Duke Power Company
Oconee Nuclear Station

Attachment 1

Radioactive Effluent Release and
Solid Waste Disposal Reports

OCONEE NUCLEAR STATION

The estimated percentage of error for both Liquid and Gaseous effluent release data at Oconee 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 = ± 5%

2) Counting error = ±15%

3) Sample preparation error = ± 3%

JMS/pja.002

OCONEE NUCLEAR STATION
EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION
REPORT DATE: 02/25/86
PERIOD COVERED: START DAY = 001 STOP DAY = 365

I. REGULATORY LIMITS - STATION

A. NOBLE GASES - AIR DOSE
1. CALENDAR QUARTER - GAMMA DOSE = 15 MRAD
2. CALENDAR QUARTER - BETA DOSE = 30 MRAD
3. CALENDAR YEAR - GAMMA DOSE = 30 MRAD
4. CALENDAR YEAR - BETA DOSE = 60 MRAD

B. LIQUID EFFLUENTS - DOSE
1. CALENDAR QUARTER - TOTAL BODY DOSE = 4.5 MREM
2. CALENDAR QUARTER - ORGAN DOSE = 15 MREM
3. CALENDAR YEAR - TOTAL BODY DOSE = 9 MREM
4. CALENDAR YEAR - ORGAN DOSE = 30 MREM

C. IODINE - 131 AND 133, TRITIUM, PARTICULATES W/T 1/2 > 8 DAYS - ORGAN DOSE
1. CALENDAR QUARTER = 22.5 MREM
2. CALENDAR YEAR = 45 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. 7.95E+02 = TOTAL NUMBER OF BATCH RELEASES
2. 1.55E+05 = TOTAL TIME(MIN.) FOR BATCH RELEASES.
3. 3.89E+03 = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE.
4. 1.95E+02 = AVERAGE TIME(MIN.) FOR A BATCH RELEASE.
5. 2.00E+00 = MINIMUM TIME(MIN.) FOR A BATCH RELEASE.
6. 1.22E+06 = AVERAGE DILUTION WATER FLOW DURING RELEASES(GPM).

B. GASEOUS EFFLUENT
1. 2.70E+02 = TOTAL NUMBER OF BATCH RELEASES.
2. 2.98E+05 = TOTAL TIME(MIN.) FOR BATCH RELEASES.
3. 7.39E+03 = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE.
4. 1.10E+03 = AVERAGE TIME(MIN.) FOR A BATCH RELEASE.
5. 1.41E+02 = MINIMUM TIME(MIN.) FOR A BATCH RELEASE.

VI. ABNORMAL RELEASES

A. LIQUID
1. NUMBER OF RELEASES 0
2. TOTAL ACTIVITY RELEASED(CURIES) 0

B. GASEOUS
1. NUMBER OF RELEASES 0
2. TOTAL ACTIVITY RELEASED(CURIES) 0

SUPPLEMENTAL REPORT PAGE 2
OCONEE NUCLEAR STATION

VALUES REPRESENTED BY "0.00E+00" WITHIN THE BODY OF THE SEMI-ANNUAL AND/OR ANNUAL REPORT ARE BELOW THE MINIMUM DETECTABLE LIMITS OF THE OCONEE COUNTING SYSTEMS. TYPICAL MDA'S FOR THE OCONEE COUNTING SYSTEM'S ARE LISTED BELOW:

ISOTOPE	ENERGY(Kev)	AVERAGE MDA
XE-133	80	1.32E-06
CE-144	133	1.42E-06
KR-88	196	1.82E-06
XE-135	249	5.04E-07
KR-87	402	9.99E-07
CS-137	661	3.17E-07
MO-99	778	1.22E-06
MN-54	834	2.18E-07
ZN-65	1115	4.27E-07
CO-60	1332	2.24E-07

OCONEE FUEL CYCLE DOSE

1985

TOTAL BODY	1.91 mrem
MAXIMUM ORGAN (TEEN-LIVER)	2.67 mrem

OCONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
DATE : 02/19/86

I. LIQUID RELEASES

YEAR : 1985

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
1. GROSS RADIOACTIVITY						
A. TOTAL RELEASE	CURIES	6.89E-01	6.44E-01	1.91E+00	9.19E-01	4.16E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	5.25E-09	4.71E-09	1.10E-08	3.93E-09	6.17E-09
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	1.43E-07	1.26E-07	3.96E-07	1.49E-07	3.96E-07
2. TRITTIUM						
A. TOTAL RELEASE	CURIES	2.93E+02	2.26E+02	3.82E+02	3.41E+02	1.24E+03
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.23E-06	1.65E-06	2.20E-06	1.46E-06	1.84E-06
3. DISSOLVED NOBLE GASES						
A. TOTAL RELEASE	CURIES	6.79E+00	1.48E+00	7.37E+00	1.61E+00	1.73E+01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	5.18E-08	1.09E-08	4.25E-08	6.88E-09	2.55E-08
4. GROSS ALPHA ACTIVITY						
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	4.27E+07	4.49E+07	6.82E+07	1.70E+07	1.73E+08
6. VOLUME OF DILUTION WATER	LITERS	1.31E+11	1.37E+11	1.73E+11	2.34E+11	6.75E+11
7. RADIONUCLIDES RELEASED	CURIES					
NA-24		2.08E-04	1.30E-04	1.73E-03	1.48E-04	2.22E-03
CR-51		1.13E-02	1.10E-02	4.11E-02	2.48E-02	8.81E-02
MN-54		2.34E-03	1.30E-03	4.50E-03	4.68E-03	1.28E-02
FE-55		7.61E-02	1.76E-01	6.54E-01	1.54E-01	1.06E+00
FE-59		1.43E-04	1.97E-04	1.12E-04	1.94E-04	6.46E-04
CO-57		2.42E-04	5.78E-05	3.40E-04	3.31E-04	9.71E-04
CO-58		8.84E-02	7.99E-02	8.78E-02	1.07E-01	3.63E-01
CO-60		1.62E-02	9.63E-03	5.20E-02	5.82E-02	1.36E-01
BR-84		1.19E-03	0.00E+00	0.00E+00	0.00E+00	1.19E-03
SR-89		0.00E+00	0.00E+00	1.83E-03	0.00E+00	1.83E-03
SR-90		2.22E-04	9.32E-05	5.13E-04	0.00E+00	8.28E-04
SR-92		5.34E-04	9.20E-04	2.28E-03	0.00E+00	3.73E-03
Y-92		6.09E-04	0.00E+00	0.00E+00	0.00E+00	6.09E-04
ZR-95		8.15E-04	5.05E-04	1.99E-04	2.11E-04	1.73E-03
NB-95		3.29E-03	1.66E-03	4.89E-03	2.84E-03	1.27E-02
NB-97		3.62E-03	1.80E-03	1.54E-03	1.83E-04	7.15E-03
TC-99M		9.93E-06	3.41E-05	0.00E+00	0.00E+00	4.40E-05
RU-103		4.74E-04	5.50E-04	1.99E-04	0.00E+00	1.22E-03
RU-106		4.60E-04	0.00E+00	0.00E+00	0.00E+00	4.60E-04
AG-110M		1.08E-02	1.50E-02	7.13E-02	1.39E-01	2.36E-01
SB-122		5.42E-04	2.70E-03	1.68E-03	1.05E-03	5.97E-03
SB-124		4.09E-03	7.51E-03	6.56E-02	1.04E-02	8.77E-02
SB-125		2.15E-01	2.61E-01	8.16E-01	3.30E-01	1.62E+00
I-131		4.63E-02	9.43E-03	1.65E-02	3.13E-02	1.04E-01
I-132		8.08E-04	6.13E-03	5.96E-04	1.44E-04	7.67E-03
I-133		1.13E-03	2.13E-04	1.06E-03	9.88E-04	3.39E-03
I-134		3.79E-04	4.08E-05	0.00E+00	0.00E+00	4.20E-04
CS-134		3.48E-02	1.19E-02	2.44E-02	8.73E-03	7.98E-02
CS-136		4.38E-05	0.00E+00	1.11E-05	0.00E+00	5.49E-05
CS-137		1.30E-01	3.63E-02	5.11E-02	1.92E-02	2.37E-01
CS-138		3.26E-02	7.62E-03	0.00E+00	5.62E-06	4.02E-02
BA-139		0.00E+00	0.00E+00	0.00E+00	2.21E-02	2.21E-02
BA-140		0.00E+00	0.00E+00	4.14E-05	0.00E+00	4.14E-05
LA-140		4.62E-03	9.96E-04	1.03E-02	3.53E-03	1.94E-02
CE-141		1.34E-04	0.00E+00	0.00E+00	0.00E+00	1.34E-04
CE-144		2.18E-04	1.35E-04	0.00E+00	3.39E-04	6.92E-04
W-187		0.00E+00	3.97E-04	0.00E+00	0.00E+00	3.97E-04
NP-239		1.30E-03	4.27E-04	5.40E-04	0.00E+00	2.27E-03
AR-41		0.00E+00	1.86E-05	0.00E+00	0.00E+00	1.86E-05
KR-85M		0.00E+00	0.00E+00	1.89E-04	0.00E+00	1.89E-04
KR-85		0.00E+00	5.17E-03	0.00E+00	0.00E+00	5.17E-03
XE-131M		1.23E-01	4.24E-02	7.00E-02	3.76E-03	2.40E-01
XE-133M		5.48E-02	6.37E-03	8.14E-02	1.74E-02	1.60E-01
XE-133		6.57E+00	1.42E+00	6.96E+00	1.53E+00	1.65E+01
XE-135		4.52E-02	1.37E-02	2.52E-01	6.19E-02	3.73E-01

