

1982
MCGUIRE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
SOLID WASTES
2ND SEMI-ANNUAL REPORT

Total volume of solid waste packaged (cubic meters) 73.8 for 2nd six months of 1982.
Total estimated activity involved (curies) 6.20 for 2nd six months of 1982.
Disposal of materials shipped off-site: All 7 shipments were made to Chem-Nuclear Systems waste disposal facility at Barnwell, South Carolina.

<u>Types of Wastes</u>	<u>Number of Shipments</u>	<u>Volume (Cubic Meters)</u>	<u>Total Activity CI</u>
1. Wastes from Liquid Systems			
(A) Powdex Resins	0	0	0
(B) Spent Resins & Bead Resins	2	7.9	2.80
(C) Evaporator Concentrates	0	0	0
2. Dry Solid Wastes			
(A) Spent Filters	0	0	0
(B) Dry Compressible Wastes	3	55.0	1.13
(C) Contaminated Equipment	2	10.9	2.27
(D) Irradiated Components	0	0	0

SUMMARY OF MAJOR RADIONUCLIDE COMPOSITION

<u>Type of Waste</u>	<u>Radionuclide</u>	<u>% Abundance</u>
1. Wastes from Liquid Systems		
(A) Powdex Resins	MN-54	0.0%
	CO-57	0.0%
	CO-58	0.0%
	CO-60	0.0%
	SR-92	0.0%
	NB-97	0.0%
	AG-110M	0.0%
	CS-134	0.0%
	CS-137	0.0%
(B) Spent Resins & Bead Resins	MN-54	0.0%
	CO-57	0.0%
	CO-58	93.3%
	CO-60	6.3%
	SR-92	0.0%
	NB-97	0.0%
	AG-110M	0.0%
	CS-134	0.0%
	CS-137	0.0%
	I-131	0.0%
	TC-99M	0.0%
	CR-51	0.0%

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<u>Type of Waste</u>	<u>Radionuclide</u>	<u>% Abundance</u>
(C) Evaporator Concentrates	MN-54	0.0%
	CO-58	0.0%
	CO-60	0.0%
	TC-99M	0.0%
	I-131	0.0%
	I-133	0.0%
	I-134	0.0%
	CS-134	0.0%
	CS-137	0.0%
	LA-140	0.0%
2. Dry Solid Waste		
(A) Spent Filters	AG-110M	0.0%
	CS-134	0.0%
	CS-137	0.0%
	CO-60	0.0%
	CO-58	0.0%
	MN-54	0.0%
(B) Dry Compressible Waste	AG-110M	6.45%
	CS-134	1.69%
	CS-137	46.25%
	CO-60	3.25%
	MN-54	1.37%
	CO-58	34.80%
	NB-97	6.19%
(C) Contaminated Equipment	AG-110M	6.45%
	CS-134	1.69%
	CS-137	46.25%
	CO-60	3.25%
	MN-54	1.37%
	CO-58	34.80%
	NB-97	6.19%
(D) Irradiated Components	AG-110M	0.0%
	CS-134	0.0%
	CS-137	0.0%
	CO-60	0.0%
	MN-54	0.0%
	CO-57	0.0%
	CO-58	0.0%
	NB-97	0.0%

