

RETS MASTER FILE

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AUGUST 29 1984  
4 SEP 4 1984

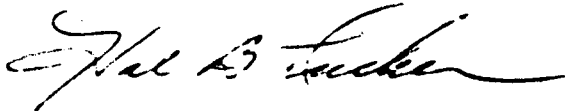
Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Re: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287

Dear Sir:

Pursuant to Oconee Nuclear Station Technical Specification 6.6.1.4 and 10 CFR 50.36a(a)(2) please find attached the First Semi-Annual Release and Solid Waste Disposal Reports for the period of January 1, 1984 to June 30, 1984.

Very truly yours,



Hal B. Tucker

RFH:slb

Attachment

cc: Director  
Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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OCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES  
DATE : 08/24/84

I. LIQUID RELEASES		UNITS	1ST QTR	2ND QTR	YEAR : 1984 SUBTOTAL
1. GROSS RADIOACTIVITY					
A. TOTAL RELEASE	CURIES	6.29E-01	3.07E-01		9.36E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.61E-09	2.86E-10		2.11E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	1.42E-07	3.09E-08		1.42E-07
2. TRITIUM					
A. TOTAL RELEASE	CURIES	3.17E+02	3.09E+02		6.26E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.32E-06	2.87E-07		4.76E-07
3. DISSOLVED MOBILE GASES					
A. TOTAL RELEASE	CURIES	3.62E+00	2.69E+00		6.31E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.31E-08	2.30E-09		4.79E-09
4. GROSS ALPHA ACTIVITY					
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00		0.00E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	0.00E+00	0.00E+00		0.00E+00
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	1.41E+07	1.33E+07		2.75E+07
6. VOLUME OF DILUTION WATER	LITERS	2.41E+11	1.08E+12		1.32E+12
7. RADIONUCLIDES RELEASED	CURIES				
HA-24		7.34E-06	9.13E-06		1.67E-05
CA-51		2.11E-02	1.45E-02		3.57E-02
HA-54		7.80E-03	5.25E-03		1.31E-02
FE-55		1.18E-01	2.90E-01		1.47E-01
FE-59		3.86E-04	3.37E-04		7.43E-04
CO-58		2.31E-01	1.47E-01		3.78E-01
CO-60		2.89E-02	3.24E-02		6.13E-02
SR-92		9.78E-03	4.51E-03		9.83E-03
ZR-95		7.40E-04	1.87E-03		1.81E-03
ZR-97		2.87E-03	1.79E-03		4.66E-03
ND-95		1.18E-02	3.87E-03		1.69E-02
TC-99A		1.73E-05	2.94E-05		4.70E-05
RU-103		0.00E+00	4.25E-05		4.25E-05
RU-106		1.21E-02	5.90E-03		1.80E-02
AG-110A		5.75E-02	3.00E-02		9.55E-02
I-131		2.03E-02	1.65E-03		2.27E-02
I-133		1.45E-03	3.31E-03		1.49E-03
I-134		8.41E-06	7.09E-05		7.93E-05
CS-134		8.23E-03	7.34E-03		1.56E-02
CS-136		2.09E-06	0.00E+00		2.09E-06
CS-137		2.19E-02	1.70E-02		3.89E-02
LA-140		1.55E-03	1.05E-04		1.66E-03
CE-144		5.80E-04	0.00E+00		5.80E-04
U-187		5.39E-05	0.00E+00		5.39E-05
MP-239		0.00E+00	8.25E-05		8.25E-05
AR-41		8.44E-05	0.00E+00		8.44E-05
HR-85A		1.98E-05	0.00E+00		1.98E-05
HR-85		8.52E-03	0.00E+00		8.52E-03
XE-131A		5.67E-02	2.86E-02		8.53E-02
XE-133A		3.67E-02	2.36E-02		6.03E-02
XE-133		3.57E+00	2.67E+00		6.20E+00
XE-135		3.05E-02	1.34E-02		4.39E-02

