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 AUTH.NAME AUTHOR AFFILIATION
 HAMPTON, J.W. Duke Power Co. *see RATS*
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: Semiannual effluent release rept for second half of 1993.W/
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DUKE POWER

February 23, 1994

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
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Subject: Oconee Nuclear Site
Docket Nos. 50-269, 50-270 and 50-287
Semi-Annual Effluent Release Report

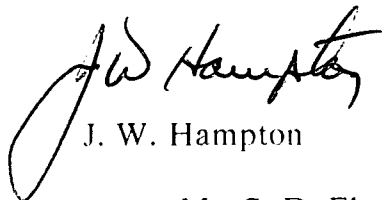
Gentlemen:

Pursuant to Oconee Nuclear Site Selected Licensee Commitment Manual, SLC 16.11-9, and 10 CFR 50.36a(a)(2), please find attached the 1993 Semi-Annual Radioactive Effluent Release Report for the second half of 1993.

Attachment 1 contains Radioactive Effluent Releases.
Attachment 2 contains Solid Waste Disposal Reports.
Attachment 3 contains Meteorological Data.
Attachment 4 contains Unplanned Offsite Releases.
Attachment 5 contains Inoperable Monitoring Equipment.
Attachment 6 contains ODCM/PCP Manual Changes.

Should there be any questions concerning this report please contact Susan Perry at (803) 885-3300.

Very truly yours,



J. W. Hampton

xc: Mr. S. D. Ebnetter
Regional Administrator, Region II

Mr. L. A. Wiens
Project Manager, ONRR

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U. S. Nuclear Regulatory Commission
February 23, 1994
Page Two

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Senior Resident Inspector, ONS

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Duke Power Company

Oconee Nuclear Site

Attachment I

**Radioactive Effluent Releases
and Supplemental Information**

OCONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
DATE : 02/07/94

DATE : 02/07/94

LIQUID RELEASES

YEAR : 1993

GROSS RADIOACTIVITY		UNITS	1ST OTR	2ND OTR	3RD QTR	4TH OTR	TOTAL	
A. TOTAL RELEASE	CURIES	2.32E-01	1.56E-01	4.95E-02	3.23E-02	4.70E-01		
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	5.00E-10	5.40E-10	2.33E-10	5.92E-10	4.61E-10		
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	6.32E-09	3.33E-08	5.68E-09	5.49E-09	3.33E-08		
2. TRITIUM								
A. TOTAL RELEASE	CURIES	2.90E+02	2.32E+02	2.52E+02	3.23E+02	1.10E+03		
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	6.25E-07	8.04E-07	1.18E-06	5.92E-06	1.08E-06		
3. DISSOLVED NOBLE GASES								
A. TOTAL RELEASE	CURIES	1.41E-01	8.32E-02	8.24E-02	2.20E-01	5.26E-01		
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	3.03E-10	2.88E-10	3.87E-10	4.03E-09	5.16E-10		
4. GROSS ALPHA ACTIVITY								
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL								
	LITERS	1.21E+09	1.09E+09	1.18E+09	1.20E+09	4.68E+09		
6. VOLUME OF DILUTION WATER								
	LITERS	4.64E+11	2.89E+11	2.13E+11	5.46E+10	1.02E+12		
7. RADIONUCLIDES RELEASED								
	CURIES							EC RATIO
H-3		2.90E+02	2.32E+02	2.52E+02	3.23E+02	1.10E+03	1.08E-03	
CR-51		2.84E-03	1.14E-02	0.00E+00	0.00E+00	1.42E-02	2.78E-08	
MN-54		2.55E-04	9.88E-05	0.00E+00	2.83E-06	3.57E-04	1.17E-08	
FE-55		4.82E-02	5.07E-03	0.00E+00	0.00E+00	5.32E-02	5.22E-07	
FE-59		0.00E+00	1.99E-04	0.00E+00	1.55E-05	2.15E-04	2.10E-08	
CO-57		7.85E-06	2.76E-05	0.00E+00	0.00E+00	3.54E-05	5.79E-10	
CO-58		8.92E-02	6.82E-02	1.23E-03	5.27E-04	1.59E-01	7.80E-06	
CO-60		1.64E-02	9.98E-03	4.55E-04	1.02E-03	2.78E-02	9.09E-06	
ZR-95		7.72E-04	1.56E-03	0.00E+00	0.00E+00	2.33E-03	1.14E-07	
NB-95		1.76E-03	2.22E-03	6.27E-05	2.67E-05	4.07E-03	1.33E-07	
MO-99		3.08E-04	0.00E+00	0.00E+00	1.93E-05	3.28E-04	1.61E-08	
TC-99M		2.99E-04	0.00E+00	0.00E+00	1.88E-05	3.18E-04	3.12E-10	
RU-103		1.08E-04	1.40E-04	0.00E+00	0.00E+00	2.48E-04	8.11E-09	
RU-106		1.33E-03	3.87E-04	0.00E+00	0.00E+00	1.72E-03	5.61E-07	
AG-110M		2.73E-02	3.00E-02	4.18E-03	2.56E-03	6.40E-02	1.05E-05	
I-131		6.20E-03	1.50E-03	7.78E-04	1.19E-03	9.67E-03	9.48E-06	
I-132		7.94E-05	2.64E-04	0.00E+00	0.00E+00	3.44E-04	3.37E-09	
I-133		7.11E-03	5.22E-04	2.36E-04	3.99E-04	8.27E-03	1.16E-06	
I-135		3.75E-04	0.00E+00	0.00E+00	0.00E+00	3.75E-04	1.23E-08	
SB-124		4.23E-04	1.70E-04	1.79E-04	0.00E+00	7.71E-04	1.08E-07	
SB-125		1.75E-02	1.36E-02	8.55E-03	3.20E-03	4.28E-02	1.40E-06	
SN-113		0.00E+00	3.07E-05	0.00E+00	0.00E+00	3.07E-05	1.00E-09	
TE-125M		0.00E+00	5.91E-04	3.32E-02	2.22E-02	5.60E-02	2.75E-06	
TE-132		1.27E-04	3.13E-04	0.00E+00	0.00E+00	4.40E-04	4.79E-08	
CS-134		8.58E-04	1.54E-03	1.73E-04	1.23E-04	2.69E-03	2.93E-06	
CS-137		3.23E-03	6.15E-03	4.21E-04	3.15E-04	1.01E-02	9.91E-06	
BA-140		0.00E+00	1.44E-04	0.00E+00	0.00E+00	1.44E-04	1.77E-08	
LA-140		3.49E-03	1.87E-03	6.39E-06	5.71E-04	5.94E-03	6.46E-07	
CE-141		1.63E-05	3.10E-06	0.00E+00	0.00E+00	1.94E-05	6.35E-10	
CE-144		3.97E-03	1.76E-04	0.00E+00	1.23E-04	4.27E-03	1.40E-06	
KR-85		8.71E-04	3.28E-02	0.00E+00	7.80E-04	3.45E-02	3.38E-07	
XE-131M		0.00E+00	7.21E-05	0.00E+00	5.10E-04	5.82E-04	5.71E-09	
XE-133		1.09E-01	4.28E-02	7.49E-02	2.08E-01	4.36E-01	4.27E-06	
XE-133M		1.50E-03	2.29E-04	9.53E-04	2.82E-03	5.51E-03	5.40E-08	
XE-135		2.88E-02	7.21E-03	6.56E-03	7.48E-03	5.00E-02	4.90E-07	
XE-135M		0.00E+00	0.00E+00	0.00E+00	1.36E-06	1.36E-06	1.34E-11	
TOTAL EC RATIO								1.14E-03

