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McGuire Nuclear Generation Department
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DUKE POWER

February 26, 1992

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: McGuire Nuclear Station
Docket Nos. 50-369 and 50-370
Semi-Annual Radioactive Effluent Release Report
Reference SLC 16.11-16

Gentlemen:

Pursuant to Commitment SLC 16.11-16 of the McGuire Nuclear Station Selected Licensee Commitments Manual, attached is the subject report covering the second half of 1991.

The liquid release summary includes dose calculations from McGuire's second release point, the Conventional Waste Water Treatment System. That data added to the primary discharge point cannot be "seen" in the station totals because of the low doses associated with the discharge point. It is provided for information purposes.

Following are the contents of the report.

Attachment I	Radioactive Effluent Releases and Supplementary Information
Attachment II	Solid Waste Disposal Report
Attachment III	Unplanned Offsite Releases
Attachment IV	Inoperable Monitoring Equipment
Attachment V	Fuel Cycle Calculations

Revision 7 to the Process Control Manual was transmitted on October 8, 1991. Revision 31 to the ODCM for MNS was submitted August 29, 1991.

For questions concerning this report, please contact Kathleen Mullen at (704) 875-4302.

Very truly yours,

Tony J. McConnell for

T. C. McMeekin, Vice President
McGuire Nuclear Site

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cc: (with attachments)
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State of NC

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ATTACHMENT I
RADIOACTIVE EFFLUENT RELEASES
UNIT 1

MCGUIRE NUCLEAR STATION
UNIT 1
RADIOACTIVE EFFLUENT RELEASES
DATE : 02/24/92

1 LIQUID RELEASES

YEAR : 1991

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL
1. GROSS RADIOACTIVITY						
A. TOTAL RELEASE	CURIES	4.17E-01	1.34E-01	2.02E-01	2.86E-01	1.04E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	5.24E-10	1.42E-10	2.08E-10	4.35E-10	3.09E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	8.87E-09	2.46E-09	5.57E-09	6.26E-09	8.87E-09
2. TRITIUM						
A. TOTAL RELEASE	CURIES	9.98E+01	1.05E+02	1.25E+02	1.15E+02	4.39E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.18E-07	1.11E-07	1.29E-07	1.75E-07	1.36E-07
3. DISSOLVED NOBLE GASES						
A. TOTAL RELEASE	CURIES	1.85E-02	7.06E-02	6.84E-02	7.37E-02	2.31E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.32E-11	7.49E-11	7.05E-11	1.12E-10	6.87E-11
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	7.71E+05	1.17E+06	2.12E+06	1.71E+06	5.77E+06
6. VOLUME OF DILUTION WATER	LITERS	7.97E+11	9.42E+11	9.70E+11	6.58E+11	3.37E+12
7. RADIONUCLIDES RELEASED	CURIES					
F-18		3.76E-06	0.00E+00	0.00E+00	0.00E+00	3.76E-06
HA-24		1.45E-05	5.51E-06	6.11E-06	1.02E-05	3.63E-05
K-40		0.00E+00	2.13E-06	0.00E+00	1.81E-06	3.93E-06
CR-51		1.16E-02	1.26E-02	9.13E-03	5.48E-02	8.81E-02
MN-54		2.15E-02	3.49E-03	9.84E-03	7.77E-03	4.26E-02
FE-55		5.26E-02	1.79E-02	3.18E-02	3.45E-02	1.37E-01
FE-59		8.91E-04	3.02E-04	1.37E-04	2.53E-03	3.86E-03
CO-57		9.18E-04	1.35E-04	3.05E-04	2.04E-04	1.56E-03
CO-58		8.91E-02	2.40E-02	1.50E-02	5.74E-02	1.85E-01
CO-60		1.60E-01	3.09E-02	8.99E-02	6.18E-02	3.43E-01
NI-63		0.00E+00	0.00E+00	0.00E+00	5.83E-06	5.83E-06
ZN-65		5.50E-04	0.00E+00	8.88E-05	2.48E-05	6.64E-04
BR-82		2.91E-05	2.43E-05	4.43E-05	1.15E-05	1.09E-04
RB-88		2.22E-04	0.00E+00	1.86E-04	7.98E-05	4.87E-04
SR-89		2.78E-05	1.81E-05	0.00E+00	1.13E-06	4.72E-05
SR-92		7.76E-05	4.55E-05	6.94E-05	4.94E-05	2.42E-04
Y-91M		0.00E+00	2.68E-06	0.00E+00	0.00E+00	2.68E-06
Y-93		0.00E+00	3.52E-05	0.00E+00	0.00E+00	3.52E-05
ZR-95		3.60E-03	8.82E-04	6.18E-04	5.75E-03	1.09E-02
ZR-97		1.95E-05	0.00E+00	0.00E+00	3.38E-05	5.33E-05
NB-95		7.92E-03	1.52E-03	1.83E-03	1.04E-02	2.17E-02
NB-97		1.01E-04	6.54E-05	1.52E-04	2.68E-04	5.86E-04
TC-99M		1.24E-04	2.04E-05	2.46E-04	6.75E-05	4.58E-04
RU-103		0.00E+00	1.37E-04	4.80E-05	7.67E-04	9.52E-04
RU-106		1.82E-03	3.39E-04	8.09E-04	1.58E-03	4.55E-03
AG-110M		3.68E-03	7.82E-04	2.53E-03	6.87E-03	1.38E-02
CD-115		0.00E+00	0.00E+00	1.23E-05	0.00E+00	1.23E-05
I-131		1.24E-02	4.66E-03	3.08E-03	1.52E-03	2.17E-02
I-132		2.52E-03	3.07E-04	1.30E-03	6.96E-05	4.20E-03
I-133		1.01E-02	6.40E-03	6.93E-03	3.45E-05	2.35E-02
I-134		1.36E-04	0.00E+00	7.73E-05	0.00E+00	2.13E-04
I-135		3.23E-03	2.37E-03	4.47E-03	9.10E-06	1.01E-02
SB-122		4.22E-05	3.90E-05	2.63E-05	8.36E-06	1.16E-04
SB-124		3.64E-04	9.45E-04	1.20E-04	2.04E-03	3.47E-03
SB-125		1.97E-02	1.77E-02	1.08E-02	2.90E-02	7.73E-02
SN-113		1.39E-03	4.12E-04	3.26E-04	6.95E-04	2.82E-03
TE-132		0.00E+00	7.95E-05	8.30E-04	1.40E-04	1.05E-03
CS-134		5.39E-03	3.63E-03	4.40E-03	2.52E-03	1.59E-02
CS-136		1.15E-05	7.97E-06	2.00E-05	0.00E+00	3.96E-05
CS-137		6.56E-03	3.92E-03	6.24E-03	4.25E-03	2.10E-02
CS-138		7.03E-05	0.00E+00	9.00E-05	0.00E+00	1.60E-04
BA-140		0.00E+00	2.87E-05	5.38E-05	0.00E+00	7.76E-05
LA-140		2.76E-04	1.30E-05	3.57E-04	2.58E-04	9.04E-04
CE-141		4.31E-06	4.98E-06	4.92E-05	1.06E-04	1.65E-04
CE-144		2.53E-04	2.17E-05	0.00E+00	5.27E-04	8.02E-04
PR-214		0.00E+00	0.00E+00	1.44E-05	0.00E+00	1.44E-05
KR-85		0.00E+00	6.47E-04	0.00E+00	0.00E+00	6.47E-04
XE-131M		0.00E+00	0.00E+00	1.42E-04	1.92E-04	3.35E-04
XE-133		1.65E-02	6.70E-02	6.50E-02	7.27E-02	2.21E-01
XE-133M		0.00E+00	6.09E-04	4.16E-04	2.44E-04	1.27E-03
XE-135		1.61E-03	2.03E-03	2.21E-03	5.56E-04	6.40E-03
XE-135M		4.64E-04	3.21E-04	5.73E-04	0.00E+00	1.36E-03
XE-138		0.00E+00	0.00E+00	0.00E+00	3.79E-07	3.79E-07

SKIN MAXIMUM DOSE- 5.47E-03 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE
 CO 60 93.97 %

BONE MAXIMUM DOSE- 3.76E-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH
 CS 134 35.08 %
 CS 137 66.40 %

LIVER MAXIMUM DOSE- 5.89E-02 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH
 H 3 6.56 %
 CO 60 8.15 %
 CS 134 42.90 %
 CS 137 40.06 %

T. BODY MAXIMUM DOSE- 4.29E-02 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH
 H 3 12.73 %
 CS 134 47.44 %
 CS 137 34.51 %

THYROID MAXIMUM DOSE- 2.37E-02 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING
 H 3 29.86 %
 I 131 68.57 %

KIDNEY MAXIMUM DOSE- 2.49E-02 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH
 H 3 15.50 %
 CO 60 17.51 %
 CS 134 32.33 %
 CS 137 32.42 %