OCONEE LIQUID DOSE - 3RD QTR 1985 RELEASES- NRC SUBMITTAL 00000010

SKIN	MAXIMUM DOSE-	1.17D-02	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE		
	CO 60	28.22 %							
	AG 110M	6.16 %							
	SB 125	46.25 %							
	CS 137	13.19 %							
BONE	MAXIMUM DOSE-	4.96D-01	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	CS 134	23.98 %							
	CS 137	70.24 %							
LIVER	MAXIMUM DOSE-	6.35D-01	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH		
	CS 134	35.86 %							
	CS 137	56.95 %							
T. BODY	MAXIMUM DOSE-	4.60D-01	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	9.51 %							
	CS 134	39.91 %							
	CS 137	49.40 %							
THYROID	MAXIMUM DOSE-	1.63D-01	MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING		
	H 3	34.63 %							
	I 131	64.67 %							
KIDNEY	MAXIMUM DOSE-	2.36D-01	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH		
	H 3	13.08 %							
	CS 134	30.75 %							
	CS 137	52.45 %							
LUNG	MAXIMUM DOSE-	1.28D-01	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING		
	H 3	45.58 %							
	CS 134	17.03 %							
	CS 137	30.77 %							
GI-LLI	MAXIMUM DOSE-	1.91D-01	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	22.85 %							
	NB 95	48.32 %							
	SB 125	9.63 %							

OCONEE LIQUID DOSE - 4TH QTR 1985 RELEASES- NRC SUBMITTAL 00000010

SKIN	MAXIMUM DOSE-	6.05D-03	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE		
	CO 60	45.05 %							
	AG 110M	17.13 %							
	SB 125	26.67 %							
	CS 137	7.07 %							
BONE	MAXIMUM DOSE-	1.33D-01	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	CS 134	23.60 %							
	CS 137	72.60 %							
LIVER	MAXIMUM DOSE-	1.88D-01	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH		
	H 3	10.87 %							
	CS 134	32.11 %							
	CS 137	53.56 %							
T. BODY	MAXIMUM DOSE-	1.43D-01	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	20.22 %							
	CS 134	34.02 %							
	CS 137	44.21 %							
THYROID	MAXIMUM DOSE-	1.86D-01	MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING		
	H 3	20.04 %							
	I 131	79.54 %							
KIDNEY	MAXIMUM DOSE-	8.63D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	H 3	44.53 %							
	CS 134	18.54 %							
	CS 137	35.01 %							
LUNG	MAXIMUM DOSE-	5.76D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING		
	H 3	66.78 %							
	CS 134	10.00 %							
	CS 137	18.98 %							
GI-LLI	MAXIMUM DOSE-	9.46D-02	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	30.51 %							
	CO 60	5.18 %							
	NB 95	41.97 %							
	AG 110M	7.59 %							
	SB 125	5.82 %							

OCONEE LIQUID DOSE - TOTAL 1985 RELEASES- NRC SUBMITTAL 00000010

SKIN	MAXIMUM DOSE-	3.16D-02	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE		
	CO 60	27.73 %							
	AG 110M	7.66 %							
	SB 125	34.49 %							
	CS 134	5.13 %							
	CS 137	22.98 %							
BONE	MAXIMUM DOSE-	2.09D+00	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	CS 134	18.94 %							
	CS 137	78.68 %							
LIVER	MAXIMUM DOSE-	2.60D+00	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH		
	CS 134	29.16 %							
	CS 137	65.68 %							
T. BODY	MAXIMUM DOSE-	1.84D+00	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	7.85 %							
	CS 134	33.21 %							
	CS 137	58.28 %							
THYROID	MAXIMUM DOSE-	8.67D-01	MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING		
	H 3	21.53 %							
	I 131	78.05 %							
KIDNEY	MAXIMUM DOSE-	9.50D-01	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH		
	H 3	10.74 %							
	CS 134	25.44 %							
	CS 137	61.54 %							
LUNG	MAXIMUM DOSE-	4.66D-01	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	H 3	41.25 %							
	CS 134	15.53 %							
	CS 137	39.79 %							
GI-LLI	MAXIMUM DOSE-	5.38D-01	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	26.82 %							
	NB 95	45.37 %							
	SB 125	6.91 %							
	CS 137	6.09 %							

OCONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
DATE : 02/19/86

II. AIRBORNE RELEASES — YEAR : 1985

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
1. TOTAL NOBLE GASES	CURIES	9.82E+03	5.14E+03	4.85E+03	3.65E+03	2.35E+04
2. TOTAL HALOGENS	CURIES	1.97E-03	9.60E-04	5.66E-04	1.46E-03	4.95E-03
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	1.03E-03	3.63E-06	1.57E-04	3.69E-06	1.19E-03
4. TOTAL TRITIUM	CURIES	1.10E+01	3.54E-01	1.66E+01	1.48E+01	4.28E+01
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.00E+00	0.00E+00	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	1.60E+03	1.60E+03
7. RADIONUCLIDES RELEASED	CURIES					
PARTICULATES						
MN-54		1.06E-05	3.01E-07	6.38E-07	0.00E+00	1.16E-05
FE-59		0.00E+00	0.00E+00	1.41E-08	0.00E+00	1.41E-08
CO-58		3.75E-05	6.48E-07	5.01E-06	2.87E-07	4.34E-05
CO-60		7.70E-05	1.44E-06	2.91E-06	2.10E-07	8.15E-05
SR-89		1.55E-11	3.82E-11	0.00E+00	3.61E-11	8.98E-11
SR-90		0.00E+00	0.00E+00	1.03E-11	0.00E+00	1.03E-11
ZR-95		0.00E+00	0.00E+00	7.52E-08	0.00E+00	7.52E-08
NB-95		0.00E+00	2.73E-09	2.49E-07	0.00E+00	2.52E-07
RU-103		1.76E-09	0.00E+00	0.00E+00	0.00E+00	1.76E-09
AG-110M		0.00E+00	1.35E-08	5.07E-07	7.13E-08	5.92E-07
CS-134		1.70E-04	3.66E-08	2.74E-05	1.00E-06	1.98E-04
CS-136		5.93E-11	0.00E+00	0.00E+00	0.00E+00	5.93E-11
CS-137		7.34E-04	1.26E-06	1.20E-04	2.12E-06	8.57E-04
HALOGENS						
I-131		1.70E-03	7.45E-04	4.86E-04	7.95E-04	3.73E-03
I-133		2.67E-04	2.15E-04	7.94E-05	6.64E-04	1.22E-03
GASES						
KR-85M		6.06E+00	2.47E+00	1.48E+00	3.68E+01	4.68E+01
KR-85		4.63E+02	2.86E+02	1.43E+02	1.84E+01	9.12E+02
KR-87		2.28E-03	1.54E-01	0.00E+00	6.74E-03	1.63E-01
KR-88		8.56E-01	3.17E+00	1.47E+00	3.23E-01	5.82E+00
XE-131M		1.35E+02	7.85E+01	6.13E+01	5.63E+01	3.31E+02
XE-133M		7.01E+01	3.62E+01	3.57E+01	4.58E+01	1.88E+02
XE-133		9.01E+03	4.67E+03	4.57E+03	3.36E+03	2.16E+04
XE-135		1.31E+02	5.78E+01	3.23E+01	1.08E+02	3.29E+02
AR-41		1.59E-02	3.06E+00	1.50E+00	1.58E+01	2.04E+01

