PROGRESS ENERGY FLORIDA, INC. CRYSTAL RIVER UNIT 3 DOCKET NUMBER 50-302 / LICENSE NUMBER DPR-72

ATTACHMENT A

RADIOACTIVE EFFLUENT RELEASE REPORT 2009

ANNUAL RADIOACTIVE EFFLUENT **RELEASE REPORT**

2009



PROGRESS ENERGY FLORIDA, INC **CRYSTAL RIVER UNIT 3**

Facility Operating License No. DPR-72

Docket No. 50-302

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CONTENTS

Introduction	1
Tabular Data Summaries	
Gaseous Effluents - Quarters 1 & 2	
Liquid Effluents - Quarters 1 & 2 Liquid Effluents - Quarters 3 & 4	
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	14
Appendix I Dose Summary	15
NEI 07-07 Required Data	16

INTRODUCTION

This report is submitted as required by the Offsite Dose Calculation Manual, section 6.5, and Technical Specifications 5.6.2.3.3 and 5.7.1.1.c.

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.
- Information required to be included in this report per NEI 07-07 Industry Ground Water Protection Initiative-Final Guidance Document issued in August 2007.

TABLE 1

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

		Unit	Quarter 1	Quarter 2	Est. Total Error %
Α.	Fission and activation gases				
1.	Total release	Ci	7.54E-03	0.00E+00	30
2.	Average release rate for period	μCi/sec	9.70E-04	0.00E+00	
3.	Percent of technical specification limit	%	6.27E-06	0.00E+00]
B.	Iodines				
1.	Total Iodine-131	Ci	3.33E-06	4.50E-06	30
2.	Average release rate for period	μCi/sec	4.28E-07	5.73E-07	
3.	Percent of technical specification limit	%	3.82E-02	4.52E-02]
C.	Particulates*				
1.	Particulates with half-lives > 8 days	Ci	5.22E-07	1.14E-06	30
2.	Average release rate for period	μCi/sec	6.70E-08	1.45E-07	
3.	Percent of technical specification limit	%	3.82E-02 .	4.52E-02	
4.	Gross alpha radioactivity	Ci	1.57E-08	1.73E-08]
D.	Tritium				
1.	Total release	Ci	3.13E+00	2.17E+00	30
2.	Average release rate for period	μCi/sec	4.03E-01	2.77E-01	
_	·			1	7

^{*} 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.

3.82E-02

3. Percent of technical specification limit

TABLE 2

EFFLUENT AND WASTE DISPOSAL REPORT – 2009

GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

		CONTINU	OUS MODE	ВАТСН	H MODE	
Nuclides Released	Unit	Quarter 1	Quarter 2	Quarter 1	Quarter 2	
A. Fission gases						
Argon-41	Ci			, 1		
Krypton-85	Ci					
Krypton-85m	Ci	· · · · · · · · · · · · · · · · · · ·				
Krypton-87	Ci					
Krypton-88	Ci					
Xenon-131m	Ci					
Xenon-133	Ci			7.54E-03		
Xenon-133m	Ci					
Xenon-135	Ci					
Xenon-135m	Ci		.,			
Xenon-138	Ci					
Total for period	Ci	0.00E+00	0.00E+00	7.54E-03	0.00E+00	
B. Iodines						
Iodine-131	Ci	3.33E-06	4.50E-06			
Iodine-132	Ci					
Iodine-133	Ci					
Iodine-135	Ci					
Total for period	Ci	3.33E-06	4.50E-06	0.00E+00	0.00E+00	
C. Particulates	•					
Manganese-54*	Ci	1.27E-07	3.34E-07			
Zinc-72	Ci			1		
Cobalt-58*	Ci	1.49E-07	2.76E-07	†		
Cobalt-60*	Ci					
Strontium-89*	Ci					
Strontium-90*	Ci					
Niobium-95m	Ci			† 		
Technicium-99m	Ci					
Tellurium-132	Ci					
Cesium-134*	Ci			†		
Cesium-137*	Ci	1.24E-07	5.27E-07	<u> </u>		
Cesium-138	Ci	1.212 01	3.27D 07	<u> </u>		
Barium-139	Ci			†		
Lanthanum-142	Ci			†	· · · · · · · · · · · · · · · · · · ·	
Cerium-141*	Ci			 		
Cerium-143*	Ci	1.22E-07		†		
Rhenium-188	Ci	1.223 (1	<u> </u>	†		
	, ~, l			1	i	
Total for period	Ci	5.22E-07	1.14E-06	0.00E+00	0.00E+00	

