

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO: Mr. A. Schwencer		FROM: Duke Power Company Charlotte, North Carolina William O. Parker		DATE OF DOCUMENT 6/14/77	
<input checked="" type="checkbox"/> LETTER <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> COPY		<input type="checkbox"/> NOTORIZED <input checked="" type="checkbox"/> UNCLASSIFIED	PROP	INPUT FORM	DATE RECEIVED 6/20/77
				NUMBER OF COPIES RECEIVED 1 SIGNED	

DESCRIPTION	ENCLOSURE
<p>RE LTR 4-18-77</p> <p>DO NOT REMOVE</p> <p>ACKNOWLEDGED (P)</p> <p>PLANT NAME: Oconee Units 1-2-3</p> <p>RJL 6/20/77</p>	<p>Consists of information related to equilibrium & transient iodine activity for the period March, 1976 to March, 1977..</p> <p>(17-P)</p>

SAFETY	FOR ACTION/INFORMATION	ENVIRONMENTAL
ASSIGNED AD:		ASSIGNED AD: V. MOORE (LTR)
BRANCH CHIEF:	<i>Schwencer (SI)</i>	BRANCH CHIEF:
PROJECT MANAGER:	<i>Neighbors</i>	PROJECT MANAGER:
LICENSING ASSISTANT:	<i>Shippard</i>	LICENSING ASSISTANT:
		B. HARLESS

INTERNAL DISTRIBUTION			
<input checked="" type="checkbox"/> REG FILES	SYSTEMS SAFETY	PLANT SYSTEMS	SITE SAFETY & ENVIRON ANALYSIS
<input checked="" type="checkbox"/> NRC PDR	HEINEMAN	TEDESCO	DENTON & MULLER
<input checked="" type="checkbox"/> T & E (2)	SCHROEDER	BENAROYA	CRUTCHFIELD
<input checked="" type="checkbox"/> OELD		LAINAS	
<input checked="" type="checkbox"/> GOSSICK & STAFF	ENGINEERING	IPPOLITO	
<input checked="" type="checkbox"/> HANAUER	KNIGHT	F. ROSA	ENVIRO TECH.
<input checked="" type="checkbox"/> MTPG	BOSNAK		ERNST
<input checked="" type="checkbox"/> CASE	SIHWELL	OPERATING REACTORS	BALLARD
<input checked="" type="checkbox"/> BOYD	PAWLICKI	STELLO	YOUNGBLOOD
		EISENHUT	
<input checked="" type="checkbox"/> PROJECT MANAGEMENT	REACTOR SAFETY	SHAO	SITE TECH.
<input checked="" type="checkbox"/> SKOVHOLT	ROSS	BAER	
<input checked="" type="checkbox"/> P. COLLINS	NOVAK	BUTLER	GAMMILL (2)
<input checked="" type="checkbox"/> HOUSTON	ROSZTGCZY	GRIMES	
<input checked="" type="checkbox"/> MELTZ	CHECK		SITE ANALYSIS
<input checked="" type="checkbox"/> HELTEMES			VOLLMER
<input checked="" type="checkbox"/> SK	AT&I		BUNCH
	SALTZMAN		J. COLLINS
	RUTBERG		KREGER

EXTERNAL DISTRIBUTION	CONTROL NUMBER
<input checked="" type="checkbox"/> LPDR: <i>Walthalla SC</i>	
<input checked="" type="checkbox"/> TIC	
<input checked="" type="checkbox"/> NAT LAB	
<input checked="" type="checkbox"/> REG IV (J. HANCHETT)	
<input checked="" type="checkbox"/> 16 CYS ACRS SENT CATEGORY <i>B</i>	
	771710068 <i>R mo 2</i>

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

June 14, 1977

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

REGULATORY DOCKET FILE COPY

Mr. A. Schwencer, Chief
Operating Reactor Branch #1
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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



Dear Mr. Schwencer:

As requested by your letter of April 18, 1977, please find attached information related to equilibrium and transient iodine activity at Oconee Nuclear Station for the period March, 1976 to March, 1977.