OCONEE GAS DOSE- 3RD QTR 1985 RELEASES- NRC SUBMITTAL 00000020

DISPERSION FACTOR- 4.10E-07 SEC/CU-M DEPOSITION FACTOR- 3.00E-10 M(-2)

BETA AIR DOSE- 6.88E-02 MILLIRADS GAMMA AIR DOSE- 2.26E-02 MILLIRADS

T.BODY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.48D-02	MILLIREM	PLUME CONTRIBUTION-	89.61%
H 3	10.21%								
XE133	82.71%								
GI-TRACT	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.48D-02	MILLIREM	PLUME CONTRIBUTION-	89.68%
H 3	10.22%								
XE133	82.78%								
BONE	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.33D-02	MILLIREM	PLUME CONTRIBUTION-	99.36%
XE133	91.72%								
LIVER	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.48D-02	MILLIREM	PLUME CONTRIBUTION-	89.24%
H 3	10.17%								
XE133	82.38%								
KIDNEY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.48D-02	MILLIREM	PLUME CONTRIBUTION-	89.51%
H 3	10.20%								
XE133	82.63%								
THYROID	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.62D-02	MILLIREM	PLUME CONTRIBUTION-	81.50%
I 131	14.32%								
XE133	75.23%								
LUNG	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.55D-02	MILLIREM	PLUME CONTRIBUTION-	90.09%
H 3	9.76%								
XE133	83.11%								
SKIN	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	4.15D-02	MILLIREM	PLUME CONTRIBUTION-	96.32%
KR 85	6.06%								
XE133	83.09%								
THYROID	AGE-	ADULT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	1.47D-02	MILLIREM	PLUME CONTRIBUTION-	89.91%
H 3	6.80%								
XE133	82.99%								
THYROID	AGE-	INFANT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	1.62D-02	MILLIREM	PLUME CONTRIBUTION-	81.50%
I 131	14.32%								
XE133	75.23%								

OCONEE GAS DOSE- 4TH QTR 1985 RELEASES- NRC SUBMITTAL 00000020

DISPERSION FACTOR- 4.10E-07 SEC/CU-M DEPOSITION FACTOR- 3.00E-10 M(-2)
BETA AIR DOSE- 5.31E-02 MILLIRADS GAMMA AIR DOSE- 2.10E-02 MILLIRADS

T.BODY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.40D-02	MILLIREM	PLUME CONTRIBUTION-	90.35%
H 3	9.62%								
XE133	64.31%								
XE135	12.73%								
AR 41	9.09%								
GI-TRACT	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.40D-02	MILLIREM	PLUME CONTRIBUTION-	90.37%
H 3	9.63%								
XE133	64.32%								
XE135	12.73%								
AR 41	9.09%								
BONE	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.26D-02	MILLIREM	PLUME CONTRIBUTION-	99.91%
XE133	71.12%								
XE135	14.07%								
AR 41	10.06%								
LIVER	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.40D-02	MILLIREM	PLUME CONTRIBUTION-	90.32%
H 3	9.62%								
XE133	64.29%								
XE135	12.72%								
AR 41	9.09%								
KIDNEY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.40D-02	MILLIREM	PLUME CONTRIBUTION-	90.30%
H 3	9.62%								
XE133	64.28%								
XE135	12.72%								
AR 41	9.09%								
THYROID	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.71D-02	MILLIREM	PLUME CONTRIBUTION-	73.93%
I 131	22.28%								
XE133	52.63%								
XE135	10.41%								
AR 41	7.44%								
LUNG	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	1.45D-02	MILLIREM	PLUME CONTRIBUTION-	90.72%
H 3	9.28%								
XE133	65.17%								
XE135	12.51%								
AR 41	8.77%								
SKIN	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	3.61D-02	MILLIREM	PLUME CONTRIBUTION-	96.28%
XE133	70.10%								
XE135	13.02%								
AR 41	5.63%								
THYROID	AGE-	ADULT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	1.43D-02	MILLIREM	PLUME CONTRIBUTION-	88.25%
H 3	6.24%								
I 131	5.35%								
XE133	62.82%								
XE135	12.43%								
AR 41	8.88%								
THYROID	AGE-	INFANT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	1.71D-02	MILLIREM	PLUME CONTRIBUTION-	73.93%
I 131	22.28%								
XE133	52.63%								
XE135	10.41%								
AR 41	7.44%								

OCONEE GAS DOSE- TOTAL 1985 RELEASES- NRC SUBMITTAL 00000020

DISPERSION FACTOR- 4.10E-07 SEC/CU-M DEPOSITION FACTOR- 3.00E-10 M(-2)

BETA AIR DOSE- 3.39E-01 MILLIRADS GAMMA AIR DOSE- 1.13E-01 MILLIRADS

T.BODY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	7.11D-02	MILLIREM	PLUME CONTRIBUTION-	94.23%	
H 3	5.47%									
XE133	81.31%									
XE135	7.62%									
GI-TRACT	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	7.10D-02	MILLIREM	PLUME CONTRIBUTION-	94.35%	
H 3	5.48%									
XE133	81.41%									
XE135	7.63%									
BONE	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	6.76D-02	MILLIREM	PLUME CONTRIBUTION-	99.08%	
XE133	85.49%									
XE135	8.02%									
LIVER	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	7.15D-02	MILLIREM	PLUME CONTRIBUTION-	93.65%	
H 3	5.44%									
XE133	80.81%									
XE135	7.58%									
KIDNEY	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	7.12D-02	MILLIREM	PLUME CONTRIBUTION-	94.08%	
H 3	5.47%									
XE133	81.18%									
XE135	7.61%									
THYROID	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	8.67D-02	MILLIREM	PLUME CONTRIBUTION-	77.20%	
I 131	20.58%									
XE133	66.62%									
XE135	6.25%									
LUNG	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	7.44D-02	MILLIREM	PLUME CONTRIBUTION-	94.53%	
H 3	5.23%									
XE133	81.62%									
XE135	7.42%									
SKIN	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	PLUME	MAXIMUM DOSE-	2.08D-01	MILLIREM	PLUME CONTRIBUTION-	98.07%	
KR 85	7.71%									
XE133	78.27%									
XE135	6.89%									
THYROID	AGE- ADULT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	7.33D-02	MILLIREM	PLUME CONTRIBUTION-	91.36%		
XE133	78.84%									
XE135	7.39%									
THYROID	AGE- INFANT	CRITICAL PATHWAY-	PLUME	TOTAL DOSE-	8.67D-02	MILLIREM	PLUME CONTRIBUTION-	77.20%		
I 131	20.58%									
XE133	66.62%									
XE135	6.25%									

OCONEE NUCLEAR STATION

SOLID RADIOACTIVE WASTE SHIPPED TO A DISPOSAL FACILITY

REPORT PERIOD 7/1/85 THROUGH 12/31/85

	TYPES OF WASTE SHIPPED	NUMBER OF SHIPMENTS	NUMBER OF CONTAINERS	WASTE CLASS	CONT. TYPE	BURIAL VOLUME (ft^3)	BURIAL VOLUME (m^3)	TOTAL ACT. Ci	EST. TOTAL ERROR %
1	WASTE FROM LIQUID SYSTEMS								
	(A) Dewatered Powdex Resins	10	10	10A	STC	2000	56.60	.3173	10
	(B) Dewatered Bead Resins	Ø	Ø	N/A	N/A	Ø	Ø	Ø	N/A
	(C) Evaporator Concentrates	Ø	Ø	N/A	N/A	Ø	Ø	Ø	N/A
	(D) Dewatered Mechanical Filters	1	3	3A	STC	276	7.81	.034	15
	(E) Dewatered Demineralizers	6	18	1B, 17C	STC	723.6	20.48	197.786	10
	(F) Solidified (cement) oils, acids, Sludges	1	1	1A	STC	200	5.66	.0079	10
2	DRY SOLID WASTE								
	(A) Dry Active Waste (compacted)	15	105	105A	STC	9660	273.38	10.925	15
	(B) Dry Active Waste (non-compacted)	9	29	29A	STC	2387	67.55	2.122	15
	(C) Irradiated Components	1	1	1C	B	57.4	1.62	1202.8	15
	TOTALS	43	167	148A, 1B, 18C	---	15,304	433.10	1,413.99	---