^{* &}gt; 8 day half-life

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

		Unit	Quarter 3	Quarter 4	Est. Total Error %
Α.	Fission and activation gases				
1.	Total release	Ci	8.38E-02	0.00E+00	30
2.	Average release rate for period	μCi/sec	1.05E-02	0.00E+00	
3.	Percent of technical specification limit	%	6.97E-05	0.00E+00	·
В.	Iodines				
1.	Total Iodine-131	Ci	0.00E+00	0.00E+00	30
2.	Average release rate for period	μCi/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	1.10E-06	1.07E-05	30
2.	Average release rate for period	μCi/sec	1.38E-07	1.34E-06	
3.	Percent of technical specification limit	%	8.40E-03	1.15E-02	
4.	Gross alpha radioactivity	Ci	2.31E-09	1.48E-07	
D.	Tritium				
_	Total places		2 405 100	2.255.00	20

1.	Total release	Ci	2.48E+00	3.25E+00	30
2.	Average release rate for period	μCi/sec	3.13E-01	4.09E-01	
3.	Percent of technical specification limit	%	8.40E-03	1.15E-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.

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TABLE 4

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

		CONTINU	OUS MODE	BATCH MODE		
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4	
A. Fission gases			•			
Argon-41	Ci					
Krypton-85	Ci					
Krypton-85m	Ci					
Krypton-87	Ci					
Krypton-88	Ci	• •			4	
Xenon-131m	Ci					
Xenon-133	Ci			8.38E-02		
Xenon-133m	Ci					
Xenon-135	Ci		1		·	
Xenon-135m	Ci					
Xenon-138	Ci					
Total for period	Ci	0.00E+00	· 0.00E+00	8.38E-02	0.00E+00	
Iodine-132 Iodine-133	Ci 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	T 6: 1		2.000		Trains Plant	
Manganese-54* Zinc-72	Ci Ci		8.01E-07			
Cobalt-58*	Ci	2.05E.07	4 10E 04	'		
Cobalt-60*	Ci	3.05E-07	4.18E-06 2.73E-06	+		
Chromium-51*	Ci		2.73E-00	 		
Strontium-89*	Ci	VIVI	+			
Strontium-90*	Ci		+			
Niobium-95*	Ci		1.10E-06			
Tin-113*	Ci		1.10E-00	+		
Zirconium-95*	Ci		5.50E-07			
Barium-133m	Ci		3.30E-07			
Cesium-137*	Ci	7.94E-07	1.06E.06			
		1.74E-U/	1.06E-06	-		
Barium-130	l ci l			I		
Barium-139	Ci					
Cerium-141	Ci		4 21E 07			
Cerium-141 Cerium-143	Ci Ci		4.21E-07			
Cerium-141 Cerium-143 Cerium-144*	Ci Ci Ci					
Cerium-141 Cerium-143	Ci Ci		4.21E-07 2.20E-07			

