

CATANBA NUCLEAR STATION  
EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION  
REPORT DATE: 08/20/85  
PERIOD COVERED: START DAY = 001 STOP DAY = 181

I. REGULATORY LIMITS

A. NOBLE GASES - AIR DOSE

1. CALENDAR QUARTER - GAMMA DOSE = 5 MRAD
2. CALENDAR QUARTER - BETA DOSE = 10 MRAD
3. CALENDAR YEAR - GAMMA DOSE = 10 MRAD
4. CALENDAR YEAR - BETA DOSE = 20 MRAD

B. LIQUID EFFLUENTS - DOSE

1. CALENDAR QUARTER - TOTAL BODY DOSE = 1.5 MREM
2. CALENDAR QUARTER - ORGAN DOSE = 5 MREM
3. CALENDAR YEAR - TOTAL BODY DOSE = 3 MREM
4. CALENDAR YEAR - ORGAN DOSE = 10 MREM

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

1. CALENDAR QUARTER = 7.5 MREM
2. CALENDAR YEAR = 15 MREM

II. MAXIMUM PERMISSIBLE CONCENTRATIONS

- A. GASEOUS EFFLUENTS - INFORMATION FOUND IN OFFSITE DOSE CALCULATION MANUAL
- B. LIQUID EFFLUENTS - INFORMATION FOUND IN 10CFR20, APPENDIX B, TABLE II, 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.  $2.60E+02$  = TOTAL NUMBER OF BATCH RELEASES
2.  $1.64E+04$  = TOTAL TIME(MIN.) FOR BATCH RELEASES
3.  $7.55E+02$  = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE
4.  $6.14E+01$  = AVERAGE TIME(MIN.) FOR A BATCH RELEASE
5.  $3.00E+00$  = MINIMUM TIME(MIN.) FOR A BATCH RELEASE
6.  $2.72E+06$  = AVERAGE DILUTION WATER FLOW DURING RELEASES(GPM)

B. GASEOUS EFFLUENT

1.  $7.80E+01$  = TOTAL NUMBER OF BATCH RELEASES
2.  $2.00E+03$  = TOTAL TIME(MIN.) FOR BATCH RELEASES
3.  $1.56E+04$  = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE
4.  $2.57E+03$  = AVERAGE TIME(MIN.) FOR A BATCH RELEASE
5.  $1.20E+01$  = MINIMUM TIME(MIN.) FOR A BATCH RELEASE

VI. ABNORMAL RELEASES

A. LIQUID

1. NUMBER OF RELEASES 0.0
2. TOTAL ACTIVITY RELEASED(CURIES) 0.0

B. GASEOUS

1. NUMBER OF RELEASES 0.0
2. TOTAL ACTIVITY RELEASED(CURIES) 0.0

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CATAMBA NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES  
DATE : 08/27/83