MOORE NUCLEAR STATION
 RADIOACTIVE EFFLUENT RELEASES
 DATE : 02/21/83

1. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR : 1982 TOTAL
1. GROSS RADIOACTIVITY						
A. TOTAL RELEASE	CURIES	2.12E-01	2.32E-01	4.10E-01	9.00E-01	1.73E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	8.66E-10	7.54E-10	1.18E-09	2.71E-09	1.42E-09
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	2.23E-09	2.29E-09	3.89E-09	7.27E-09	4.11E-09
2. TRITIUM						
A. TOTAL RELEASE	CURIES	8.37E+00	3.40E+01	4.68E+01	7.09E+01	1.60E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	3.41E-08	1.11E-07	1.35E-07	2.13E-07	1.30E-07
3. DISSOLVED NOBLE GASES						
A. TOTAL RELEASE	CURIES	2.78E-04	7.70E-04	2.04E-03	4.72E-03	7.82E-03
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.13E-12	2.51E-12	5.93E-12	1.42E-11	6.35E-12
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	1.48E+06	2.64E+06	2.79E+06	2.60E+06	9.50E+06
6. VOLUME OF DILUTION WATER	LITERS	2.45E+11	3.07E+11	3.47E+11	3.32E+11	1.23E+12
7. RADIOISOTOPES RELEASED	CURIES					
F-18		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HA-24		2.54E-04	2.65E-03	1.46E-03	1.40E-04	4.51E-03
AR-41		1.64E-04	1.21E-04	1.39E-04	6.81E-05	4.92E-04
CR-51		4.11E-02	3.13E-03	7.61E-02	2.30E-02	1.43E-01
NR-54		2.48E-03	2.04E-03	2.28E-03	3.73E-03	1.05E-02
NR-56		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-57		2.19E-05	2.56E-05	5.29E-05	2.44E-04	3.44E-04
CO-58		1.04E-01	1.14E-01	2.24E-01	4.49E-01	1.09E+00
CO-60		1.82E-02	9.56E-03	2.35E-02	4.40E-02	1.15E-01
FE-59		3.29E-03	8.79E-04	2.27E-03	5.09E-03	1.15E-02
NI-65		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZN-65		0.00E+00	0.00E+00	5.54E-05	1.53E-04	2.08E-04
KR-85		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-87		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-88		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
T-88		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
T-92		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SR-89		0.00E+00	1.52E-04	0.00E+00	0.00E+00	1.52E-04
SR-90		0.00E+00	4.91E-06	0.00E+00	0.00E+00	4.91E-06
SR-91		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SR-92		6.61E-04	4.64E-05	1.04E-03	5.85E-04	2.34E-03
NR-95		1.40E-03	3.90E-04	1.73E-03	1.84E-03	5.36E-03
NR-97		0.00E+00	0.00E+00	5.74E-05	0.00E+00	5.74E-05
ZR-95		9.76E-04	1.96E-04	7.19E-04	4.74E-04	2.37E-03
ZR-97		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MO-99		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TC-99M		0.00E+00	9.47E-05	3.77E-06	0.00E+00	9.85E-05
RU-103		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RU-103M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RU-106		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
AG-102M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
AG-110M		1.00E-03	2.71E-05	1.83E-03	1.11E-03	3.97E-03
CD-109		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CD-115		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CD-115M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IN-115M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-122		0.00E+00	1.62E-03	1.06E-03	6.78E-05	2.75E-02
SB-124		6.81E-03	3.43E-03	1.03E-02	1.27E-02	3.33E-02
SB-125		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SM-123M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SM-125		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131		0.00E+00	2.50E-04	6.76E-05	6.84E-05	3.86E-04
I-132		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133		0.00E+00	8.68E-04	6.61E-05	1.99E-05	9.54E-04
I-134		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135		2.55E-03	0.00E+00	0.00E+00	0.00E+00	2.55E-03
XE-131M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133		6.70E-05	2.89E-04	1.13E-03	4.29E-03	5.77E-03
XE-133M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135		4.74E-05	3.60E-04	7.92E-04	3.60E-04	1.56E-03
CE-134		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CE-141		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CE-144		0.00E+00	3.11E-04	0.00E+00	0.00E+00	3.11E-04
CS-134		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-135M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-136		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-137		0.00E+00	0.00E+00	0.00E+00	4.53E-04	4.53E-04
CS-138		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-139		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-LA-140		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
W-187		0.00E+00	3.77E-04	0.00E+00	0.00E+00	3.77E-04
NP-239		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
P-32		1.23E-02	6.37E-02	1.06E-02	9.85E-03	9.65E-02
FE-55		1.69E-02	2.80E-02	5.32E-02	1.27E-01	2.25E-01

MCQUIRE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
DATE : 02/21/83

II. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR : 1982 TOTAL
1. TOTAL NOBLE GASES	CURIES	4.06E+02	3.93E+02	3.01E+02	5.49E+02	1.45E+03
2. TOTAL HALOGENS	CURIES	0.00E+00	3.52E-04	1.16E-09	3.17E-09	3.52E-04
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	5.86E-04	1.03E-08	0.00E+00	1.34E-05	5.99E-04
4. TOTAL TRITIUM	CURIES	6.30E-02	1.02E-03	3.07E-01	3.40E+00	3.85E+00
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	9.06E-10	0.00E+00	0.00E+00	0.00E+00	9.06E-10
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