LUNG MAXIMUM DOSE- 1.48E-02 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH
 H 3 26.04 %
 CO 60 29.41 %
 CS 134 20.93 %
 CS 137 21.52 %

GI-LLI MAXIMUM DOSE- 7.68E-02 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH
 H 3 7.12 %
 CO 60 12.01 %
 NB 95 73.84 %

SKIN	MAXIMUM DOSE-	1.00E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	84.64 %				
	SB 125	5.05 %				
	CS 137	5.13 %				
BONE	MAXIMUM DOSE-	1.97E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	38.77 %				
	CS 137	59.22 %				
LIVER	MAXIMUM DOSE-	3.16E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	16.48 %				
	CS 134	45.56 %				
	CS 137	36.69 %				
T. BODY	MAXIMUM DOSE-	2.49E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	20.86 %				
	CS 134	47.15 %				
	CS 137	30.43 %				
THYROID	MAXIMUM DOSE-	1.26E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	53.19 %				
	I 131	44.96 %				
KIDNEY	MAXIMUM DOSE-	1.47E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	47.29 %				
	CS 134	26.45 %				
	CS 137	24.81 %				
LUNG	MAXIMUM DOSE-	9.88E-03 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	70.18 %				
	CS 134	14.12 %				
	CS 137	13.30 %				
GI-LLI	MAXIMUM DOSE-	1.79E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	29.14 %				
	CO 60	8.54 %				
	NB 95	54.07 %				

SKIN	MAXIMUM DOSE-	2.61E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	93.01 %				
BONE	MAXIMUM DOSE-	2.80E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	32.29 %				
	CS 137	64.95 %				
LIVER	MAXIMUM DOSE-	4.33E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	9.97 %				
	CO 60	5.24 %				
	CS 134	40.03 %				
	CS 137	43.66 %				
T. BODY	MAXIMUM DOSE-	3.29E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	18.55 %				
	CS 134	42.43 %				
	CS 137	36.07 %				
THYROID	MAXIMUM DOSE-	1.19E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	66.49 %				
	I 131	31.36 %				
KIDNEY	MAXIMUM DOSE-	1.90E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	42.85 %				
	CS 134	24.25 %				
	CS 137	29.96 %				
LUNG	MAXIMUM DOSE-	1.24E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	65.68 %				
	CS 134	13.37 %				
	CS 137	16.60 %				
GI-LLI	MAXIMUM DOSE-	2.41E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	25.38 %				
	CO 60	18.11 %				
	NB 95	47.77 %				

SKIN	MAXIMUM DOSE-	2.80E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	88.08 %				
BONE	MAXIMUM DOSE-	2.70E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	28.19 %				
	CS 137	67.73 %				
LIVER	MAXIMUM DOSE-	4.25E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	13.84 %				
	CO 60	5.42 %				
	CS 134	34.26 %				
	CS 137	44.63 %				
T. BODY	MAXIMUM DOSE-	3.31E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H	25.12 %				
	CS 134	35.43 %				
	CS 137	35.97 %				
THYROID	MAXIMUM DOSE-	1.32E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	83.88 %				
	I 131	12.34 %				
KIDNEY	MAXIMUM DOSE-	2.13E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	52.17 %				
	CS 134	18.21 %				
	CS 137	26.86 %				
LUNG	MAXIMUM DOSE-	1.52E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	72.82 %				
	CS 134	9.14 %				
	CS 137	13.55 %				
GI-LLI	MAXIMUM DOSE-	1.04E-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 5	7.99 %				
	NB 95	83.69 %				

SKIN	MAXIMUM DOSE-	1.15E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	91.68 %				
BONE	MAXIMUM DOSE-	1.11E-01 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	33.72 %				
	CS 137	62.84 %				
LIVER	MAXIMUM DOSE-	1.74E-01 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	9.95 %				
	CO 60	5.67 %				
	CS 134	41.18 %				
	CS 137	41.61 %				
T. BODY	MAXIMUM DOSE-	1.33E-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	18.51 %				
	CS 134	43.83 %				
	CS 137	34.36 %				
THYROID	MAXIMUM DOSE-	6.04E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	52.49 %				
	I 131	46.08 %				
KIDNEY	MAXIMUM DOSE-	7.61E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	42.92 %				
	CS 134	25.03 %				
	CS 137	28.65 %				
LUNG	MAXIMUM DOSE-	4.99E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	65.46 %				
	CS 134	13.74 %				
	CS 137	15.79 %				
GI-LLI	MAXIMUM DOSE-	2.07E-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	11.84 %				
	CO 60	9.15 %				
	NB 95	72.93 %				

MCQUIRE NUCLEAR STATION
UNIT 1
RADIOACTIVE EFFLUENT RELEASES
DATE: 02/24/92

II. AIRBORNE RELEASES	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR TOTAL	1991
1. TOTAL NOBLE GASES	CURIES	2.04E+01	9.36E+01	2.11E+02	1.24E+02	4.47E+02	
2. TOTAL HALOGENS	CURIES	5.63E-04	2.28E-04	1.85E-04	3.13E-04	1.29E-03	
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	3.13E-05	1.35E-05	1.31E-05	3.52E-04	4.10E-04	
4. TOTAL TRITIUM	CURIES	1.24E+01	5.26E+00	2.97E+00	1.23E+01	3.23E+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							
CL-38		3.56E-08	0.00E+00	6.03E-09	0.00E+00	4.16E-08	
K-40		1.26E-06	1.24E-08	7.98E-09	0.00E+00	1.28E-06	
CR-51		5.25E-06	0.00E+00	0.00E+00	2.24E-05	2.77E-05	
MN-54		0.00E+00	0.00E+00	0.00E+00	3.04E-06	3.04E-06	
CO-57		0.00E+00	0.00E+00	0.00E+00	2.17E-07	2.17E-07	
CO-58		0.00E+00	0.00E+00	0.00E+00	9.43E-05	9.43E-05	
CO-60		1.47E-05	7.67E-06	1.80E-06	2.25E-04	2.49E-04	
BR-82		5.52E-08	1.29E-08	1.23E-08	3.85E-09	8.42E-08	
BR-84		0.00E+00	0.00E+00	3.24E-09	0.00E+00	3.24E-09	
RB-88		5.49E-06	5.70E-06	1.09E-05	3.53E-07	2.25E-05	
NO-95		0.00E+00	0.00E+00	0.00E+00	3.92E-06	3.92E-06	
RU-106		0.00E+00	5.11E-09	0.00E+00	0.00E+00	5.11E-09	
TE-132		0.00E+00	0.00E+00	7.57E-12	0.00E+00	7.57E-12	
CS-134		0.00E+00	2.68E-10	6.20E-10	0.00E+00	8.87E-10	
CS-137		4.08E-06	2.60E-10	1.58E-09	2.63E-06	6.71E-06	
CS-138		4.17E-07	1.12E-07	3.28E-07	1.50E-09	8.59E-07	
BA-139		0.00E+00	3.41E-09	2.05E-08	0.00E+00	2.39E-09	
PB-214		0.00E+00	1.45E-09	4.69E-10	2.64E-11	1.94E-09	
HALOGENS							
I-130		0.00E+00	9.58E-08	0.00E+00	0.00E+00	9.58E-08	
I-131		1.84E-04	1.25E-04	7.98E-05	2.13E-04	5.96E-04	
I-132		4.72E-06	1.40E-06	1.72E-05	4.27E-05	6.61E-05	
I-133		3.54E-04	9.65E-05	9.21E-05	5.76E-05	6.01E-04	
I-134		3.32E-06	7.74E-07	3.92E-07	0.00E+00	4.49E-06	
I-135		1.63E-05	4.70E-06	1.42E-06	0.00E+00	2.25E-05	
GASES							
AR-41		3.80E-01	5.58E-01	9.66E-01	2.93E-01	2.26E+00	
KR-85		7.58E-01	1.06E+00	6.04E+00	1.16E+00	9.02E+00	
KR-85M		1.27E-01	2.70E-01	4.08E-01	1.91E-01	9.86E-01	
KR-87		3.84E-02	6.06E-02	9.17E-02	2.32E-02	2.14E-01	
KR-88		1.58E-01	2.96E-01	4.62E-01	1.57E-01	1.07E+00	
XE-131M		3.35E-02	2.98E-01	2.24E+00	8.65E-01	3.44E+00	
XE-133		1.65E+01	8.57E+01	1.90E+02	1.18E+02	4.11E+02	
XE-133M		3.02E-01	1.19E+00	2.48E+00	1.29E+00	5.26E+00	
XE-135		2.08E+00	4.09E+00	7.62E+00	1.84E+00	1.56E+01	
XE-135M		1.68E-02	1.22E-02	1.82E-02	1.30E-04	4.73E-02	
XE-138		2.89E-03	0.45E+00	0.00E+00	0.00E+00	2.89E-03	

MCQUIRE UNIT 1 GAS DOSE 001-090 91 RELEASE HEIGHTED MET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES NNE

02/24/92

NOBLE GAS EXPOSURE:

BETA AIR DOSE = $3.32\text{E-}02$ MILLIRADS
GAMMA AIR DOSE = $2.05\text{E-}02$ MILLIRADS

TOTAL BODY DOSE = $1.30\text{E-}02$ MILLIREM

KR 88	15.90%
XE133	31.85%
XE135	25.41%
AR 41	23.07%

TOTAL SKIN DOSE = $3.12\text{E-}02$ MILLIREM

KR 88	9.17%
XE133	37.55%
XE135	28.08%
AR 41	15.48%

MCQUIRE UNIT 1 GAS DOSE 001-090 91 RELEASE WEIGHTED MET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES E

02/24/92

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATH - VEGET @ 75.42%

MAXIMUM ORGAN DOSE = 4.43E-02 MILLIREM
H 3 80.56%
I 131 16.19%

MCGUIRE UNIT 1 GAS DOSE 091-181 91 RELEASE WEIGHTED NET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES NE

02/24/92

NOBLE GAS EXPOSURE:

BETA AIR DOSE = $1.87\text{E}-01$ MILLIRADS
GAMMA AIR DOSE = $8.23\text{E}-02$ MILLIRADS

TOTAL BODY DOSE = $5.02\text{E}-02$ MILLIREM
KR 88 9.28%
XE133 61.31%
XE135 15.72%
AR 41 11.34%

TOTAL SKIN DOSE = $1.32\text{E}-01$ MILLIREM
KR 88 4.87%
XE133 65.78%
XE135 15.80%
AR 41 6.88%

MCQUIRE UNIT 1 GAS DOSE 091-101 91 RELEASE WEIGHTED NET REPORT SUMMARY 02/24/92
SPECIAL LOCATION
AT 0.50 MILES E

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET 3 74.31%
MAXIMUM ORGAN DOSE = 2.50E-02 MILLIREM
H 3 82.67%
I 131 15.72%

MCQUIRE UNIT 1 GAS DOSE 182-273 91 RELEASE WEIGHTED MET REPORT SUMMARY 02/24/92
 SPECIAL LOCATION
 AT 0.50 MILES NNE

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 5.58E-01 MILLIRADS
 GAMMA AIR DOSE = 2.29E-01 MILLIRADS

TOTAL BODY DOSE = 1.35E-01 MILLIREM
 KR 85 0.12%
 KR 88 7.91%
 XE133 44.76%
 XE135 15.14%
 AR 41 9.89%

TOTAL SKIN DOSE = 3.82E-01 MILLIREM
 KR 85 5.25%
 KR 88 3.96%
 XE133 66.55%
 XE135 14.51%
 AR 41 5.75%

MCQUIRE UNIT 1 GAS DOSE 182-273 91 RELEASE WEIGHTED NET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES ESE

02/24/92

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 70.46%

MAXIMUM ORGAN DOSE = 1.25E-02 MILLIREM
H 3 74.96%
I 131 21.75%

MC GUIRE UNIT 1 GAS DOSE 274-365 91 RELEASE HEIGHTED NET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES NNE

01/29 '72

NOBLE GAS EXPOSURE:

BETA AIR DOSE = $2.57\text{E}-01$ MILLIRADS
GAMMA AIR DOSE = $9.72\text{E}-02$ MILLIRADS

TOTAL BODY DOSE = $5.81\text{E}-02$ MILLIREM
KR 88 5.34%
XE133 79.40%
XE135 7.65%
AR 41 5.83%

TOTAL SKIN DOSE = $1.60\text{E}-01$ MILLIREM
KR 88 2.68%
XE133 81.44%
XE135 7.36%
AR 41 3.41%

MCQUIRE UNIT 1 GAS DOSE 274-345 91 RELEASE WEIGHTED NET REPORT SUMMARY 02/24/92
SPECIAL LOCATION
AT 0.50 MILES E

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET 3 70.71%
MAXIMUM ORGAN DOSE = 5.27E-02 MILLIREM
H 3 81.55%
CO 60 6.60%
I 131 11.59%

MCQUIRE UNIT 1 GAS DOSE 001-365 91 RELEASE WEIGHTED MET REPORT SUMMARY 02/24/92
SPECIAL LOCATION
AT 0.50 MILES NNE

NORLE GAS EXPOSURE:

BETA AIR DOSE = 1.03E+00 MILLIRADS
GAMMA AIR DOSE = 4.33E-01 MILLIRADS

TOTAL BODY DOSE = 2.64E-01 MILLIREM
KR 88 8.17%
XE133 65.23%
XE135 14.29%
AR 41 10.03%

TOTAL SKIN DOSE = 7.09E-01 MILLIREM
KR 88 4.19%
XE133 68.35%
XE135 14.03%
AR 41 5.98%

MCQUIRE UNIT 1 GAS DOSE 001-365 91 RELEASE WEIGHTED MET REPORT SUMMARY 92/24/92
SPECIAL LOCATION
AT 0.50 MILES E

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 73.20Z
MAXIMUM ORGAN DOSE = 1.45E-01 MILLIREM
H 3 61.50Z
I 131 14.28Z

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ATTACHMENT I
RADIOACTIVE EFFLUENT RELEASES
UNIT 2

ACQUIRE NUCLEAR STATION
UNIT 2
RADIOACTIVE EFFLUENT RELEASES
DATE 02/24/92

1. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR 1991 TOTAL
1. GROSS RADIOACTIVITY						
A. TOTAL RELEASE	CURIES	4.17E-01	1.34E-01	2.02E-01	2.86E-01	1.04E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	5.24E-10	1.42E-10	2.08E-10	4.35E-10	3.09E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	8.87E-09	2.46E-09	5.57E-09	6.26E-09	8.87E-09
2. TRITIUM						
A. TOTAL RELEASE	CURIES	9.38E+01	1.05E+02	1.25E+02	1.15E+02	4.39E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.18E-07	1.11E-07	1.29E-07	1.75E-07	1.30E-07
3. DISSOLVED NOBLE GASES						
A. TOTAL RELEASE	CURIES	1.85E-02	7.06E-02	6.84E-02	7.37E-02	2.81E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.32E-11	7.49E-11	7.05E-11	1.12E-10	6.87E-11
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	7.71E+05	1.17E+06	2.12E+06	1.71E+06	5.77E+06
6. VOLUME OF DILUTION WATER	LITERS	7.97E+11	9.42E+11	9.70E+11	6.58E+11	3.37E+12
7. RADIONUCLIDES RELEASED	CURIES					
F-18		3.76E-06	0.00E+00	0.00E+00	0.00E+00	3.76E-06
NA-24		1.45E-05	5.51E-06	6.11E-06	1.02E-05	3.63E-05
K-40		0.00E+00	2.13E-06	0.00E+00	1.81E-06	3.93E-06
CR-51		1.16E-02	1.26E-02	9.13E-03	5.48E-02	8.81E-02
MN-54		2.15E-02	3.49E-03	9.84E-03	7.77E-03	4.26E-02
FE-55		5.26E-02	1.79E-02	3.18E-02	3.45E-02	1.37E-01
FE-59		8.91E-04	3.02E-04	1.37E-04	2.53E-03	3.86E-03
CO-57		9.18E-04	1.35E-04	3.05E-04	2.04E-04	1.56E-03
CO-58		8.91E-02	2.40E-02	1.50E-02	5.74E-02	1.85E-01
CO-60		1.60E-01	3.09E-02	8.99E-02	6.18E-02	3.43E-01
NI-63		0.00E+00	0.00E+00	0.00E+00	5.83E-06	5.83E-06
ZN-65		5.50E-04	0.00E+00	8.88E-05	2.48E-05	6.64E-04
BR-82		2.91E-05	2.43E-05	4.43E-05	1.15E-05	1.09E-04
BR-88		2.22E-04	0.00E+00	1.06E-04	7.98E-05	4.87E-04
SR-89		2.78E-05	1.83E-05	0.00E+00	1.13E-06	4.72E-05
SR-92		7.76E-05	4.59E-05	6.94E-05	4.94E-05	2.42E-04
Y-91M		0.00E+00	2.68E-06	0.00E+00	0.00E+00	2.68E-06
Y-93		0.00E+00	3.52E-05	0.00E+00	0.00E+00	3.52E-05
ZR-95		3.60E-03	8.82E-04	6.18E-04	5.75E-03	1.09E-02
ZR-97		1.95E-05	0.00E+00	0.00E+00	3.38E-05	5.33E-05
NB-95		7.92E-03	1.52E-03	1.83E-03	1.04E-02	2.17E-02
NB-97		1.01E-04	6.54E-05	1.52E-04	2.68E-04	5.86E-04
TC-99M		1.24E-04	2.04E-05	2.46E-04	6.75E-05	4.50E-04
RU-103		0.00E+00	1.37E-04	4.80E-05	7.67E-04	9.52E-04
RU-106		1.82E-03	3.39E-04	8.09E-04	1.58E-03	4.55E-03
AG-110M		3.68E-03	7.39E-04	9.53E-03	6.87E-03	1.38E-02
CD-115		0.00E+00	0.00E+00	1.23E-05	0.00E+00	1.23E-05
I-131		1.24E-02	4.66E-03	3.08E-03	1.52E-03	2.17E-02
I-132		2.52E-03	3.87E-04	1.30E-03	6.96E-05	4.20E-03
I-133		1.01E-02	6.40E-03	6.93E-03	3.45E-05	2.35E-02
I-134		1.36E-04	0.00E+00	7.73E-05	0.00E+00	2.13E-04
I-135		3.23E-03	2.37E-03	4.47E-03	9.10E-06	1.01E-02
SB-122		4.22E-05	3.90E-05	2.63E-05	8.36E-06	1.16E-04
SB-124		3.64E-04	9.45E-04	1.20E-04	2.04E-03	3.47E-03
SB-125		1.97E-02	1.77E-02	1.08E-02	2.90E-02	7.7E-02
SN-113		1.39E-03	4.12E-04	3.26E-04	4.95E-04	2.91E-03
TE-132		0.00E+00	7.95E-05	8.30E-04	1.42E-04	1.01E-03
CS-134		5.39E-03	3.63E-03	4.40E-03	2.52E-03	1.54E-02
CS-136		1.15E-05	7.97E-06	2.00E-05	0.00E+00	1.34E-05
CS-137		6.56E-03	3.92E-03	6.24E-03	4.25E-03	2.10E-02
CS-138		7.03E-05	0.00E+00	9.00E-05	0.00E+00	1.60E-04
BA-140		0.00E+00	2.37E-05	5.38E-05	0.00E+00	7.76E-05
LA-140		2.76E-04	1.30E-05	3.57E-04	2.58E-04	9.04E-04
CE-141		4.31E-06	4.98E-06	4.92E-05	1.06E-04	1.65E-04
CE-144		2.53E-04	2.17E-05	0.00E+00	5.27E-04	8.02E-04
PR-214		0.00E+00	0.00E+00	1.44E-05	0.00E+00	1.44E-05
KR-85		0.00E+00	6.47E-04	0.00E+00	0.00E+00	6.47E-04
XE-131M		0.00E+00	0.00E+00	1.42E-04	1.92E-04	3.35E-04
XE-133		1.65E-02	6.70E-02	6.50E-02	7.27E-02	2.21E-01
XE-133M		0.00E+00	6.09E-04	4.16E-04	2.44E-04	1.27E-03
XE-135		1.61E-03	2.83E-03	2.21E-03	5.56E-04	6.40E-03
XE-135M		4.64E-04	3.21E-04	5.70E-04	0.00E+00	1.36E-03
XE-138		0.00E+00	0.00E+00	0.00E+00	3.79E-07	3.79E-07