SKIN	MAXIMUM DOSE-	6.02E-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 58	6.03 %				
	CO 60	62.98 %				
	AG 110M	16.69 %				
	SB 125	7.02 %				
	CS 137	5.90 %				
BONE	MAXIMUM DOSE-	1.01E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	15.10 %				
	CS 137	79.48 %				
LIVER	MAXIMUM DOSE-	2.67E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	60.25 %				
	CS 134	9.34 %				
	CS 137	28.71 %				
T. BODY	MAXIMUM DOSE-	2.00E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	DRINKING
	H 3	60.39 %				
	CS 134	11.74 %				
	CS 137	26.12 %				
THYROID	MAXIMUM DOSE-	3.29E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	47.58 %				
	I 131	43.97 %				
	I 133	8.41 %				
KIDNEY	MAXIMUM DOSE-	1.96E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	82.24 %				
	CS 137	12.79 %				
LUNG	MAXIMUM DOSE-	1.75E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	91.95 %				
	CS 137	5.17 %				
GI-LLI	MAXIMUM DOSE-	2.79E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	43.30 %				
	NB 95	43.40 %				

SKIN	MAXIMUM DOSE-	7.81E-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 58	5.76 %				
	CO 60	47.88 %				
	AG 110M	22.91 %				
	SB 125	6.81 %				
	CS 137	14.03 %				
BONE	MAXIMUM DOSE-	2.95E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	15.04 %				
	CS 137	83.99 %				
LIVER	MAXIMUM DOSE-	5.23E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	40.05 %				
	CS 134	13.93 %				
	CS 137	45.41 %				
T. BODY	MAXIMUM DOSE-	3.91E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	40.17 %				
	CS 134	17.52 %				
	CS 137	41.36 %				
THYROID	MAXIMUM DOSE-	2.63E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	77.17 %				
	I 131	21.57 %				
KIDNEY	MAXIMUM DOSE-	3.11E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	67.25 %				
	CS 134	7.26 %				
	CS 137	24.89 %				
LUNG	MAXIMUM DOSE-	2.47E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	84.72 %				
	CS 137	11.34 %				
GI-LLI	MAXIMUM DOSE-	4.54E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	34.61 %				
	NB 95	54.70 %				

SKIN	MAXIMUM DOSE-	1.18E-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	19.80 %				
	AG 110M	28.95 %				
	SB 125	38.85 %				
	CS 137	8.71 %				
BONE	MAXIMUM DOSE-	4.53E-03 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	TE 125M	31.93 %				
	CS 134	15.11 %				
	CS 137	51.43 %				
LIVER	MAXIMUM DOSE-	3.50E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	89.19 %				
	CS 137	6.37 %				
T. BODY	MAXIMUM DOSE-	3.20E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	97.47 %				
THYROID	MAXIMUM DOSE-	3.49E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	89.55 %				
	I 131	8.80 %				
KIDNEY	MAXIMUM DOSE-	3.23E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	96.55 %				
LUNG	MAXIMUM DOSE-	3.17E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	98.64 %				
GI-LLI	MAXIMUM DOSE-	3.32E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	94.21 %				

SKIN	MAXIMUM DOSE-	3.94E-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	51.94 %				
	AG 110M	20.75 %				
	SB 125	17.02 %				
	CS 137	7.63 %				
BONE	MAXIMUM DOSE-	1.26E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	TE 125M	29.82 %				
	CS 134	15.00 %				
	CS 137	53.73 %				
LIVER	MAXIMUM DOSE-	1.67E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	93.53 %				
T. BODY	MAXIMUM DOSE-	1.58E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	98.54 %				
THYROID	MAXIMUM DOSE-	1.77E-01 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	85.48 %				
	I 131	13.61 %				
KIDNEY	MAXIMUM DOSE-	1.59E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	97.95 %				
LUNG	MAXIMUM DOSE-	1.57E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	99.23 %				
GI-LLI	MAXIMUM DOSE-	1.61E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	96.95 %				

SKIN	MAXIMUM DOSE-	2.18E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 58	5.48 %				
	CO 60	54.44 %				
	AG 110M	19.95 %				
	SB 125	8.75 %				
	CS 137	9.41 %				
BONE	MAXIMUM DOSE-	5.87E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	15.06 %				
	CS 137	79.08 %				
LIVER	MAXIMUM DOSE-	1.74E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	65.06 %				
	CS 134	8.34 %				
	CS 137	25.56 %				
T. BODY	MAXIMUM DOSE-	1.30E-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	DRINKING
	H 3	65.25 %				
	CS 134	10.49 %				
	CS 137	23.27 %				
THYROID	MAXIMUM DOSE-	1.58E-01 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	69.65 %				
	I 131	26.47 %				
KIDNEY	MAXIMUM DOSE-	1.33E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	85.20 %				
	CS 137	10.92 %				
LUNG	MAXIMUM DOSE-	1.21E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	93.77 %				
GI-LLI	MAXIMUM DOSE-	1.55E-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	DRINKING
	H 3	54.68 %				
	NB 95	33.42 %				

OCONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
DATE : 02/07/94

YEAR : 1993

II. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	
1. TOTAL NOBLE GASES	CURIES	7.08E+01	1.45E+02	7.29E+01	3.69E+02	6.58E+02	
2. TOTAL HALOGENS	CURIES	1.08E-02	9.49E-04	1.97E-03	8.30E-03	2.20E-02	
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	2.52E-02	2.68E-02	4.38E-02	1.05E-02	1.06E-01	
4. TOTAL TRITIUM	CURIES	1.18E+01	1.22E+01	1.38E+01	6.43E+00	4.42E+01	
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.00E+00	0.00E+00	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	1.60E+03	1.60E+03	
7. RADIONUCLIDES RELEASED	CURIES						EC RATIO
H-3		1.18E+01	1.22E+01	1.38E+01	6.43E+00	4.42E+01	5.74E-06