I LIQUID RELEASES		UNITS	1ST QTR	2ND QTR	YEAR : 1983 SUBTOTAL
1	GROSS RADIOACTIVITY				
	A. TOTAL RELEASE	CURIES	7.01E-03	3.54E-01	3.61E-01
	B. AVERAGE CONCENTRATION RELEASED	UCI/ML	3.90E-10	1.69E-08	9.26E-09
	C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	1.14E-09	4.26E-08	4.26E-08
2	TRITIUM				
	A. TOTAL RELEASE	CURIES	3.18E+00	2.06E+01	2.37E+01
	B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.77E-07	9.81E-07	6.09E-07
3	DISSOLVED NOBLE GASES				
	A. TOTAL RELEASE	CURIES	7.76E-04	5.89E-03	6.67E-03
	B. AVERAGE CONCENTRATION RELEASED	UCI/ML	4.32E-11	2.81E-10	1.71E-10
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	1.83E+06	2.46E+06	4.30E+06
6	VOLUME OF DILUTION WATER	LITERS	1.80E+10	2.10E+10	3.89E+10
7	RADIONUCLIDES RELEASED	CURIES			
	HA-24		6.41E-04	6.69E-03	7.34E-03
	CR-51		5.38E-04	5.23E-02	5.28E-02
	MN-54		1.00E-04	4.16E-03	4.26E-03
	FE-55		0.00E+00	1.04E-02	1.04E-02
	FE-59		9.58E-06	6.81E-03	6.82E-03
	CO-57		0.00E+00	6.14E-04	6.14E-04
	CO-58		3.70E-03	2.38E-01	2.42E-01
	CO-60		9.61E-05	5.25E-03	5.34E-03
	ZN-63		0.00E+00	6.83E-05	6.83E-05
	SE-75		0.00E+00	4.93E-04	4.93E-04
	SR-89		0.00E+00	4.85E-05	4.85E-05
	ZR-95		1.17E-05	2.80E-03	2.81E-03
	NB-95		0.00E+00	2.13E-03	2.13E-03
	NB-97		1.93E-05	2.21E-05	4.14E-05
	MO-99		0.00E+00	1.92E-04	1.92E-04
	TC-99M		1.29E-04	5.89E-04	7.18E-04
	AG-108M		0.00E+00	2.64E-05	2.64E-05
	AG-110M		0.00E+00	1.30E-05	1.30E-05
	SB-122		1.39E-05	3.10E-04	3.24E-04
	SB-124		0.00E+00	7.35E-03	7.35E-03
	SB-125		0.00E+00	1.06E-03	1.06E-03
	I-131		4.54E-04	2.56E-03	3.01E-03
	I-133		4.67E-04	4.37E-03	4.84E-03
	I-134		0.00E+00	3.16E-06	3.16E-06
	I-135		0.00E+00	8.68E-04	8.68E-04
	CS-137		0.00E+00	1.85E-04	1.85E-04
	BA-140		0.00E+00	2.08E-04	2.08E-04
	LA-140		6.61E-05	2.52E-03	2.59E-03
	CE-141		0.00E+00	5.43E-06	5.43E-06
	CE-144		0.00E+00	2.20E-05	2.20E-05
	W-187		7.58E-04	2.55E-03	3.31E-03
	HP-239		3.83E-06	1.54E-03	1.54E-03
	KR-85M		0.00E+00	5.89E-06	5.89E-06
	XE-133M		0.00E+00	4.13E-05	4.13E-05
	XE-133		4.69E-04	3.77E-03	4.24E-03
	XE-135		3.07E-04	2.07E-03	2.38E-03

DO YOU WISH TO PRINT THIS REPORT BY UNIT? (Y/N)

CATAWBA LIQUID DOSE- SEMI-ANNUAL '85 NRC SUBMITTAL- 1ST QTR- 8/27/85 00000010

SKIN	MAXIMUM DOSE-	1.03D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CU 58	38.55 %				
	CO 60	56.88 %				
BONE	MAXIMUM DOSE-	1.26D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	NA 24	9.01 %				
	CO 58	27.10 %				
	CO 60	39.81 %				
	I 131	7.07 %				
	W 187	11.91 %				
LIVER	MAXIMUM DOSE-	3.57D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	36.64 %				
	MN 54	15.82 %				
	CO 58	20.96 %				
	CO 60	14.89 %				
T. BODY	MAXIMUM DOSE-	3.54D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	36.91 %				
	CO 58	36.12 %				
	CO 60	16.09 %				
THYROID	MAXIMUM DOSE-	4.63D-03 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	I 131	84.85 %				
	I 133	10.68 %				
KIDNEY	MAXIMUM DOSE-	2.71D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	48.17 %				
	MN 54	7.07 %				
	CO 58	12.55 %				
	CO 60	18.44 %				
	I 131	7.79 %				
LUNG	MAXIMUM DOSE-	2.31D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	H 3	56.58 %				
	CO 58	14.74 %				
	CO 60	21.66 %				
GI-LLI	MAXIMUM DOSE-	5.11D-03 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	CO 58	16.40 %				
	W 187	74.04 %				