SKIN	MAXIMUM DOSE-	5.47E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	93.97 %				
BONE	MAXIMUM DOSE-	3.76E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	35.08 %				
	CS 137	60.40 %				
LIVER	MAXIMUM DOSE-	5.89E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	6.56 %				
	CO 60	8.15 %				
	CS 134	42.90 %				
	CS 137	40.06 %				
T. BODY	MAXIMUM DOSE-	4.29E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	12.73 %				
	CS 134	47.44 %				
	CS 137	34.51 %				
THYROID	MAXIMUM DOSE-	2.37E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	29.86 %				
	I 131	68.57 %				
KIDNEY	MAXIMUM DOSE-	2.49E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	15.50 %				
	CO 60	17.51 %				
	CS 134	32.33 %				
	CS 137	32.42 %				
LUNG	MAXIMUM DOSE-	1.46E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	26.04 %				
	CO 60	29.41 %				
	CS 134	20.93 %				
	CS 137	21.52 %				
GI-LLI	MAXIMUM DOSE-	7.68E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	7.12 %				
	CO 60	12.01 %				
	NB 95	73.84 %				

SKIN	MAXIMUM DOSE-	1.00E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	84.64 %				
	SB 125	5.05 %				
	CS 137	5.13 %				
BONE	MAXIMUM DOSE-	1.97E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	38.77 %				
	CS 137	59.22 %				
LIVER	MAXIMUM DOSE-	3.16E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	16.48 %				
	CS 134	45.56 %				
	CS 137	36.69 %				
T. BODY	MAXIMUM DOSE-	2.49E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	20.86 %				
	CS 134	47.15 %				
	CS 137	30.43 %				
THYROID	MAXIMUM DOSE-	1.26E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	53.19 %				
	I 131	44.96 %				
KIDNEY	MAXIMUM DOSE-	1.47E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	47.29 %				
	CS 134	26.45 %				
	CS 137	24.81 %				
LUNG	MAXIMUM DOSE-	9.88E-03 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	70.18 %				
	CS 134	14.12 %				
	CS 137	13.30 %				
GI-LLI	MAXIMUM DOSE-	1.79E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	29.14 %				
	CO 60	8.54 %				
	NB 95	54.07 %				

SKIN	MAXIMUM DOSE-	2.61E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	93.01 %				
BONE	MAXIMUM DOSE-	2.80E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	32.29 %				
	CS 137	64.95 %				
LIVER	MAXIMUM DOSE-	4.33E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	9.97 %				
	CO 60	5.24 %				
	CS 134	40.03 %				
	CS 137	43.66 %				
T. BODY	MAXIMUM DOSE-	3.29E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	18.55 %				
	CS 134	42.43 %				
	CS 137	36.07 %				
THYROID	MAXIMUM DOSE-	1.19E-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	64.49 %				
	I 131	34.36 %				
KIDNEY	MAXIMUM DOSE-	1.90E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	42.85 %				
	CS 134	24.25 %				
	CS 137	29.96 %				
LUNG	MAXIMUM DOSE-	1.24E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	65.68 %				
	CS 134	13.37 %				
	CS 137	16.60 %				
GI-LLI	MAXIMUM DOSE-	2.41E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	25.38 %				
	CO 60	18.11 %				
	NB 95	47.77 %				

SKIN	MAXIMUM DOSE-	2.80E-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CD 60	88.08 %				
BONE	MAXIMUM DOSE-	2.70E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	28.19 %				
	CS 137	67.73 %				
LIVER	MAXIMUM DOSE-	4.25E-02 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
	H 3	13.84 %				
	CD 60	5.42 %				
	CS 134	34.26 %				
	CS 137	44.63 %				
T. BODY	MAXIMUM DOSE-	3.31E-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	25.12 %				
	CS 134	35.43 %				
	CS 137	35.97 %				
THYROID	MAXIMUM DOSE-	1.32E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	83.88 %				
	I 131	12.34 %				
KIDNEY	MAXIMUM DOSE-	2.13E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	52.17 %				
	CS 134	18.21 %				
	CS 137	26.86 %				
LUNG	MAXIMUM DOSE-	1.52E-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	72.82 %				
	CS 134	9.14 %				
	CS 137	13.55 %				
GI-LLI	MAXIMUM DOSE-	1.04E-01 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	7.99 %				
	MS 95	83.69 %				

SKIN MAXIMUM DOSE- 1.15E-02 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE
CO 60 91.68 %

BONE MAXIMUM DOSE- 1.11E-01 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH
CS 134 33.72 %
CS 137 62.84 %

LIVER MAXIMUM DOSE- 1.74E-01 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH
H 3 9.95 %
CO 60 5.67 %
CS 134 41.18 %
CS 137 41.61 %

T. BODY MAXIMUM DOSE- 1.33E-01 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH
H 3 18.51 %
CS 134 43.63 %
CS 137 34.36 %

THYROID MAXIMUM DOSE- 6.04E-02 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING
H 3 52.49 %
I 131 96.08 %

KIDNEY MAXIMUM DOSE- 7.61E-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH
H 3 42.92 %
CS 134 25.03 %
CS 137 28.65 %

LUNG MAXIMUM DOSE- 4.99E-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- DRINKING
H 3 65.46 %
CS 134 13.74 %
CS 137 15.79 %

GI-LLI MAXIMUM DOSE- 2.07E-01 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH
H 3 11.84 %
CO 60 9.15 %
H8 95 72.93 %