SUMMARY OF MAJOR RADIOACTIVE COMPOSITION

TYPES OF WASTES

1. Wastes from Liquid Systems	Radionuclide	% Abundance
(A) Dewatered Powdex Resin	Mn54	0.3
	Co50	0.2
	Co58	0.6
	Co60	1.9
	Cs134	13.4
	Cs137	36.2
	H3	21.4
	Ni63	2.6
	Sr90	1.3
	Fe55	1.1
	Cm242	0.2
	Pu241	12.1
	Σ TRU	0.4
	Xe133	0.5
	Sb122	0.8
	I131	7.0
(B) Dewatered Bead Resin	(None shipped this period)	
(C) Solidified Evaporator Concentrates (Cement)	(None shipped this period)	
(D) Dewatered Mechancial Filter	Mn54	0.2
	Co58	4.3
	Co60	5.0
	Ag110m	1.0
	Cs134	20.3
	Cs137	31.0
	Fe55	3.0
	H3	9.0
	Ni63	7.0
	I131	7.0
	Xe133	0.5
	Sr90	1.1
	Pu241	10.1
	Cm242	0.2
	Σ TRU	0.3

	Radionuclide	% Abundance
(E) Dewatered Demineralizers	Cr51	0.5
	Mn54	16.3
	Co57	0.2
	Co58	16.4
	Co60	2.0
	Fe55	1.9
	Fe59	0.1
	Ag110m	0.5
	Sb125	1.0
	I129	0.1
	I131	0.6
	Cs134	16.7
	Cs136	0.1
	Cs137	18.9
	Ni63	24.2
	Pu241	0.4
(F) Solidified Misc. Liquid (Cement)	Mn54	0.5
	Co58	0.4
	Co60	6.9
	Ag110m	1.8
	Cs134	4.6
	Cs137	60.0
	H3	6.3
	Fe55	18.1
	Ni63	1.4
2. Dry Solid Wastes		
(A) Dry Active Waste (Compacted)	Cr51	4.0
	Mn54	1.9
	Co58	27.5
	Co60	5.5
	Ag110m	0.8
	Nb95	0.9
	Cs134	16.3
	Cs137	27.9
	Fe55	14.0
	Ni63	1.1

Duke Power Company
Oconee Nuclear Station

Attachment 2

Summary of Unplanned Radioactive
Releases to Unrestricted Areas

Unplanned Radioactive Releases To Unrestricted Areas

None

Duke Power Company
Oconee Nuclear Station

Attachment 3

Meteorological Data Concurrent
With Gaseous Effluent Releases

PASQUILL STABILITY A

	WIND SPEED CLASS										
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	>9.50 M/S	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR											
-N-	.	2	2	3	.	.	.	.	.	.	7
-NNE-	1	3	.	.	.	.	.	.	.	.	4
-NE-	.	1	7	1	1	2	.	.	.	.	12
-ENE-	.	.	8	16	9	6	3	1	.	.	43
-E-	1	7	13	10	3	1	1	.	.	.	36
-ESE-	.	4	7	.	.	.	.	.	.	.	11
-SE-	2	3	6	4	.	.	.	.	.	.	15
-SSE-	3	13	6	.	.	.	.	.	.	.	22
-S-	.	13	18	4	1	1	.	.	.	.	37
-SSW-	3	18	31	27	1	1	.	.	.	.	81
-SW-	3	18	23	15	2	.	.	.	.	.	61
-WSW-	4	16	2	.	.	.	.	.	.	.	22
-W-	5	17	3	.	.	1	.	.	.	.	26
-WNW-	1	1	1	1	2	2	.	1	2	1	12
-NW-	.	1	.	1	.	.	.	.	.	.	2
-NNW-	.	2	1	.	.	.	.	.	.	.	3
TOTAL	23	119	128	82	19	14	4	2	2	1	394

PASQUILL STABILITY C

	WIND SPEED CLASS						
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	TOTAL
SECTOR	NO.	NO.	NO.	NO.	NO.	NO.	NO.
-N-	2	1	.	.	.	.	3
-NNE-	1	3	.	.	.	.	4
-NE-	3	2	.	.	1	1	7
-ENE-	1	1	2	6	1	1	12
-E-	.	1	3	.	1	.	5
-ESE-	1	3	.	.	1	.	5
-SE-	2	2	1	.	.	.	5
-SSE-	.	2	3	2	.	.	7
-S-	3	3	3	1	.	.	10
-SSW-	3	4	4	1	1	.	13
-SW-	5	5	6	2	.	.	18
-WSW-	2	2	.	.	.	.	4
-W-	5	5	.	.	.	.	10
-WNW-	1	5	.	.	.	.	6
-NW-	1	1	.	.	.	.	2
-NNW-	.	.	.	.	1	.	1
TOTAL	30	40	22	12	6	2	112

1985 METEOROLOGY JOINT FREQUENCIES: OCONEE NUCLEAR STATION (3rd QUARTER)

10:38 TUESDAY, FEBRUARY 25, 1986

PASQUILL STABILITY D

	WIND SPEED CLASS									
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	TOTAL
SECTOR	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
-N-	7	19	7	3	.	.	.	.	.	36
-NNE-	12	13	5	1	.	.	.	.	.	31
-NE-	7	7	7	9	7	4	1	.	.	42
-ENE-	1	4	8	7	13	10	7	1	1	52
-E-	4	7	5	8	4	.	.	.	.	28
-ESE-	3	2	3	2	.	.	.	.	.	10
-SE-	3	10	8	.	.	.	.	.	.	21
-SSE-	8	11	4	3	1	1	.	.	.	28
-S-	15	14	13	5	.	.	.	1	.	48
-SSW-	6	7	16	5	3	.	.	.	.	37
-SW-	13	11	11	9	.	.	.	.	.	44
-WSW-	10	7	2	2	1	.	.	.	.	22
-W-	13	6	1	1	.	.	.	.	.	21
-WNW-	18	1	2	.	1	.	.	.	.	22
-NW-	14	2	2	1	2	.	1	.	.	22
-NNW-	6	4	2	1	.	1	.	.	.	14
-CALM-	1	.	.	.	.	.	.	.	.	1
TOTAL	141	125	96	57	32	16	9	2	1	479

PASQUILL STABILITY E

	WIND SPEED CLASS							
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR								
-N-	27	63	44	4	1	.	.	139
-NNE-	13	25	11	5	.	.	.	54
-NE-	10	35	22	28	16	12	.	123
-ENE-	9	16	29	20	9	2	1	86
-E-	14	15	12	6	.	1	.	48
-ESE-	12	9	6	1	.	.	.	28
-SE-	13	14	9	2	.	.	.	38
-SSE-	4	7	6	.	1	.	.	18
-S-	10	9	12	8	.	1	.	40
-SSW-	4	8	12	3	2	.	.	29
-SW-	9	16	18	5	1	.	.	49
-WSW-	13	13	8	1	1	.	.	36
-W-	16	6	2	1	.	.	.	25
-WNW-	10	13	5	3	.	.	.	31
-NW-	20	19	7	2	.	.	.	48
-NNW-	22	37	20	3	.	.	.	82
-CALM-	14	.	.	.	.	.	.	14
TOTAL	220	305	223	92	31	16	1	888

PASQUILL STABILITY F

	WIND SPEED CLASS						
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	7.50-8.49	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR							
-N-	20	27	19	.	.	.	66
-NNE-	13	13	7	2	1	.	36
-NE-	14	6	4	2	.	.	26
-ENE-	7	1	4	3	1	.	16
-E-	7	5	2	1	.	.	15
-ESE-	3	2	.	.	.	.	5
-SE-	4	4	1	.	.	.	9
-SSE-	2	1	1	.	.	1	5
-S-	2	7	3	3	.	.	15
-SSW-	3	.	1	.	.	.	4
-SW-	4	2	3	.	.	.	9
-WSW-	4	3	.	.	.	.	7
-W-	8	1	1	1	.	.	11
-WNW-	11	4	.	.	.	.	15
-NW-	16	9	1	1	.	.	27
-NNW-	17	16	4	.	.	.	37
-CALM-	8	.	.	.	.	.	8
TOTAL	143	101	51	13	2	1	311