^{* &}gt; 8 day half-life

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

		Unit	Quarter 1	Quarter 2	Est. Total Error %
Α.	Fission and activation products				
1.	Total release (not including tritium, gases, alpha)	Ci	8.81E-03	3.73E-04	25
2.	Average diluted concentration during period	μCi/ml	1.66E-12	6.54E-13	
3.	Percent of applicable limit	%	9.98E-04	4.66E-04	
В.	Tritium				
1.	Total release .	Ci	1.87E+02	1.91E+02	30
2.	Average diluted concentration during period	μCi/ml	3.52E-07	3.35E-07	
3.	Percent of applicable limit	%	2.99E-01	3.35E-01	
C.	Dissolved and entrained gases				
1.	Total release	Ci	2.83E-03	2.19E-03	25
2.	Average diluted concentration during period	μCi/ml	5.33E-12	3.84E-12	
3.	Percent of applicable limit	%	2.26E-04	1.92E-04	
D.	Gross alpha radioactivity				
1.	Total release	Ci	0.00E+00	0.00E+00	30
E.	Volume of waste released (prior to dilution)		-		
1.	Batch and continuous modes	Liters	9.58E+06	1.00E+07	10
F.	Volume of dilution water used during period				
1.	Batch and continuous modes	Liters	5.31E+11	5.70E+11	10

TABLE 6
EFFLUENT AND WASTE DISPOSAL REPORT - 2009
LIQUID EFFLUENTS

		CONTINU	OUS MODE	BATCH MODE		
Fission and activation products	Unit	Ougston 1	Quarter 3	Overter 1	Ougutou 2	
		Quarter 1	Quarter 2	Quarter 1	Quarter 2	
Sodium-24 Chromium-51	Ci Ci			<u> </u>		
				1		
Manganese-54	Ci Ci	•		1		
Manganese-56				2 225 04		
Iron-55	Ci			2.33E-04		
Iron-59	Ci					
Cobalt-57	Ci Ci			9.47E-07	7.225.07	
Cobalt-58					7.22E-07	
Cobalt-60	Ci			1.05E-05	2.10E-05	
Zinc-69	Ci			·		
Strontium-85	Ci Ci		 			
Strontium-89						
Strontium-90	Ci			-		
Yttrium-91m	Ci					
Yttrium-92	Ci					
Yttrium-93	Ci					
Niobium-95	Ci					
Niobium-95m	Ci	· ·				
Niobium-97	Ci					
Zirconium-95	Ci		****			
Zirconium-97	Ci					
Molybdinum-99	Ci					
Technetium-99m	Ci					
Technetium-101	Ci					
Ruthenium-103	Ci					
Ruthenium-106	Ci					
Silver-110m	Ci					
Tin-113	Ci					
Indium-113m	Ci					
Antimony-122	Ci					
Antimony-124	Ci					
Antimony-125	Ci			7.04E-06	3.11E-04	
Tellurium-129	Ci		·			
Tellurium-132	Ci				•	
Iodine-131	Ci					
Iodine-133	Ci		•			
Iodine-135	Ci					
Cesium-134	Ci					
Cesium-137	Ci	4.49E-05		6.79E-05	3.47E-05	
Cesium-138	Ci					
Barium-133m	Ci				1.67E-06	
Barium-140	Ci	يد				
Lanthanum-140	Ci				<u> </u>	
Cerium-141	Ci					
Cerium-143	Ci					
Neodymium-147	Ci					
Tungsten-187	Ci					
Neptunium239	Ci					
Nickle-63	Ci			5.17E-04	4.42E-06	
Total for period	Ci	4.49E-05	0.00E+00	8.81E-04	3.73E-04	

TABLE 6 (CONTINUED)

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

LIQUID EFFLUENTS

	(OUS MODE	BATCH MODE	
Dissolved and entrained gases	Unit	Quarter 1	Quarter 2	Quarter 1	Quarter 2
Argon-41	Ci				
Krypton-85	Ci				2.53E-04
Krypton-85m	Ci				
Krypton-87	Ci				
Krypton-88	Ci				"
Xenon-131m	Ci				1.94E-04
Xenon-133	Ci			2.77E-03	1.69E-03
Xenon-133m	Ci				
Xenon-135	Ci		*	5.84E-05	5.03E-05
Xenon-135m	Ci				
Total for period	Ci	0.00E+00	0.00E+00	2.83E-03	2.19E-03