Very truly yours,

W. O. Parker, Jr.

William O. Parker, Jr. *By [Signature]*

WOP/jm

cc: Mr. R. T. Bond	Mr. H. B. Tucker
Mr. J. E. Smith	Mr. K. S. Canady
Mr. R. F. Wardell	Mr. D. C. Holt
Mr. R. B. Thompson	Mr. M. S. Tuckman
Mr. W. A. Haller	Mr. Lionel Lewis
Mr. C. T. Yongue	
Master File: OS 801.03	
Section File: OS 801.03	

771710068

OCONEE NUCLEAR STATION
EQUILIBRIUM AND TRANSIENT IODINE ACTIVITY

EXPLANATORY NOTES

- 1.0 Date - Date transient occurred.

- 2.0 Percent Power - Net power changes in excess of 25%. Length of time over which power change occurred is not qualified due to the relative inaccessibility of this data.

- 3.0 Isotope - Isotopes as requested.

- 4.0 Concentration - Expressed as microcuries per milliliter.
 - 4.1 First and second columns are measurements taken prior to transient.
 - 4.2 Third column is measurement of transient peak.
 - 4.3 Fourth column is measurement of post-transient equilibrium.

- 5.0 Measurements were not reported if they were less than 10^{-3} microcuries per milliliter or were not taken based on previously indicated activity levels.

- 6.0 Units that operated at constant power level for entire month experienced no transients.

- 7.0 Units that were out of service for the entire month experienced no transients.

OCONEE NUCLEAR STATION

UNIT NO. 1

1. 100% Reactor Thermal Power = 2568 MWE
2. RC System Cleanup Flowrate = 70 GPM
3. RC System Temperature = 532°F
4. RC System Pressure = 2155 PSI

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
3-23-77	100 down	I-131	5.5×10^{-1}	0.30	0.42	0.30
		I-133	0.18	0.55	0.35	0.12
		Xe-133	1.40	1.35	1.75	0.10
		Xe-135	0.37	0.82	0.57	0.13
3-13-77	100 up	I-131	6.4×10^{-1}	0.28	0.12	4.4×10^{-1}
		I-133		$<10^{-3}$		
		Xe-133	0.62	0.90	1.20	0.62
		Xe-135	0.60	0.70	0.75	0.37
2-28-77	100 down	I-131	0.10	1.90	0.95	0.65
		I-133	0.25	1.50	0.38	0.14
		Xe-133	2.70	2.20	3.70	3.0
		Xe-135	0.80	0.90	0.70	0.40
2- 8-77	100 up	I-131	0.17	0.32	0.35	0.19
		I-133	3×10^{-2}	3.6×10^{-1}	8.5×10^{-1}	5×10^{-1}
		Xe-133	0.36	0.50	0.80	0.14
		Xe-135	0.62	0.78	0.90	0.14
2- 1-77	100 down	I-131	4.3×10^{-1}	0.25	0.37	0.27
		I-133	0.17	0.55	0.34	0.12
		Xe-133	1.20	1.70	1.30	0.90
		Xe-135	0.90	0.85	0.75	0.65