CATAWBA LIQUID DOSE- SEMI-ANNUAL '85 NRC SUBMITTAL- 2ND QTR- 8/27/85 00000010

SKIN	MAXIMUM DOSE-	5.44D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 58	40.85 %				
	CO 60	51.19 %				
BONE	MAXIMUM DOSE-	1.47D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	FE 55	5.34 %				
	CO 58	12.87 %				
	CO 60	16.06 %				
	CS 137	55.06 %				
LIVER	MAXIMUM DOSE-	2.34D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	MN 54	8.71 %				
	FE 59	6.97 %				
	CO 58	17.85 %				
	CO 60	10.77 %				
	CS 137	46.21 %				
T. BODY	MAXIMUM DOSE-	1.62D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	CO 58	43.94 %				
	CO 60	16.63 %				
	CS 137	23.33 %				
THYROID	MAXIMUM DOSE-	2.58D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	CO 58	7.35 %				
	CO 60	9.17 %				
	I 131	67.22 %				
	I 133	11.46 %				
KIDNEY	MAXIMUM DOSE-	1.02D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	7.19 %				
	MN 54	6.78 %				
	CO 58	18.60 %				
	CO 60	23.21 %				
	CS 137	36.24 %				
LUNG	MAXIMUM DOSE-	7.77D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	H 3	9.44 %				
	FE 59	6.91 %				
	CO 58	24.42 %				
	CO 60	30.46 %				
	CS 137	18.80 %				
GI-LLI	MAXIMUM DOSE-	4.14D-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	CO 58	11.28 %				
	PA 95	81.32 %				

CATAWBA LIQUID DOSE- SEMI-ANNUAL '85 NRC SUBMITTAL- TOTAL- 8/27/85 00000010

SKIN	MAXIMUM DOSE-	5.94D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 58	40.87 %				
	CO 60	51.23 %				
BONE	MAXIMUM DOSE-	1.60D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	FE 55	5.30 %				
	CO 58	12.99 %				
	CO 60	16.21 %				
	CS 137	54.66 %				
LIVER	MAXIMUM DOSE-	2.54D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	MN 54	8.80 %				
	FE 59	6.89 %				
	CO 58	17.91 %				
	CO 60	10.81 %				
	CS 137	45.61 %				
T. BODY	MAXIMUM DOSE-	1.78D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	5.10 %				
	CO 58	43.84 %				
	CO 60	16.59 %				
	CS 137	22.89 %				
THYROID	MAXIMUM DOSE-	3.16D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	CO 58	6.57 %				
	CO 60	8.20 %				
	I 131	69.45 %				
	I 133	11.16 %				
KIDNEY	MAXIMUM DOSE-	1.12D-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	8.09 %				
	MN 54	6.79 %				
	CO 58	18.49 %				
	CO 60	23.08 %				
	CS 137	35.43 %				
LUNG	MAXIMUM DOSE-	8.56D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	H 3	10.59 %				
	FE 59	6.75 %				
	CO 58	24.21 %				
	CO 60	30.22 %				
	CS 137	18.34 %				
GI-LLI	MAXIMUM DOSE-	4.49D-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	Co 50	11.34 %				
	Nb 95	80.45 %				

CATAWBA NUCLEAR STATION  
 RADIOACTIVE EFFLUENT RELEASES  
 DATE : 08/21/85

II. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR : 1985 SUBTOTAL
1. TOTAL NOBLE GASES	CURIES	1.55E+01	3.95E+01	4.90E+01
2. TOTAL HALOGENS	CURIES	0.00E+00	1.22E-09	1.22E-09
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	0.00E+00	0.00E+00	0.00E+00
4. TOTAL TRITIUM	CURIES	0.92E-05	1.59E-01	1.59E-01
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. RADIONUCLIDES RELEASED	CURIES			
PARTICULATES				
HALOGENS				
I-131		0.00E+00	0.01E-10	0.01E-10
I-133		0.00E+00	4.16E-10	4.16E-10
GASES				
KR-85M		2.09E-01	2.10E-02	2.31E-01
KR-85		1.72E-01	9.00E+00	1.72E-01
KR-87		7.02E-02	0.00E+00	7.02E-02
KR-88		9.16E-01	7.20E-03	9.23E-01
XE-133M		0.00E+00	1.20E-01	1.00E-01
XE-133		0.46E+00	3.21E+01	4.06E+01
XE-135		1.25E+00	5.35E-01	1.79E+00
AR-41		4.99E+00	6.37E-01	5.62E+00