C-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
P-32	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CR-51	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KM-54	1.77E-06	0.00E+00	0.00E+00	1.75E-11	1.77E-06
FE-55	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FE-59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-58	5.84E-04	0.00E+00	0.00E+00	6.60E-11	5.84E-04
CO-60	0.00E+00	0.00E+00	0.00E+00	1.34E-05	1.34E-05
NI-63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZN-65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RB-86	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SR-89	0.00E+00	9.51E-09	0.00E+00	0.00E+00	9.51E-09
SR-90	6.08E-11	7.61E-10	0.00E+00	0.00E+00	8.21E-10
Y-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZR-95	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MB-95	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MO-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RU-103	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RU-106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
AG-110M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CD-115M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SM-123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SM-126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-124	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TE-127M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TE-129M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-136	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-140	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CE-141	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CE-144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

HALOGENS

I-131	0.00E+00	4.55E-05	0.00E+00	9.82E-10	4.55E-05
I-133	0.00E+00	3.06E-04	1.16E-09	2.19E-09	3.06E-04

BASES

KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	4.80E+00	6.01E-01	1.24E+00	1.42E+00	8.06E+00
KR-85	0.00E+00	1.05E+00	2.45E+00	6.64E-01	4.17E+00
KR-87	0.00E+00	0.00E+00	0.00E+00	5.91E-03	5.91E-03
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-90	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133M	1.97E-04	3.57E-01	4.82E-02	6.92E+00	7.32E+00
XE-133	1.92E+02	1.80E+02	1.09E+02	4.96E+02	9.76E+02
XE-135M	2.32E-01	9.33E-02	0.00E+00	0.00E+00	3.25E-01
XE-135	7.90E+01	4.96E+01	2.83E+01	2.09E+01	1.78E+02
XE-137	0.00E+00	0.00E+00	0.00E+00	2.85E+00	2.85E+00
XE-138	0.30E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
AR-41	1.31E+02	1.61E+02	1.59E+02	2.08E+01	4.72E+02

CALCULATED DOSES TO THE GENERAL PUBLIC
FROM EFFLUENT RELEASES AT MCGUIRE NUCLEAR STATION FOR THE YEAR 1982

MREM

FLUID WASTES (with P-32 included and using a bioaccumulation factor for P-32 of 3.0E+03)

	<u>WHOLE BODY</u>	<u>SKIN</u>	<u>GI-LLI</u>	<u>THYROID</u>	<u>BONE</u>	<u>LIVER</u>	<u>KIDNEY</u>	<u>LUNG</u>
<u>Calculated Max.</u>	8.70E-02	4.54E-03	0.278	1.49E-02	1.69	0.101	1.58E-02	1.61E-02
<u>Age Group</u>	Child	Teen	Adult	Child	Child	Child	Child	Child
<u>Critical Pathway</u>	Fish	Shore	Fish	Drink	Fish	Fish	Drink	Drink
<u>Major Contributors</u>	P-32	Co-60	P-32	H-3, I-131, I-133	P-32	P-32	H-3, MN-54, Na-24	H-3

GASEOUS WASTE

	<u>WHOLE BODY</u>	<u>SKIN</u>	<u>GI-LLI</u>	<u>THYROID</u>		<u>BONE</u>	<u>LIVER</u>	<u>KIDNEY</u>	<u>LUNG</u>
				<u>INFANT</u>	<u>ADULT</u>				
<u>Calculated Max.</u>	1.02	1.79	1.02	1.03	1.02	1.01	1.02	1.02	1.03
<u>Age Group</u>	Child	Child	Child	Infant	Adult	All	Child	Child	Child
<u>Critical Pathway</u>	Plume	Plume	Plume	Plume, Goat	Plume	Plume	Plume	Plume	Plume
<u>Major Contributors</u>	Ar-41, H-3	Ar-41, H-3	Ar-41	Ar-41, I-131	Ar-41	Ar-41	Ar-41	Ar-41	Ar-41

LADTAP II (Liquid Annual Doses To All Persons) is a code developed by the Nuclear Regulatory Commission which calculates individual and population doses from liquid pathways. This computer code is based on the following standards:

Calculation of Annual Doses
to Man from Routine Releases
of Reactor Effluents for the
Purposes of Evaluating
Compliance with 10 CFR Part 50,
Appendix I

Reg. Guide 1.109, Rev. 1
October 1977

Estimating Aquatic Dispersion
of Effluents from Accidental
and Routine Reactor Releases
for the Purpose of Implementing
Appendix I

Reg. Guide 1.113, Rev. 1
April 1977

The LADTAP II computer program was placed in service September 28, 1981.