PASQUILL STABILITY G

	WIND SPEED CLASS				
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	TOTAL
	NO.	NO.	NO.	NO.	NO.
SECTOR					
-N-	2	1	1	.	4
-NNE-	1	.	.	.	1
-NE-	1	.	.	.	1
-ENE-	.	.	1	.	1
-E-	.	.	.	1	1
-ESE-	.	1	.	.	1
TOTAL	4	2	2	1	9

ALL STABILITY CLASSES

	WIND SPEED CLASS										
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	>9.50 M/S	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR											
-N-	58	113	73	10	1	.	.	.	.	.	255
-NNE-	41	57	23	8	1	.	.	.	.	.	130
-NE-	35	51	40	40	25	19	1	.	.	.	211
-ENE-	18	22	52	52	33	19	11	2	1	.	210
-E-	26	35	35	26	8	2	1	.	.	.	133
-ESE-	19	21	16	3	1	.	.	.	.	.	60
-SE-	24	33	25	6	.	.	.	.	.	.	88
-SSE-	17	34	20	5	2	1	.	1	.	.	80
-S-	30	46	49	21	1	2	.	1	.	.	150
-SSW-	19	37	64	36	7	1	.	.	.	.	164
-SW-	34	52	61	31	3	.	.	.	.	.	181
-WSW-	33	41	12	3	2	.	.	.	.	.	91
-W-	47	35	7	3	.	1	.	.	.	.	93
-WNW-	41	24	8	4	3	2	.	1	2	1	86
-NW-	51	32	10	5	2	.	1	.	.	.	101
-NNW-	45	59	27	4	1	1	.	.	.	.	137
-CALM-	23	.	.	.	.	.	.	.	.	.	23
TOTAL	561	692	522	257	90	48	14	5	3	1	2193

PASQUILL STABILITY A

	WIND SPEED CLASS										
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	>9.50 M/S	TOTAL
SECTOR	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
-N-	.	1	2	.	.	.	.	.	.	.	3
-NNE-	.	1	1	.	.	.	.	.	.	.	2
-NE-	1	6	2	1	1	.	1	.	.	.	12
-ENE-	1	3	2	3	8	1	2	1	2	1	24
-E-	1	6	4	3	3	.	.	.	.	.	17
-ESE-	1	4	6	.	.	.	.	.	.	.	11
-SE-	1	6	4	2	1	.	.	.	.	.	14
-SSE-	1	3	4	1	.	.	.	.	.	.	9
-S-	.	3	8	10	2	.	.	.	.	.	23
-SSW-	2	4	17	26	9	3	1	.	.	.	62
-SW-	4	7	13	8	4	3	1	1	.	.	41
-WSW-	.	5	1	3	.	1	2	.	.	.	12
-W-	3	6	1	2	4	5	2	2	.	2	27
-WNW-	.	3	.	1	3	1	2	1	1	.	12
-NW-	1	.	1	1	2	.	1	2	.	.	8
TOTAL	16	58	66	61	37	14	12	7	3	3	277

1985 METEOROLOGY JOINT FREQUENCIES: OCONEE NUCLEAR STATION (4th QUARTER)

10:34 TUESDAY, FEBRUARY 25, 1986

PASQUILL STABILITY C

	WIND SPEED CLASS										
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	>9.50 M/S	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR											
-NNE-	1	1	.	.	.	.	.	.	.	.	2
-NE-	1	.	1	.	2	.	2	.	1	.	7
-ENE-	.	5	6	2	1	2	2	.	3	.	21
-E-	1	2	3	1	.	1	.	.	.	.	8
-ESE-	.	.	1	.	.	.	.	.	.	.	1
-SE-	1	2	1	.	.	.	.	.	.	.	4
-SSE-	2	1	.	.	.	.	.	.	.	.	3
-S-	2	2	2	2	1	1	.	.	.	.	10
-SSW-	.	.	3	1	4	1	.	.	.	.	9
-SW-	2	3	4	3	.	1	.	1	.	.	14
-WSW-	1	2	1	1	1	.	.	.	.	.	6
-W-	1	2	.	1	.	.	.	1	.	1	6
-WNW-	2	1	.	.	.	1	.	1	.	.	5
-NW-	.	2	.	.	.	.	1	.	.	.	3
-NNW-	1	.	.	.	.	.	.	.	.	.	1
TOTAL	15	23	22	11	9	7	5	3	4	1	100

PASQUILL STABILITY D

	WIND SPEED CLASS										
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	>9.50 M/S	TOTAL
SECTOR	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
-N-	3	7	4	2	.	.	.	.	.	.	16
-NNE-	5	5	6	3	1	.	.	.	.	.	20
-NE-	13	13	10	16	7	5	7	1	.	.	72
-ENE-	5	12	34	18	18	17	14	13	9	9	149
-E-	5	11	16	7	3	2	1	1	.	.	46
-ESE-	3	8	8	1	1	.	1	.	.	.	22
-SE-	17	7	11	4	.	.	.	.	.	.	39
-SSE-	11	7	3	1	.	.	.	.	.	.	22
-S-	8	10	13	7	3	.	.	.	.	.	41
-SSW-	9	14	10	12	7	4	.	.	.	.	56
-SW-	12	11	5	9	9	6	3	.	.	.	55
-WSW-	11	6	6	8	6	3	4	.	.	.	44
-W-	12	5	2	4	6	4	5	3	2	1	44
-WNW-	3	5	1	3	4	6	5	4	3	.	34
-NW-	11	3	1	.	.	1	2	3	.	1	22
-NNW-	8	5	2	1	.	1	.	.	.	.	17
-CALM-	4	.	.	.	.	.	.	.	.	.	4
TOTAL	140	129	132	96	65	49	42	25	14	11	703

1985 METEOROLOGY JOINT FREQUENCIES: OCONEE NUCLEAR STATION (4th QUARTER)

10:34 TUESDAY, FEBRUARY 25, 1986

PASQUILL STABILITY E

	WIND SPEED CLASS								
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR									
-N-	13	23	5	2	.	2	1	.	46
-NNE-	6	13	3	1	.	.	1	.	24
-NE-	7	17	19	22	11	1	.	.	77
-ENE-	7	20	23	19	4	2	6	.	81
-E-	9	11	6	4	2	.	.	.	32
-ESE-	7	12	2	.	.	.	.	.	21
-SE-	8	17	9	5	.	.	.	.	39
-SSE-	5	3	2	2	.	.	.	.	12
-S-	7	4	8	3	1	.	.	.	23
-SSW-	4	8	12	12	10	.	1	.	47
-SW-	9	6	24	20	15	2	1	.	77
-WSW-	5	12	6	10	6	.	.	.	39
-W-	10	10	7	4	10	4	1	.	46
-WNW-	12	3	3	8	9	5	4	1	45
-NW-	14	12	7	3	1	.	.	.	37
-NNW-	8	10	7	1	.	.	.	.	26
-CALM-	12	.	.	.	.	.	.	.	12
TOTAL	143	181	143	116	69	16	15	1	684

1985 METEOROLOGY JOINT FREQUENCIES: OCONEE NUCLEAR STATION (4th QUARTER)

10:34 TUESDAY, FEBRUARY 25, 1986

PASQUILL STABILITY F

	WIND SPEED CLASS						
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR							
-N-	27	26	9	.	.	.	62
-NNE-	11	15	13	1	.	.	40
-NE-	3	12	3	.	.	.	18
-ENE-	3	4	4	.	.	.	11
-E-	8	6	3	.	.	.	17
-ESE-	4	3	1	.	.	.	8
-SE-	6	.	4	.	.	.	10
-SSE-	1	1	1	.	.	.	3
-S-	5	2	4	3	.	.	14
-SSW-	4	7	3	2	1	1	18
-SW-	3	8	2	3	3	2	21
-WSW-	6	8	6	3	4	1	28
-W-	16	7	.	1	1	2	27
-WNW-	7	9	2	.	.	1	19
-NW-	11	7	.	.	.	.	18
-NNW-	17	7	.	.	.	.	24
-CALM-	9	.	.	.	.	.	9
TOTAL	141	122	55	13	9	7	347

