

50-269/270/287

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FILE NUMBER

TO:

Mr. A. Schwencer

FROM:

Duke Power Company
Charlotte, North Carolina
William O. Parker

DATE OF DOCUMENT

6/14/77

DATE RECEIVED

6/20/77

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PLANT NAME: Oconee Units 1-2-3

RJL 6/20/77

ENCLOSURE

Consists of information related to
equilibrium & transient iodine activity
for the period March, 1976 to March, 1977..

(17-P)

SAFETY

FOR ACTION/INFORMATION

ENVIRONMENTAL

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LICENSING ASSISTANT:

ASSIGNED AD:

V. MOORE (LTR)

BRANCH CHIEF:

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LPDR: Waltham SC

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NSIC

771710068

R mw
2

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 $\mu\text{Ci}/\text{Ml}$			
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	0.22
		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

		%	RC SYSTEM ACTIVITY			
DATE	POWER	ISOTOPE	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
NOTE: Unit operated at 100% power February and January						
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

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	2×10^{-2}	$<10^{-3}$	2.5×10^{-2}	2.8×10^{-2}
		I-133		$<10^{-3}$		
		Xe-133		$<10^{-3}$		
		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	