PARTICULATES

NA-24	1.12E-06	0.00E+00	0.00E+00	0.00E+00	1.12E-06	2.08E-12
CO-58	3.81E-06	2.11E-05	2.31E-10	0.00E+00	2.49E-05	3.23E-10
CO-60	3.19E-07	0.00E+00	0.00E+00	0.00E+00	3.19E-07	8.28E-11
RB-88	5.98E-03	2.23E-02	3.14E-02	1.03E-02	7.00E-02	1.01E-08
MO-99	5.69E-07	0.00E+00	0.00E+00	0.00E+00	5.69E-07	3.69E-12
TC-99M	5.52E-07	0.00E+00	0.00E+00	0.00E+00	5.52E-07	3.59E-14
AG-110M	9.85E-05	8.44E-06	0.00E+00	0.00E+00	1.07E-04	1.39E-08
CS-134	1.54E-06	3.08E-04	4.23E-07	0.00E+00	3.10E-04	2.01E-08
CS-137	1.12E-04	7.25E-05	1.39E-04	6.48E-05	3.89E-04	2.52E-08
CS-138	1.90E-02	4.12E-03	1.23E-02	1.67E-04	3.56E-02	5.78E-09

HALOGENS

I-131	7.09E-04	1.27E-04	7.21E-04	9.34E-04	2.49E-03	1.62E-07
I-132	1.51E-03	1.15E-04	3.81E-05	6.34E-03	8.00E-03	5.20E-09
I-133	4.00E-03	6.72E-04	1.09E-03	1.00E-03	6.77E-03	8.79E-08
I-134	4.19E-04	0.00E+00	0.00E+00	0.00E+00	4.19E-04	9.07E-11
I-135	4.15E-03	3.52E-05	1.18E-04	2.66E-05	4.33E-03	9.37E-09

GASES

AR-41	3.40E+00	8.08E-03	4.41E-02	0.00E+00	3.45E+00	4.48E-06
KR-85	4.86E-01	8.79E-02	7.23E-02	3.13E+00	3.78E+00	7.01E-08
KR-85M	1.02E-03	0.00E+00	0.00E+00	1.34E+00	1.34E+00	1.74E-07
KR-87	4.62E-04	0.00E+00	0.00E+00	0.00E+00	4.62E-04	3.00E-10
KR-88	1.62E-03	0.00E+00	0.00E+00	0.00E+00	1.62E-03	2.34E-09
XE-131M	3.90E-02	2.08E-03	3.10E-02	3.08E-01	3.80E-01	2.47E-09
XE-133	4.32E+01	1.28E+02	6.12E+01	3.23E+02	5.56E+02	1.44E-05
XE-133M	3.74E-03	6.16E-03	4.98E-03	2.12E-01	2.27E-01	4.91E-09
XE-135	2.37E+01	1.69E+01	1.15E+01	4.06E+01	9.28E+01	1.72E-05
XE-135M	1.36E-03	0.00E+00	0.00E+00	0.00E+00	1.36E-03	4.43E-10

TOTAL EC RATIO 4.25E-05

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY
SPECIAL LOCATION
AT 4.00 MILES S

001-090 93

02/08/94

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 1.51E-03 MILLIRADS
GAMMA AIR DOSE = 1.20E-03 MILLIRADS

TOTAL BODY DOSE = 7.79E-04 MILLIREM

AR 41 35.02%
XE133 14.88%
XE135 50.03%

TOTAL SKIN DOSE = 1.80E-03 MILLIREM

24.28%
18.07%
57.11%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 001-090 93
SPECIAL LOCATION
AT 5.00 MILES S

02/08/94

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 94.66%
MAXIMUM ORGAN DOSE = 7.42E-03 MILLIREM
H 3 10.29%
I 131 83.06%
I 133 6.40%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 091-181 93 02/08/94
SPECIAL LOCATION
AT 4.00 MILES S

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 2.29E-03 MILLIRADS
GAMMA AIR DOSE = 1.01E-03 MILLIRADS

TOTAL BODY DOSE = 6.21E-04 MILLIREM
XE133 55.10%
XE135 44.78%

TOTAL SKIN DOSE = 1.70E-03 MILLIREM
56.64%
43.19%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 091-181 93
SPECIAL LOCATION
AT 1.50 MILES S

02/08/94

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - LIVER
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 77.03%

MAXIMUM ORGAN DOSE = 4.75E-03 MILLIREM
H 3 54.35%
CS137 15.42%
CS134 30.14%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY
SPECIAL LOCATION
AT 4.00 MILES S

182-273 93

02/08/94

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 1.21E-03 MILLIRADS
GAMMA AIR DOSE = 5.73E-04 MILLIRADS

TOTAL BODY DOSE = 3.57E-04 MILLIREM
XE133 45.99%
XE135 53.00%

TOTAL SKIN DOSE = 9.70E-04 MILLIREM
47.61%
51.63%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 182-273 93
SPECIAL LOCATION
AT 5.00 MILES S

02/08/94

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 95.91%

MAXIMUM ORGAN DOSE = 7.10×10^{-3} MILLIREM
H 3 12.40%
I 131 85.49%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 274-365 93 02/08/94
SPECIAL LOCATION
AT 4.00 MILES S

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 5.85E-03 MILLIRADS
GAMMA AIR DOSE = 2.52E-03 MILLIRADS

TOTAL BODY DOSE = 1.55E-03 MILLIREM
XE133 55.89%
XE135 43.10%

TOTAL SKIN DOSE = 4.32E-03 MILLIREM
56.67%
40.94%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 274-365 93
SPECIAL LOCATION
AT 5.00 MILES S

02/08/94

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 96.94%

MAXIMUM ORGAN DOSE = 8.41E-03 MILLIREM
I 131 93.57%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY
SPECIAL LOCATION
AT 4.00 MILES S

001-365 93

02/08/94

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 1.08E-02 MILLIRADS
GAMMA AIR DOSE = 5.32E-03 MILLIRADS

TOTAL BODY DOSE = 3.31E-03 MILLIREM

XE133 44.86%
AR 41 8.37%
XE135 46.27%

TOTAL SKIN DOSE = 8.80E-03 MILLIREM

47.72%
5.05%
45.90%

O'CONNOR GROUND AND ELEVATED COMBINED SUMMARY 001-365 93
SPECIAL LOCATION:
AT 5.00 MILES S

02/08/94

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 95.47%

MAXIMUM ORGAN DOSE = 2.49E-02 MILLIREM
H 3 11.50%
I 131 84.93%

SUPPLEMENTAL INFORMATION

OCONEE NUCLEAR STATION
EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION
REPORT DATE: 02/08/94
PERIOD COVERED: START DAY = 001 STOP DAY = 365

I. REGULATORY LIMITS - STATION

A. NOBLE GASES - AIR DOSE

1. CALENDAR QUARTER - GAMMA DOSE = 15 MRAD
2. CALENDAR QUARTER - BETA DOSE = 30 MRAD
3. CALENDAR YEAR - GAMMA DOSE = 30 MRAD
4. CALENDAR YEAR - BETA DOSE = 60 MRAD

B. LIQUID EFFLUENTS - DOSE

1. CALENDAR QUARTER - TOTAL BODY DOSE = 4.5 MREM
2. CALENDAR QUARTER - ORGAN DOSE = 15 MREM
3. CALENDAR YEAR - TOTAL BODY DOSE = 9 MREM
4. CALENDAR YEAR - ORGAN DOSE = 30 MREM