PASQUILL STABILITY G

	WIND SPEED CLASS					
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR						
-N-	4	2	.	.	.	6
-NNE-	1	1	.	.	.	2
-NE-	2	.	.	.	.	2
-ENE-	1	.	.	.	.	1
-E-	.	.	.	1	.	1
-ESE-	.	.	1	.	.	1
-SE-	1	1	.	.	.	2
-SSE-	1	.	.	.	.	1
-S-	2	.	.	.	.	2
-SW-	.	1	.	.	1	2
-WSW-	.	4	1	.	.	5
-W-	.	2	.	.	.	2
-WNW-	3	.	.	.	.	3
-NNW-	1	.	.	.	.	1
-CALM-	1	.	.	.	.	1
TOTAL	17	11	2	1	1	32

1985 METEOROLOGY JOINT FREQUENCIES: OCONEE NUCLEAR STATION (4th QUARTER)

10:34 TUESDAY, FEBRUARY 25, 1986

ALL STABILITY CLASSES

	WIND SPEED CLASS										
	0.45-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.49	5.50-6.49	6.50-7.49	7.50-8.49	8.50-9.49	>9.50 M/S	TOTAL
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
SECTOR											
-N-	47	59	20	4	.	2	1	.	.	.	133
-NNE-	24	36	23	5	1	.	1	.	.	.	90
-NE-	27	48	35	39	21	6	10	1	1	.	188
-ENE-	17	44	69	42	31	22	24	14	14	10	287
-E-	24	36	32	16	8	3	1	1	.	.	121
-ESE-	15	27	19	1	1	.	1	.	.	.	64
-SE-	34	33	29	11	1	.	.	.	.	.	108
-SSE-	21	15	10	4	.	.	.	.	.	.	50
-S-	24	21	35	25	7	1	.	.	.	.	113
-SSW-	19	33	45	53	31	9	2	.	.	.	192
-SW-	30	36	48	43	32	14	5	2	.	.	210
-WSW-	23	37	21	25	17	5	6	.	.	.	134
-W-	42	32	10	12	21	15	8	6	2	4	152
-WNW-	27	21	6	12	16	14	11	7	4	.	118
-NW-	37	24	9	4	3	1	4	5	.	1	88
-NNW-	35	22	9	2	.	1	.	.	.	.	69
-CALM-	26	.	.	.	.	.	.	.	.	.	26
TOTAL	472	524	420	298	190	93	74	36	21	15	2143

Duke Power Company
Oconee Nuclear Station

Attachment 4

Radioactive Gas and Liquid Monitors
Inoperable for Greater Than 30 Days

Radioactive Gas and Liquid Monitors
Inoperable for Greater Than 30 Days

RIA-33 was considered out of service for the period August 12 - September 19, 1985, since the readings fell out of the expected range for 6 of 70 releases. This out of service period was necessary in order to compile enough data for correlation and to allow I&E personnel to trouble-shoot the system.

The RIA's for Oconee Units 1 and 2 which monitor Noble Gas Activity was repaired and calibrated on July 19, 1985 as committed to the NRC. It could not be declared operable until Health Physics could verify correlation; all gas samples released during late 1985 were too low in activity to provide sufficient data points to verify correlation. It wasn't until February of 1986 that enough data points were collected to allow correlation. The monitors were returned to service on February 7, 1986.

The RIA's for Oconee Units 1, 2 and 3 which monitors Low Pressure Service Water have been out of service for an extended period due to system design problems. As presently configured, these monitors do not receive a representative composite sample for all portions of the LPSW system. These monitors cannot be returned to service until a Nuclear Station Modification is implemented to resolve the design problem.

The Unit 2 Flow Rate Monitor was declared inoperable on October 28, 1985 due to an inoperable transmitter which feeds the recorder and indicator providing stack flow indication. The transmitter was determined to be obsolete, requiring a Nuclear Station Modification (NSM) implementation to install a new design transmitter. This NSM was completed and the instrument returned to service on January 3, 1986.

Duke Power Company
Oconee Nuclear Station

Attachment 5

Revisions to Duke Power's Corporate
Process Control Program and
Oconee's Process Control Program

DUKE POWER COMPANY

CORPORATE

PROCESS CONTROL PROGRAM

TABLE OF CONTENTS

DUKE POWER COMPANY

CORPORATE

PROCESS CONTROL PROGRAM

1.0 PURPOSE

1.1 The purpose of the Duke Power Company Corporate Process Control Program is to establish a set of requirements that shall be met at all nuclear stations to insure that all solidification and dewatering activities are conducted in a manner and produce a final product that complies with all applicable Federal and State regulations and licensed burial site criteria.

1.2 The Duke Power Company Process Control Program shall be used to control and direct all solidification and dewatering activities for liquids (e.g., evaporator concentrates) and "wet solids" (e.g., resin slurries, filter backwash slurries, cartridge filters) at the Oconee Nuclear Station, Units 1, 2 and 3, the McGuire Nuclear Station, Units 1 and 2, and the Catawba Nuclear Station, Units 1 and 2.

1.3 Station - specific procedures shall be developed to implement the requirements of this corporate PCP.

1.4 This Process Control Program and implementing procedures shall assure that all solidification and dewatering activities are in compliance with 10CFR20, 50, 61, 71, and 49 CFR and licensed burial site criteria.

1.5 If this Process Control Program is not followed, each vessel of processed (i.e., solidified or dewatered) waste shall be physically tested to verify the absence of free standing liquids.

2.0 SOLIDIFICATION

2.1 Vendor Requirements

2.1.1 Any vendor utilized for solidification services by Duke Power Company shall have a Topical Report that is either under NRC review or has NRC approval, or shall supply to Duke Power sufficient documentation of the process and results for review to demonstrate that an acceptable product will be produced using the described solidification process.

2.1.2 Any vendor solidification services utilized by Duke Power Company shall be approved by the Corporate Radwaste Engineer and station(s) Technical Services Superintendent prior to operation.

2.1.2.1 Technical review shall be performed by corporate and station radwaste staffs of all vendor documents and procedures to insure they meet the requirements of the Duke Power Company PCP outlined below.

2.1.3 Chem-Nuclear Systems Inc. has been reviewed and approved to provide solidification services to the Oconee, McGuire, and Catawba Nuclear Stations as described in: Mobile Cement Solidification System, Topical Report CNSI-2(4313-01354-0IP-A). Approved waste forms for solidification are:boric acid evaporator concentrates, spent bead resin, spend powdered resin, filters, filter backwash slurry, and resin regenerative chemical wastes.

2.2 Program Requirements

2.2.1 The vendor topical report or documentation supplied to the Company shall include a detailed system description giving all vendor interfaces with company equipment. Drawings or diagrams shall be included detailing all solidification system interfaces with plant radwaste systems and equipment.

2.2.2 The vendor topical report or documentation supplied to the Company shall include a statement that the design, construction, operation and quality assurance provisions are in accordance with NRC ETSB Branch Technical Position 11-3 and Regulatory Guide 1.143.

2.2.3 Duke Power Company permanent or portable solidification systems shall have a detailed system description giving all solidification equipment interfaces with other company equipment. Drawings or diagrams shall be included detailing all solidification system interfaces with other plant radwaste equipment and systems.

NOTE: This information may be included as part of a Topical Report furnished by the equipment manufacturer or supplier or as part of the plant specific Final Safety Analysis Report.

2.2.4 Duke Power Company permanent or portable solidification systems shall be designed, constructed, operated per and meet all quality assurance provisions of NRC ETSB Branch Technical Position 11-3 and Regulatory Guide 1.143.

2.2.5 Station procedures shall be established to assure the following requirements are met:

2.2.5.1 A representative sample shall be taken from at least every tenth batch of each waste type to verify solidification.

2.2.5.2 If the initial sample fails to verify solidification, a representative sample shall be taken from each consecutive batch of the same type waste until three consecutive samples demonstrate solidification.

2.2.5.3 A representative sample shall meet all the following conditions:

2.2.5.3.1 The contents of the container to be sampled shall be recirculated a minimum of three volume turnovers or adequately mixed to achieve a homogeneous mixture.

NOTE: Adequately mixed shall be defined as: mixing via agitative or recirculative flow which exceeds a specified minimum rate which has been documented to provide a representative sample for the vessel.

2.2.5.3.2 For final samples prior to initiating solidification, no additional waste shall be introduced into the container after recirculation or mixing has begun. Vessel level readings or input isolation shall be documented at the time of mixing initiation, sampling, and process initiation.