		·			
Tritium	Ci	1.51E-01	0.00E+00	1.87E+02	1.91E+02

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

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	2.24E-02	6.84E-03	25
2.	Average diluted concentration during period	μCi/ml	3.98E-11	2.96E-11	
3.	Percent of applicable limit	%	1.15E-03	1.07E-03	
B.	Tritium				
1.	Total release	Ci	2.81E+02	5.64E+01	30
2.	Average diluted concentration during period	μCi/ml	5.00E-07	2.44E-07	
3.	Percent of applicable limit	%	3.61E-01	8.33E-02	
C.	Dissolved and entrained gases				
1.	Total release	Ci	1.64E-02	2.59E-03	25
2.	Average diluted concentration during period	μCi/ml	2.92E-11	1.12E-11	
3.	Percent of applicable limit	%	1.05E-03	1.91E-04	
D.	Gross alpha radioactivity				
1.	Total release	Ci	0.00E+00	1.69E-04	30
E.	Volume of waste released (prior to dilution)				
1.	Batch and continuous modes	Liters	1.18E+07	6.39E+06	10
F.	Volume of dilution water used during period				
1.	Batch and continuous modes	Liters	5.62E+11	2.31E+11	10

TABLE 8
EFFLUENT AND WASTE DISPOSAL REPORT - 2009
LIQUID EFFLUENTS

		CONTINU	OUS MODE	BATCH MODE		
Fission and						
activation products	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4	
Sodium-24	Ci					
Chromium-51	Ci			8.95E-04	6.30E-05	
Manganese-54	Ci			6.20E-06	3.93E-06	
Manganese-56	Ci					
Iron-55	Ci					
Iron-59	Ci					
Cobalt-57	Ci				, ,	
Cobalt-58	Ci			1.37E-04	2.46E-04	
Cobalt-60	Ci			2.26E-04	3.84E-05	
Zinc-69	Ci					
Zinc-72	Ci			9.26E-06		
Strontium-85	Ci					
Strontium-89	Ci					
Strontium-90	Ci					
Strontium-92	Ci					
Yttrium-91	Ci	···				
Yttrium-92	Ci			 		
Yttrium-93	Ci			<u> </u>		
Rubidium-88	Ci			 		
Niobium-95	Ci			3.52E-05	2.55E-05	
Niobium-95m	Ci			3.32E 03	2.332 03	
Zirconium-95	Ci			2.60E-05	1.50E-05	
Molybdinum-99	Ci		*****	2.0012-03	1.5012-05	
Technetium-99m	Ci			· · · · · · · · · · · · · · · · · · ·		
Technetium-101	Ci			 		
	Ci			·		
Ruthenium-106				2 725 05	0.615.06	
Silver-110m	Ci Ci			3.72E-05	9.61E-06	
1011	Ci			 		
Indium-113m						
Antimony-122	Ci					
Antimony-124	Ci	-		2 007 00	(1/500	
Antimony-125	Ci			2.09E-02	6.16E-03	
Tellurium-129	Ci					
Tellurium-132	Ci					
Iodine-131	Ci	· · · · · · · · · · · · · · · · · · ·				
Iodine-133	Ci					
Iodine-135	Ci			ļ		
Cesium-134	Ci			2.12E-07		
Cesium-137	Ci			1.12E-04	1.26E-04	
Barium-133m	Ci					
Barium-139	Ci					
Barium-140	Ci					
Lanthanum-140	Ci					
Cerium-141	Ci			1.57E-05		
Cerium-143	Ci				7.54E-05	
Praseodymium-144	Ci					
Neodymium-147	Ci		1			
Neptunium-239	Ci	-			3.73E-06	
Nickel-63	Ci			7.11E-05	4.11E-05	
Rhenium-188	Ci					
Total for period	Ci	0.00E+00	0.00E+00	2.24E-02	6.84E-03	