C. IODINE - 131 AND 133, TRITIUM, PARTICULATES W/T 1/2 > 8 DAYS - ORGAN DOSE

1. CALENDAR QUARTER = 22.5 MREM
2. CALENDAR YEAR = 45 MREM

II. MAXIMUM PERMISSIBLE EFFLUENT CONCENTRATIONS

- A. GASEOUS EFFLUENTS - INFORMATION FOUND IN OFFSITE DOSE CALCULATION MANUAL
- B. LIQUID EFFLUENTS - INFORMATION FOUND IN 10CFR20, APPENDIX B, TABLE 2, COLUMN 2

III. AVERAGE ENERGY - NOT APPLICABLE

IV. MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY
INFORMATION FOUND IN OFFSITE DOSE CALCULATION MANUAL

V. BATCH RELEASES

A. LIQUID EFFLUENT

1. $5.58E+02$ = TOTAL NUMBER OF BATCH RELEASES
2. $5.69E+05$ = TOTAL TIME(MIN.) FOR BATCH RELEASES.
3. $4.46E+04$ = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE.
4. $1.02E+03$ = AVERAGE TIME(MIN.) FOR A BATCH RELEASE.
5. $2.00E+00$ = MINIMUM TIME(MIN.) FOR A BATCH RELEASE.
6. $6.79E+06$ = AVERAGE DILUTION WATER FLOW DURING RELEASES(GPM).

B. GASEOUS EFFLUENT

1. $8.70E+01$ = TOTAL NUMBER OF BATCH RELEASES.
2. $6.09E+05$ = TOTAL TIME(MIN.) FOR BATCH RELEASES.
3. $4.46E+04$ = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE.
4. $7.00E+03$ = AVERAGE TIME(MIN.) FOR A BATCH RELEASE.
5. $3.70E+01$ = MINIMUM TIME(MIN.) FOR A BATCH RELEASE.

VI. ABNORMAL RELEASES

A. LIQUID

1. NUMBER OF RELEASES 0
2. TOTAL ACTIVITY RELEASED(CURIES) 0

B. GASEOUS

1. NUMBER OF RELEASES 0
2. TOTAL ACTIVITY RELEASED(CURIES) 0

SUPPLEMENTAL REPORT PAGE 2

OCONEE NUCLEAR STATION

Values represented by "0.00E+00" within the body of the Annual report are below the minimum detectable limits of the Oconee counting systems. Typical MDA's for the Oconee counting systems are listed below:

<u>ISOTOPE</u>	<u>ENERGY (Kev)</u>	<u>AVERAGE MDA</u>
Xe-133	80	1.32E-06
Ce-144	133	1.42E-06
Kr-88	196	1.82E-06
Xe-135	249	5.04E-07
Kr-87	402	9.99E-07
Cs-137	661	3.17E-07
Nb-95	766	2.55E-07
Mo-99	778	1.22E-07
Mn-54	834	2.18E-07
Zn-65	1115	4.27E-07
Co-60	1332	2.24E-07

SUPPLEMENTAL REPORT PAGE 3

OCONEE NUCLEAR STATION

The estimated percentage of error for both Liquid and Gaseous effluent release data at Oconee Nuclear Station has been determined to be $\pm 16.1\%$. This value was derived by taking the square root of the sum of the squares of the following discrete individual estimates of error:

- (1) Flow rate determining devices = $\pm 5\%$
- (2) Counting error = $\pm 15\%$
- (3) Sample preparation error = $\pm 3\%$

FUEL CYCLE CALCULATION

1993 OCONEE FUEL CYCLE SUMMARY

DAYS 001-365

02/08/94 AT 07:57

MAXIMUM TOTAL BODY	S 4.00 MILES	1.33E-01	AGE : ADULT
ONS.GAS		3.31E-03	2.4 %
		XE133	44.8 %
		AR 41	8.3 %
		XE135	46.2 %
ONS.LIQUID		1.30E-01	97.5 %
CRITICAL PATH		DRINKING	64.5 %
		H 3	65.3 %
		CS 134	10.4 %
		CS 137	23.2 %

MAXIMUM ORGAN	S 1.50 MILES	1.85E-01	AGE : CHILD	ORGAN : LIVER
ONS.GAS		1.10E-02	5.9 %	
CRITICAL PATH		GARDEN	75.6 %	
		H 3	56.6 %	
		CS137	29.8 %	
		CS134	13.0 %	
ONS.LIQUID		1.74E-01	94.0 %	
CRITICAL PATH		DRINKING	65.5 %	
		H 3	64.7 %	
		CS 134	8.3 %	
		CS 137	25.4 %	

1993 OCONEE FUEL CYCLE SUMMARY

DAYS 001-365 02/08/94 AT 07:57

MAXIMUM TOTAL BODY S 4.00 MILES 1.33E-01 AGE : ADULT

MAXIMUM ORGAN S 1.50 MILES 1.85E-01 AGE : CHILD ORGAN : LIVER

Duke Power Company

Oconee Nuclear Site

Attachment II

Solid Waste Disposal Report

DUKE POWER COMPANY
OCONEE NUCLEAR STATION
SOLID RADIOACTIVE WASTE SHIPPED TO A DISPOSAL FACILITY

REPORT PER JULY - DECEMBER 1993

TYPES OF WASTE SHIPPED	NUMBER OF SHIPMENTS	NUMBER OF CONTAINERS	WASTE CLASS				CONT. TYPE	BURIAL CU.FT.	VOLUME CU.MET.	TOTAL ACTIVITY CURIES
			A-U	A-S	B	C				
1) WASTE FROM LIQUID SYSTEM										
(A) DEWATERED POWDEX RESIN	35	*	*	0	0	0	STC	1436.2	40.669	0.282
(B) DEWATERED BEAD RESIN	2	2	0	0	2	0		240.6	6.8132	184.3
(C) EVAPORATOR CONCENTRATES	0	0								
(D) DEWATERED MECHANICAL FILTERS										
1.PRIMARY FILTER MEDIA	3	9	0	3	0	6		334.4	9.4693	27.154
2.SECONDARY FILTER MEDIA	0	0	*	0	0	0		0	0	0
(E) DEWATERED DEMINERALIZERS	1	1	0	0	0	1	STC	120.3	3.4066	45.1
(F) SOLIDIFIED (CEMENT) OIL, ACIDS,SLUDGES	0	0	0	0	0	0		0	0	0
2) DRY SOLID WASTE										
(A) DRY ACTIVE E (COMPACT (1)		*								
(2)	14	*	*				STC	1055.81	29.898	0.2634
(3)	57	*	*				STC	792.8	22.45	1.0458
(B) DRY ACTIVE WASTE (NON-COMPACTED)	1	8	8	0	3	0	STC	60	1.699	0.06
(C) DRY ACTIVE WASTE (BROKERED)	0	0								
(D) IRRADIATED COMPONENTS	2	2	0	0	0	2		114.8	3.2508	19400
TOTAL	115	22	8	3	5	9		4154.91	117.66	19658

NOTE: (1) SHIPMENTS FROM WESTINGHOUSE TO CNSI @ BARNWELL
(2) SHIPMENTS FROM ALARON TO CNSI @ BARNWELL
(3) SHIPMENTS FROM SEG TO CNSI @ BARNWELL

*SHIPMENTS MADE FROM OTHER COMPANYS
SO INFORMATION IS NOT KNOWN

SEMI-ANNUAL SOLID WASTE REPORT WORKSHEET
 OCONEE NUCLEAR STATION
 WASTE TYPE: DEMIN VESSELS
 REPORT PER JULY-DECEMBER
 YEAR 1993

ISOTOPE	% ABUNDANCE/LINER						# OF LINERS SHIPPED						# OF SHIPMENTS						TOTAL	AVE.
CR-51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
MN-54	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4 = 0.4	0.4
CO-57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CO-58	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.6 = 4.6	4.6
CO-60	8.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.3 = 8.3	8.3
NB-95	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3 = 0.3	0.3
ZR-95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CS-134	4.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.1 = 4.1	4.1
RU-103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
AG-110M	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.5 = 9.5	9.5
SB-125	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4 = 1.4	1.4
I-131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CS-137	6.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.7 = 6.7	6.7
H-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
NI-63	33.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33.4 = 33.4	33.4
FE-59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
FE-55	25.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.7 = 25.7	25.7
NP-239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CS-136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
XE-133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
C-14	4.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.1 = 4.1	4.1
PU-241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
TRU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
LA-140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
BA-140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
TC-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CE-144	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3 = 1.3	1.3
TOTAL	99.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99.8 = 99.8	99.8
CLASS C	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 = 1	1
CLASS B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CLASS AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CLASS AU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CURIES	45.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45.1 = 45.1	45.1
CU. FT.	120.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120.3 = 120.3	120.3
CU. M.	3.40658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4066 = 3.4066	3.4066

YEAR 1993

2

ISOTOPE	% ABUNDANCE/LINER					SEG TO CNSI					35	SEG TO CNSI					35	TOTAL		AVE.		
						# OF LINERS SHIPPED						# OF SHIPMENTS										
CR-51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
MN-54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CO-57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CO-58	0	0	0	0	2.85	10.33	12.3	0	1.38	4.39	0	0	0	0	0	0	0	0	=	31.25	=	3.906
CO-60	0	0	0	12.21	1.02	4.67	4.45	1.22	1.14	2.49	1.84	0	0	0	0	0	0	0	=	29.04	=	3.63
NB-95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
ZR-95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CS-134	0	0	0	7.88	18.28	12.53	11.98	16.68	17.52	15.74	17.89	0	0	0	0	0	0	0	=	118.5	=	14.81
RU-103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
AG-110M	0	0	0	0	0	2.57	2.83	0	1.12	1.26	1.46	0	0	0	0	0	0	0	=	9.24	=	1.155
SB-125	0	0	0	0	2.6	2.66	3.48	4.72	2.21	2.11	0	0	0	0	0	0	0	0	=	17.78	=	2.223
I-131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CS-137	0	0	0	35.64	71.72	50.28	48.74	73.19	72.69	64.74	72.62	0	0	0	0	0	0	0	=	489.62	=	61.2
H-3	0	0	0	0.13	0.26	0.18	0.18	0.26	0.26	0.23	0.26	0	0	0	0	0	0	0	=	1.76	=	0.22
NI-63	0	0	0	22.98	1.93	8.74	8.35	2.31	2.16	4.71	3.48	0	0	0	0	0	0	0	=	54.66	=	6.833
FE-55	0	0	0	5.08	0	1.94	1.85	0	0	1.03	0	0	0	0	0	0	0	0	=	9.9	=	1.238
SR-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
TE-125M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CS-136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
XE-133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
C-14	0	0	0	16.08	1.34	6.1	5.84	1.62	1.51	3.3	2.44	0	0	0	0	0	0	0	=	38.23	=	4.779
PU-241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
TRU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
FE-59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
SB-124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
RU-106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CE-144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
TOTAL	0	0	0	100	100	100	100	100	99.99	100	99.99	0	0	0	0	0	0	0	=	799.98	=	100
CLASS C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS AU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CURIES	0.031	0.071	0.09	0	0	0	0.09	0	0	0	0	0	0	0	0	0	0	0	=	0.282		
CU. FT.	89.5	248.2	444.2	0	0	0	654.3	0	0	0	0	0	0	0	0	0	0	0	=	1436.2		
CU. M.	2.53441	7.0284	12.579	0	0	0	18.528	0	0	0	0	0	0	0	0	0	0	0	=	40.669		
RSR #	932022	93202	93204				932051				93206											

SEMI-ANNUAL SOLID WASTE REPORT WORKSHEET
OCONEE NUCLEAR STATION
WASTE TYPE: DEWATERED PRIMARY FILTER MEDIA
REPORT PER JULY - DECEMBER
YEAR 1993

ISOTOPE	% ABUNDANCE/LINER						# OF LINERS SHIPPED			9	# OF SHIPMENTS						3	TOTAL		AVE.		
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====		
CR-51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
MN-54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CO-57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CO-58	12.7	11.4	11.4	11.4	11.4	11.4	11.1	11.2	11.1	0	0	0	0	0	0	0	0	0	=	103.1	=	11.46
CO-60	0	13.9	13.9	13.9	13.9	13.9	14	14	14	0	0	0	0	0	0	0	0	0	=	111.5	=	12.39
NB-95	0	3	3	3	3	3	2.8	2.8	2.8	0	0	0	0	0	0	0	0	0	=	23.4	=	2.6
ZR-95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CS-134	33.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	33.8	=	3.756
RU-106	0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0	0	0	0	0	0	0	0	0	=	19.2	=	2.133
AG-110M	0	6.3	6.2	6.3	6.2	6.2	6.2	6.2	6.3	0	0	0	0	0	0	0	0	0	=	49.9	=	5.544
SB-125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
SB-124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CS-137	48.9	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	=	49.6	=	5.511
H-3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0.1	=	0.011
NI-63	2.4	27.1	27	27.1	27	27	27.2	27.2	27.2	0	0	0	0	0	0	0	0	0	=	219.2	=	24.36
FE-55	1.8	34.9	34.9	34.9	34.9	34.9	35	35.1	35	0	0	0	0	0	0	0	0	0	=	281.4	=	31.27
SR-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
TE-125M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CS-136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
XE-133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
C-14	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	=	1.9	=	0.211
PU-241	0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0	0	0	0	0	0	0	0	=	5.6	=	0.622
TRU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
XE-131M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
LA-140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
TC-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
CE-144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	0
TOTAL	100	99.9	99.8	100	99.8	99.8	99.7	99.9	99.8	0	0	0	0	0	0	0	0	0	=	898.7	=	99.86
CLASS C	0	1	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	=	6		
CLASS B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS AS	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	=	3		
CLASS AU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CURIES	0.456	2.42	5.67	0.728	2.83	0.97	8.05	3.62	2.41	0	0	0	0	0	0	0	0	0	=	27.154		
CU. FT.	28	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	0	0	0	0	0	0	0	0	0	=	334.4		
CU. M.	0.79289	1.0846	1.0846	1.08456	1.08456	1.0846	1.0846	1.0846	1.08456	0	0	0	0	0	0	0	0	0	=	9.4693		