2.2.5.3.3 Recirculation or mixing time and/or volume must be uninterrupted from initiation until completion of sample collection.

2.2.5.4 During the recirculation and sampling period, the vessel shall not be placed in a transfer mode.

2.2.5.5 Sample analysis shall be performed as outlined in site-specific procedures for each waste form and solidification media. These should include such analysis as:

2.2.5.5.1 Waste pH

2.2.5.5.2 Waste density

2.2.5.5.3 Waste boron concentration

2.2.5.5.4 Waste oil content

2.2.5.6 Test solidification shall be performed to establish boundary conditions for all process parameters.

NOTE: "Process parameters" shall be defined as, "those conditions critical to insure complete solidification".

NOTE: "Boundary conditions" shall be defined as, "acceptable numerical values for process parameters as established by a test solidification".

2.2.5.7 Process parameters should include any of the following which are required to assure solidification:

2.2.5.7.1 Waste form.

2.2.5.7.2 Waste to solidification agent ratio.

2.2.5.7.3 Amount of each solidification additive.

2.2.5.7.4 Waste pH.

2.2.5.7.5 Waste boron concentration.

2.2.5.7.6 Waste density.

2.2.5.7.7 Waste oil content.

2.2.5.7.8 Mixer speed.

2.2.5.7.9 Mixing time.

2.2.5.7.10 Curing time.

2.2.5.7.11 Specific activity.

2.2.5.8 Vendor shall submit sample analysis, test solidification results and prescribed boundary conditions to Station Radwaste Supervision.

2.2.5.9 Station Radwaste Supervision shall review the data outlined in Step 2.2.5.8 and shall authorize solidification prior to initiation.

2.2.5.9.1 Difficulties and/or disagreements between vendor and station personnel should be resolved through direct interaction between vendor and station. Corporate Radwaste Engineering staff should be contacted if resolution can not be reached at the station level.

2.2.5.10 Solidification for disposal shall not be performed unless the test solidification is acceptable.

2.2.5.11 All system operation shall be controlled by station procedures to assure that the solidification system is operated within the boundary conditions established in Step 2.2.5.7.

2.2.5.11.1 Vendor procedures shall be incorporated as attachments to station procedures. Vendor format may be retained as a DPC enclosure if desired or the procedure may be rewritten into DPC format.

2.2.5.12 The absence of free standing liquids (FSL) shall be verified for each vessel of solidified waste prior to disposal. Verification shall be performed by either confirmation that the Process Control Program was followed or by physical testing.

2.2.5.12.1 Physical testing shall be required for each vessel if the Process Control Program was not followed or if any off-normal condition existed during processing.

2.2.5.12.1.1 Physical testing shall consist of visual inspection and probe penetrate tests.

2.2.5.12.2 A vessel shall have less than 0.5% free standing liquid by waste volume.

2.2.5.12.3 If a High Integrity Container is utilized, the vessel shall have less than 1% free standing liquid.

2.2.5.13 Any solidification vessel that does not pass the tests specified in Step 2.2.5.12 shall not be shipped to a burial site until reprocessing or repackaging has resulted in an acceptable product.

2.2.5.14 Records shall be maintained by Duke Power Company on each vessel of solidified wastes. These records shall be maintained for six (6) years (per the Administrative Policy Manual).

2.2.5.14.1 These records shall include:

2.2.5.14.1.1 Representative sampling documentation (per Step 2.2.5.3).

2.2.5.14.1.2 Sample analysis results (per Step 2.2.5.5).

2.2.5.14.1.3 Reference test solidification results and boundary conditions (per Steps 2.2.5.6 and 2.2.5.7)

2.2.5.14.1.4 Station Radwaste Supervision authorization for solidification per (Step 2.2.5.9).

2.2.5.14.1.5 System operation data to insure all boundary conditions were met (per Step 2.2.5.11).

2.2.5.14.1.6 FSL Verification (per Step 2.2.5.12).

3.0 DEWATERING

3.1 Vendor Requirements

3.1.1 Any vendor utilized by Duke Power Company to provide dewatering services shall have a Topical Report that is either under NRC review or has NRC approval, or shall supply to Duke Power sufficient documentation of process and results for review to demonstrate adequate dewatering is accomplished using the described process.

3.1.2 Any vendor dewatering services utilized by Duke Power Company shall be approved by the Corporate Radwaste Engineer and station(s) Technical Services Superintendent prior to operation.

3.1.2.1 Technical review shall be performed by corporate and station radwaste staffs of all vendor documents and procedures to insure they meet all requirements of the Duke Power Company PCP outlined below.

3.1.3 Chem-Nuclear Systems Inc. has been reviewed and approved to provide dewatering services to Oconee, McGuire, and Catawba Nuclear Stations as described in Topical Report CNSI-DW-11118-01.

3.2 Program Requirements

3.2.1 The vendor topical report or documentation supplied to the Company shall include a detailed system description giving all vendor interfaces with company equipment. Drawings or diagrams shall be included detailing all dewatering system interfaces with plant radwaste systems and equipment.

3.2.2 The vendor topical report or documentation supplied to the Company shall include a statement that the design, construction, operation and quality assurance provisions are in accordance with Regulatory Guide 1.143.

3.2.3 All vendor supplied portable demineralizers shall meet all requirements of Steps 3.2.1 and 3.2.2.

3.2.4 Duke Power Company permanent or portable dewatering systems shall have a detailed system description giving all dewatering equipment interfaces with other company equipment. Drawings or diagrams shall be included detailing all dewatering system interfaces with other plant radwaste equipment and systems.

NOTE: This information may be included as part of a Topical Report furnished by the equipment manufacturer or supplier or as part of the plant specific Final Safety Analysis Report.

3.2.5 Duke Power Company permanent or portable dewatering systems shall be designed, constructed, operated per and meet all quality assurance provisions of NRC Branch Technical Position 11-3 and Regulatory Guide 1.143.

3.2.6 Station procedures shall be established to assure the following requirements are met:

3.2.6.1 Boundary conditions shall be established for all process parameters.

NOTE: Process parameters shall be defined as, "those conditions critical to insure complete dewatering".

NOTE: "Boundary conditions" shall be defined as, "acceptable numerical values for process parameters".

3.2.6.2 Process parameters shall be identified in site-specific procedures. Typical parameters are:

3.2.6.2.1 Waste form.

3.2.6.2.2 Settling time.

3.2.6.2.3 Drain (or pump) time

3.2.6.2.4 Drying time.

3.2.6.3 Sample analysis and boundary conditions shall be submitted to the Station Radwaste Supervisor.

3.2.6.3.1 For filter dewatering, data shall be submitted to the Station Health Physics Supervisor.

3.2.6.4 Station Supervisor shall review the data outlined in Step 3.2.6.3 and shall authorize dewatering prior to initiation.

3.2.6.4.1 Difficulties and/or disagreements between vendor and station personnel should be resolved through direct interaction between vendor and station. Corporate Radwaste Engineering staff should be contacted if resolution can not be reached at the station level.

3.2.6.5 All operations shall be controlled by station procedures to assure that all boundary conditions established in Step 3.2.6.1 are met.

3.2.6.5.1 Vendor procedures shall be incorporated as attachments to station procedures. Vendor format may be retained as a DPC enclosure if desired or the procedure may be rewritten into DPC format.

3.2.6.6 The absence of free standing liquids (FSL) shall be verified for each vessel of dewatered waste prior to disposal. Verification shall be performed by either confirmation that the Process Control Program was followed or by physical testing.

3.2.6.6.1 Physical testing shall be required for each vessel if the Process Control Program was not followed or if any off-normal condition existed during processing.

3.2.6.6.2 A vessel shall have less than 0.5% free liquids by waste volume.

3.2.6.6.3 A High Integrity Container shall have less than 1% free liquids by waste volume.

3.2.6.7 Any dewatered vessel containing excess free liquids, as defined in Step 3.2.6.6, shall not be shipped to a burial site until reprocessing or repackaging has resulted in an acceptable product.

