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 FACIL: 50-269 Oconee Nuclear Station, Unit 1, Duke Power Co. 05000269  
 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 Release & Solid Waste Disposal Rept, Jan-June 1983," W/830929 ltr.

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	IE FILE 01	1	1	NRR/DE/EEB 08		1	1
	NRR/DL/DRAB 09	1	1	NRR/DSI/METB		2	2
	NRR/DSI/RAB 10	1	1	RGN2/DRSS/EPRPB		1	1
	RM/DDAMI/MIB	1	1				
EXTERNAL:	LPDR 03	1	1	NRC PDR 02		1	1
NOTES:		1	1				

DCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES  
DATE : 09/28/83

I. LI LEASES		UNITS	1ST QTR	2ND QTR	YEAR : 1983 SUBTOTAL
1.	GROSS RADIOACTIVITY				
A.	TOTAL RELEASE	CURIES	3.38E-02	7.90E-02	1.13E-01
B.	AVERAGE CONCENTRATION RELEASED	UCI/ML	1.17E-10	2.26E-10	1.76E-10
C.	MAXIMUM CONCENTRATION RELEASED	UCI/ML	5.02E-09	9.19E-09	6.59E-09
2.	TRITIUM				
A.	TOTAL RELEASE	CURIES	3.15E+02	3.94E+02	7.09E+02
B.	AVERAGE CONCENTRATION RELEASED	UCI/ML	1.08E-06	1.13E-06	1.11E-06
3.	DISSOLVED NOBLE GASES				
A.	TOTAL RELEASE	CURIES	1.00E+00	1.26E+00	2.26E+00
B.	AVERAGE CONCENTRATION RELEASED	UCI/ML	3.45E-09	3.61E-09	3.54E-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	1.87E+07	1.13E+07	3.00E+07
6.	VOLUME OF DILUTION WATER	LITERS	2.90E+11	3.50E+11	6.40E+11
7.	RADIONUCLIDES RELEASED	CURIES			
	F-18		0.00E+00	0.00E+00	0.00E+00
	NA-24		0.00E+00	0.00E+00	0.00E+00
	AR-41		0.00E+00	0.00E+00	0.00E+00
	CR-51		4.53E-04	2.40E-03	3.05E-03
	MM-54		1.76E-04	4.46E-04	6.21E-04
	MM-56		0.00E+00	0.00E+00	0.00E+00
	CO-57		5.63E-06	0.00E+00	5.60E-06
	CO-58		1.26E-03	3.70E-02	3.82E-02
	CO-60		2.75E-03	2.73E-03	5.48E-03
	FE-59		0.00E+00	1.10E-05	1.10E-05
	NI-65		0.00E+00	0.00E+00	0.00E+00
	ZM-65		0.00E+00	0.00E+00	0.00E+00
	KR-85		3.63E-02	7.87E-02	1.15E-01
	KR-85M		0.00E+00	0.00E+00	0.00E+00
	KR-87		0.00E+00	0.00E+00	0.00E+00
	KR-88		0.00E+00	0.00E+00	0.00E+00
	Y-88		0.00E+00	0.00E+00	0.00E+00
	Y-92		0.00E+00	0.00E+00	0.00E+00
	SR-89		0.00E+00	2.05E-04	2.05E-04
	SR-90		0.00E+00	5.12E-05	5.12E-05
	SR-91		7.00E-06	7.51E-06	1.45E-05
	SR-92		1.83E-04	3.11E-04	4.94E-04
	MB-95		6.06E-06	1.53E-04	1.59E-04
	MB-97		2.31E-03	2.99E-03	5.29E-03
	ZR-95		0.00E+00	2.59E-05	2.59E-05
	ZR-97		1.37E-05	8.11E-06	2.18E-05
	MO-99		2.54E-04	2.24E-04	4.79E-04
	TC-99M		0.00E+00	0.00E+00	0.00E+00
	RU-103		0.00E+00	0.00E+00	0.00E+00
	RU-103M		0.00E+00	0.00E+00	0.00E+00
	RU-106		4.82E-04	6.06E-04	1.09E-03
	AG-108M		0.00E+00	0.00E+00	0.00E+00
	AG-110M		6.16E-04	7.95E-04	1.41E-03
	CD-109		0.00E+00	0.00E+00	0.00E+00
	CD-115		0.00E+00	0.00E+00	0.00E+00
	CD-115M		0.00E+00	0.00E+00	0.00E+00
	IN-115M		0.00E+00	0.00E+00	0.00E+00
	SB-122		0.00E+00	0.00E+00	0.00E+00
	SB-124		0.00E+00	0.00E+00	0.00E+00
	SB-125		2.20E-05	2.40E-05	4.59E-05
	SM-123M		0.00E+00	0.00E+00	0.00E+00
	SM-125		0.00E+00	0.00E+00	0.00E+00
	I-131		2.49E-03	1.81E-03	4.29E-03
	I-132		0.00E+00	0.00E+00	0.00E+00
	I-133		4.46E-04	4.13E-05	4.88E-04
	I-134		2.76E-04	2.18E-04	4.93E-04
	I-135		8.20E-05	0.00E+00	8.20E-05
	XE-131M		1.08E-02	2.30E-02	3.38E-02
	XE-133		9.42E-01	1.15E+00	2.09E+00
	XE-133M		8.13E-03	1.09E-02	1.90E-02
	XE-135		2.24E-03	3.85E-03	6.09E-03
	CE-134		0.00E+00	0.00E+00	0.00E+00
	CE-141		0.00E+00	0.00E+00	0.00E+00
	CE-144		3.70E-04	4.65E-04	8.35E-04
	CS-134		6.77E-03	8.24E-03	1.50E-02
	CS-135M		0.00E+00	0.00E+00	0.00E+00
	CS-136		1.19E-05	1.18E-05	2.37E-05
	CS-137		1.47E-02	1.97E-02	3.43E-02
	CS-138		0.00E+00	0.00E+00	0.00E+00
	BA-139		0.00E+00	0.00E+00	0.00E+00
	BA-LA-140		1.13E-04	2.61E-04	3.75E-04
	U-187		7.38E-05	1.09E-04	1.83E-04
	NP-239		1.50E-05	2.17E-05	3.67E-05
8.	PERCENT OF TECHNICAL SPECIFICATIONS LIMIT (15 CI) FOR TOTAL GROSS ACTIVITY RELEASED		2.26E-01	5.27E-01	7.52E-01