ACQUIRE NUCLEAR STATION
UNIT 2
RADIOACTIVE EFFLUENT RELEASES
DATE: 02/24/92

11 AIRBORNE RELEASES	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	YEAR 1991
1. TOTAL NOBLE GASES	CURIES	2.04E+01	9.36E+01	2.11E+02	1.24E+02	4.49E+02	
2. TOTAL HALOGENS	CURIES	5.63E-04	2.28E-04	1.85E-04	3.13E-04	1.29E-03	
3. TOTAL PARTICULATE GROSS ALPHA-GAMMA	CURIES	3.13E-05	1.35E-05	1.31E-05	3.52E-04	4.10E-04	
4. TOTAL TRITIUM	CURIES	1.24E+01	5.26E+00	2.37E+00	1.23E+01	3.23E+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							
CL-38		3.56E-06	0.00E+00	6.09E-09	0.00E+00	4.16E-08	
K-40		1.26E-06	1.24E-08	7.98E-09	0.00E+00	1.28E-06	
CR-51		5.25E-06	0.00E+00	0.00E+00	2.24E-05	2.77E-05	
MN-54		0.00E+00	0.00E+00	0.00E+00	3.04E-06	3.04E-06	
CO-57		0.00E+00	0.00E+00	0.00E+00	2.17E-07	2.17E-07	
CO-58		0.00E+00	0.00E+00	0.00E+00	9.43E-05	9.43E-05	
CO-60		1.47E-05	7.67E-06	1.80E-06	2.25E-04	2.49E-04	
BR-82		5.52E-08	1.29E-08	1.23E-08	3.85E-09	8.42E-08	
BR-84		0.00E+00	0.00E+00	3.24E-09	0.00E+00	3.24E-09	
RB-88		5.49E-06	5.70E-06	1.09E-05	8.53E-07	2.25E-05	
NB-95		0.00E+00	0.00E+00	0.00E+00	3.92E-06	3.92E-06	
RU-106		0.00E+00	5.11E-09	0.00E+00	0.00E+00	5.11E-09	
TE-132		0.00E+00	0.00E+00	7.57E-12	0.00E+00	7.57E-12	
CS-134		0.00E+00	2.68E-10	6.20E-10	0.00E+00	8.87E-10	
CS-137		4.08E-06	2.60E-10	1.58E-09	2.63E-06	6.71E-06	
CS-138		4.17E-07	1.12E-07	3.28E-07	1.50E-09	8.59E-07	
BA-139		0.00E+00	3.41E-09	2.05E-08	0.00E+00	2.39E-08	
PB-214		0.00E+00	1.45E-09	4.69E-10	2.64E-11	1.94E-09	
HALOGENS							
I-130		0.00E+00	9.58E-08	0.00E+00	0.00E+00	9.58E-08	
I-131		1.84E-04	1.25E-04	7.38E-05	2.13E-04	5.96E-04	
I-132		4.72E-06	1.40E-06	1.72E-05	4.27E-05	6.61E-05	
I-133		3.54E-04	9.65E-05	9.21E-05	5.76E-05	6.01E-04	
I-134		3.32E-06	7.74E-07	3.92E-07	0.00E+00	4.49E-06	
I-135		1.63E-05	4.70E-06	1.42E-06	0.00E+00	2.25E-05	
GASES							
AR-41		3.80E-01	5.58E-01	9.66E-01	2.93E-01	2.20E+00	
KR-85		7.58E-01	1.06E+00	6.04E+00	1.16E+00	9.02E+00	
KR-85M		1.27E-01	2.70E-01	4.08E-01	1.81E-01	9.86E-01	
KR-87		3.84E-02	6.06E-02	9.17E-02	2.32E-02	2.14E-01	
KR-88		1.58E-01	2.96E-01	4.62E-01	1.57E-01	1.07E+00	
XE-131M		3.35E-02	2.98E-01	2.24E+00	8.65E-01	3.44E+00	
XE-133		1.65E+01	8.57E+01	1.90E+02	1.18E+02	4.11E+02	
XE-133M		3.02E-01	1.19E+00	2.48E+00	1.29E+00	5.26E+00	
XE-135		2.08E+00	4.09E+00	7.62E+00	1.84E+00	1.56E+01	
XE-135M		1.68E-02	1.22E-02	1.82E-02	1.30E-04	4.73E-02	
XE-138		2.89E-03	0.00E+00	0.00E+00	0.00E+00	2.89E-03	

MCGRINE UNIT 2 GAS DOSE 001-090 91 RELEASE WEIGHTED MET REPORT SUMMARY 02/24/92
 SPECIAL LOCATION
 AT 0.50 MILES NWE

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 3.12E-02 MILLIRADS
 GAMMA AIR DOSE = 2.05E-02 MILLIRADS

TOTAL BODY DOSE = 1.30E-02 MILLIREM
 KR 88 15.90%
 XE133 31.65%
 XE135 25.41%
 AR 41 25.07%

TOTAL SKIN DOSE = 3.12E-02 MILLIREM
 KR 88 9.17%
 XE133 37.55%
 XE135 26.08%
 AR 41 15.45%

MCGUIRE UNIT 2 GAS DOSE 001-090 91 RELEASE WEIGHTED MET REPORT SUMMARY 02/24/92
SPECIAL LOCATION
AT 0.50 MILES E

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 75.42%
MAXIMUM ORGAN DOSE = 4.43E-02 MILLIREM
H 3 80.56%
I 131 16.19%

MCQUIRE UNIT 2 GAS DOSE 091-181 91 RELEASE WEIGHTED NET REPORT SUMMARY 02/24/92
 SPECIAL LOCATION
 AT 0.50 MILES NE

MOBILE GAS EXPOSURE:

BETA AIR DOSE = 1.87E-01 MILLIRADS
 GAMMA AIR DOSE = 8.23E-02 MILLIRADS

TOTAL BODY DOSE = 5.02E-02 MILLIREM
 KR 88 9.28%
 XE133 61.31%
 XE135 15.72%
 AR 41 11.34%

TOTAL SKIN DOSE = 1.32E-01 MILLIREM
 KR 88 4.87%
 XE133 65.78%
 XE135 15.80%
 AR 41 6.88%

MCQUIRE UNIT 2 GAS DOSE 091-181 91 RELEASE WEIGHTED NET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES E

02/24/92

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 74.31%

MAXIMUM ORGAN DOSE = 2.50E-02 MILLIREM
H 3 82.67%
I 131 15.72%

MCGUIRE UNIT 2 GAS DOSE 182-273 91 RELEASE WEIGHTED NET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES NNE

02/24/92

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 5.58E-01 MILLIRADS
GAMMA AIR DOSE = 2.29E-01 MILLIRADS

TOTAL BODY DOSE = 1.39E-01 MILLIREM

KR 85	0.12%
KR 88	7.91%
XE133	64.76%
XE135	15.14%
AR 41	9.89%

TOTAL SKIN DOSE = 3.82E-01 MILLIREM

KR 85	5.25%
KR 88	3.96%
XE133	66.55%
XE135	14.51%
AR 41	5.75%

MCQUIRE UNIT 2 GAS DOSE 182-273 91 RELEASE WEIGHTED NET REPORT SUMMARY 02/24/92
SPECIAL LOCATION
AT 0.50 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 70.46%
MAXIMUM ORGAN DOSE = 1.25E-02 MILLIREM
H 3 79.96%
T 131 21.75%

MCQUIRE UNIT 2 GAS DOSE 274-365 91 RELEASE WEIGHTED NET REPORT SUMMARY 02/24/92
 SPECIAL LOCATION
 AT 0.50 MILES NWE

MOBILE GAS EXPOSURE:

BETA AIR DOSE = 2.57E-01 MILLIRADS
 GAMMA AIR DOSE = 9.72E-02 MILLIRADS

TOTAL BODY DOSE = 5.81E-02 MILLIREM	TOTAL SKIN DOSE = 1.60E-01 MILLIREM
KR 88 5.36%	KR 88 2.68%
XE135 79.40%	XE135 81.44%
XE135 7.65%	XE135 7.36%
AR 41 5.83%	AR 41 5.41%

MCGUIRE UNIT 2 GAS DOSE 274-361 91 RELEASE WEIGHTED NET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES E

02/24/92

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 70.71%

MAXIMUM ORGAN DOSE = 5.27E-02 MILLIREM
H 3 81.55%
CO 60 6.60%
I 131 11.39%

MC GUIRE UNIT 2 GAS DOSE 001-365 91 RELEASE WEIGHTED MET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES NNE

02/24/92

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 1.03E+00 MILLIRADS
GAMMA AIR DOSE = 4.33E-01 MILLIRADS

TOTAL BODY DOSE = 2.64E-01 MILLIREM
KR 88 8.17%
XE133 65.23%
XE135 14.29%
AR 41 10.03%

TOTAL SKIN DOSE = 7.09E-01 MILLIREM
KR 88 4.19%
XE133 68.35%
XE135 14.03%
AR 41 5.98%

MCGUIRE UNIT 2 GAS DOSE 001-365 91 R' LEASE WEIGHTED MET REPORT SUMMARY
SPECIAL LOCATION
AT 0.50 MILES E

02/24/92

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - CHILD
CRITICAL PATHWAY - VEGET @ 73.20%

MAXIMUM ORGAN DOSE = 1.45E-01 MILLIREM
H 3 81.50%
I 131 14.28%

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ATTACHMENT I

SUPPLEMENTAL INFORMATION

SET TO TOP OF NEW PAGE AND PRESS RETURN

MCQUIRE NUCLEAR STATION
EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION

REPORT DATE: 02/25/92

PERIOD COVERED: START DAY = 001 STOP DAY = 365

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/T 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 11, 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. $4.69E+02$ = TOTAL NUMBER OF BATCH RELEASES
2. $3.15E+05$ = TOTAL TIME(MIN.) FOR BATCH RELEASES
3. $9.83E+03$ = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE
4. $6.72E+02$ = AVERAGE TIME(MIN.) FOR A BATCH RELEASE
5. $1.00E+00$ = MINIMUM TIME(MIN.) FOR A BATCH RELEASE
6. $1.74E+06$ = AVERAGE DILUTION WATER FLOW DURING RELEASES(GPM)

B. GASEOUS EFFLUENT

1. $2.14E+02$ = TOTAL NUMBER OF BATCH RELEASES
2. $1.12E+06$ = TOTAL TIME(MIN.) FOR BATCH RELEASES
3. $4.46E+04$ = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE
4. $5.25E+03$ = AVERAGE TIME(MIN.) FOR A BATCH RELEASE
5. $3.80E+01$ = 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 3
2. TOTAL ACTIVITY RELEASED(CURIES) 21.5

SUPPLEMENTAL REPORT PAGE 2

MCGUIRE 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 McGuire counting systems. Typical MDA's for the McGuire counting system's are listed below:

ISOTOPE	ENERGY (Kev)	AVERAGE MDA
<u>Liquid</u>		
XE-133	80	6.0E-8
CS-134	133	1.2E-7
KR-88	196	1.7E-7
XE-135	249	2.3E-8
KR-87	402	2.5E-7
CS-137	661	2.6E-7
MO-99	778	4.3E-7
MN-54	834	2.2E-8
ZN-65	1115	4.0E-8
CO-60	1332	4.4E-8
<u>Gas</u>		
XE-133	80	2.5E-8
Kr-85M	151	1.0E-8
Xe-131M	163	3.3E-7
Kr-88	196	4.7E-8
Xe-133m	233	7.9E-8
Xe-135	250	9.5E-9
Xe-138	258	6.2E-8
Kr-87	402	4.7E-8
Kr-85	514	2.8E-8
Xe-135M	526	1.9E-8
Ar-41	1293	3.6E-8

SUPPLEMENTAL REPORT PAGE 3
MCGUIRE NUCLEAR STATION

The estimated percentage of error for both Liquid and Gaseous effluent release data at McGuire Nuclear Station has been determined to be $\pm 31\%$. This number was derived by summing the following individual estimates of errors:

- 1) Flow rate determining devices = $\pm 13\%$
- 2) Counting error = $\pm 15\%$
- 3) Sample preparation error = $\pm 3\%$

MCGUIRE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES
02/20/92

YEAR 1992

PERIOD COVERED: START DAY = 001
STOP DAY = 365

TYPE COVERED: WC

I. LIQUID RELEASES

	UNITS	PERIOD COVERED	YEAR TO STOP
1. GROSS RADIOACTIVITY			
A. TOTAL RELEASE	CURIES	2.89E-04	2.89E-04
2. TRITIUM			
A. TOTAL RELEASE	CURIES	4.05E-01	4.05E-01
3. DISSOLVED NOBLE GASES			
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00
4. ALPHA ACTIVITY			
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00

DO YOU WANT THE ISOTOPE LIST(Y/N)

Y

5. RADIOISOTOPES

CO-60	2.92E-05	2.92E-05
CS-137	2.60E-04	2.60E-04

TOTAL VOLUME DISCHARGED (GALS.) 1.03E+07 1.03E+07

SUMMARY COMPLETE
THANK YOU

MCGUIRE CCW DOSE- ANNUAL 1991 RELEASE- 2/20/91 001/365

00000010

SKIN	MAXIMUM DOSE-	2.71D-06 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
BONE	MAXIMUM DOSE-	4.96D-04 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
LIVER	MAXIMUM DOSE-	5.24D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
T. BODY	MAXIMUM DOSE-	3.36D-04 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
THYROID	MAXIMUM DOSE-	1.78D-05 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
KIDNEY	MAXIMUM DOSE-	1.06D-04 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
LUNG	MAXIMUM DOSE-	7.92D-05 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	FISH
GI-LLI	MAXIMUM DOSE-	2.38D-05 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	DRINKING

METEROLOGICAL SURVEY

HCGUIRE METEOROLOGICAL SURVEY TOWER DATA									
SUMMARY OF PASQUILL A									
FOR PERIOD OF 01-01-91 THRU 12-31-91									
WIND OCCURRENCES BY SECTOR + SPEED CLASS (PERCENT)									
DATE OF REPORT 02-24-92									
WIND SPEED CLASS									
WIND SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
SECTOR TOTAL	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
360.0	00.02	00.55	00.41	00.29	00.05	00.03	00.07	00.01	00.01
-N-	00.01	00.45	00.67	00.38	00.19	00.06	00.05	00.10	00.01
-NNE-	00.01	00.14	00.19	00.29	00.19	00.07	00.00	00.00	00.00
-NE-	00.00	00.06	00.11	00.13	00.02	00.00	00.00	00.00	00.00
-ENE-	00.00	00.03	00.14	00.02	00.01	00.00	00.00	00.00	00.00
-E-	00.00	00.18	00.05	00.01	00.00	00.00	00.00	00.00	00.00
-ESE-	00.00	00.16	00.13	00.00	00.00	00.00	00.00	00.00	00.00
-SE-	00.00	00.07	00.02	00.01	00.00	00.00	00.00	00.00	00.00
-SSE-	00.00	00.03	00.01	00.00	00.00	00.00	00.00	00.00	00.00
-S-	00.01	00.02	00.00	00.06	00.03	00.00	00.00	00.00	00.00
-SSW-	00.01	00.11	00.01	00.01	00.00	00.00	00.00	00.00	00.00
-SW-	00.00	00.02	00.01	00.02	00.00	00.00	00.01	00.00	00.00
-WSW-	00.00	00.03	00.00	00.01	00.00	00.00	00.00	00.00	00.00
-W-	00.00	00.02	00.02	00.01	00.01	00.00	00.00	00.01	00.01
-WNW-	00.00	00.00	00.00	00.02	00.00	00.01	00.00	00.00	00.00
-NW-	00.01	00.00	00.00	00.07	00.00	00.01	00.00	00.00	00.00
-NNW-	00.00	00.05	00.02	00.02	00.03	00.03	00.05	00.03	00.00
-N-	00.00	00.08	00.01	00.01	00.01	00.01	00.01	00.01	00.01
-NN-	00.00	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00
-NNN-	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
-NNNN-	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
CALM	00.02	00.02	00.02	00.02	00.02	00.02	00.02	00.02	00.02
TOTAL	006.29	001.92	001.79	001.33	000.53	000.22	000.18	000.14	000.07

MCQUIRE METEOROLOGICAL SURVEY TOWER DATA									
FOR PERIOD OF 01-01-91 THRU 12-31-91									
MIND OCCURRENCES BY SECTOR + SPEED CLASS (PERCENT)									
DATE OF REPORT 02-24-92									
MIND SPEED CLASS									
SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
TOTAL	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
360.0	00.07	00.45	00.38	00.07	00.05	00.07	00.03	00.02	00.00
N-	00.00	00.61	00.49	00.25	00.15	00.14	00.07	00.15	00.02
NNE-	00.01	00.26	00.43	00.22	00.17	00.05	00.00	00.00	00.00
NE-	00.00	00.09	00.13	00.14	00.13	00.05	00.02	00.00	00.00
E-	00.01	00.10	00.08	00.01	00.00	00.00	00.00	00.00	00.00
ESE-	00.01	00.09	00.06	00.00	00.00	00.00	00.00	00.00	00.00
SE-	00.01	00.11	00.03	00.02	00.01	00.00	00.00	00.00	00.00
SSE-	00.02	00.08	00.02	00.00	00.01	00.00	00.00	00.00	00.00
S-	00.02	00.15	00.21	00.05	00.02	00.00	00.00	00.00	00.00
SSW-	00.01	00.06	00.15	00.18	00.03	00.05	00.00	00.00	00.00
SW-	00.01	00.01	00.03	00.10	00.05	00.01	00.00	00.00	00.00
WSW-	00.00	00.03	00.06	00.08	00.01	00.00	00.00	00.00	00.00
W-	00.00	00.02	00.05	00.02	00.02	00.01	00.00	00.00	00.01
WNW-	00.00	00.01	00.03	00.11	00.05	00.00	00.01	00.00	00.01
NW-	00.01	00.02	00.02	00.03	00.11	00.03	00.02	00.00	00.00
NNW-	00.00	00.09	00.00	00.06	00.11	00.06	00.03	00.00	00.00
CALM	00.01								
TOTAL	007.72	000.18	002.17	001.34	000.96	000.47	000.18	000.17	000.05