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CATAWBA GAS RELEASES- SEMI-ANNUAL '85 NRC SUBMITTAL- 1ST QTR- 8/21/85 00000020

DISPERSION FACTOR- 3.10E-05 SEC/CU-M DEPOSITION FACTOR- 7.30E-10 M(-2)

BETA AIR DOSE- 3.02E-02 MILLIRADS GAMMA AIR DOSE- 5.63E-02 MILLIRADS

T BODY KR 88 AR 41	CRITICAL AGE- 8.58% 81.43%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
GI-TRACT KR 88 AR 41	CRITICAL AGE- 8.58% 81.43%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
BONE KR 88 AR 41	CRITICAL AGE- 8.58% 81.43%	INFANT	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
LIVER KR 88 AR 41	CRITICAL AGE- 8.58% 81.43%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
KIDNEY KR 88 AR 41	CRITICAL AGE- 8.58% 81.43%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
THYROID KR 88 AR 41	CRITICAL AGE- 8.58% 81.43%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
LUNG KR 88 AR 41	CRITICAL AGE- 8.57% 81.12%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 3.74D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
SKIN KR 88 XE133 XE135 AR 41	CRITICAL AGE- 6.91% 7.57% 6.46% 76.34%	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE- 6.37D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
THYROID KR 88 AR 41	AGE- 8.58% 81.43%	ADULT	CRITICAL PATHWAY- PLUME	TOTAL DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%
THYROID KR 88 AR 41	AGE- 8.58% 81.43%	INFANT	CRITICAL PATHWAY- PLUME	TOTAL DOSE- 3.73D-02 MILLIREM	PLUME CONTRIBUTION- 100.00%

CATAMBA GAS RELEASES- SEMI-ANNUAL '85 NRC SUBMITTAL- 2ND QTR- 8/21/85 00000020

DISPERSION FACTOR- 3.10E-05 SEC/CU-M DEPOSITION FACTOR- 7.30E-10 M(-2)  
 BETA AIR DOSE- 3.68E-02 MILLIRADS GAMMA AIR DOSE- 1.82E-02 MILLIRADS

T. BODY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.25D-02 MILLIREM	PLUME CONTRIBUTION-	89.57%
H	10.43%						
XE133	52.13%						
XE135	5.35%						
AR 41	31.10%						
GI-TRACT	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.25D-02 MILLIREM	PLUME CONTRIBUTION-	89.57%
H	10.43%						
XE133	52.13%						
XE135	5.35%						
AR 41	31.10%						
BONE	CRITICAL AGE-	INFANT	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.12D-02 MILLIREM	PLUME CONTRIBUTION-	100.00%
XE133	58.20%						
XE135	5.97%						
AR 41	34.73%						
LIVER	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.25D-02 MILLIREM	PLUME CONTRIBUTION-	89.57%
H	10.43%						
XE133	52.13%						
XE135	5.35%						
AR 41	31.10%						
KIDNEY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.25D-02 MILLIREM	PLUME CONTRIBUTION-	89.57%
H	10.43%						
XE133	52.13%						
XE135	5.35%						
AR 41	31.10%						
THYROID	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.25D-02 MILLIREM	PLUME CONTRIBUTION-	89.57%
H	10.43%						
XE133	52.13%						
XE135	5.35%						
AR 41	31.10%						
LUNG	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	1.28D-02 MILLIREM	PLUME CONTRIBUTION-	89.85%
H	10.15%						
XE133	53.30%						
XE135	5.26%						
AR 41	30.26%						
SKIN	CRITICAL AGE-	CHILD	CRITICAL PATHWAY- PLUME	MAXIMUM DOSE-	2.80D-02 MILLIREM	PLUME CONTRIBUTION-	95.35%
XE133	65.48%						
XE135	6.30%						
AR 41	22.20%						
THYROID	ADULT	CRITICAL PATHWAY- PLUME	TOTAL DOSE-	1.20D-02 MILLIREM	PLUME CONTRIBUTION-	93.16%	
H	AGE-						
XE133	6.84%						
XE135	54.22%						
AR 41	32.35%						
THYROID	INFANT	CRITICAL PATHWAY- PLUME	TOTAL DOSE-	1.20D-02 MILLIREM	PLUME CONTRIBUTION-	93.04%	
H	AGE-						
XE133	5.96%						
XE135	54.15%						
AR 41	32.31%						

