

ACCESSION NBR: 8504090515 DOC. DATE: 82/06/30 NOTARIZED: NO DOCKET #
 FACIL: 50-269 ~~Browns Ferry Nuclear Power Station, Unit 2, Tennessee~~ 05000260
 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co. 05000270
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287
 AUTH. NAME AUTHOR AFFILIATION
 TUCKER, H.B. Duke Power Co.
 RECIP. NAME RECIPIENT AFFILIATION

O'REILLY, J.P. Region 2, Office of Director

SUBJECT: "Semiannual Radioactive Effluent Release Rept, Jan-June 1982." W/820830 ltr.

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COONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
DATE : 08/26/82

1. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR : 1982 SUBTOTAL
1. GROSS RADIOACTIVITY				
A. TOTAL RELEASE	CURIES	4.86E-01	3.03E-01	7.91E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	3.69E-07	2.33E-07	3.64E-07
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	1.55E-08	8.80E-09	1.20E-08
2. TRITIUM				
A. TOTAL RELEASE	CURIES	1.41E+02	4.02E+01	1.82E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.65E-06	3.05E-07	8.35E-07
3. DISSOLVED NOBLE GASES				
A. TOTAL RELEASE	CURIES	3.19E+00	1.40E-01	3.33E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	3.71E-08	1.06E-09	1.53E-08
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	1.03E+08	1.13E+08	2.16E+08
6. VOLUME OF DILUTION WATER	LITERS	8.58E+10	1.32E+11	2.17E+11
7. RADIONUCLIDES RELEASED	CURIES			

F-18	0.00E+00	0.00E+00	0.00E+00
NA-24	7.26E-05	2.17E-05	9.42E-05
AR-41	7.20E-05	0.00E+00	7.20E-05
CR-51	3.86E-03	2.74E-03	6.60E-03
MN-54	4.05E-03	9.57E-04	5.00E-03
MN-56	2.41E-05	0.00E+00	2.41E-05
CO-57	1.87E-04	4.80E-05	2.35E-04
CO-58	6.91E-02	2.53E-02	9.44E-02
CO-60	2.02E-02	4.61E-03	2.48E-02
FE-59	4.24E-05	0.00E+00	4.24E-05
NI-65	0.00E+00	0.00E+00	0.00E+00
ZN-65	0.00E+00	0.00E+00	0.00E+00
KA-85	1.67E-01	8.74E-02	2.56E-01
KR-85M	7.47E-04	0.00E+00	7.47E-04
KR-87	0.00E+00	0.00E+00	0.00E+00
KF-88	0.00E+00	0.00E+00	0.00E+00
Y-88	2.87E-06	0.00E+00	2.87E-06
Y-92	0.00E+00	0.00E+00	0.00E+00
SR-89	2.77E-03	2.06E-03	4.82E-03
SR-90	6.84E-04	5.93E-03	6.61E-03
SR-91	2.31E-04	1.35E-04	3.66E-04
SR-92	2.41E-03	2.58E-04	2.67E-03
NR-95	1.52E-03	1.54E-04	1.67E-03
NR-97	1.46E-02	1.77E-03	1.64E-02
ZK-95	4.08E-05	0.00E+00	4.08E-05
ZR-97	1.56E-04	0.00E+00	1.56E-04
MO-99	1.61E-03	1.34E-03	2.95E-03
TC-99M	1.29E-04	2.55E-06	1.31E-04
RU-103	1.20E-05	0.00E+00	1.20E-05
RU-103M	0.00E+00	0.00E+00	0.00E+00
RU-106	3.44E-03	2.82E-03	6.26E-03
AG-108M	0.00E+00	0.00E+00	0.00E+00
AG-110M	6.11E-03	9.76E-04	7.07E-03
CD-109	0.00E+00	0.00E+00	0.00E+00
CD-115	1.85E-04	2.23E-04	4.08E-04
CD-115M	0.00E+00	0.00E+00	0.00E+00
IN-115M	0.00E+00	0.00E+00	0.00E+00
SR-122	0.00E+00	0.00E+00	0.00E+00
SR-124	0.00E+00	0.00E+00	0.00E+00
SR-125	7.26E-04	5.17E-04	1.24E-03
SN-123M	0.00E+00	0.00E+00	0.00E+00
SN-125	0.00E+00	0.00E+00	0.00E+00
I-131	6.65E-03	1.88E-03	8.52E-03
I-132	1.04E-04	0.00E+00	1.04E-04
I-133	6.61E-04	1.51E-05	6.76E-04
I-134	4.69E-04	0.00E+00	4.69E-04
I-135	1.74E-04	0.00E+00	1.74E-04
XE-131M	1.84E-02	8.69E-04	1.93E-02
XE-133	2.91E+00	5.12E-02	2.96E+00
XE-133M	3.36E-02	1.67E-04	3.38E-02
XE-135	5.14E-02	3.48E-04	5.17E-02
CE-134	0.00E+00	0.00E+00	0.00E+00
CE-141	0.00E+00	0.00E+00	0.00E+00
CE-144	2.27E-03	2.05E-03	4.31E-03
CS-134	1.40E-01	9.47E-02	2.34E-01
CS-135M	0.00E+00	0.00E+00	0.00E+00
CS-136	2.59E-04	3.01E-05	2.89E-04
CS-137	2.01E-01	1.52E-01	3.53E-01
CS-138	2.78E-05	0.00E+00	2.78E-05
BA-139	0.00E+00	0.00E+00	0.00E+00
BA-LA-140	2.34E-03	1.18E-03	3.51E-03
U-187	1.26E-03	8.78E-04	2.14E-03
NP-239	8.36E-04	6.19E-04	1.45E-03