SUMMARY OF PASQUILL D										
MCQUIRE METEOROLOGICAL SURVEY TOWER DATA										
WIND OCCURRENCES BY SECTOR + SPEED CLASS (PERCENT)										
FOR PERIOD OF 01-01-91 THRU 12-31-91										
DATE OF REPORT 02-24-92										
WIND SPEED CLASS										
1.0-3.2 3.3-5.5 5.6-7.8 7.9-10.0 10.1-12.3 12.4-14.5 14.6-16.7 16.8-19.0 19.1-21.2 >21.2 MPH										
.45-1.49 1.5-2.49 2.5-3.49 3.5-4.49 4.5-5.49 5.5-6.49 6.5-7.49 7.5-8.49 8.5-9.49 >9.5 M/S										
SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2	>21.2 MPH
TOTAL	00.30	00.95	00.27	00.33	00.21	00.14	00.08	00.02	00.00	00.00
360.0	00.30	00.95	00.27	00.33	00.21	00.14	00.08	00.02	00.00	00.00
-N-	00.17	01.34	00.80	00.96	00.87	00.53	00.10	00.13	00.00	00.00
-NNE-	00.15	00.89	01.36	01.40	01.14	00.49	00.06	00.00	00.00	00.00
-NE-	00.05	00.54	00.75	00.63	00.26	00.03	00.00	00.00	00.00	00.00
-ENE-	00.09	00.39	00.37	00.03	00.00	00.00	00.00	00.00	00.00	00.00
-E-	00.24	00.58	00.11	00.01	00.00	00.00	00.00	00.00	00.00	00.00
-ESE-	00.30	00.39	00.11	00.02	00.02	00.01	00.00	00.00	00.00	00.00
-SE-	00.19	00.42	00.16	00.02	00.01	00.01	00.00	00.01	00.00	00.00
-SSE-	00.24	01.02	01.21	00.29	00.15	00.05	00.02	00.02	00.00	00.00
-S-	00.34	01.39	01.16	00.81	00.48	00.21	00.05	00.01	00.00	00.00
-SSW-	00.47	01.08	00.89	00.29	00.33	00.16	00.06	00.00	00.00	00.00
-SW-	00.25	00.70	00.45	00.16	00.02	00.03	00.03	00.01	00.00	00.00
-WSW-	00.22	00.29	00.27	00.10	00.05	00.03	00.02	00.06	00.00	00.01
-W-	00.17	00.27	00.16	00.31	00.30	00.10	00.06	00.03	00.01	00.02
-WNW-	00.11	00.29	00.14	00.27	00.26	00.18	00.07	00.01	00.00	00.00
-NW-	00.24	00.33	00.21	00.37	00.42	00.11	00.01	00.00	00.00	00.00
-NNW-	00.23	010.82	008.42	006.00	004.52	002.08	000.56	000.30	000.01	000.03
TOTAL	003.53	010.82	008.42	006.00	004.52	002.08	000.56	000.30	000.01	000.03

MCQUIRE METEOROLOGICAL SURVEY TOWER DATA									
FOR PERIOD OF 01-01-92 THRU 12-31-92									
SUMMARY OF PASQUILL E									
WIND OCCURRENCES BY SECTOR + SPEED CLASS (PERCENT)									
DATE OF REPORT 02-24-92									
WIND SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
TOTAL	00.14	00.31	00.15	00.14	00.06	00.00	00.00	00.00	00.00
360.0	00.14	00.31	00.15	00.14	00.06	00.00	00.00	00.00	00.00
N-N	00.16	00.45	00.27	00.24	00.15	00.05	00.01	00.01	00.00
NNE	00.07	00.42	00.39	00.33	00.19	00.14	00.01	00.00	00.00
NE	00.08	00.27	00.38	00.17	00.02	00.01	00.00	00.00	00.00
ENE	00.33	00.64	00.37	00.07	00.00	00.00	00.00	00.00	00.00
E	00.35	00.74	00.10	00.02	00.00	00.00	00.00	00.00	00.00
ESE	00.18	00.33	00.05	00.00	00.00	00.00	00.00	00.00	00.00
SE	00.27	00.47	00.09	00.02	00.01	00.00	00.00	00.00	00.00
SSE	00.51	01.00	00.64	00.42	00.24	00.09	00.02	00.01	00.00
S	00.91	01.83	01.10	01.03	00.33	00.11	00.03	00.00	00.00
SSW	00.76	01.11	00.40	00.21	00.18	00.02	00.00	00.00	00.00
SW	00.61	00.39	00.11	00.10	00.03	00.00	00.00	00.00	00.00
WSW	00.63	00.30	00.18	00.06	00.02	00.02	00.01	00.00	00.00
W	00.43	00.45	00.24	00.22	00.05	00.03	00.01	00.00	00.00
WNW	00.41	00.40	00.38	00.21	00.09	00.05	00.02	00.00	00.00
WNW	00.22	00.24	00.21	00.30	00.08	00.00	00.00	00.00	00.00
CALM	00.58								
TOTAL	006.06	009.35	005.06	003.54	001.45	000.52	000.11	000.02	000.00

SUMMARY OF PASQUILL F									
MCGUIRE METEOROLOGICAL SURVEY TOWER DATA									
MIND OCCURRENCES BY SECTOR + SPEED CLASS (PERCENT)									
FOR PERIOD OF 01-01-91 THRU 12-31-91									
DATE OF REPORT 02-24-92									
MIND SPEED CLASS									
SECTOR	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
TOTAL	1.0-3.2	3.3-5.5	5.6-7.8	7.9-10.0	10.1-12.3	12.4-14.5	14.6-16.7	16.8-19.0	19.1-21.2
360.0	00.10	00.09	00.09	00.09	00.02	00.01	00.00	00.00	00.00
N-	00.10	00.09	00.09	00.09	00.02	00.01	00.00	00.00	00.00
22.5	00.06	00.08	00.03	00.03	00.01	00.00	00.00	00.00	00.00
NNE-	00.06	00.08	00.03	00.03	00.01	00.00	00.00	00.00	00.00
45.0	00.09	00.06	00.02	00.02	00.00	00.00	00.00	00.00	00.00
NE-	00.09	00.06	00.02	00.02	00.00	00.00	00.00	00.00	00.00
67.5	00.17	00.08	00.00	00.02	00.00	00.00	00.00	00.00	00.00
ENE-	00.17	00.08	00.00	00.02	00.00	00.00	00.00	00.00	00.00
90.0	00.16	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
E-	00.16	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
112.5	00.19	00.13	00.00	00.00	00.00	00.00	00.00	00.00	00.00
ESE-	00.19	00.13	00.00	00.00	00.00	00.00	00.00	00.00	00.00
135.0	00.25	00.05	00.00	00.00	00.00	00.00	00.00	00.00	00.00
SE-	00.25	00.05	00.00	00.00	00.00	00.00	00.00	00.00	00.00
157.5	00.16	00.03	00.00	00.00	00.00	00.00	00.00	00.00	00.00
SSE-	00.16	00.03	00.00	00.00	00.00	00.00	00.00	00.00	00.00
180.0	00.34	00.35	00.13	00.00	00.00	00.00	00.00	00.00	00.00
S-	00.34	00.35	00.13	00.00	00.00	00.00	00.00	00.00	00.00
202.5	00.61	00.48	00.42	00.02	00.00	00.00	00.00	00.00	00.00
SSW-	00.61	00.48	00.42	00.02	00.00	00.00	00.00	00.00	00.00
225.0	00.61	00.24	00.06	00.02	00.01	00.00	00.00	00.00	00.00
SW-	00.61	00.24	00.06	00.02	00.01	00.00	00.00	00.00	00.00
247.5	00.40	00.11	00.00	00.00	00.02	00.00	00.00	00.00	00.00
WSW-	00.40	00.11	00.00	00.00	00.02	00.00	00.00	00.00	00.00
270.0	00.38	00.11	00.06	00.01	00.01	00.00	00.00	00.00	00.00
W-	00.38	00.11	00.06	00.01	00.01	00.00	00.00	00.00	00.00
292.5	00.14	00.13	00.08	00.03	00.00	00.00	00.00	00.00	00.00
WNW-	00.14	00.13	00.08	00.03	00.00	00.00	00.00	00.00	00.00
315.0	00.21	00.17	00.02	00.00	00.00	00.00	00.00	00.00	00.00
NN-	00.21	00.17	00.02	00.00	00.00	00.00	00.00	00.00	00.00
337.5	00.15	00.11	00.06	00.01	00.01	00.00	00.00	00.00	00.00
NNW-	00.15	00.11	00.06	00.01	00.01	00.00	00.00	00.00	00.00
CALM	00.96								
TOTAL	004.02	002.22	000.97	000.14	000.06	000.00	000.00	000.00	000.00

MCQUIRE METEOROLOGICAL SURVEY TOWER DATA
SUMMARY OF PASQUILL G WIND OCCURANCES BY SECTOR + SPEED CLASS (PERCENT)
FOR PERIOD OF 01-01-91 THRU 12-31-91
DATE OF REPORT 02-24-92

