

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

1 - January/30 - June - 1981

Facility Three Mile Island, Unit-I

Licensee DPR-50/50-289

1. Regulatory Limits

- a. Fission and activation gases:
- b. Iodines: Environmental Technical Specifications,
- c. Particulates, half-lives >8 days: Article 2.3.
- d. Liquid effluents:

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: 10 CFR, Part 20, Appendix B.
- d. Liquid effluents:

3. Average Energy

Provide the average energy (\bar{E}) of the radionuclide mixture in releases of fission and activation gases, if applicable. \bar{E}_γ 0.514 mev and \bar{E}_β 0.249 mev.

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: Ge(Li) spectrometry, liquid scintillation.
- b. Iodines: Ge(Li) spectrometry.
- c. Particulates: Ge(Li) spectrometry, gas flow proportional, β spectrometry.
- d. Liquid effluents: Ge(Li) spectrometry, liquid scintillation.

5. Batch Releases

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

a. Liquid

	1st Quarter	2nd Quarter
1. Number of batch releases:	14	14
2. Total time period for batch releases:	5.239E3 min.	9.379E3 min.
3. Maximum time period for a batch release:	7.70E2 min.	1.45E3 min.
4. Average time period for batch releases:	3.74 E2 min.	6.70E2 min.
5. Minimum time period for batch release:	2.55E2 min.	2.65E2 min.
6. Average stream flow during periods of release of effluent into a flowing stream:	2.451E6 cfm	1.981E6 cfm

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b. Gaseous

	1st Quarter	2nd Quarter
1. Number of batch releases:	14	19
2. Total time period for batch releases:	6.051E4 min.	5.372E4 min.
3. Maximum time period for a batch release:	2.772E4 min.	1.350E4 min.
4. Average time period for batch releases:	4.322E3 min.	2.827E3 min.
5. Minimum time period for batch release:	5.10E2 min.	3.60E2 min.

6. Abnormal Releases

a. Liquid

1. Number of releases:	none	none
2. Total activity released:	- 0 -	- 0 -

b. Gaseous

1. Number of releases:	none	none
2. Total activity released:	- 0 -	- 0 -

TABLE 1A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1981)
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

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

1. Total release	Ci	1.94 E-3	<LLD	2.50 E+1
2. Average release rate for period	μCi/sec	2.43 E-4	N/A	
3. Percent of technical specification limit	%	4.28 E-6	N/A	

B. Iodines

1. Total iodine - 131	Ci	<LLD	<LLD	2.50 E+1
2. Average release rate for period	μCi/sec	N/A	N/A	
3. Percent of technical specification limit	%	N/A	N/A	

C. Particulates

1. Particulates with half-lives >8 days	Ci	2.73 E-4	5.33 E-5	2.50 E+1
2. Average release rate for period	μCi/sec	3.43 E-5	6.71 E-6	
3. Percent of technical specification limit	%	6.86 E-2	1.34 E-2	
4. Gross alpha radioactivity	Ci	3.53 E-12	<LLD	

D. Tritium

1. Total release	Ci	1.37 E-2	3.06 E-4	2.50 E+1
2. Average release rate for period	μCi/sec	1.73 E-3	3.85 E-5	
3. Percent of technical specification limit	%	4.54 E-5	1.01 E-6	

NOTE: Tech. Spec. Limit

A. 3. - $\leq 1.9 \text{ E}+4 \text{ m}^3/\text{sec.}$

B. 3. - $0.05 \text{ } \mu\text{Ci}/\text{sec.}$

C. 3. - $0.05 \text{ } \mu\text{Ci}/\text{sec.}$

D. 3. - $\leq 1.9 \text{ E}+4 \text{ m}^3/\text{sec.}$

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1981)
GASEOUS EFFLUENTS-GROUND-LEVEL RELEASES

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
1. Fission gases					
Krypton-85	Ci	<LLD	<LLD	1.94 E-3	<LLD
Krypton-85m	Ci	<LLD	<LLD	<LLD	<LLD
Krypton-87	Ci	<LLD	<LLD	<LLD	<LLD
Krypton-88	Ci	<LLD	<LLD	<LLD	<LLD
Xenon-133	Ci	<LLD	<LLD	<LLD	<LLD
Xenon-135	Ci	<LLD	<LLD	<LLD	<LLD
Xenon-135m	Ci	<LLD	<LLD	<LLD	<LLD
Xenon-138	Ci	<LLD	<LLD	<LLD	<LLD
Others (specify)	Ci				
	Ci				
	Ci				
Unidentified	Ci				
Total for period	Ci			1.94 E-3	

2. Iodines

Iodine-131	Ci	<LLD	<LLD	<LLD	<LLD
Iodine-133	Ci	<LLD	<LLD	<LLD	<LLD
Iodine-135	Ci	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	<LLD	<LLD	<LLD	<LLD

3. Particulates

Strontium-89	Ci	<LLD	<LLD	<LLD	<LLD
Strontium-90	Ci	9.68 E-13	<LLD	<LLD	<LLD
Cesium-134	Ci	<LLD	<LLD	<LLD	<LLD
Cesium-137	Ci	2.72 E-4	2.61 E-5	3.67 E-7	2.09 E-5
Barium-Lanthanum-140	Ci	<LLD	<LLD	<LLD	<LLD
Other (specify)	Ci				
	Ci				
	Ci				
Unidentified	Ci				

TABLE 2A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1981)
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	1.00 E-2	1.73 E-2	2.50 E+1
2. Average diluted concentration during period	μCi/ml	8.70 E-10	1.26 E-9	
3. Percent of applicable limit	%	4.00 E-1	6.92 E-1	

B. Tritium

1. Total release	Ci	2.58 E-0	1.81 E-0	2.50 E+1
2. Average diluted concentration during period	μCi/ml	2.24 E-7	1.32 E-7	
3. Percent of applicable limit	%	7.47 E-1	4.40 E-1	

C. Dissolved and entrained gases

1. Total release	Ci	<LLD	<LLD	
2. Average diluted concentration during period	μCi/ml	<LLD	<LLD	
3. Percent of applicable limit	%	N/A	N/A	

D. Gross alpha radioactivity

1. Total release	Ci	<LLD	<LLD	
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E. Volume of waste released (prior to dilution)	liters	3.15 E+5	3.28 E+5	2.50 E+1
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F. Volume of dilution water used during period	liters	1.15 E+10	1.37 E+10	1.00 E+1
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Tech. Specs. - A. 3. = 2.5 curies/quarter

B. 3. = 10 CFR 20, Appendix B, Table II

C. 3. = 10 CFR 20, Appendix B, Table II

TABLE 2B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1981)
LIQUID EFFLUENTS

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
Strontium-89	Ci	<LLD	<LLD	<LLD	<LLD
Strontium-90	Ci	<LLD	<LLD	1.95 E-5	8.24 E-6
Cesium-134	Ci	<LLD	<LLD	1.38 E-3	2.55 E-3
Cesium-137	Ci	<LLD	<LLD	6.59 E-3	9.73 E-3
Iodine-131	Ci	<LLD	<LLD	<LLD	<LLD
Cobalt-58	Ci	<LLD	<LLD	<LLD	3.40 E-5
Cobalt-60	Ci	<LLD	<LLD	1.25 E-3	2.38 E-3
Iron-59	Ci	<LLD	<LLD	<LLD	<LLD
Zinc-65	Ci	<LLD	<LLD	4.45 E-6	<LLD
Manganese-54	Ci	<LLD	<LLD	5.98 E-5	<LLD
Chromium-51	Ci	<LLD	<LLD	<LLD	<LLD
Zirconium-Niobium-95	Ci	<LLD	<LLD	<LLD	<LLD
Molybdenum-99	Ci	<LLD	<LLD	<LLD	<LLD
Technetium-99m	Ci	<LLD	<LLD	<LLD	<LLD
Barium-Lanthanum-140	Ci	<LLD	<LLD	<LLD	<LLD
Cerium-141	Ci	<LLD	<LLD	<LLD	<LLD
Other (specify)	Ci				
Ag-110m	Ci	<LLD	<LLD	4.36 E-4	<LLD
Sb-125	Ci	<LLD	<LLD	3.84 E-4	1.52 E-3
Co-57	Ci	<LLD	<LLD	<LLD	2.99 E-6
Fe-55	Ci	<LLD	<LLD	<LLD	1.03 E-3
P-32	Ci	<LLD	<LLD	<LLD	2.7 E-7
Unidentified	Ci				
Total for period (above)	Ci			1.01 E-2	1.73 E-2
Xenon-133	Ci	<LLD	<LLD	<LLD	<LLD
Xenon-135	Ci	<LLD	<LLD	<LLD	<LLD