OCONEE NUCLEAR STATION

UNIT NO. 1

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{MI}$			
1-26-77	100 Up	I-131	0.11	5.8×10^{-1}	4.7×10^{-1}	3.4×10^{-1}
		I-133	7.8×10^{-1}	0.10	0.13	0.14
		Xe-133	0.33	0.64	1.20	0.70
		Xe-135	0.59	0.90	0.88	0.75
1-16-77	100 down	I-131	9.0×10^{-1}	0.98	1.09	0.95
		I-133	0.16	0.65	0.60	0.48
		Xe-133	3.20	3.20	3.50	2.40
		Xe-135	0.90	0.92	0.40	0.30
12-23-76	30 Up	I-131	1.3×10^{-1}	1.6×10^{-1}	1.8×10^{-1}	2.3×10^{-1}
		I-133	0.11	0.13	0.12	
		Xe-133	0.40	0.66	0.95	0.87
		Xe-135	0.82	0.81	0.88	0.62
12-22-76	70 Up	I-131	3.2×10^{-2}	2.3×10^{-1}	1.6×10^{-1}	9.0×10^{-2}
		I-133	8.7×10^{-1}	0.12	0.22	0.11
		Xe-133	1×10^{-2}	0.95×10^{-2}	2×10^{-1}	1.5×10^{-1}
		Xe-135	6×10^{-1}	6×10^{-1}	0.82	
12- 8-76	100 down	I-131	3×10^{-1}	7×10^{-1}	4×10^{-1}	2×10^{-1}
		I-133	4×10^{-1}	8×10^{-1}	0.10	3×10^{-1}
		Xe-133	3.8×10^{-2}	0.02	0.9×10^{-1}	
		Xe-135	4×10^{-2}	3×10^{-1}	0.15	3×10^{-1}
12- 7-76	100 down	I-131	7×10^{-1}	2×10^{-1}	1×10^{-1}	
		I-133		$<10^{-3}$		
		Xe-133	7×10^{-1}	0.13	4×10^{-1}	3×10^{-1}
		Xe-135		$<10^{-3}$		

OCONEE NUCLEAR STATION

UNIT NO. 1

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
11-18-76	100 down	I-131	4×10^{-1}	0.26	8×10^{-1}	
		I-133	0.15	0.46	7×10^{-1}	
		Xe-133	0.24	0.60	0.58	0.38
		Xe-135	0.65	0.80	0.23	3×10^{-1}
11-16-76	50 up	I-131	0.11			
		I-133		$<10^{-3}$		
		Xe-133		$<2 \times 10^{-1}$		
		Xe-135		$<10^{-3}$		
11-15-76	40 up	I-131	5×10^{-1}			
		I-133		$<10^{-3}$		
		Xe-133		$<2 \times 10^{-1}$		
		Xe-135		$<10^{-1}$		
10-31-76	100 down	I-131	0.19	0.46	0.49	0.38
		I-133	0.13	0.13	0.13	8×10^{-1}
		Xe-133	1.0	1.5	1.6	1.5×10^{-1}
		Xe-135	0.40	0.40	0.25	7×10^{-1}
10-26-76	100 down	I-131	8×10^{-1}	2.6	0.92	0.25
		I-133	0.11	2.0	0.55	0.14
		Xe-133	2.80	4.80	4.30	1.20
		Xe-135	0.85	0.97	1.00	0.85
10- 8-76	50 down	I-131	0.12	0.58	0.18	0.10
		I-133	0.14	0.22	0.24	0.13
		Xe-133	2.40	3.10	3.10	2.80
		Xe-135	0.78	0.80	0.90	0.61

OCONEE NUCLEAR STATION

UNIT NO. 1

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{ML}$			
9- 5-76	55 Up	I-131	8.5×10^{-1}	0.12	0.10	7×10^{-1}
		I-133	0.16	0.25	0.18	7×10^{-1}
		Xe-133	1.80	2.30	1.80	
		Xe-135	0.80	0.88	0.68	
9- 4-76	100 down	I-131	6×10^{-1}	0.70	0.34	0.14
		I-133	0.12	0.96	0.23	0.13
		Xe-133	1.70	2.30	1.40	
		Xe-135	0.40	0.52	0.24	
8-29-76	50 down	I-131	9×10^{-1}	0.22	0.16	0.10
		I-133	0.12	0.35	0.18	0.15
		Xe-133	1.50	1.70	3.90	2.30
		Xe-135	0.58	0.54	1.20	0.54
8-14-76	75 down	I-131	9×10^{-1}	0.55	0.38	0.11
		I-133	9×10^{-1}	0.21	9×10^{-1}	
		Xe-133	0.90	0.95	1.20	1.00
		Xe-135	0.30	0.46	0.60	0.45
7-13-76	100 down	I-131	9×10^{-1}	0.38	0.12	9×10^{-1}
		I-133	0.23	0.51	0.23	0.18
		Xe-133	1.60	2.10	1.80	1.20
		Xe-135	0.33	0.50	0.41	0.30
7- 7-76	100 down	I-131	0.10	0.65	0.16	9×10^{-1}
		I-133	0.24	0.90	0.22	0.19
		Xe-133	1.80	2.20	2.10	1.40
		Xe-135	0.38	0.44	0.36	