GASPAR is a code developed by the Nuclear Regulatory Commission for the evaluation of radiological impacts resulting from the release of radioactive material to the atmosphere during normal operation of light water reactors. In particular, the code implements the radiological impact models of Regulatory Guide 1.109, Rev. 1, for atmospheric releases. The code is presently used by the NRC in reactor licensing evaluations to estimate (1) the collective or population dose (person-rem) to the population within a 50-mile radius of a facility (referred to as ALARA dose); (2) the total collective dose to the U.S. population (the NEPA dose); and (3) the maximum individual doses at selected locations in the vicinity of the plant.

The GASPAR computer program was placed in service November 9, 1981.

Attachment 2

Key for Wind Frequency Table
Low Elevation Winds
McGuire 1982

SCLS = Stability Class

- 1 - Pasquill stability A
- 2 - Pasquill stability B-C
- 3 - Pasquill stability D
- 4 - Pasquill stability E
- 5 - Pasquill stability F
- 6 - Pasquill stability G

SEC = Wind Direction Sector

- 1 - N
- 2 - NNE
- 3 - NE
- 4 - ENE
- 5 - E
- 6 - ESE
- 7 - SE
- 8 - SSE
- 9 - S
- 10 - SSW
- 11 - SW
- 12 - WSW
- 13 - W
- 14 - WNW
- 15 - NW
- 16 - NNW
- 17 - Calm

WSCLS = Wind Speed Class

- 0 - Calm
- 1 - 1.0-3.2 mph
- 2 - 3.3-5.5 mph
- 3 - 5.6-7.8 mph
- 4 - 7.9-10.0 mph
- 5 - 10.1-12.3 mph
- 6 - 12.4-14.5 mph
- 7 - 14.6-16.7 mph
- 8 - 16.8-19.0 mph
- 9 - 19.1-21.2 mph
- 10 - >21.2 mph

TABLE OF SEC BY WSCLS
CONTROLLING FOR SCLS= 1

SEC	0	1	2	3	4	5	6	7	8	9	10	TOTAL
FREQUENCY	0	0	0	0	0	0	0	0	0	0	0	0
1	0	3	8	14	3	1	0	0	0	0	0	29
2	0	1	16	19	7	7	1	0	0	0	0	51
3	0	3	9	10	23	5	11	1	0	0	0	62
4	0	0	0	2	2	0	0	0	0	0	0	4
5	0	1	2	0	0	0	0	0	0	0	0	3
6	0	1	5	1	0	0	0	0	0	0	0	7
7	0	1	11	5	1	0	0	0	0	0	0	18
8	0	1	2	4	0	1	0	0	0	0	0	8
9	0	4	0	2	3	2	3	6	3	2	2	27
10	0	9	1	1	2	0	0	1	1	0	2	17
11	0	8	0	3	1	1	0	0	1	1	0	15
12	0	1	1	1	3	1	0	0	0	0	0	7
13	0	0	0	0	0	2	0	0	0	0	0	2
14	0	0	0	0	0	0	0	0	1	0	0	1
15	0	1	0	0	1	2	0	0	0	0	1	5
16	0	0	0	0	2	3	0	0	0	0	0	5
17	47	0	0	0	0	0	0	0	0	0	0	47
TOTAL	47	34	55	62	48	25	15	8	6	3	5	308