WIND SECTOR	SECTOR TOTAL	WIND SPEED CLASS																DATE	REPORT	02-24-92
		1.0-3.2 .45-1.49	3.3-5.5 1.5-2.49	5.6-7.8 2.5-3.49	7.9-10.0 3.5-4.49	10.1-12.3 4.5-5.49	12.4-14.5 5.5-6.49	14.6-16.7 6.5-7.49	16.8-19.0 7.5-8.49	19.1-21.2 8.5-9.49	>21.2 MPH >9.5 M/S									
360.0	000.43	00.37	00.06	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-N-																				
22.5	000.43	00.38	00.05	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-NNE-																				
45.0	000.39	00.35	00.03	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-NE-																				
67.5	000.24	00.22	00.02	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-ENE-																				
90.0	000.42	00.42	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-E-																				
112.5	000.78	00.76	00.02	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-ESE-																				
135.0	000.64	00.63	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-SE-																				
157.5	000.82	00.81	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-SSE-																				
180.0	001.17	01.00	00.16	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-S-																				
202.5	001.93	01.28	00.62	00.03	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-SSW-																				
225.0	001.06	00.88	00.16	00.01	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-SW-																				
247.5	000.79	00.67	00.10	00.01	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-WSW-																				
270.0	000.68	00.63	00.05	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-W-																				
292.5	000.42	00.34	00.07	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-WNW-																				
315.0	000.50	00.42	00.07	00.01	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-NNW-																				
337.5	000.57	00.49	00.08	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00		
-NNW-																				
CALM	02.92																			
TOTAL	011.27	009.65	601.51	000.09	000.02	000.00	000.00	000.00	000.00	000.00	000.00	000.00	000.00	000.00	000.00	000.00	000.00	000.00		

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ATTACHMENT II
SOLID WASTE DISPOSAL REPORT

McGUIRE NUCLEAR STATION
SOLID RADIOACTIVE WASTE SHIPPED TO A DISPOSAL FACILITY
REPORT PERIOD 07/01/91 THROUGH 12/31/91

TYPES OF WASTE SHIPPED	Number of Shipments	Number Containers	Waste Class	Cont. Type	Burial Volume		Total Cf
					(ft ³)	(m ³)	
WASTE FROM LIQUID SYSTEMS							
(A) Dewatered Secondary Resins (brokered)	0	0	N/A	N/A	0	0	0
(B) Dewatered Bead Resins	1	1	2BS	HIC	83.4	2.36	209.9
(C) Evaporator Concentrates	0	0	N/A	N/A	0	0	0
(D) Dewatered Mechanical Filter	1	3	2CS 1AS	HIC	30.6	0.87	31.524
(E) Dewatered Demineralizers	0	0	N/A	N/A	0	0	0
(F) Solidified (Cement) Oils, Acids, Sludges	0	0	N/A	N/A	0	0	0
(G) Dewatered Secondary Bead	1	3	N/A	N/A	0	0	0
DRY SOLID WASTE							
(A) Dry Active Waste (compacted)	0	0	N/A	N/A	0	0	0
Dry Active Waste (non-compt)	0	0	N/A	N/A	0	0	0
Dry Active Waste (brokered)	7*	11*	AU	STC	538.5	15.25	1.971
Dry Active Waste (brokered and non-compt)	1*	7*	AU	STC	274.89	7.78	1.108
(B) Irradiated Components	0	0	N/A	N/A	0	0	0
TOTALS	11	25	---	---	927.39	26.26	244.503

* McGuire shipments for processing.

SUMMARY OF MAJOR RADIONUCLIDE COMPOSITION

Type of Wastes

	<u>Radionuclide</u>	<u>% Abundance*</u>
1. <u>Wastes from Liquid Systems</u>		
(A) Dewatered Secondary Resins (Powdex)	(None Buried This Period)	
(B) Dewatered Bead Resins (Primary)	Co-60	11.2
	Co-58	0.5
	Co-57	2.4E-2
	Mn-54	0.5
	Cs-134	1.6
	Cs-137	3.7
	H-3	2.6E-4
	Sb-125	9.8E-2
	C-14	1.0E-2
	Fe-55	62.9
	Ni-63	9.4
	Sr-90	1.1E-2
	Cm-242	1.1E-5
	Pu-241	2.6E-3
	ETRU	2.6E-4
	Te-125m	3.5E-3
(C) Evaporator Concentrates	(None Buried This Period)	
(D) Dewatered Mechanical Filters	Mn-54	1.79
	Co-58	3.06
	Co-60	11.62
	Nb-95	2.10
	Zr-95	1.02
	Cs-137	0.13
	Ce-144	0.48
	Cm-242	1.2E-2
	Pu-241	0.25
	ETRU	5.0E-3
	C-14	6.7E-3
	Fe-55	77.83
	Ni-63	1.70
	Sr-90	2.1E-3
	H-3	2.5E-3
	Am-241	1.5E-5
	Pu-238	3.5E-6
(E) Dewatered Demineralizers (Vendor)	(None Buried This Period)	
(F) Solidified (Cement) Acids, Oils,	(None Buried This Period)	
(G) Dewatered Secondary Bead Resins	(None Buried This Period)	
2. <u>Dry Solid Waste</u>		
(A) Dry Active Waste	ETRU	6.7E-4
	Sr-90	3.2E-2
	Mn-54	4.21
	Co-58	2.27
	Co-60	19.62
	Cm-242	1.6E-3
	Cs-137	0.10
	C-14	5.2E-2
	Ni-63	2.06
	Fe-55	71.62
	Pu-241	3.6E-2
(B) Irradiated Components	(None Buried This Period)	

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ATTACHMENT III
UNPLANNED OFFSITE RELEASES

February 5, 1992

MEMORANDUM TO FILE

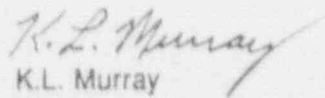
Subject: McGuire Nuclear Station
Waste Gas System Leak
On 08/27/91

On August 27, 1991, Waste Gas Recombiner 'B' experienced a small leak. Chemistry performed an investigation and generated Chemistry Incident Report (CIR) #91-079.

The count rate on the Unit Vent (1 & 2EMF36L) did not change significantly during the event, but the Auxiliary Building EMF41 went to Trip 2, high radiation alarm. This increase in gaseous activity did not exceed any Selected Licensee Commitments limits.

The activity released during this event, ~ 1 curie, was accounted for during the month of August when the procedure, HP/O/B/1003/01, Unit Vent Calculations was performed.

This memo will be placed in the semi-annual effluent report for 07/01/91 to 12/31/91.


K.L. Murray
Scientist
Radiation Protection
McGuire Nuclear Station

KLM/ah

cc: J.W. Foster
W.F. Byrum
J.S. Mooneyhan
Semi-Annual Report

February 5, 1992

MEMORANDUM TO FILE

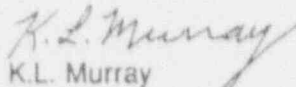
Subject: McGuire Nuclear Station
Waste Gas System Leak
On 10/08/91

On October 8, 1991, WGD'T 'C' experienced a loss of pressure. Chemistry performed an investigation and generated Chemistry Incident Report (CIR) #91-013.

The count rate on the Unit Vent (1EMF36L) went from a background reading of approximately 60 cpm to approximately 400 cpm during the release. This increase in gaseous activity did not exceed any Selected Licensee Commitments limits.

The activity released during this event, 18 curies, was accounted for during the month of October when the procedure, HP/0/B/1003/01, Unit Vent Calculations, was performed.

This memo will be placed in the semi-annual effluent report for 07/01/91 to 12/31/91.


K.L. Murray
Scientist
Radiation Protection
McGuire Nuclear Station

KLM/ah

cc: J.W. Foster
J.S. Mooneyhan
W.F. Byrum
Semi-Annual Report

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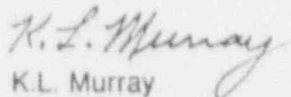
ATTACHMENT IV
INOPERABLE MONITORING EQUIPMENT

February 5, 1992

MEMORANDUM TO FILE

Subject: McGuire Nuclear Station
Inoperable Instruments Exceeding
Selected Licensee Commitments (SLC) Limits

During the time frame from July 1, 1991, to December 31, 1991, there were no SLC related effluent monitoring instruments out of service greater than the SLC limits for inoperability.


K.L. Murray
Scientist
Radiation Protection
McGuire Nuclear Station

KLM/ah

cc: J.W. Foster
J.S. Mooneyhan
W.F. Byrum
Semi-Annual Report

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ATTACHMENT V
FUEL CYCLE CALCULATIONS

1991 MCGUIRE FUEL CYCLE SUMMARY DAYS 001-365 02/25/92 AT 10:33

MAXIMUM TOTAL BODY NNE 0.50 MILES 7.99E-01 AGE : ADULT

MAXIMUM ORGAN E 0.50 MILES 5.97E-01 AGE : ADULT ORGAN : GI-TRACK

OFFSITE DOSE ASSESSMENT

FUEL CYCLE CALCULATIONS

STATION CODE : HNS
YEAR : 91
START DATE : 001
STOP DATE : 365
DILUTION VOLUME : 3.37E+12

02/25/92

10:33