OCONEE NUCLEAR STATION

UNIT NO. 1

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{ml}$			
6-29-76	30 Up	I-131	0.10	0.10	0.10	
		I-133	0.25	0.23	0.25	
		Xe-133	1.50	2.80	1.40	
		Xe-135	0.43	0.36	0.55	
6-28-76	70 Up	I-131	0.10	0.10		
		I-133	0.25	0.27		
		Xe-133	0.45	1.80	1.70	
		Xe-135	0.13	0.41	0.41	
6-27-76	100 down	I-131	0.10	0.70	0.15	0.10
		I-133	0.30	1.0	0.25	0.26
		Xe-133	1.20	2.30	1.80	
		Xe-135	0.24	0.41	0.36	
6-22-76	90 Up	I-131	0.11	0.10	0.10	
		I-133	0.25	0.30	0.30	
		Xe-133	1.50	2.20	2.00	
		Xe-135	0.41	0.47	0.49	
6-21-76	100 down	I-131	0.12	0.36	0.20	0.11
		I-133	0.30	0.65	0.38	0.25
		Xe-133	2.60	2.80	1.50	
		Xe-135	0.38	0.55	0.41	
6-9-76	90 Up	I-131	8×10^{-1}	0.28	6×10^{-1}	
		I-133	0.30	0.70	0.30	
		Xe-133	1.10	1.40	1.30	
		Xe-135	0.40	0.42	0.35	

OCONEE NUCLEAR STATION

UNIT NO. 1

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
6- 8-76	100 down	I-131	8×10^{-1}	0.29	0.14	6.4×10^{-1}
		I-133	0.30	0.80	0.32	
		Xe-133	0.41	0.90	0.82	
		Xe-135	0.28	0.37	0.18	
6-1-76	40 Up	I-131	4.4×10^{-2}	4.5×10^{-2}	5.8×10^{-2}	
		I-133		$<10^{-3}$		
		Xe-133	0.35	0.44	0.41	
		Xe-135	0.24	0.38	0.36	
5-31-76	40 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
4-18-76	70 down	I-131	1.4×10^{-2}	3.2×10^{-1}	1.8×10^{-1}	
		I-133	8.2×10^{-1}	9.0×10^{-1}	7.5×10^{-1}	
		Xe-133	0.21	0.32	0.30	
		Xe-135	0.13	0.17	8×10^{-1}	

NOTE: Unit did not operate during March, 1976

OCONEE NUCLEAR STATION

UNIT NO. 2

1. 100% Reactor Thermal Power = 2568 MWE
2. RC System Cleanup Flowrate = 70 GPM
3. RC System Temperature = 532°F
4. RC System Pressure = 2155 PSI

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
3-29-77	65 Up	I-131	0.38	0.37	0.33	0.31
		I-133	0.55	0.43	0.45	
		Xe-133	10.3	7.63	8.80	7.00
		Xe-135	5.5	3.43	3.80	3.10
3-28-77	65 down	I-131	0.25	0.26	0.58	0.50
		I-133	0.48	0.78	0.66	0.63
		Xe-133	0.48	0.47	10.3	7.60
		Xe-135	2.60	2.70	5.50	3.40
3-24-77	80 Up	I-131	0.26	0.25	0.26	
		I-133	0.34	0.27	0.36	
		Xe-133	7.80	5.80	5.20	5.00
		Xe-135	2.50	2.30	1.90	1.90
3-23-77	100 down	I-131	0.27	6.20	1.20	0.47
		I-133	0.22	3.30	0.58	0.33
		Xe-133	6.80	4.70	9.50	7.80
		Xe-135	3.40	2.50	2.20	1.90
12-28-76	60 Up	I-131	0.10	0.12	0.13	0.15
		I-133	0.38	0.46	0.47	0.35
		Xe-133	0.14	0.95	0.95	1.2
		Xe-135	0.60	0.35	1.40	1.60