CATAWBA GAS RELEASES- SEMI-ANNUAL '85 NRC SUBMITTAL- TOTAL- 8/21/85 00000020

DISPERSION FACTOR- 3.10E-05 SEC/CU-M DEPOSITION FACTOR- 7.30E-10 M(-2)

BETA AIR DOSE- 6.70E-02 MILLIRADS GAMMA AIR DOSE- 7.44E-02 MILLIRADS

T. BODY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.97D-02 MILLIREM	PLUME CONTRIBUTION-	97.39%
KR 88	6.57%							
XE133	16.53%							
AR 41	68.78%							
GI-TRACT	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.97D-02 MILLIREM	PLUME CONTRIBUTION-	97.39%
KR 88	6.57%							
XE133	16.53%							
AR 41	68.78%							
BONE	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.84D-02 MILLIREM	PLUME CONTRIBUTION-	100.00%
KR 88	6.75%							
XE133	16.97%							
AR 41	70.63%							
LIVER	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.97D-02 MILLIREM	PLUME CONTRIBUTION-	97.39%
KR 88	6.57%							
XE133	16.53%							
AR 41	68.78%							
KIDNEY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.97D-02 MILLIREM	PLUME CONTRIBUTION-	97.39%
KR 88	6.57%							
XE133	16.53%							
AR 41	68.78%							
THYROID	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.97D-02 MILLIREM	PLUME CONTRIBUTION-	97.39%
KR 88	6.57%							
XE133	16.53%							
AR 41	68.78%							
LUNG	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	5.02D-02 MILLIREM	PLUME CONTRIBUTION-	97.41%
KR 88	6.53%							
XE133	17.20%							
AR 41	68.11%							
SKIN	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	9.16D-02 MILLIREM	PLUME CONTRIBUTION-	98.58%
XE133	25.27%							
XE135	6.44%							
AR 41	59.77%							
THYROID	AGE-	ADULT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	4.92D-02 MILLIREM	PLUME CONTRIBUTION-	98.34%
KR 88	6.64%							
XE133	16.69%							
AR 41	69.45%							
THYROID	AGE-	INFANT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	4.92D-02 MILLIREM	PLUME CONTRIBUTION-	98.30%
KR 88	6.64%							
XE133	16.68%							
AR 41	69.43%							

### CATAWBA NUCLEAR STATION

The estimated percentage of error for both Liquid and Gaseous effluent release data at Catawba Nuclear Station has been determined to be +23%. This number was derived by summing the following individual estimates of errors:

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

DUKE POWER COMPANY

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

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

August 29, 1985

Dr. J. Nelson Grace, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Subject: Catawba Nuclear Station  
Docket Nos. 50-413 and 50-414  
Semi Annual Radioactive Effluent  
Release Report

Dear Sir:

Pursuant to Catawba Nuclear Station's Technical Specification 6.9.1.7, attached is the Semi Annual Radioactive Effluent Release Report for covering the period for initial criticality on January 7, 1985 through June 30, 1985. This report contains data for liquid and gaseous releases. No solid waste was released during this time period.

Very truly yours,

*H.B. Tucker*

Hal B. Tucker

WLH:slb

Attachment

cc: Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Palmetto Alliance  
2135½ Devine Street  
Columbia, South Carolina 29205

Robert Guild, Esq.  
P. O. Box 12097  
Charleston, South Carolina 29412

NRC Resident Inspector  
Catawba Nuclear Station

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

DESIGNATED ORIGINAL

Certified By *Carline Scott*

Send orig. to Maurice Beebe

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