3.2.6.8 Records shall be maintained by Duke Power Company on each vessel of dewatered wastes. These records shall be maintained for six (6) years (per the Administrative Policy Manual). These records shall include:

3.2.6.8.1. Sample analysis and boundary conditions (per Step 3.2.6.3).

3.2.6.8.2 Station supervisor authorization for dewatering (per Step 3.2.6.4).

3.2.6.8.3 Equipment operation data to insure all boundary conditions were met (per Step 3.2.6.5).

3.2.6.8.4 FSL Verification (per Step 3.2.6.6).

4.0 WASTE OIL

4.1 Incidental levels of waste oil may be solidified using the system described in Section 2.2.

4.1.1 "Incidental" shall be defined as less than 1% oil.

4.2 If larger volumes of waste oil are to be solidified a special procedure shall be used.

4.2.1 The oil-specific procedure shall include all requirements in Section 2.0.

4.3 Solidified waste oil shall not be shipped to the licensed burial site at Barnwell, S.C. for disposal, except as defined in Step 4.1.

5.0 INTERIM STORAGE

5.1 Program Requirements

5.1.1 Station procedures shall be established to assure the following requirements are met:

5.1.1.1 Any processed (i.e., solidified or dewatered) waste that is stored for an interim period in a disposal container shall be packaged such that there is no interaction between the waste and its container.

5.1.1.2 If applicable, Certificates of Compliance shall be maintained at each station for all waste disposal containers used for interim storage.

5.1.1.3 Vendor supplied handling and storage procedures shall be maintained at each station.

5.1.1.4 Each container and waste shall be checked against information given in Steps 5.1.1.2 and 5.1.1.3 to insure all chemical compatibility requirements are met.

5.1.1.5 Station Radwaste or Health Physics supervision shall review the information in Step 5.1.1.4 and shall certify chemical compatibility and authorize storage.

5.1.1.6 Records shall be maintained by Duke Power Company for each container. These records shall be maintained for six (6) years (per the Administrative Policy Manual). These records shall include:

5.1.1.6.1 Chemical compatibility certification (per Step 5.1.1.5).

5.1.1.6.2 Station supervision authorization to store waste (per Step 5.1.1.5).

6.0 10 CFR 61 COMPLIANCE

6.1 Vendor Requirements

6.1.1 The vendor(s) described in Section 2.1 for solidification shall have a NRC approved report documenting compliance with waste form requirements in the final solidified product, or shall supply Duke Power sufficient documentation to demonstrate waste form compliance.

6.1.2 The vendor(s) described in Section 3.1 for dewatering shall have a NRC approved report documenting compliance with waste form requirements in the final dewatered product, or shall supply Duke Power sufficient documentation to demonstrate waste form compliance.

6.1.3 Any vendor providing High Integrity Containers to Duke Power Company shall have a NRC approved report documenting compliance with waste form requirements, or shall supply Duke Power sufficient documentation to demonstrate waste form compliance.

6.1.4 All vendor reports (per Steps 6.1.1, 6.1.2, and 6.1.3) shall contain a statement that the final product conforms to the appropriate waste form for either Class A, B or C waste.

6.2 Program Requirements

6.2.1 Station procedures shall be established to assure the following requirements are met:

6.2.1.1 Each container of processed (i.e., solidified or dewatered) waste shall be classified as either Class A, B or C waste using the Duke Power Company "10 CFR Part 61 Waste Classification and Waste Form Implementation Program".

6.2.1.2 Each container of processed waste shall be certified to the appropriate waste form for either Class A, B or C waste.

6.2.1.2.1 Waste form certification shall be contingent upon the documents referenced in Section 6.1.

6.2.1.3 Records shall be maintained for each container of processed waste to assure compliance with the requirements of Steps 6.2.1.1 and 6.2.1.2. These records shall be maintained for six (6) years (per the Administrative Policy Manual).

7.0 TRANSPORTATION

7.1 Program Requirements

7.1.1 All shipping casks used to transport processed waste for burial shall have a NRC issued Certificate of Compliance.

7.1.2 Station procedures shall be established to insure all requirements of the Certificate of Compliance are met.

7.1.2.1 Vendor procedures shall be incorporated into station procedures prior to use. Vendor format may be retained if desired or the procedure may be rewritten into DPC format.

7.1.3 Station procedures shall be established to insure all applicable Federal and State regulations and burial site criteria are met for each container of processed waste.

7.1.4 Records shall be maintained for each container and shipment of processed waste. These records shall be maintained for six (6) years (per the Administrative Policy Manual). These records shall include:

7.1.4.1 Documentation of a valid Certificate of Compliance for each cask (per Step 7.1.1). Maintained for six (6) years.

7.1.4.2 Documentation that all requirements of the Certificate of Compliance were met (per Step 7.1.2). Maintained for six (6) years.

7.1.4.3 Documentation that all shipping regulations were met (per Step 7.1.3). Maintained for life of plant.

8.0 REVIEWS

8.1 Program Requirements

8.1.1 Changes to the Corporate Process Control Program shall be reviewed by the Corporate Radwaste Engineering staff and each station's Radwaste and Health Physics staffs prior to implementation. Proposed revisions shall be reviewed against Technical Specifications and all applicable NRC guidance to assure all requirements of a Process Control Program have been addressed. Review documents shall include:

8.1.1.1 NUREG-0133.

8.1.1.2 NUREG-0472.

8.1.1.3 NUREG-0800.

8.1.1.4 Branch Technical Position - ETBS 11-3.

8.1.1.5 Appendix 11.4-A, "Design Guidance for Temporary Storage...".

8.1.1.6 NRC Review Criteria for Solid Waste Management Systems.

8.1.1.7 Site-specific Technical Specifications.

8.1.2 Changes to the Corporate Process Control Program shall be approved by the System Radwaste Engineer and each station's Technical Services Superintendent prior to implementation.

8.1.3 Each Station Manager shall document that any changes to the Corporate Process Control Program have been reviewed and approved (per Steps 8.1.1 and 8.1.2).

8.1.4 The Nuclear Safety Review Board shall review the activities of the Station Manager detailed in Step 8.1.3.

8.1.5 A record of the review (per Step 8.1.4) shall be sent to the Vice President, Nuclear Production and the Executive Vice President, Power Operations within fourteen (14) days following completion of the review.

8.1.6 All changes to the Corporate PCP shall be sent to the NRC in each station's Semi-annual Radioactive Effluent Report for the period in which the changes were implemented.

8.1.7 Changes to all implementing procedures shall be reviewed by station radwaste or health physics staff and approved by the station's Technical Services, Operating, OR Maintenance Superintendent, or Station Manager, prior to implementation.

8.1.7.1 Changes to implementing procedures shall be reviewed by the Technical Services, Operating, OR Maintenance Superintendent, or Station Manager, to assure they do not conflict with the Corporate Process Control Program.

8.1.8 Records shall be maintained documenting the approvals required by Section 8.1. Records shall be maintained for six (6) years (per the Administrative Policy Manual).

9.0 AUDITS

9.1 Program Requirements

9.1.1 The Corporate Process Control Program and station implementing procedures shall be audited at least once per twenty four months at each station.

9.1.2 This audit shall be performed under the cognizance of the NSRB.

9.1.3 Audit reports shall be forwarded to the Vice President, Nuclear Production; Executive Vice President, Power Operations; and Station Manager within thirty (30) days of completion of the audit.

DUKE POWER COMPANY

STATION

PROCESS CONTROL PROGRAM

1.0 PURPOSE

The purpose of the Duke Power Company Station Process Control Program shall be to insure all requirements of the DPC Corporate Process Control Program have been met for each container of solidified or dewatered radioactive waste shipped for burial at a licensed burial facility.

2.0 COMPOSITION

2.1 The Duke Power Company Station Process Control Program shall consist of:

2.1.1 The Duke Power Company Process Control Manual Introduction (Section I).

2.1.2 The Duke Power Company Corporate Process Control Program.

2.1.3 A list of all station-specific procedures that implement the requirements of the Corporate Process Control Program.

2.1.4 Diagrams or drawings or drawing numbers showing all connections between plant radwaste systems and solidification and dewatering equipment.

2.1.5 Documentation of NRC approval of the initial station Process Control Program.

2.1.6 Documentation of System Radwaste Engineer, station Technical Services Superintendent, and Station Manager approval of all changes to the Corporate Process Control Program.

2.1.7 Documentation that all changes to the Corporate and/or Station Process Control Program were sent to the NRC in the Semi-Annual Radioactive Effluent Report.

3.0 EXCEPTIONS

3.1 The Station process control program takes the following exceptions with the Corporate Process Control Program: