

TABLE 1A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	Quarter 1st	Quarter 2nd	Est.Total Error, %
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A. Fission & activation gases

1. Total release	Ci	<1.00 E-8	<1.00E-8	2.5E1
2. Average release rate for period	µCi/sec	N/A	N/A	
3. Percent of technical specification limit	%	-0-	-0-	

B. Iodines

1. Total iodine - 131	Ci	<1.00E-8	<1.00E-8	N/A
2. Average release rate for period	µCi/sec	N/A	N/A	
3. Percent of technical specification limit	%	-0-	-0-	

C. Particulâtes

1. Particulâtes with half-lives > 8 days	Ci	3.52E-5	1.27E-5	2.5E1
2. Average release rate for period	µCi/sec	4.43E-6	1.60E-6	
3. Percent of technical specification limit	%	*	*	
4. Gross alpha radioactivity	Ci	<1.00E-11	<1.00E-11	

D. Tritium

1. Total release	Ci	1.00E-6	5.81E-5	2.5E1
2. Average release rate for period	µCi/sec	N/A	7.31E-6	
3. Percent of technical specification limit	%	N/A	*	

Note: All less than (<) values are in µCi/cc.

*% Tech Spec limits: Listed on Dose Summary Table

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
GASEOUS EFFLUENTS - GROUND-LEVEL RELEASES

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		Quarter 1st	Quarter 2nd	Quarter 1st	Quarter 2nd
1. Fission gases					
krypton-85	Ci	<8.00E-6	<8.00E-6	<8.00E-6	<8.00E-6
krypton-85m	Ci	<5.00E-8	<5.00E-8	<5.00E-8	<5.00E-8
krypton-87	Ci	<8.00E-8	<8.00E-8	<8.00E-8	<8.00E-8
krypton-88	Ci	<1.00E-7	<1.00E-7	<1.00E-7	<1.00E-7
xenon-133	Ci	<8.00E-8	<8.00E-8	<8.00E-8	<8.00E-8
xenon-135	Ci	<5.00E-8	<5.00E-8	<5.00E-8	<5.00E-8
xenon-135m	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
xenon-138	Ci	<3.00E-7	<3.00E-7	<3.00E-7	<3.00E-7
Others (specify)	Ci				
	Ci				
	Ci				
unidentified	Ci				
Total for period	Ci	N/A	N/A	N/A	N/A

2. Iodines

iodine-131	Ci	<1.00E-12	<1.00E-12	<1.00E-8	<1.00E-8
iodine-133	Ci	<1.00E-10	<1.00E-10	<1.00E-8	<1.00E-8
iodine-135	Ci	<1.00E-10	<1.00E-10	<1.00E-8	<1.00E-8
Total for period	Ci	N/A	N/A	N/A	N/A

3. Particulates

strontium-89	Ci	<1.00E-11	<1.00E-11	--	--
strontium-90	Ci	<1.00E-11	8.20E-6	--	--
cesium-134	Ci	<1.00E-11	<1.00E-11	<1.00E-8	<1.00E-8
cesium-137	Ci	3.45E-5	4.54E-6	6.95E-7	<1.00E-8
barium-lanthanum-140	Ci	<1.00E-11	<1.00E-11	<1.00E-8	<1.00E-8

Note: All less than values (<) are in $\mu\text{Ci/cc}$.

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

Unit	Quarter 1st	Quarter 2nd	Est. Total Error, %
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A. Fission and activation products

1. Total release (not including tritium, gases, alpha)	Ci	2.53E-2	1.45E-2	2.5E1
2. Average diluted concentration during period	µCi/ml	1.01E-9	1.36E-9	
3. Percent of applicable limit	%	*	*	

B. Tritium

1. Total release	Ci	7.44E-1	8.46E-1	2.5E1
2. Average diluted concentration during period	µCi/ml	2.96E-8	7.91E-8	
3. Percent of applicable limit	%	*	*	

C. Dissolved and entrained gases

1. Total release	Ci	<1.00E-4	<1.00E-4	2.5E1
2. Average diluted concentration during period	µCi/ml	N/A	N/A	
3. Percent of applicable limit	%	N/A	N/A	

D. Gross alpha radioactivity

1. Total Release	Ci	1.95E-5	<1.00E-7	2.5E1
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E. Volume of waste released (prior to dilution)	liters	3.63E6	1.45E6	1.0E1
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F. Volume of dilution water used during period.	liters	2.51E10	1.07E10	1.0E1
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Note: All less than values (<) are in µCi/ml.

*% Tech. Spec. Limits: Listed on Dose Summary Table.

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
LIQUID EFFLUENTS

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		Quarter 1st	Quarter 2nd	Quarter 1st	Quarter 2nd
strontium-89	Ci	<5.00E-8	<5.00E-8	<5.00E-8	<5.00E-8
strontium-90	Ci	<5.00E-8	<5.00E-8	1.55E-4	2.94E-4
cesium-134	Ci	<5.00E-7	<5.00E-7	8.51E-4	1.13E-3
cesium-137	Ci	<5.00E-7	<5.00E-7	6.12E-3	8.53E-3
iodine-131	Ci	<1.00E-6	<1.00E-6	<1.00E-6	<1.00E-6
cobalt-58	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
cobalt-60	Ci	<5.00E-7	<5.00E-7	9.80E-3	3.52E-3
iron-59	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
zinc-65	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
manganese-54	Ci	<5.00E-7	<5.00E-7	2.72E-5	<5.00E-7
chromium-51	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
zirconium-niobium-95	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
molybdenum-99	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
technetium-99m	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
barium-lanthanum-140	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
cerium-141	Ci	<5.00E-7	<5.00E-7	<5.00E-7	<5.00E-7
Other (specify)					
Iron-55	Ci	<1.00E-6	<1.00E-6	7.84E-3	8.93E-4
Antimony-125	Ci	<5.00E-7	<5.00E-7	2.62E-4	1.31E-4
Phosphorus-32	Ci	<1.00E-6	<1.00E-6	<1.00E-6	<1.00E-6
Silver-110m	Ci	<5.00E-7	<5.00E-7	3.92E-5	2.21E-5
Ruthium-106	Ci	<5.00E-7	<5.00E-7	2.14E-4	<5.00E-7
Total for period (above)	Ci	N/A	N/A	2.53E-2	1.45E-2
xenon-133	Ci	<1.00E-5	<1.00E-5	<1.00E-4	<1.00E-4
xenon-135	Ci	<1.00E-5	<1.00E-5	<1.00E-4	<1.00E-4

Unit I Jan. - June 1983 LSA Waste

TABLE 3A

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1983)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. Solid waste shipped off-site for burial or disposal (not irradiated fuel)

1. Type of waste	UNIT I	6 MONTH PERIOD	EST. TOTAL ERROR, %
a. Spent resins, filter sludges,	m ³	26.9	
* evaporator bottoms, etc. Hittman Liners	Ci	9.86	5%
b. Dry compressible waste, contaminated	m ³	187.50	
** equipment, etc. Prums, Boxes, overpacks	Ci	9.38	5%
c. Irradiated components, control rods, etc.	m ³	N/A	N/A
d. Other (describe)	m ³	N/A	N/A
	Ci	N/A	N/A

2. Estimate of major nuclide composition (by type of waste)		
a. Co-60	49%	
Cs-134	6%	
Cs-137	40%	
Sb-125	5%	
b. Cs-137	5%	
Sb-125	3.6%	
Co60	80%	
Sr-90	4.81%	
Y-90	4.81%	
c. N/A		
d. N/A		

3. Solid Waste Disposition		
Number of Shipments	Mode of Transportation	Destination
(a) 10 shipments	Tractor - Flatbed	Harford, Washington
(a) 1 shipment	Tractor - Flatbed	Barnwell, South Carolina
(b) 7 shipments-Drums & Boxes	Tractor - Trailer (Van)	Harford, Washington
(b) 2 shipments-overpacks	Tractor - Flatbed	Barnwell, South Carolina
20 - Total Shipments		

B. Irradiated Fuel Shipments (Disposition)

Number of Shipments	Mode of Transportation	Destination
None	N/A	N/A
None	N/A	N/A

* Shipped in 22 LSA Liners, 172.3 cu.ft., solidified with cement.

** Shipped in 196 LSA (Type A) Steel drums, 7.5 ft³/ea. & 41 LSA Steel Boxes, 98 ft³/ea.

ATTACHMENT 1

Attachment - Joint Frequency Tables for 1st Quarter (1983)

Attachment - Joint Frequency Tables for 2nd Quarter (1983)

Attachment - Summary of Maximum Individual Dose Accumulation
for First Quarter of 1983

Attachment - Summary of Maximum Individual Dose Accumulation
for Second Quarter of 1983

ATTACHMENT 1

SITE, THREE MILE ISLD. 08.37

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD = 830101-03033124

STABILITY CLASS, DT/DZ

ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	1	6	3	0	0	22
NNE	0	4	2	0	0	0	6
NE	0	1	0	0	0	0	1
ENE	0	4	1	0	0	0	5
E	0	0	1	1	0	0	2
ESE	1	10	6	0	0	0	17
SE	1	2	0	0	0	0	3
SSE	0	0	0	0	0	0	0
S	0	1	2	0	0	0	3
SSW	2	1	0	0	0	0	3
SW	1	3	0	0	0	0	4
WSW	1	1	0	0	0	0	2
W	0	1	3	6	0	0	10
WNW	2	5	8	7	2	0	24
NW	3	11	8	12	5	0	39
NNW	2	21	12	20	8	0	63
TOTAL	15	84	49	49	15	0	212

PERIODS OF CALM(HOURS): 3

VARIABLE DIRECTION

HOURS OF MISSING DATA: 4

ENTER, [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

SITE, THREE MILE ISLD. 08.30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD = 830101-03033124

STABILITY CLASS, DT/DZ

ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	1	0	1	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	1	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	3	0	0	3
ESE	0	2	2	2	0	0	6
SE	2	2	1	0	0	0	5
SSE	1	1	0	0	0	0	2
S	1	0	0	0	0	0	1
SSW	0	1	0	0	0	0	1
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	1	0	0	2	1	0	4
WNW	0	1	1	5	1	0	8
NW	0	1	3	8	5	1	18
NNW	0	1	3	2	1	4	11
TOTAL	5	11	10	23	8	5	62

PERIODS OF CALM(HOURS): 3

VARIABLE DIRECTION

HOURS OF MISSING DATA: 0

ENTER, [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

SITE, THREE MILE ISLD. 08.30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD = 830101-03033124

STABILITY CLASS, DT/DZ

ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	1	1	1	0	0	4
NNE	0	0	1	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
TOTAL	5	8	7	10	6	2	38

PERIODS OF CALM(HOURS): 3

VARIABLE DIRECTION

HOURS OF MISSING DATA: 2

ENTER, [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

SITE, THREE MILE ISLD. 08.30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD = 830101-03033124

STABILITY CLASS, DT/DZ

ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	12	16	8	2	0	0	38
NNE	1	10	2	0	0	0	13
NE	2	10	11	1	0	0	33
ENE	6	37	11	2	0	0	56
E	7	31	51	20	3	0	120
ESE	3	18	24	13	1	0	59
SE	3	13	5	3	0	0	24
SSE	3	7	4	1	0	0	15
S	2	4	0	0	0	0	6
SSW	3	4	1	0	0	0	8
SW	2	1	2	0	0	0	5
WSW	5	2	2	1	0	0	10
W	11	30	30	20	1	0	92
WNW	2	8	34	64	25	0	133
NW	4	5	44	63	30	10	165
NNW	3	10	17	27	7	11	84
TOTAL	59	205	255	233	76	21	849

PERIODS OF CALM(HOURS): 3

VARIABLE DIRECTION

HOURS OF MISSING DATA: 28

ENTER, [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

ATTACHMENT 1 (cont'd)

SITE, THREE MILE ISLD.

08,40

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD = 830101-83033124
 STABILITY CLASS, E DT/OZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	20	11	5	1	0	35
NNE	4	10	2	0	0	0	16
NE	5	25	2	0	0	0	32
ENE	16	19	4	0	0	0	39
E	14	36	13	0	0	0	63
ESE	6	16	8	0	0	0	30
SE	6	14	10	2	0	0	32
SSE	3	6	2	0	0	0	11
S	4	5	0	0	0	0	9
SSW	6	7	1	0	0	0	14
SW	3	11	1	0	0	0	15
WSW	4	6	5	0	0	0	15
W	11	19	24	3	0	0	57
WNW	9	18	32	15	0	0	74
NW	4	18	23	26	4	0	75
NNW	14	28	21	18	2	1	76
TOTAL	108	276	150	61	7	1	612

PERIODS OF CALM(HOURS)

VARIABLE DIRECTION

HOURS OF MISSING DATA

ENTER: (RETURN) CONTINUE, (SO) START OVER, (EX) TO EXIT

SITE, THREE MILE ISLD.

08,41

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD = 830101-83033124
 STABILITY CLASS, C DT/OZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	6	3	0	0	0	0	9
NNE	3	0	0	0	0	0	3
NE	2	0	0	0	0	0	2
ENE	5	2	0	0	0	0	7
E	5	3	0	0	0	0	8
ESE	8	4	1	0	0	0	13
SE	4	0	0	0	0	0	4
SSE	10	3	0	0	0	0	13
S	13	0	0	0	0	0	13
SSW	6	0	0	0	0	0	6
SW	4	2	0	0	0	0	6
WSW	4	3	0	0	0	0	7
W	3	3	0	0	0	0	6
WNW	2	2	0	0	0	0	4
NW	2	3	0	0	0	0	5
NNW	6	5	0	0	0	0	11
TOTAL	68	30	1	0	0	0	119

PERIODS OF CALM(HOURS)

VARIABLE DIRECTION

HOURS OF MISSING DATA

ENTER: (RETURN) CONTINUE, (SO) START OVER, (EX) TO EXIT

SITE, THREE MILE ISLD.

08,41

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD = 830101-83033124
 STABILITY CLASS, F DT/OZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	13	14	2	0	0	0	29
NNE	4	3	0	0	0	0	7
NE	5	1	0	0	0	0	6
ENE	5	3	0	0	0	0	8
E	9	4	0	0	0	0	13
ESE	7	0	0	0	0	0	7
SE	10	7	0	0	0	0	17
SSE	9	1	0	0	0	0	10
S	11	2	0	0	0	0	13
SSW	9	6	0	0	0	0	15
SW	8	4	0	0	0	0	12
WSW	7	5	0	0	0	0	12
W	10	7	1	0	0	0	18
WNW	4	7	1	0	0	0	12
NW	10	8	2	1	0	0	21
NNW	4	18	10	0	0	0	32
TOTAL	125	90	16	1	0	0	241

PERIODS OF CALM(HOURS)

VARIABLE DIRECTION

HOURS OF MISSING DATA

ENTER: (RETURN) CONTINUE, (SO) START OVER, (EX) TO EXIT

SITE, THREE MILE ISLD.

08,42

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD = 830101-83033124
 STABILITY CLASS, ALL DT/OZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND SPEED(MPH)

DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	43	75	28	12	1	0	159
NNE	12	37	7	0	0	0	56
NE	14	47	13	1	0	0	75
ENE	22	65	16	2	0	0	105
E	35	82	65	32	3	0	217
ESE	25	60	41	15	1	0	142
SE	26	39	16	5	0	0	86
SSE	26	18	6	1	0	0	51
S	31	12	2	0	0	0	45
SSW	30	20	2	0	0	0	52
SW	20	19	3	0	0	0	42
WSW	21	17	7	2	0	0	47
W	27	41	68	40	2	0	178
WNW	28	41	77	93	30	0	261
NW	23	47	81	111	56	12	330
NNW	30	93	65	63	19	17	287
TOTAL	485	713	407	377	112	29	2133

PERIODS OF CALM(HOURS)

VARIABLE DIRECTION

HOURS OF MISSING DATA

ENTER: (RETURN) CONTINUE, (SO) START OVER, (EX) TO EXIT

SITE, THREE MILE ISLD.

00.45

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, A DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, B DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

WIND DIRECTION	WIND SPEED (MPH)							>24 TOTAL
	1-3	4-7	8-12	13-18	19-24			
N	11	7	0	1	0	0	0	24
NNE	1	1	0	0	0	0	0	2
NE	0	2	0	0	0	0	0	2
ENE	1	6	0	0	0	0	0	7
E	2	6	1	0	0	0	0	9
ESE	1	6	4	0	0	0	0	11
SE	3	7	1	1	0	0	0	12
SSE	7	6	1	0	0	0	0	14
S	8	13	15	1	0	0	0	37
SSW	8	18	5	1	0	0	0	32
SW	11	6	1	1	0	0	0	19
WSW	10	4	1	0	0	0	0	15
W	13	5	12	0	0	0	0	30
WNW	17	10	13	7	0	0	0	56
NW	15	28	12	12	18	0	0	92
NNW	10	14	16	6	0	2	66	
TOTAL	127	148	94	30	27	2	437	

PERIODS OF CALM(HOURS), 94
 VARIABLE DIRECTION 30
 HOURS OF MISSING DATA, 88
 ENTER: [RETURN] CONTINUE, [50] START OVER, [EX] TO EXIT

SITE, THREE MILE ISLD.

00.46

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, C DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, D DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

WIND DIRECTION	WIND SPEED (MPH)							>24 TOTAL
	1-3	4-7	8-12	13-18	19-24			
N	1	3	0	0	0	0	4	
NNE	0	0	0	0	0	0	0	
NE	0	1	0	0	0	0	1	
ENE	0	2	0	0	0	0	2	
E	0	2	0	0	0	0	2	
ESE	3	5	0	0	0	0	8	
SE	1	2	2	0	0	0	5	
SSE	0	0	5	0	0	0	5	
S	4	2	2	0	0	0	8	
SSW	1	1	1	0	0	0	3	
SW	0	0	2	0	0	0	2	
WSW	2	1	0	0	1	0	4	
W	0	3	0	1	0	0	4	
WNW	0	1	2	2	0	0	5	
NW	2	1	1	3	2	0	9	
NNW	4	0	2	1	2	0	9	
TOTAL	18	24	16	7	5	0	70	

PERIODS OF CALM(HOURS), 94
 VARIABLE DIRECTION 0
 HOURS OF MISSING DATA, 80
 ENTER: [RETURN] CONTINUE, [50] START OVER, [EX] TO EXIT

SITE, THREE MILE ISLD.

00.45

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, B DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, B DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

WIND DIRECTION	WIND SPEED (MPH)							>24 TOTAL
	1-3	4-7	8-12	13-18	19-24			
N	1	1	0	0	0	0	0	2
NNE	2	0	0	0	0	0	0	2
NE	0	1	0	0	0	0	0	1
ENE	2	1	0	0	0	0	0	3
E	0	0	1	0	0	0	0	1
ESE	2	1	1	2	0	0	0	6
SE	0	3	1	0	0	0	0	4
SSE	0	1	0	0	0	0	0	1
S	2	2	1	0	0	0	0	5
SSW	4	2	1	0	0	0	0	7
SW	1	0	0	0	0	0	0	1
WSW	1	0	0	0	0	0	0	1
W	2	1	3	3	2	0	0	11
WNW	0	0	4	4	1	0	0	9
NW	0	1	8	2	0	0	0	11
NNW	2	2	0	1	2	0	0	7
TOTAL	10	16	20	12	5	0	72	

PERIODS OF CALM(HOURS), 94
 VARIABLE DIRECTION 0
 HOURS OF MISSING DATA, 88
 ENTER: [RETURN] CONTINUE, [50] START OVER, [EX] TO EXIT

SITE, THREE MILE ISLD.

00.46

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, D DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

PERIOD OF RECORD = 83040101-83063024
 STABILITY CLASS, D DT/DZ
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT100A

WIND DIRECTION	WIND SPEED (MPH)							>24 TOTAL
	1-3	4-7	8-12	13-18	19-24			
N	7	7	13	4	0	0	0	31
NNE	4	6	1	0	0	0	0	11
NE	0	12	1	2	0	0	0	24
ENE	8	18	11	4	0	0	0	41
E	16	14	10	0	1	0	0	41
ESE	22	28	4	12	0	0	0	66
SE	11	36	13	13	0	0	0	73
SSE	10	42	18	1	0	0	0	80
S	15	24	6	1	0	0	0	46
SSW	6	12	5	3	0	0	0	27
SW	5	6	2	0	0	0	0	13
WSW	2	4	1	0	0	0	0	7
W	6	14	20	3	0	0	0	43
WNW	7	13	20	24	5	0	0	69
NW	3	10	24	24	11	0	0	72
NNW	8	10	16	2	3	1	0	40
TOTAL	150	256	165	93	20	1	686	

PERIODS OF CALM(HOURS), 94
 VARIABLE DIRECTION 45
 HOURS OF MISSING DATA, 88
 ENTER: [RETURN] CONTINUE, [50] START OVER, [EX] TO EXIT

ATTACHMENT 2 (cont'd)

SITE: THREE MILE ISLD.

00.47

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD * 03040101-03063024
 STABILITY CLASS, E 01/02
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	17	0	3	0	0	0	20
NNE	0	0	0	0	0	0	10
NE	11	7	2	0	0	0	20
ENE	0	6	1	0	0	0	16
E	21	2	0	0	0	0	23
ESE	20	3	0	0	0	0	23
SE	17	12	1	0	0	0	30
SSE	6	11	2	0	0	0	20
S	12	18	1	0	0	0	31
SSW	14	23	10	3	0	0	51
SW	13	12	5	0	0	0	30
WSW	18	0	1	0	0	0	20
W	20	14	5	1	0	0	40
WNW	14	11	7	0	0	0	32
NW	0	13	10	4	0	0	44
NNW	17	15	6	0	1	0	39
TOTAL	227	174	62	8	1	0	474

PERIODS OF CALM(HOURS), 04
 VARIABLE DIRECTION, 50
 HOURS OF MISSING DATA, 00
 ENTER: [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

SITE: THREE MILE ISLD.

00.52

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD * 03040101-03063024
 STABILITY CLASS, G 01/02
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	1	0	0	0	0	0	1
NNE	2	0	0	0	0	0	2
NE	3	0	0	0	0	0	3
ENE	3	0	0	0	0	0	5
E	6	0	0	0	0	0	6
ESE	0	0	0	0	0	0	0
SE	10	1	0	0	0	0	11
SSE	20	0	0	0	0	0	20
S	25	1	0	0	0	0	26
SSW	14	0	0	0	0	0	14
SW	10	2	0	0	0	0	12
WSW	4	0	0	0	0	0	4
W	6	6	0	0	0	0	12
WNW	4	1	0	0	0	0	5
NW	3	3	0	0	0	0	6
NNW	7	0	0	0	0	0	7
TOTAL	120	14	0	0	0	0	143

PERIODS OF CALM(HOURS), 04
 VARIABLE DIRECTION, 10
 HOURS OF MISSING DATA, 00
 ENTER: [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

SITE: THREE MILE ISLD.

00.47

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD * 03040101-03063024
 STABILITY CLASS, F 01/02
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	0	3	0	0	0	0	11
NNE	6	0	0	0	0	0	6
NE	4	1	0	0	0	0	5
ENE	6	1	0	0	0	0	7
E	11	2	0	0	0	0	13
ESE	16	2	0	0	0	0	18
SE	0	1	0	0	0	0	10
SSE	15	0	0	0	0	0	16
S	12	3	0	0	0	0	15
SSW	18	2	0	0	0	0	20
SW	10	1	0	0	0	0	11
WSW	10	0	0	0	0	0	10
W	11	4	0	0	0	0	15
WNW	14	4	0	0	0	0	18
NW	0	10	0	0	0	0	10
NNW	0	12	0	0	0	0	20
TOTAL	167	46	0	0	0	0	214

PERIODS OF CALM(HOURS), 04
 VARIABLE DIRECTION, 32
 HOURS OF MISSING DATA, 00
 ENTER: [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

SITE: THREE MILE ISLD.

00.53

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD * 03040101-03063024
 STABILITY CLASS, ALL 01/02
 ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	46	30	21	5	0	0	102
NNE	24	16	1	0	0	0	41
NE	27	24	3	2	0	0	56
ENE	31	34	12	4	0	0	81
E	50	26	12	0	1	0	97
ESE	72	45	0	14	0	0	141
SE	51	62	18	14	0	0	145
SSE	67	60	26	1	0	0	156
S	78	63	25	2	0	0	168
SSW	65	58	21	7	0	0	153
SW	50	27	10	1	0	0	88
WSW	47	18	3	0	1	0	69
W	50	47	40	17	2	0	164
WNW	56	40	46	37	6	0	194
NW	41	66	70	45	31	0	253
NNW	65	53	40	10	17	3	188
TOTAL	836	678	357	150	58	3	2006

PERIODS OF CALM(HOURS), 04
 VARIABLE DIRECTION, 104
 HOURS OF MISSING DATA, 00
 ENTER: [RETURN] CONTINUE, [SO] START OVER, [EX] TO EXIT

UNIT 1
1st Quarter Dose Report for 1983

*(Revised August 1983)

SUMMARY OF MAXIMUM INDIVIDUAL DOSES FOR UNIT 1 FROM
January 1, 1983 through March 31, 1983

Effluent	Applicable Organ	Estimated Dose (mrem)	Age Group	Location Dist Dir (m) (toward)	% of Applicable Limit		10CFR50 App. I Limits (mrem)	
					Quarterly	Annual	Quarterly	Annual
Liquid	Total Body	8.44E-2	Adult	Receptor 1	5.6	2.8	1.5	3.0
Liquid	Liver	1.28E-1	Teen	Receptor 1	2.6	1.3	5.0	10.0
Noble Gas	Air Dose (gamma-mrad)	N/A	--	--	---	---	5.0	10.0
Noble Gas	Air Dose (beta-mrad)	N/A	--	--	---	---	10.0	20.0
Noble Gas	Total Body	N/A	--	--	--	---	--	5.0
Noble Gas	Skin	N/A	--	--	--	---	--	15.0
Iodine & Particulates	Skin	4.15E-4	Adult	750 SE	5.5E-3	2.8E-3	7.5	15.0

SUMMARY OF MAXIMUM POPULATION DOSES FOR UNIT 1 FROM
January 1, 1983 through March 31, 1983

Effluent	Applicable Organ	Estimated Population Dose (person-rem)
Liquid	Total Body	3.2E-2
Liquid	Bone	6.9E-2
Gaseous	Total Body	3.7E-4
Gaseous	Skin	4.3E-4