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OCONEE NUCLEAR STATION  
 RADIOACTIVE EFFLUENT RELEASES  
 DATE: 09/28/83

II. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR: 1983 SUBTOTAL
1. TOTAL NOBLE GASES	CURIES	5.04E+03	7.49E+03	1.25E+04
2. TOTAL HALOGENS	CURIES	2.40E-02	3.63E-02	6.03E-02
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	1.20E-03	1.84E-03	3.04E-03
4. TOTAL TRITIUM	CURIES	1.86E-04	9.51E+00	9.51E+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	%	9.88E+00	1.47E+01	2.46E+01
B. HALOGENS	%	6.32E+00	9.55E+00	1.59E+01
C. PARTICULATES	%	1.09E-01	1.67E-01	2.76E-01
8. RADIONUCLIDES RELEASED	CURIES			
PARTICULATES				
CR-51		2.63E-07	5.35E-05	5.37E-05
MN-54		1.03E-06	1.04E-06	2.07E-06
FE-59		5.49E-08	2.36E-06	2.41E-06
CO-58		1.31E-05	3.68E-04	3.81E-04
CO-60		2.70E-04	4.14E-04	6.84E-04
ZN-65		6.82E-08	3.52E-06	3.58E-06
SR-89		2.12E-09	1.90E-08	2.11E-08
SR-90		2.51E-10	4.52E-09	4.78E-09
ZR-95		5.27E-08	1.12E-06	1.17E-06

OCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES  
DATE: 09/28/83

II. AIRBORNE RELEASES (cont'd)

	<u>1ST QTR</u>	<u>2ND QTR</u>	<u>YEAR: 1983</u> <u>SUBTOTAL</u>
NB-95	3.07E-08	1.02E-06	1.05E-06
MO-99	2.43E-07	5.17E-05	5.20E-05
RU-103	2.98E-08	3.81E-08	6.79E-08
RU-106	2.97E-07	6.16E-05	6.19E-05
AG-110M	3.17E-08	3.90E-08	7.06E-08
SB-125	9.25E-08	6.37E-06	6.46E-06
CS-134	1.61E-04	1.15E-04	2.76E-04
CS-136	7.03E-06	3.91E-08	7.07E-06
CS-137	7.42E-04	6.97E-04	1.44E-03
BA-140	1.25E-07	2.07E-05	2.08E-05
CE-144	2.21E-07	4.36E-05	4.39E-05
HALOGENS			
I-131	1.98E-02	2.74E-02	4.72E-02
I-133	2.58E-03	6.68E-03	9.26E-03
I-133	1.58E-03	2.19E-03	3.77E-03
GASES			
KR-85M	7.39E+01	1.57E+00	7.55E+01
KR-85	4.85E+01	2.32E+02	2.81E+02
XE-131M	8.71E+01	9.03E+01	1.77E+02
XE-133M	1.47E+01	3.03E+01	4.49E+01
XE-133	4.82E+03	7.10E+03	1.19E+04
XE-135M	6.87E-02	0.00E+00	6.87E-02
XE-135	1.23E+00	4.66E+01	4.79E+01

1983  
Oconee Nuclear Station  
Radioactive Effluent Releases  
Solid Wastes  
1st Semi - Annual Report

Total volume of solid waste packaged (cubic feet) 21,609.8 for 1st six months of 1983.

Total estimated activity involved (curies) 2,514.73 for 1st six months of 1983.  
Disposal of materials shipped off-site: All 72 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>
1/03/83	200	.898
1/04/83	200	.898
1/05/83	200	.898
1/06/83	821	1.724
1/07/83	200	.878
1/10/83	200	.878
1/14/83	200	.631
1/14/83	200	.631
1/17/83	200	.631
1/20/83	442.5	.813
1/24/83	920	2.875
1/26/83	200	.007
1/27/83	200	.010
2/01/83	200	.982
2/03/83	686	1.054
2/04/83	200	.948
2/07/83	200	.948
2/14/83	200	1.075
2/16/83	121	1.070
2/22/83	200	.914
2/23/83	882	1.066
2/25/83	200	.895
2/28/83	200	.970
3/03/83	195	40.886
3/07/83	200	.826
3/09/83	200	.013
3/09/83	200	.826
3/10/83	200	.015

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
3/10/83	784	1.192
3/14/83	200	1.058
3/15/83	200	1.058
3/16/83	200	.011
3/22/83	200	2.205
3/29/83	200	1.806
3/30/83	200	1.806
4/01/83	882	1.693
4/05/83	200	.982
4/07/83	200	.982
4/13/83	200	1.001
4/15/83	200	1.001
4/19/83	200	1.157
4/20/83	200	1.157
4/26/83	200	1.274
4/28/83	200	.016
4/28/83	882	4.265
4/29/83	200	.014
5/03/83	200	.835
5/05/83	4	897.3
5/11/83	4	598.1
5/10/83	200	.863
5/11/83	200	.284
5/15/83	4	897.3
5/16/83	200	1.373
5/20/83	200	.300
5/19/83	882	.280
5/23/83	200	2.046
5/24/83	200	1.825
5/25/83	200	.012
5/27/83	200	3.618
5/31/83	200	2.878
6/03/83	200	2.878
6/02/83	784	.229
6/06/83	200	3.145
6/07/83	200	3.145
6/13/83	200	2.665

<u>Date</u>	<u>Cubic Feet</u>	<u># of Curies</u>
6/14/83	200	2.665
6/16/83	919.1	.788
6/17/83	200	2.503
6/20/83	200	2.432
6/21/83	200	2.432
6/23/83	843.7	.576
6/30/83	753.5	2.320

DUKE POWER COMPANY  
P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

September 29, 1983

93 OCT 3 P 2:29

TELEPHONE  
(704) 373-4531

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
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 §50.36a(a)(2) please find attached the First Semi-Annual Release and Solid Waste Disposal Reports for the period of January 1, 1983 to June 30, 1983. My letter of August 29, 1983 addressed the delay of this submittal.

Very truly yours,

*Hal B. Tucker*

Hal B. Tucker

JCP/php

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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Certified By *[Signature]*

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