8. PERCENT OF TECHNICAL SPECIFICATIONS
LIMIT (15 CI) FOR TOTAL GROSS ACTIVITY
RELEASED

3.35E+00 2.02E+00 5.37E+00

1525
111

8504090515 820630
PDR ADDCK 05000269
R

OCONEE NUCLEAR STATION
 RADIOACTIVE EFFLUENT RELEASES
 DATE : 08/26/82

II. AIR RELEASES				YEAR : 1982
	UNITS	1ST QTR	2ND QTR	SUBTOTAL
1. TOTAL NOBLE GASES	CURIES	6.94E+03	7.99E+03	1.49E+04
2. TOTAL HALOGENS	CURIES	5.72E-02	3.73E-02	9.65E-02
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	1.89E-02	1.60E-02	3.46E-02
4. TOTAL TRITIUM	CURIES	2.41E+00	5.66E+00	8.09E+00
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. PERCENT OF APPLICABLE LIMIT FOR :				
A. NOBLE GASES	%	1.36E+01	1.57E+01	2.93E+01
B. HALOGENS	%	1.56E+01	9.82E+00	2.54E+01
C. PARTICULATES	%	1.71E+00	1.45E+00	3.17E+00
8. RADIONUCLIDES RELEASED	CURIES			
PARTICULATES				
C-14		0.00E+00	0.00E+00	0.00E+00
P-32		0.00E+00	0.00E+00	0.00E+00
CR-51		5.62E-04	2.43E-04	8.05E-04
HM-54		9.13E-05	9.50E-06	1.01E-04
FE-55		0.00E+00	0.00E+00	0.00E+00
FE-59		2.95E-05	1.93E-05	4.88E-05
CO-58		9.10E-03	1.49E-03	1.06E-02
CO-60		1.55E-03	5.37E-03	6.96E-03
NI-63		0.00E+00	0.00E+00	0.00E+00
ZN-65		6.44E-05	4.86E-05	1.13E-04
RB-86		0.00E+00	0.00E+00	0.00E+00
SR-87		0.00E+00	4.81E-05	4.81E-05
SR-90		5.14E-08	7.49E-10	5.22E-08
Y-91		0.00E+00	0.00E+00	0.00E+00
Zr-95		2.25E-05	8.07E-06	3.09E-05
NZ-95		2.02E-04	3.25E-06	2.06E-04
MO-99		3.29E-04	1.93E-04	5.22E-04
RU-103		6.10E-05	2.98E-06	6.40E-05
RU-106		4.32E-04	2.31E-04	6.63E-04
AG-110M		9.74E-04	4.81E-05	1.02E-03
CM-115M		0.00E+00	0.00E+00	0.00E+00
SM-123		0.00E+00	0.00E+00	0.00E+00
SM-126		0.00E+00	0.00E+00	0.00E+00
SB-124		0.00E+00	0.00E+00	0.00E+00
SB-125		9.27E-05	4.99E-05	1.43E-04
TE-127M		0.00E+00	0.00E+00	0.00E+00
TE-129M		0.00E+00	0.00E+00	0.00E+00
CS-134		1.20E-03	1.14E-03	2.34E-03