UNIT 1 - SUMMARY OF MAXIMUM POPULATION DOSES FOR UNIT 1 FROM
April 1, 1983 through June 30, 1983

Effluent	Applicable Organ	Estimated Dose (rem)	Age Group	Receptor	1 of Applicable Limit		100% ASD App. 1 Limits (rem)	
					Quarterly	Annual*	Quarterly	Annual
Liquid	Total Body	1.45E-1	Adult	Receptor 1	9.7	7.7	1.5	3.0
Liquid	Liver	2.21E-1	Teen	Receptor 1	4.4	3.5	5.0	10.0
Noble Gas	Air Dose (gamma-rad)	0	--	--	--	--	5.0	10.0
Noble Gas	Air Dose (beta-rad)	0	--	--	--	--	10.0	20.0
Noble Gas	Total Body	0	--	--	--	--	--	5.0
Noble Gas	Skin	0	--	--	--	--	--	15.0
Incline & Particulates	Bone	8.80E-3	Child	750 SE	1.2E-1	6.1E-2	7.5	15.0

SUMMARY OF MAXIMUM POPULATION DOSES FOR UNIT 1 FROM
April 1, 1983 through June 30, 1983

<u>Effluent</u>	<u>Applicable Organ</u>	<u>Estimated Population Dose (person-rem)</u>
Liquid	Total Body	5.8E-2
Liquid	Bone	1.4 E-1
Gaseous	Total Body	1.3 E-2
Gaseous	Bone	5.2 E-2

* To date.

Supplemental Information

Facility TMI-1License DPR 50-289

1. Regulatory Limits

- a. Fission and activation gases:
- b. Iodines:
- c. Particulates, half-lives > 8days:
- d. Liquid effluents:

TMI - Unit 1 Tech. Specs.
Appendix A

2. Maximum Permissible Concentrations

Provide the MPCs used in determining allowable release rates or concentrations.

- a. Fission and activation gases:
- b. Iodines:
- c. Particulates, half-lives > 8 days:
- d. Liquid effluents:

10 CFR 20, Appendix B,
Table II

3. Average Energy

Provide the average energy (\bar{E}) of the radionuclide mixture in releases of fission and activation gases, if applicable. (3.165E-1)

4. Measurements and Approximations of Total Radioactivity

Provide the methods used to measure or approximate the total radioactivity in effluents and the methods used to determine radionuclide composition.

- a. Fission and activation gases: Gamma Spectrometry, Liquid Scintillation
- b. Iodines: Gamma Spectrometry
- c. Particulates: Gamma Spectrometry, gas flow proportional, beta spectrometry
- d. Liquid effluents: Gamma Spectrometry, Liquid Scintillation.

5. Batch Releases

Provide the following information relating to batch releases of radioactive materials in liquid and gaseous effluents.

	1st Quarter	2nd Quarter
a. Liquid		
1. Number of batch releases:	24	36
2. Total time period for batch releases: (min.)	10,491	17,573
3. Maximum time period for a batch release: (min.)	1,190	4,320
4. Average time period for batch releases: (min.)	437	488
5. Minimum time period for a batch release: (min.)	272	6
6. Average stream flow during periods of release of effluent into a flowing stream: (CFM)	2.04E6	4.11E6
b. Gaseous		
1. Number of batch releases:	14	16
2. Total time period for batch releases: (min.)	49,316	46,042
3. Maximum time period for a batch release: (min.)	34,680	25,860
4. Average time period for batch releases: (min.)	3,523	2,878
5. Minimum time period for a batch release: (min.)	210	495
6. Abnormal Releases		
a. Liquid		
1. Number of releases	0	0
2. Total activity releases:	N/A	N/A
b. Gaseous		
1. Number of releases:	0	0
2. Total activity released:	N/A	N/A