TABLE 8 (CONTINUED)

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

LIQUID EFFLUENTS

		CONTINUOUS MODE		BATCH MODE		
Dissolved and entrained gases	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4	
Argon-41	Ci					
Krypton-85	Ci	1986		5.21E-04		
Krypton-85m	Ci					
Krypton-87	Ci	,				
Krypton-88	Ci					
Xenon-131m	Ci					
Xenon-133	Ci			1.54E-02	2.59E-03	
Xenon-133m	Ci					
Xenon-135	Ci			4.68E-04		
Xenon-135m	Ci					
Total for period	Ci	0.00E+00	0.00E+00	1.64E-02	2.59E-03	

Tritium	Ci	8.95E-02	0.00E+00	2.81E+02	5.64E+01

EFFLUENT AND WASTE DISPOSAL REPORT - 2009

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

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

Type of waste		Unit	12 month period	Est. Total Error %	
a. Spent res	Spent resins, filter sludges, evaporator bottoms, etc.		m3 Ci	2.55E+00 3.38E-07	25
b. Dry com	pressible waste, contaminated equipme	ent, etc.	m3 Ci	8.18E+02 1.14E+00	25
c. Irradiated	components, control rods, etc.		m3 Ci	0.00E+00 0.00E+00	25
d. Other (describe): Combined DAW package			m3 Ci	3.66E+01 2.01E+00	25
2. Estimate of ma	ajor nuclide composition (by type of w	vaste in %)*			
a.	Ce-144 16.22	Co-60	44.51		Cs-137 39.27
b.	Ce-144 2.91 Fe-55 38.3 Co-60 19.98	Ni-63 Mn-54 Cs-137	18.97 3.95 2.96		Co-58 10.67 Nb-95 2.1 Cs-134 0.31
c.	N/A	N/A			N/A
d.	Fe-55 32.5 Co-60 21.17 Ni-63 30.56	Sb-125 Cs-134 Cs-137 Pu-241	1.76 3.04 8.01 0.518		Mn-54 0.958 H-3 1.08 C-14 0.196

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

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	<u>Destination</u>
2	Hittman Transport Services	EnergySolutions
21	Hittman Transport Services	EnergySolutions-Bear Creek
1	Hittman Transportation	Studsvik Processing Facility, LLC

B. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments	Mode of Transportation	<u>Destination</u>
0	N/A	N/A

Unplanned Releases

There were no unplanned releases in 2009.

Radioactive Waste Treatment Systems

There were no significant changes to the radioactive waste treatment systems in 2009. A new macroporous anion ion-specific speciality resin was added to one waste processing demineralizer to target removal of Sb-125. Data is still being collected on this project.

Annual Land Use Census

The 2009 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 2009.

ODCM & PCP Changes

The ODCM was revised once in 2009. Revision 32 incorporated the following changes:

- 1. The replacement of the CR-3 steam generators in refuel 16 outage require cutting a sizeable hole in the reactor building wall to facilitate removal and installation of these large components. Verbiage was added to page 97 under the section for representative sampling method 3.1-5 dealing with the reactor building equipment hatch and personnel hatch being in the open position to also include the steam generator replacement access hole.
 - Under certain wind flow conditions outside air might flow into the reactor building through one open hatch and out the other open hatch. ODCM sampling specification 3.1-5 was established to provide guidance for controlling these hatches (personal and equipment hatches) to minimize the chances of releasing airborne radioactive material. This guidance is not a commitment and is not a required part of the ODCM.
 - The SG replacement project requires an opening in the Reactor Building that is equivalent to having another hatch opening. This new opening is not practical to control in the same way the personnel and equipment hatches have been controlled in the past. Consequently, the sampling specification is being revised to recognize this new opening and to provide for flexibility in the application of the guideline.
- 2. Also on page 97 under the section for representative sampling method 3.1-6 dealing with sampling to support the reactor building integrated leak rate test, verbiage was added that describes use of RM-A6 samples prior to pressurizing the RB or use of RM-A1 samples from the previous RB purge permit as long as the source term has not changed.
- 3. On page 11 the footnote of table 2-3 for requirements of when the RM-A1 automatic isolation function is required was updated to state that this function is not required during periods of "no mode" due to no gas source term being located in the RB during the "no mode" plant condition.
- 4. On page 140, the direction for station C14H was changed from NW to N as we moved the collection of surface water slightly east to eliminate dilution effects of units CR 1&2. Also footnote 1 was added to the vegetation collection areas to provide an alternate means of collecting required media if adequate vegetation is not available.

The PCP was not revised in 2009.

Emergency Feed Pump 2 & Steam Releases

Emergency Feed Pump 2 (EFP-2) over-speed 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 2009 due to operation of this pump. In addition, radioactive releases due to other steam releases have been estimated and included. These values include any plant trips with associated secondary plant atmosphere steam relief valve initiation. The results are given below in units of Curies/year.

Xe-133	3.77E-07	I-131	8.80E-09	Cs-137	3.77E-10
Xe-135	4.28E-07	I-133	7.55E-08		
H-3	1.51E-05				

These values are not included in Tables 1 through 4.

2009 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) Maximum Organ Dose (mrem) Maximum Organ was GI	1.50E-05 6.70E-06	6.99E-06 6.03E-06	1.73E-05 5.86E-05	1.61E-05 4.23E-05	5.53E-05 1.14E-04

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

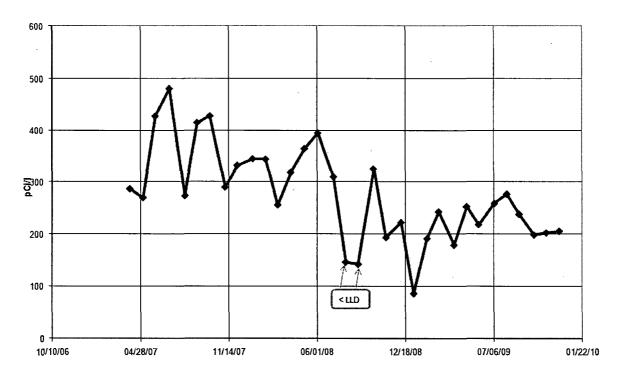
Gaseous Release Dose Summary

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual Total
Gamma Air Dose (mrad)	2.11E-07	0.00E+00	2.34E-06	0.00E+00	2.56E-06
Beta Air Dose (mrad)	6.27E-07	0.00E+00	6.97E-06	0.00E+00	7.60E-06
Total Body Dose (mrem) Maximum Organ Dose (mrem) Maximum Organ was Thyroid	7.56E-04	5.31E-04	6.04E-04	8.26E-04	2.72E-03
	2.86E-03	3.39E-03	6.01E-04	8.24E-04	7.68E-03

Nuclear Electric Institute (NEI) Required Information

The following environmental data is being included in this report per objective 2.4.b.i and 2.4.b.ii of NEI 07-07 Industry Ground Water Protection Initiative, as this groundwater well data is used to evaluate groundwater at the site, but is not officially included in the Radiological Environmental Monitoring Program (REMP) or the Offsite Dose Calculation Manual (ODCM). These 2 graphs are of tritium measurements in units of pCi/l, taken from groundwater monitoring wells located west of CR-3 on either side of the settling ponds. There are many other groundwater monitoring wells included in the REMP that are used for evaluating the groundwater in the vicinity of the CR-3 site. These 2 wells are providing supplemental information. The LLD for tritium measurement of these environmental well samples is ~150 pCi/l.

Tritium Measurements GW Well # MWC-IF2



Tritium Measurements GW Well # MWC-27