NOTE: Unit operated at 100% power February and January

OCONEE NUCLEAR STATION

UNIT NO. 2

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{ML}$			
12-27-76	100 down	I-131	0.12	0.77	0.18	0.10
		I-133	0.26	2.40	0.37	0.34
		Xe-133	4×10^{-1}	0.10	0.19	0.14
		Xe-135	$<10^{-2}$	0.40	0.60	0.35
12-25-76	70 Up	I-131	0.47	1.20	0.30	0.12
		I-133		$<10^{-2}$		
		Xe-133	4×10^{-1}	0.10	0.19	0.14
		Xe-135		$<10^{-2}$		
12- 5-76	100 down	I-131	0.31	5.00	3.50	3.52
		I-133	0.25	5.00	1.30	0.72
		Xe-133	4.5	9.3	8.6	1.7
		Xe-135	2.5	2.5	0.85	4.5×10^{-1}
NOTE: Unit operated at 100% power during November						
10-17-76	80 Up	I-131	0.40	0.35	0.50	0.40
		I-133	0.42	0.45	0.60	0.52
		Xe-133	6.8	4.7	2.4	
		Xe-135	0.92	1.3	1.4	
10-16-76	60 down	I-131	0.37	5.00	1.6	0.40
		I-133	0.14	1.40	0.30	0.33
		Xe-133	5.7	3.7	6.8	4.7
		Xe-135	1.4	0.85	0.92	1.3
10-13-76	40 down	I-131	0.50	0.60	0.92	0.68
		I-133	0.50	0.60	0.90	0.48
		Xe-133	3.7	4.6	5.0	4.4
		Xe-135	1.9	2.1	1.8	1.2

OCONEE NUCLEAR STATION

UNIT NO. 2

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
10- 4-76	30 Up	I-131	0.37	0.75	0.77	0.55
		I-133	0.57	0.93	0.75	0.60
		Xe-133	5.8	7.2	3.6	5.6
		Xe-135	2.0	2.7	1.6	
10- 3-76	40 down	I-131	0.46	0.38	0.55	0.37
		I-133	0.70	0.56	0.90	0.57
		Xe-133	4.5	3.2	5.8	7.0
		Xe-135	2.2	1.5	2.0	2.7
9-19-76	40 Up	I-131	0.50	0.49	0.65	0.65
		I-133	0.85	0.85	0.75	0.75
		Xe-133	3.5	5.8	7.6	5.8
		Xe-135	1.7	2.1	2.0	1.8
9-18-76	40 down	I-131	0.50	0.49	0.65	0.65
		I-133	0.85	0.85	0.75	0.75
		Xe-133	3.5	5.8	7.6	5.8
		Xe-135	1.7	2.1	2.0	1.8
9-10-76	90 Up	I-131	0.52	3.70	1.60	0.63
		I-133	0.11	5.10	0.12	0.58
		Xe-133	3.6	6.5	4.6	4.0
		Xe-135	1.0	1.0	1.3	1.5
9- 8-76	100 down	I-131	0.52	3.70	1.60	0.63
		I-133	0.11	5.10	0.12	0.58
		Xe-133	4.7	3.6	6.5	4.6
		Xe-135	1.7	1.0	1.0	1.3