Do You Wish To Run Another Program?(Y/N):

SKIN	MAXIMUM DOSE-	1.78D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 58	6.17 X				
	CO 60	56.83 X				
	AG 110M	14.09 X				
	CS 137	17.15 X				
BONE	MAXIMUM DOSE-	8.98D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	21.99 X				
	CS 137	76.69 X				
LIVER	MAXIMUM DOSE-	1.25D-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	14.83 X				
	CS 134	29.70 X				
	CS 137	54.62 X				
T. BODY	MAXIMUM DOSE-	9.50D-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	19.59 X				
	CS 134	32.09 X				
	CS 137	47.29 X				
THYROID	MAXIMUM DOSE-	6.13D-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	39.21 X				
	I 131	60.11 X				
KIDNEY	MAXIMUM DOSE-	5.69D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	43.59 X				
	CS 134	17.66 X				
	CS 137	37.83 X				
LUNG	MAXIMUM DOSE-	3.67D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	67.62 X				
	CS 134	9.86 X				
	CS 137	21.21 X				
OI-LLI	MAXIMUM DOSE-	1.13D-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	16.44 X				
	NB 95	73.29 X				

OCONEE GAS DOSE- 1ST SEMI-ANNUAL '84 NRC REPORT- 8/24/84

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DISPERSION FACTOR- 4.10E-07 SEC/CU-M DEPOSITION FACTOR- 3.00E-10 M(-2)

BETA AIR DOSE- 1.54E-01 MILLIRADS GAMMA AIR DOSE- 4.91E-02 MILLIRADS

T.BODY H 3 XE133	CRITICAL AGE- 55.00% 43.62%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 6.38D-02 MILLIREM	PLUME CONTRIBUTION- 44.96%
GI-TRACT H 3 XE133	CRITICAL AGE- 55.01% 43.63%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 6.38D-02 MILLIREM	PLUME CONTRIBUTION- 44.98%
BONE XE133	CRITICAL AGE- 96.80%	INFANT	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 2.87D-02 MILLIREM	PLUME CONTRIBUTION- 99.79%
LIVER H 3 XE133	CRITICAL AGE- 54.98% 43.60%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 6.38D-02 MILLIREM	PLUME CONTRIBUTION- 44.95%
KIDNEY H 3 XE133	CRITICAL AGE- 54.97% 43.60%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 6.38D-02 MILLIREM	PLUME CONTRIBUTION- 44.94%
THYROID H 3 I 131 XE133	CRITICAL AGE- 47.54% 13.38% 37.70%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 7.38D-02 MILLIREM	PLUME CONTRIBUTION- 38.86%
LUNG H 3 XE133	CRITICAL AGE- 53.72% 44.78%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 6.53D-02 MILLIREM	PLUME CONTRIBUTION- 46.27%
SKIN H 3 XE133	CRITICAL AGE- 28.66% 64.08%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 1.22D-01 MILLIREM	PLUME CONTRIBUTION- 71.34%
THYROID H 3 I 131 XE133	AGE- 41.53% 7.20% 49.59%	ADULT	CRITICAL PATHWAY- PLUME	TOTAL DOSE- 5.61D-02 MILLIREM	PLUME CONTRIBUTION- 51.12%
THYROID H 3 I 131 XE133	AGE- 23.81% 31.27% 43.27%	INFANT	CRITICAL PATHWAY- COM MILK	TOTAL DOSE- 6.43D-02 MILLIREM	PLUME CONTRIBUTION- 44.61%

OCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES  
DATE : 08/24/84

II. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR : 1984 SUBTOTAL
1. TOTAL NOBLE GASES	CURIES	5.70E+03	5.14E+03	1.08E+04
2. TOTAL HALOGENS	CURIES	4.99E-02	1.41E-02	6.40E-02
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	1.34E+03	9.36E+02	9.30E+02
4. TOTAL TRITIUM	CURIES	8.39E+00	3.77E+02	3.86E+02
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.00E+00	0.00E+00	0.00E+00
6. MAXIMUM NOBLE GAS RELEASE RATE	UCI/SEC	1.60E+03	1.60E+03	1.60E+03
7. RATIONUCLIDES RELEASED	CURIES			
PARTICULATES				
CR-51		3.19E-10	0.00E+00	3.19E-10
RU-54		4.61E-07	0.54E-08	5.15E-07
FE-55		0.00E+00	9.19E-04	9.19E-04
CO-58		1.80E-06	3.91E-06	5.71E-06
CO-60		3.25E-06	1.36E-06	4.60E-06
Zn-65		1.36E-08	0.00E+00	1.36E-08
SA-89		7.83E-11	0.00E+00	7.83E-11
Zr-95		0.00E+00	1.40E-07	1.40E-07
MO-95		7.32E-09	2.45E-07	2.52E-07
MO-99		2.67E-12	0.00E+00	2.67E-12
RU-103		0.00E+00	2.16E-08	2.16E-08
AG-110A		4.27E-07	0.00E+00	4.27E-07
CS-134		7.42E-07	1.57E-06	2.31E-06
CS-136		9.34E-07	0.00E+00	9.34E-07
CS-137		5.82E-06	5.13E-06	1.10E-05
BA-140		0.00E+00	1.27E-08	1.27E-08
HALOGENS				
I-131		3.37E-03	8.38E-04	4.20E-03
I-133		1.62E-03	3.72E-04	2.19E-03
GASES				
RR-85A		2.21E-01	0.00E+00	2.21E-01
RR-85		6.26E+01	2.66E+02	3.28E+02
RR-88		5.56E-02	0.00E+00	5.56E-02
XE-131M		1.01E+01	9.43E+01	6.44E+01
XE-133M		5.53E+01	6.72E+00	6.20E+01
XE-133		5.67E+03	4.81E+03	1.04E+04
XE-135		3.61E+01	7.06E+01	3.68E+01

1984  
OCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES  
SOLID WASTES  
1ST SEMI-ANNUAL REPORT

Total volume of solid waste packaged (cubic feet) 16,718.9 for 1st six months of 1984.

v 0.028

Total estimated activity involved (curies) 2,680.27 for 1st six months of 1984. Disposal of materials shipped off-site: All 48 shipments were made to Chem Nuclear Systems waste disposal facility at Barnwell, South Carolina.

DATE	CUBIC FEET	CURIES
01-03-84	200	1.777
01-04-84	200	1.408
01-04-84	200	1.41
01-05-84	200	1.8
01-06-84	810	.56
01-10-84	200	1.39
01-11-84	200	1.386
01-12-84	810	.56
01-17-84	121	3.97
01-20-84	121	9.3
01-25-84	630	.68
01-27-84	121	1.7
02-01-84	200	1.41
02-02-84	200	1.41
02-09-84	810	.832
02-22-84	120.6	8.22
02-23-84	814.5	.58
03-06-84	200	1.41
03-09-84	200	.458
03-12-84	120.6	6.03
03-13-84	200	.456
03-15-84	200	1.41
03-16-84	814.5	1.23

DATE	CUBIC FEET	CURIES
03-29-84	828	1.39
04-02-84	200	.900
04-03-84	200	.985
04-05-84	858.6	1.44
04-09-84	200	.986
04-10-84	121	1313.39
04-11-84	200	1.22
04-13-84	200	1.22
04-19-84	843.3	1.13
04-25-84	125	5.5
05-01-84	200	1.71
05-03-84	846	.69
05-10-84	120.6	3.45
05-17-84	846	1.63
05-21-84	121	174.95
05-21-84	846	.858
05-24-84	95	1.98
06-01-84	120.6	5.734
06-07-84	846	2.5
06-08-84	121	97.96
06-14-84	120.6	80.32
06-20-84	846	.725
06-25-84	121	930.21