TABLE OF SEC BY WSCLS
CONTROLLING FOR SCLS= 2

SEC	FREQUENCY	0	1	2	3	4	5	6	7	8	9	10	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	2	41	39	0	9	3	2	1	0	1	0	98
3	0	2	42	55	21	14	8	8	3	3	0	3	151
4	0	2	30	40	35	25	9	2	0	0	0	0	143
5	0	0	10	12	15	7	1	1	0	0	0	0	45
6	0	0	5	2	1	0	1	1	0	0	0	0	9
7	0	1	13	2	0	0	0	0	0	0	0	0	16
8	0	2	17	4	0	0	0	0	0	0	0	0	23
9	0	7	6	6	3	1	0	0	0	0	0	0	23
10	0	0	3	18	8	0	0	0	1	0	0	0	30
11	0	0	2	9	10	0	0	3	0	3	1	0	28
12	0	1	1	6	1	0	0	0	2	0	1	0	12
13	0	1	2	1	1	1	0	0	0	0	0	0	5
14	0	1	1	1	0	0	0	0	0	0	0	0	3
15	0	0	1	0	0	0	0	0	0	0	0	1	2
16	0	0	2	1	3	1	1	0	1	1	1	0	10
17	0	0	3	4	2	2	2	2	1	2	0	0	18
TOTAL	0	21	179	200	109	53	26	11	9	4	4	4	616

TABLE OF SEC BY WSCLS
CONTROLLING FOR SCLS= 3

SEC	WSCLS																		TOTAL
FREQUENCY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	264
2	0	26	49	42	17	37	18	22	8	4	1	0	0	0	0	0	0	0	355
3	0	33	42	72	53	43	29	21	12	7	3	0	0	0	0	0	0	0	548
4	0	13	69	135	131	102	63	19	6	6	4	0	0	0	0	0	0	0	278
5	0	5	59	98	69	38	8	1	0	0	0	0	0	0	0	0	0	0	69
6	0	10	37	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	44
7	0	7	26	8	1	2	0	0	0	0	0	0	0	0	0	0	0	0	81
8	0	29	45	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	94
9	0	27	51	13	2	1	0	0	0	0	0	0	0	0	0	0	0	0	290
10	0	21	85	104	46	13	13	5	1	1	1	0	0	0	0	0	0	0	423
11	0	24	124	124	84	40	16	8	3	0	0	0	0	0	0	0	0	0	277
12	0	27	79	59	57	31	10	5	3	3	3	0	0	0	0	0	0	0	133
13	0	24	36	43	17	10	2	1	0	0	0	0	0	0	0	0	0	0	82
14	0	15	28	16	8	5	2	3	3	1	1	0	0	0	0	0	0	0	69
15	0	10	9	10	9	11	7	6	3	2	2	0	0	0	0	0	0	0	84
16	0	12	8	15	14	11	6	7	8	2	1	0	0	0	0	0	0	0	120
17	0	9	18	13	20	30	14	11	2	3	0	0	0	0	0	0	0	0	59
TOTAL	59	292	845	774	535	374	188	109	49	29	16	0	0	0	0	0	0	0	3270

TABLE OF SEC BY WSCLS
CONTROLLING FOR SCLS= 4

SEC	WSCLS																	TOTAL
FREQUENCY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144
2	0	26	37	29	26	17	7	2	0	0	0	0	0	0	0	0	0	148
3	0	25	61	37	17	7	0	1	0	0	0	0	0	0	0	0	0	292
4	0	24	68	65	63	43	20	6	1	1	1	1	1	1	1	1	1	241
5	0	17	84	83	44	12	1	0	0	0	0	0	0	0	0	0	0	59
6	0	12	35	11	1	0	0	0	0	0	0	0	0	0	0	0	0	55
7	0	15	30	10	0	0	0	0	0	0	0	0	0	0	0	0	0	68
8	0	43	21	3	1	0	0	0	0	0	0	0	0	0	0	0	0	89
9	0	51	27	8	2	1	0	0	0	0	0	0	0	0	0	0	0	370
10	0	97	140	76	38	10	5	2	1	1	1	1	1	1	1	1	1	596
11	0	137	215	138	70	20	10	4	1	1	1	1	1	1	1	1	1	255
12	0	88	95	45	19	9	5	2	2	0	0	0	0	0	0	0	0	129
13	0	61	27	31	8	2	0	0	0	0	0	0	0	0	0	0	0	105
14	0	43	23	24	4	6	3	0	2	0	0	0	0	0	0	0	0	90
15	0	26	21	14	14	6	5	3	1	1	1	1	1	1	1	1	1	111
16	0	31	25	22	13	10	5	3	1	1	1	1	1	1	1	1	1	111
17	0	14	22	33	22	16	2	1	1	1	1	1	1	1	1	1	1	40
TOTAL	40	710	921	629	342	159	63	24	10	4	1	1	1	1	1	1	1	2903