CS-136		1.24E-07	5.31E-06	5.43E-06
CS-137		3.46E-03	6.62E-03	1.01E-02
EA-140		2.05E-04	1.05E-04	3.11E-04
CE-141		0.00E+00	0.00E+00	0.00E+00
CE-144		3.27E-04	1.90E-04	5.17E-04
HALOGENS				
I-131		5.17E-02	3.03E-02	8.20E-02
I-133		3.32E-03	4.61E-03	7.94E-03
I-135		4.14E-03	2.42E-03	6.56E-03
GASES				
KR-83M		0.00E+00	0.00E+00	0.00E+00
KR-85M		8.87E-01	7.00E-02	9.59E-01
KR-85		2.38E+02	2.76E+01	2.65E+02
KR-87		1.30E-01	1.27E-01	2.57E-01
KR-88		0.00E+00	1.56E-03	1.56E-03
KR-89		0.00E+00	0.00E+00	0.00E+00
KR-90		0.00E+00	0.00E+00	0.00E+00
XE-131M		3.36E+01	7.11E+01	1.05E+02
XE-133M		6.81E+01	5.50E+01	1.24E+02
XE-133		6.58E+03	7.81E+03	1.44E+04
XE-135M		0.00E+00	0.00E+00	0.00E+00
XE-135		4.92E+01	2.31E+01	7.23E+01
XE-137		0.00E+00	0.00E+00	0.00E+00
XE-138		0.00E+00	0.00E+00	0.00E+00
AR-41		0.00E+00	1.12E-01	1.12E-01
PARTICULATES AND IODINES WITH T 1/2 > 8 DAYS				
		7.01E-02	4.59E-02	1.61E-01

1982
OCONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
SOLID WASTES
1ST SEMI-ANNUAL REPORT

Total volume of solid waste packaged (cubic feet) 65,750.6 for 1st six months of 1982.

Total estimated activity involved (curies) 7,899.62 for 1st six months of 1982.
Disposal of materials shipped off-site: All 139 shipments were made to Chem-Nuclear Systems waste disposal facility at Barnwell, South Carolina.

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
1/4/82	962.1	1.77
1/4/82	200	1.2
1/4/82	200	.94
1/5/82	885.5	1.23
1/6/82	200	.94
1/7/82	858.5	1.22
1/12/82	252	.63
1/18/82	900	1.52
1/19/82	886.6	4.04
1/20/82	121	.85
1/20/82	1091.8	1.4
1/21/82	872.2	2.15
1/21/82	200	6.54
1/25/82	252	.383
1/25/82	200	2.07
1/26/82	951.2	2.11
1/27/82	60	12.24
1/28/82	955.4	1.37
2/2/82	200	3.72
2/1/82	960	1.47
2/2/82	948.2	.81
2/3/82	916.6	1.49
2/5/82	200	6.5
2/8/82	200	2.35
2/8/82	954.9	1.01
2/9/82	931.4	2.63

