	3.68E-04	1.84E-03	4.51E-03	6.73E-03
Total Body Dose (mrem)	5.38E-04	3.71E-04	6.74E-04	1.24E-03	2.82E-03
Maximum Organ Dose (mrem)	5.38E-04	3.68E-04	8.19E-04	5.94E-03	7.66E-03
Maximum Organ was Thyroid					