TABLE OF SEC BY WSCLS
CONTROLLING FOR SCLS= 5

SEC	WSCLS	0	1	2	3	4	5	6	7	8	9	10	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	13	9	9	3	0	0	0	0	0	0	0	25
2	0	20	20	20	8	3	0	0	0	0	0	0	51
3	0	9	12	12	2	0	1	0	0	0	0	0	24
4	0	11	3	3	0	0	0	0	0	0	0	0	14
5	0	4	0	0	0	0	0	0	0	0	0	0	4
6	0	6	1	1	0	0	0	0	0	0	0	0	7
7	0	19	3	0	0	0	0	0	0	0	0	0	22
8	0	20	0	0	0	1	0	0	0	0	0	0	21
9	0	81	53	53	8	0	0	0	0	0	0	0	142
10	0	75	48	48	13	2	0	0	0	0	0	0	139
11	0	45	6	6	2	0	0	0	0	0	0	0	53
12	0	31	7	7	4	0	0	0	0	0	0	0	42
13	0	18	6	6	1	0	0	0	0	0	0	0	25
14	0	20	8	8	1	0	0	0	0	0	0	0	29
15	0	19	8	8	1	0	0	0	0	0	0	0	28
16	0	9	10	10	2	2	0	0	0	0	0	0	23
17	44	0	0	0	0	0	0	0	0	0	0	0	44
TOTAL	44	400	194	194	45	8	1	0	0	0	0	0	692

TABLE OF SEC BY WSCLS
CONTROLLING FOR SCLS= A

SEC	0	1	2	3	4	5	6	7	8	9	10	TOTAL
FREQUENCY	0	0	0	0	0	0	0	0	0	0	0	.
1	0	13	3	1	0	0	0	0	0	0	0	17
2	0	6	8	6	0	0	0	0	0	0	0	20
3	0	9	4	2	0	0	0	0	0	0	0	15
4	0	5	0	0	0	0	0	0	0	0	0	5
5	0	9	0	0	0	0	0	0	0	0	0	9
6	0	3	0	0	0	0	0	0	0	0	0	3
7	0	14	0	0	0	0	0	0	0	0	0	14
8	0	27	3	0	0	0	0	0	0	0	0	30
9	0	160	22	2	0	0	0	0	0	0	0	184
10	0	193	7	0	0	1	0	0	0	0	0	201
11	0	104	2	1	0	0	0	0	0	0	0	107
12	0	58	1	0	0	0	0	0	0	0	0	59
13	0	41	4	0	0	0	0	0	0	0	0	45
14	0	18	4	2	0	0	0	0	0	0	0	24
15	0	21	3	1	0	0	0	0	0	0	0	25
16	0	7	2	0	0	0	0	0	0	0	0	9
17	173	0	0	0	0	0	0	0	0	0	0	173
TOTAL	173	688	63	15	.	1	940

DUKE POWER COMPANY

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CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

March 1, 1983

TELEPHONE
(704) 373-4531

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 2900
Atlanta, Georgia 30303

Re: McGuire Nuclear Station, Unit 1
Docket No. 50-369/D
Semi-Annual Radioactive Effluent Release Report and Annual Summary
of Meteorological Data

Dear Mr. O'Reilly:

Pursuant to Technical Specifications 6.9.1.8 and 6.9.1.9, attached are radioactive effluent release reports for the period July-December 1982. Attachment 1 includes summaries of solid waste shipments, liquid and gaseous effluent releases, calculated dose assessments to the general public, and LADTAP and GASPAP dose assessments. Also attached is the annual summary of meteorological data for 1982 which is required by Technical Specification 6.9.1.9. Attachment 2 is the key for the wind frequency table derived from low elevation wind instruments, and Attachment 3 is the low elevation wind frequency table.

Very truly yours,

H.B. Tucker

Hal B. Tucker

WHM/php
Attachments

cc: Mr. Richard C. DeYoung, Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. W. T. Orders
NRC Senior Resident Inspector
McGuire Nuclear Station

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