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
2/9/82	200	2.39
2/11/82	1065.3	3.39
2/12/82	200	2.61
2/16/82	1049.3	2.35
2/17/82	200	1.63
2/17/82	920.3	2.7
2/18/82	864.5	.77
2/19/82	60	5.76
2/23/82	200	1.66
2/23/82	200	6.68
2/23/82	1012	6.4
2/24/82	60	11.52
2/25/82	974	.15
2/25/82	273	.142
2/26/82	200	2.6
3/1/82	955.4	1.66
3/1/82	200	2.07
3/4/82	954.6	1.49
3/4/82	13	1224.2
3/8/82	200	4.05
3/8/82	200	4.05
3/8/82	958.5	2.31
3/11/82	966	1.75
3/12/82	200	2.77
3/15/82	200	2.77
3/15/82	938.9	2.88
3/16/82	200	3.08
3/17/82	200	2.88
3/18/82	1016.1	4.75
3/19/82	200	2.56
3/19/82	200	1.55
3/19/82	120	.32
3/22/82	200	1.57
3/22/82	896.9	4.45

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
3/23/82	200	2.47
3/25/82	1008.4	4.4
3/26/82	200	2.23
3/29/82	1010.3	3.82
3/29/82	200	1.23
3/30/82	200	1.73
4/1/82	200	1.58
4/2/82	200	1.83
4/2/82	195	.1
4/2/82	121	3.66
4/5/82	200	1.89
4/6/82	969.9	1.69
4/6/82	200	.54
4/7/82	200	1.06
4/8/82	978	8.02
4/8/82	121	.08
4/9/82	200	.54
4/12/82	200	1.41
4/13/82	960	3.63
4/13/82	200	1.4
4/14/82	200	1.73
4/15/82	900	1.25
4/15/82	200	.67
4/16/82	200	1.7
4/19/82	200	.95
4/19/82	938.3	2.58
4/20/82	200	.95
4/20/82	831	3.4
4/22/82	195	.18
4/23/82	195	.38
4/23/82	200	.71
4/26/82	200	.71
4/26/82	1007.6	2.56
4/27/82	200	.14

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
4/27/82	200	1.15
4/28/82	762.7	2.6
4/29/82	513.5	2.6
4/29/82	88	1.97
4/30/82	200	.75
5/3/82	984.2	2.53
5/3/82	200	.94
5/4/82	200	.74
5/5/82	200	.03
5/6/82	943.6	3.21
5/10/82	1019.7	2.03
5/10/82	200	.2
5/11/82	570	1.08
5/11/82	200	.2
5/13/82	951.4	.14
5/14/82	200	.34
5/17/82	1071.2	7.21
5/17/82	200	.34
5/19/82	200	.13
5/20/82	510	.46
5/21/82	973.8	.87
5/21/82	200	.26
5/24/82	1	6317.4
5/26/82	978.8	2.88
5/28/82	200	.56
5/28/82	121	.20
6/1/82	200	.58
6/2/82	200	.25
6/2/82	920.7	1.2
6/3/82	562.5	.41
6/4/82	200	.56
6/8/82	200	.51
6/7/82	1034.6	.12
6/7/82	488.4	.13
6/10/82	919.2	1.51
6/14/82	200	.39

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
6/17/82	973	1.1
6/18/82	200	.78
6/21/82	913.3	1.2
6/21/82	195	91.36
6/23/82	200	.02
6/24/82	768	.98
6/25/82	200	.72
6/28/82	200	.72
6/29/82	200	.54

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

August 30, 1982

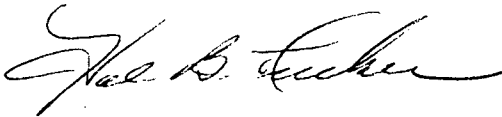
Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

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, §50.36a(a)(2) please find attached the semiannual effluent release report. The report summarizes releases for the period of January 1, 1982 to June 30, 1982.

Very truly yours,



Hal B. Tucker

JFN/php
Attachment

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

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