OCONEE NUCLEAR STATION

UNIT NO. 2

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
8-30-76	90 Up	I-131	2.00	0.65	0.48	0.42
		I-133	1.20	0.77	0.85	0.85
		Xe-133	1.6	6.5	6.5	4.6
		Xe-135	0.20	1.4	1.4	1.6
8-29-76	90 down	I-131	0.42	0.42	0.50	8.50
		I-133	0.85	1.00	0.88	6.50
		Xe-133	5.8	5.1	6.2	1.6
		Xe-135	1.9	1.7	1.2	0.20
8- 4-76	60 Up	I-131	0.52	1.10	0.58	
		I-133	1.1×10^{-2}	1.0×10^{-2}	3.3×10^{-1}	
		Xe-133	0.62	0.45	0.58	0.68
		Xe-135	$<10^{-3}$	$<10^{-3}$	0.11	0.56
7-27-76	70 down	I-131	1.20	3.5×10^{-1}	8.5×10^{-1}	1.80
		I-133	3×10^{-1}	4.5×10^{-2}	6.2×10^{-2}	6.6×10^{-2}
		Xe-133	2.4	2.5	5.0	3.5
		Xe-135	0.58	0.61	0.13	1.8×10^{-1}
7-26-76	30 down	I-131	0.31	0.25	1.0	0.40
		I-133	0.98	0.52	1.4	0.20
		Xe-133	1.9	2.4	2.5	2.4
		Xe-135	.48	0.88	0.95	0.94
7-15-76	35 Up	I-131	1.5×10^{-2}	1.2×10^{-2}	2.6×10^{-2}	
		I-133	1.2×10^{-1}	1.0×10^{-1}	1.9×10^{-1}	
		Xe-133	1.8×10^{-1}	2.3×10^{-1}	5.1×10^{-1}	
		Xe-135	2.5×10^{-1}	4.8×10^{-1}	5.1×10^{-1}	

OCONEE NUCLEAR STATION

UNIT NO. 2

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
7-13-76	40 Up	I-131		$<10^{-3}$		
		I-133	5.5×10^{-2}	3.7×10^{-1}	1.1×10^{-1}	
		Xe-133	$<10^{-3}$	7.8×10^{-2}	1.9×10^{-1}	
		Xe-135	1.3×10^{-2}	2.5×10^{-2}	5.0×10^{-1}	
7-12-76	25 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
7-11-76	25 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
NOTE: Unit did not operate during June and May						
4- 7-76	70 down	I-131	1.7×10^{-1}	1.6×10^{-1}	1.9	1.6
		I-133	1.3×10^{-1}	1.7×10^{-1}	1.2	4.2×10^{-1}
		Xe-133	0.90	0.90	1.3	0.65
		Xe-135	0.24	0.24	0.36	0.20
3-27-76	30 down	I-131	1.6×10^{-1}	1.8×10^{-1}	2.0×10^{-1}	1.5×10^{-1}
		I-133	2.2×10^{-1}	2.5×10^{-1}	2.9×10^{-1}	1.8×10^{-1}
		Xe-133	0.90	0.30	0.86	8.8×10^{-1}
		Xe-135	0.23	5.3×10^{-1}	0.13	1.6×10^{-1}

OCONEE NUCLEAR STATION

UNIT NO. 3

1. 100% Reactor Thermal Power = 2568 MWE
2. RC System Cleanup Flowrate = 70 GPM
3. RC System Temperature = 532°F
4. RC System Pressure = 2155 PSI