YEAR 1993

6

[illegible]

YEAR 1993

CU. M. 3.40658 3.4066 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 = 6.8132

YEAR 1993

ISOTOPE	% ABUNDANCE/LINER						# OF LINERS SHIPPED		2	# OF SHIPMENTS		2	TOTAL		AVE.	
CR-51	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 1	0.5
MN-54	0.7	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0.9	0.45
NI-59	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0.1	0.05
CO-58	6.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 6.2	3.1
CO-60	45.3	50.7	0	0	0	0	0	0	0	0	0	0	0	0	0 = 96	48
NB-95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
NI-59	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0.2	0.1
CS-134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
RU-103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
AG-110M	4.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 4.1	2.05
SB-125	1.2	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0 = 2.6	1.3
I-131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CS-137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
H-3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0.6	0.3
NI-63	20.2	31.5	0	0	0	0	0	0	0	0	0	0	0	0	0 = 51.7	25.85
FE-55	20.9	15.6	0	0	0	0	0	0	0	0	0	0	0	0	0 = 36.5	18.25
SR-90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
TE-125M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CS-136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
XE-133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
C-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
PU-241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
TRU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
XE-131M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
LA-140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
TC-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
CE-144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	0
TOTAL	100	99.9	0	0	0	0	0	0	0	0	0	0	0	0	0 = 199.9	99.95
CLASS C	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0 = 2	
CLASS B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	
CLASS AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	
CLASS AU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 = 0	
CURIES	14800	4600	0	0	0	0	0	0	0	0	0	0	0	0	0 = 19400	
CU. FT.	57.4	57.4	0	0	0	0	0	0	0	0	0	0	0	0	0 = 114.8	
CU. M.	1.62542	1.6254	0	0	0	0	0	0	0	0	0	0	0	0	0 = 3.2508	

OF SHIPMENTS TO SEG 4

TOT. CU.M. 22.45

# OF CONTAINERS	8
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[illegible]

SEMI-ANNUAL SOLID WASTE REPORT WORKSHEET
CONEE NUCLEAR STATION
WASTE TYPE: SOLIDIFIED (CEMENT) OIL, ACIDS, SLUDGES
REPORT PER JULY - DECEMBER
YEAR 1993
OF SHIPMENTS 0
OF CONTAINERS 0

ISOTOPE	% ABUNDAN												CONTAINER	TOTAL		AVE
CR-51	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
MN-54	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CO-57	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CO-58	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CO-60	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
NB-95	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
ZR-95	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CS-134	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
RU-103	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
AG-110M	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
SB-125	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
I-131	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CS-137	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
H-3	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
NI-63	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
FE-55	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
SR-90	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
TE-125M	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CS-136	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
XE-133	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
C-14	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
PU-241	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
TRU	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
XE-131M	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
LA-140	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
TC-99	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
CE-144	0	0	0	0	0	0	0	0	0	0	0	0	=	0	=	ERR
	0	0	0	0	0	0	0	0	0	0	0	0				ERR
CLASS C	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS B	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS AS	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CLASS AU	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CURIUS	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CU. FT.	0	0	0	0	0	0	0	0	0	0	0	0	=	0		
CU. M.	0	0	0	0	0	0	0	0	0	0	0	0	=	0		

# OF SHIPMENTS TO ALARON	3
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0

ME = METAL

Duke Power Company

Oconee Nuclear Site

Attachment III

Meteorological Data

O'CONNOR NUCLEAR STATION METEOROLOGY @60M A (THIRD QTR) 1993
WIND SPEED_DIRECTION_STABILITY JOINT FREQUENCY DISTRIBUTION

1
10:50 Thursday, February 3, 1994

PASQUILL STABILITY A

SECTOR	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
-N-	.	11	.	.	1	12
-NNE-	.	3	1	.	.	1	5
-NE-	.	1	3	4
-ENE-	1	2	3	.	1	7
-E-	.	.	4	.	3	7
-ESE-	.	.	1	1
-SE-	1	.	3	4
-SSE-	.	.	2	2
-S-	.	2	.	2	.	.	1	.	.	.	5
-SSW-	.	16	22	21	5	1	65
-SW-	2	27	31	13	7	4	1	.	.	1	86
-WSW-	1	17	5	3	1	.	1	1	.	.	29
-W-	.	6	.	1	2	9
-WNW-	3	5	3	1	2	2	.	.	1	.	17
-NW-	4	4	1	9
-NNW-	3	5	.	.	1	9
TOTAL	15	99	79	41	23	8	3	1	1	1	271

PASQUILL STABILITY B

SECTOR	WIND SPEED CLASS									TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	8.50- 9.49	>9.50 M/S	
	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	
-N-	1	1	1	3
-NNE-	1	8	.	2	11
-NE-	.	2	2	4
-ENE-	.	.	7	3	2	12
-E-	.	1	2	.	1	4
-ESE-	.	1	1	2
-SE-	.	2	2
-SSE-	.	.	3	3
-S-	.	1	1	1	3
-SSW-	1	11	7	2	3	1	.	.	.	25
-SW-	2	9	7	.	1	1	4	.	.	24
-WSW-	3	9	.	.	.	1	.	.	.	13
-W-	3	2	.	.	2	.	1	2	.	10
-WNN-	3	1	.	.	1	1	.	.	.	6
-NW-	3	2	5
-NNW-	1	2	3
TOTAL	18	52	30	8	10	4	5	2	1	130

OCONEE NUCLEAR STATION METEOROLOGY 360M AGL (THIRD QTR) 1993
WIND SPEED_DIRECTION_STABILITY JOINT FREQUENCY DISTRIBUTION

10:50 Thursday, February 3, 1994 ³

PASQUILL STABILITY C

	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	8.50- 9.49	>9.50 M/S		
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
SECTOR											
-N-	2	2	1	5	
-NNE-	5	4	4	1	14	
-NE-	2	.	2	5	9	
-ENE-	1	1	4	5	11	
-E-	.	4	2	.	1	7	
-ESE-	.	1	1	2	
-SE-	1	1	2	
-SSE-	.	1	.	1	.	.	1	.	.	3	
-S-	1	3	.	1	5	
-SSW-	3	2	1	1	3	10	
-SW-	3	9	1	1	2	1	.	.	.	17	
-WSW-	2	6	.	.	1	1	.	1	.	11	
-W-	5	2	1	.	1	9	
-WNW-	7	1	1	9	
-NW-	2	1	1	1	5	
-NNW-	3	1	2	6	
TOTAL	37	39	20	16	7	2	2	1	1	125	