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
3-17-76	70 Up	I-131	1.5×10^{-2}	2.3×10^{-2}	1.2×10^{-1}	4.8×10^{-2}
		I-133	1.6×10^{-2}	1.8×10^{-2}	1.4×10^{-1}	3.8×10^{-2}
		Xe-133	8.1×10^{-1}	8.0×10^{-1}	8.0×10^{-1}	6.9×10^{-1}
		Xe-135	1.5×10^{-1}	1.7×10^{-1}	1.8×10^{-1}	1.9×10^{-1}
3-16-77	100 down	I-131	1.5×10^{-2}	2.3×10^{-2}	1.2×10^{-1}	4.8×10^{-2}
		I-133	1.6×10^{-2}	1.8×10^{-2}	1.4×10^{-1}	3.8×10^{-2}
		Xe-133	2.8×10^{-1}	2.6×10^{-1}	1.20	8.2×10^{-1}
		Xe-135	1.1×10^{-1}	1.1×10^{-1}	2.7×10^{-1}	1.5×10^{-1}
2-26-77	50 Up	I-131	1.6×10^{-2}		$<10^{-3}$	
		I-133	4.0×10^{-2}		$<10^{-3}$	
		Xe-133	6.1×10^{-2}	7.9×10^{-2}	1×10^{-1}	9.1×10^{-2}
		Xe-135	$<10^{-3}$	4×10^{-2}	5.8×10^{-2}	$<10^{-3}$
2-14-77	100 down	I-131	$<10^{-3}$	1.8×10^{-1}	9×10^{-2}	$<10^{-3}$
		I-133	$<10^{-3}$	9×10^{-2}	1.7×10^{-2}	$<10^{-3}$
		Xe-133	3.4×10^{-2}	2.1×10^{-1}	4.9×10^{-1}	1.8×10^{-1}
		Xe-135	$<10^{-3}$	1.2×10^{-2}	3.5×10^{-2}	$<10^{-3}$

NOTE: Unit at 100% power during January and December

11-17-76	35 Up	I-131		$<10^{-3}$	
		I-133		$<10^{-3}$	
		Xe-133	1.6×10^{-2}	1.2×10^{-2}	$<10^{-3}$
		Xe-135		$<10^{-3}$	

OCONEE NUCLEAR STATION

UNIT NO. 3

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
11-15-76	40 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133	1.4×10^{-2}	1.6×10^{-2}	1.2×10^{-2}	1.3×10^{-2}
		Xe-135		$<10^{-3}$		
11-14-76	40 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133	1.8×10^{-2}	1.3×10^{-2}	1.6×10^{-2}	
		Xe-135		$<10^{-3}$		
11-13-76	40 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		

NOTE: Unit did not operate during October.

9-18-76	80 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133	1.7×10^{-2}	1.4×10^{-2}	1.5×10^{-2}	
		Xe-135		$<10^{-3}$		
9-17-76	80 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133	1.6×10^{-2}	1.5×10^{-2}	1.7×10^{-2}	1.4×10^{-2}
		Xe-135		$<10^{-3}$		
9-16-76	45 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133	1.4×10^{-2}	1.6×10^{-2}	1.5×10^{-2}	1.6×10^{-2}
		Xe-135		$<10^{-3}$		

OCONEE NUCLEAR STATION

UNIT NO. 3

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY			
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$			
9-10-76	60 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133	2×10^{-2}	2.5×10^{-2}	2.8×10^{-2}	2.5×10^{-2}
		Xe-135		$<10^{-3}$		
8-17-76	40 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
8- 1-76	60 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
7-21-76	100 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
7-12-76	80 Up	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		
7-11-76	80 down	I-131		$<10^{-3}$		
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		Xe-135		$<10^{-3}$		

OCONEE NUCLEAR STATION

UNIT NO. 3

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY	
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$	
7- 9-76	80 Up	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	
7- 2-76	100 down	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	
NOTE: Unit at 100% power during June and May				
4-23-76	35 Up	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	
4-22-76	35 down	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	
4-21-76	80 UP	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	
4-20-76	100 down	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	

OCONEE NUCLEAR STATION

UNIT NO. 3

DATE	% POWER	ISOTOPE	RC SYSTEM ACTIVITY	
			CONCENTRATION $\mu\text{Ci}/\text{Ml}$	
4-17-76	80 Up	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	
3-20-76	100 down	I-131	<10 ⁻³	
		I-133	<10 ⁻³	
		Xe-133	<10 ⁻³	
		Xe-135	<10 ⁻³	