OCONEE NUCLEAR STATION METEOROLOGY 360M ASL (THIRD QTR) 1993
WIND SPEED_DIRECTION_STABILITY JOINT FREQUENCY DISTRIBUTION

10:50 Thursday, February 3, 1994 4

PASQUILL STABILITY D

SECTOR	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
-N-	14	36	16	8	.	1	75
-NNE-	18	33	22	5	2	2	82
-NE-	9	19	35	21	1	85
-ENE-	1	12	18	20	4	1	56
-E-	3	9	10	7	4	33
-ESE-	1	5	8	.	.	1	15
-SE-	1	6	1	1	9
-SSE-	1	7	5	13
-S-	6	8	6	3	1	24
-SSW-	10	2	10	10	7	1	40
-SW-	9	7	15	12	9	12	11	3	2	.	80
-WSW-	8	17	14	9	5	8	2	.	3	.	66
-W-	11	15	3	1	1	2	1	.	2	1	37
-WNW-	10	12	3	.	8	5	6	.	.	.	44
-NW-	22	15	8	3	8	5	1	.	.	.	62
-NNW-	18	39	13	2	1	.	.	1	.	.	74
TOTAL	142	242	187	102	51	38	21	4	7	1	795

OCONEE NUCLEAR STATION METEOROLOGY 360M ASL (THIRD QTR) 1993
WIND SPEED_DIRECTION_STABILITY JOINT FREQUENCY DISTRIBUTION

10:50 Thursday, February 3, 1994 5

PASQUILL STABILITY E

SECTOR	WIND SPEED CLASS								TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	
	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	
-N-	24	62	23	2	111
-NNE-	32	42	24	3	1	.	.	.	102
-NE-	9	17	19	1	46
-ENE-	11	21	9	5	46
-E-	8	8	8	1	25
-ESE-	3	10	4	1	18
-SE-	1	6	4	3	14
-SSE-	5	4	11	1	.	1	.	.	22
-S-	2	5	5	4	2	.	.	.	18
-SSW-	3	4	7	8	5	.	.	.	27
-SW-	5	18	15	5	4	.	.	.	47
-WSW-	6	14	6	2	3	1	2	.	34
-W-	11	11	3	1	1	.	.	.	27
-WNW-	18	20	6	.	1	1	.	.	46
-NW-	17	24	6	4	3	5	.	.	59
-NNW-	29	48	18	3	1	.	.	1	100
TOTAL	184	314	168	44	21	8	2	1	742

OCONEE NUCLEAR STATION METEOROLOGY 260M ASL (THIRD QTR) 1993
WIND SPEED_DIRECTION_STABILITY JOINT FREQUENCY DISTRIBUTION

10:50 Thursday, February 3, 1994⁶

PASQUILL STABILITY F

	WIND SPEED CLASS						TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	6.50- 7.49	
	NO.	NO.	NO.	NO.	NO.	NO.	
SECTOR							
-N-	.	2	2
-NNE-	.	1	1
-NE-	.	1	1
-ENE-	.	1	1	.	1	.	3
-E-	2	.	.	1	1	.	4
-ESE-	.	.	1	.	.	.	1
-SE-	1	.	1	.	.	.	2
-SSE-	1	2	3	.	.	.	6
-SSW-	2	1	3
-WSW-	1	1
-W-	.	2	2
-NW-	3	3
-NNW-	.	1	1
TOTAL	9	11	6	1	2	1	30

OCONEE NUCLEAR STATION METEOROLOGY @60M A (THIRD QTR) 1993
WIND SPEED_DIRECTION_STABILITY JOINT FREQUENCY DISTRIBUTION

10:50 Thursday, February 3, 1994 7

ALL STABILITY CLASSES

SECTOR	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
-N-	41	114	40	10	1	1	.	.	.	1	208
-NNE-	56	91	51	11	3	3	215
-NE-	20	40	61	27	1	149
-ENE-	14	37	42	33	8	1	135
-E-	13	22	26	9	10	80
-ESE-	4	17	16	1	.	1	39
-SE-	5	15	9	4	33
-SSE-	7	14	24	2	.	1	1	.	.	.	49
-S-	9	19	12	11	3	.	1	.	.	.	55
-SSW-	19	36	47	42	23	3	170
-SW-	21	70	69	31	23	18	16	3	2	1	254
-WSW-	20	63	25	14	10	11	6	1	4	.	154
-W-	30	38	6	3	6	2	3	.	4	2	94
-WNW-	41	39	13	1	12	9	6	.	1	.	122
-NW-	51	46	16	8	11	10	1	.	.	.	143
-NNW-	54	96	33	5	3	.	.	2	.	.	193
TOTAL	405	757	490	212	114	60	34	6	11	4	2093

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PASQUILL STABILITY A

	WIND SPEED CLASS										TOTAL
	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S		
	Nº.	Nº.	Nº.	Nº.	Nº.	Nº.	Nº.	Nº.	Nº.		
SECTOR											
-N-	.	.	1	1	
-NNE-	.	1	2	3	
-NE-	1	.	5	2	2	1	.	.	.	11	
-ENE-	.	1	3	3	5	1	.	.	.	13	
-E-	1	1	4	1	7	
-S-	1	1	
-SSW-	1	3	6	7	1	18	
-SW-	4	11	3	7	3	5	1	4	4	42	
-WSW-	4	5	2	.	1	12	
-W-	2	.	.	2	.	1	.	.	.	5	
-WNW-	2	1	1	.	.	2	2	.	5	13	
-NW-	1	1	1	3	
TOTAL	15	23	27	22	13	10	4	5	10	129	

PASQUILL STABILITY B

	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	
SECTOR											
-N-	.	1	2	1	.	.	4
-NNE-	.	2	2
-NE-	.	.	3	2	2	7
-ENE-	.	.	6	3	2	11
-E-	.	.	4	4	3	11
-S-	1	1	2
-SSW-	.	3	7	6	1	3	20
-SW-	2	8	.	3	3	3	2	2	3	5	31
-WSW-	.	9	3	.	.	.	12
-W-	.	5	.	.	1	1	4	.	.	.	11
-WNW-	.	2	1	.	2	5
-NW-	.	.	.	1	2	.	1	.	.	1	5
-NNW-	1	1
TOTAL	2	30	22	19	15	8	10	4	3	9	122

PASQUILL STABILITY C

SECTOR	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	
-N-	.	.	1	1	2
-NNE-	1	3	3	7
-NE-	.	3	1	.	.	1	1	.	.	.	6
-ENE-	.	4	7	3	3	.	4	2	.	.	23
-E-	.	1	3	3	1	8
-ESE-	.	.	.	1	1
-SE-	.	2	2
-SSE-	1	1
-S-	.	.	1	1
-SSW-	.	11	7	2	1	.	1	1	.	.	23
-SW-	1	4	2	.	.	4	2	5	3	6	27
-WSW-	1	5	1	.	.	1	.	1	1	1	11
-W-	2	2	1	.	.	.	2	.	.	.	7
-WNN-	1	1	.	.	1	3	6
-NW-	2	1	.	.	1	.	.	1	.	.	5
-NNW-	1	1	1	.	.	1	4
TOTAL	9	37	27	10	8	7	11	10	4	11	134

PASQUILL STABILITY D

SECTOR	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
-N-	7	11	5	1	24
-NNE-	.	14	10	11	4	39
-NE-	2	9	17	43	29	13	2	.	.	.	115
-ENE-	1	4	14	28	15	21	11	5	2	1	102
-E-	9	7	15	12	8	2	1	.	.	.	54
-ESE-	6	8	6	1	21
-SE-	5	6	5	16
-SSE-	8	14	10	2	1	35
-S-	7	12	14	2	3	1	39
-SSW-	5	9	18	13	5	5	5	.	1	.	61
-SW-	11	12	12	17	19	15	19	5	5	12	127
-WSW-	9	13	13	14	9	13	10	4	4	12	101
-W-	10	11	3	1	5	6	6	.	1	6	49
-WNW-	16	7	2	13	6	6	6	5	5	9	75
-NW-	16	11	5	3	3	.	.	1	.	3	42
-NNW-	4	13	1	2	1	.	1	1	.	.	23
TOTAL	116	161	150	163	108	81	61	21	18	44	923

PASQUILL STABILITY E

	WIND SPEED CLASS									TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	>9.50 M/S	
	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	
SECTOR										
-N-	29	95	28	1	153
-NNE-	15	53	30	2	100
-NE-	6	11	11	5	1	.	.	.	1	35
-ENE-	7	14	10	10	1	1	.	.	2	45
-E-	4	3	8	7	1	23
-ESE-	4	3	3	10
-SE-	4	12	4	1	1	.	.	.	1	23
-SSE-	2	5	6	7	2	22
-S-	2	11	8	8	1	30
-SSW-	6	7	9	7	2	2	.	.	1	34
-SW-	3	10	8	8	7	1	1	1	4	43
-WSW-	5	11	3	3	.	6	1	.	2	31
-W-	16	19	1	1	2	3	2	.	.	44
-WNW-	29	13	3	1	1	1	.	.	4	52
-NW-	26	16	2	3	47
-NNW-	24	43	6	2	1	76
TOTAL	182	326	140	61	19	14	4	1	21	768

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PASQUILL STABILITY F

	WIND SPEED CLASS						TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	7.50- 8.49	
	NO.	NO.	NO.	NO.	NO.	NO.	
SECTOR							
-N-	.	11	14	1	.	.	26
-NNE-	.	15	11	.	.	.	26
-NE-	2	1	1	.	.	.	4
-ENE-	.	1	1
-E-	1	2	3
-ESE-	.	.	1	.	.	.	1
-SE-	.	2	1	1	.	.	4
-SSE-	.	.	1	.	.	.	1
-S-	.	1	1
-SW-	.	.	.	1	.	.	1
-WSW-	1	.	.	1	.	1	3
-W-	2	2
-WNW-	1	1
-NNW-	1	2	1	.	1	.	5
TOTAL	8	35	30	4	1	1	79

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PASQUILL STABILITY G

	WIND SPEED CLASS	TOTAL NO.
	0.45- 1.49	
SECTOR		
-N-	1	1
-ENE-	1	1
TOTAL	2	2

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ALL STABILITY CLASSES

SECTOR	WIND SPEED CLASS										TOTAL
	0.45- 1.49	1.50- 2.49	2.50- 3.49	3.50- 4.49	4.50- 5.49	5.50- 6.49	6.50- 7.49	7.50- 8.49	8.50- 9.49	>9.50 M/S	
	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	NØ.	
-N-	37	118	50	5	.	.	.	1	.	.	211
-NNE-	16	87	55	13	4	2	177
-NE-	10	25	33	55	34	16	4	.	.	1	178
-ENE-	9	23	38	47	24	27	16	7	2	3	196
-E-	14	14	31	30	14	2	1	.	.	.	106
-ESE-	10	11	10	2	33
-SE-	9	22	10	2	1	1	45
-SSE-	11	19	17	9	3	59
-S-	9	24	23	10	4	2	.	.	.	2	74
-SSW-	11	31	44	34	16	11	6	1	1	1	156
-SW-	17	38	33	32	36	26	29	14	15	31	271
-WSW-	16	42	22	20	9	21	14	6	5	15	170
-W-	30	39	5	2	10	10	15	.	1	6	118
-WNW-	47	25	6	15	8	7	8	8	5	23	152
-NW-	44	28	7	4	6	.	1	3	1	8	102
-NNW-	29	58	8	4	4	1	2	1	.	2	109
TOTAL	319	604	392	284	173	123	96	41	30	95	2157

Duke Power Company

Oconee Nuclear Site

Attachment IV

Unplanned Offsite Releases

OCONEE NUCLEAR SITE

UNPLANNED LIQUID RELEASES

There were no unplanned liquid releases during this reporting period.

UNPLANNED GASEOUS RELEASES

There were no unplanned gaseous releases during this reporting period.

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Attachment V

Inoperable Monitoring Equipment

RADIOACTIVE GAS/LIQUID MONITORS INOPERABLE FOR GREATER THAN 30 DAYS:

1-RIA-37 & 1-RIA-38, Gaseous Waste Disposal Low and High Range
3-RIA-37/38, Gaseous Waste Disposal Low and High Range

These monitors were out of service from July 1 through December 31, 1993. The monitors are functional, but the NSM package has not been accepted. A problem has been identified in that the monitors will automatically restart a release that trips due to exceeding the high trip setpoint. Once the concentrate drops below the high trip setpoint lower band, the release automatically restarts. A firmware change to correct this problem has been initiated, although it has not been installed at this time. These monitors may be returned to service during the first half of 1994.

2-RIA-35; Low-Pressure Service Water

This monitor was out of service from July 1 through December 18, 1993 due to air bubbles in the sample line causing spurious loss of flow alarms. The sample line was relocated and the monitor was placed in service on December 18.

3-RIA-35, Low Pressure Service Water

This monitor was out of service from October 12 through December 21, 1993 while the monitor was upgraded with a new Sorrento detector assembly.

RIA-53, Interim Radwaste Building Ventilation Monitoring System

RIA-53 was out of service from July 1 through September 13, 1993. The monitor was put in service after modifications were completed on the new monitor's particulate and iodine cartridge location.

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Attachment VI

ODCM / PCP Manual Changes

OCONEE NUCLEAR SITE

There were no changes made to the Offsite Dose Calculation Manual (ODCM) or the Process Control Program (PCP) during this reporting period.