UNIT I

TABLE 3A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1981)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

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

1. Type of waste	UNIT	6 month period	EST. TOTAL ERROR %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m ³ Ci	104.6 39.04	5%
b. Dry compressible waste, contaminated equipment, etc.	m ³ Ci	102.9 1.29	5%
c. Irradiated components, control rods, etc.	m ³ Ci	N/A	
d. Other (describe)	m ³ Ci	N/A	

2. Estimate of major nuclide composition (by type of waste)		
a. Cs-137	%	58
Ba-137m	%	18
Cs-134	%	15
Co-60	%	6
b. Cs-137	%	33
Ba-137m	%	31
Cs-134	%	19
Co-60	%	7.7
Mn-54	%	6.1
c.	%	
	%	
	%	
	%	
	%	
	%	
d.	%	
	%	
	%	
	%	
	%	

3. Solid Waste Disposition Number of Shipments	Mode of Transportation	Destination
4	Tractor/Trailer (Van)	Barnwell, S.C.
2	Tractor/Trailer (Van)	Washington State
7	Shipping Cask	Barnwell, S.C.
6	Tractor/Flatbed Trailer	Washington State
1	Tractor/Flatbed Trailer	Barnwell, S.C.

B. Irradiated Fuel Shipments (Disposition)

Number of Shipments	Mode of Transportation	Destination

NOTE: Three shipments contained both Unit I and Unit II waste and had both a Unit I and Unit II shipment number assigned to them.

Joint Frequency Tables of Wind Speed and Direction 100ft
versus Delta Temperature 150-33ft
for Specific Dates - First Quarter 1981

UNIT I

1 of 4

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: A

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

	WIND SPEED(MPH)						
WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	3	4	0	1	0	0	8
NNE	0	1	0	0	0	0	1
NE	0	1	0	0	0	0	1
ENE	0	1	0	0	0	0	1
E	4	0	0	0	0	0	4
ESE	1	5	0	0	0	0	6
SE	1	3	1	0	0	0	5
SSE	2	2	0	0	0	0	4
S	0	0	2	0	0	0	2
SSW	1	5	2	0	0	0	8
SW	0	3	0	0	0	0	3
WSW	1	2	1	0	0	0	4
W	0	2	2	2	0	0	6
WNW	0	0	6	8	4	5	18
NW	1	1	5	18	7	1	33
NNW	1	4	0	1	0	0	6
VARIABLE	3	0	0	0	0	0	6

TOTAL 116
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 10

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: B

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

	WIND SPEED(MPH)						
WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
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	1	1	0	0	0	2
SE	2	0	0	0	0	0	2
SSE	1	0	0	1	0	0	2
S	1	1	1	0	0	0	3
SSW	0	0	2	0	0	0	2
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	1	2	1	0	0	4
WNW	0	0	3	2	0	0	5
NW	0	0	0	3	1	0	4
NNW	0	1	0	0	0	0	1
VARIABLE	0	0	0	0	0	0	0

TOTAL 25
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 10

First Quarter Joint Frequency Tables

UNIT I

2 of 4

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: C

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

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

TOTAL 38
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 10

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: D

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	5-12	13-18	19-24	>24	TOTAL
N	4	1	2	0	0	0	7
NNE	1	5	0	0	0	0	6
N E	4	4	0	0	0	0	8
ENE	2	6	0	0	0	0	8
E	2	7	10	0	0	0	19
ESE	1	6	4	9	3	0	23
SE	0	8	3	5	2	0	18
SSE	1	5	3	1	0	0	10
S	3	1	2	0	0	0	6
SSW	6	4	1	0	0	0	11
SW	1	1	2	0	0	0	4
WSW	0	1	1	0	0	0	2
W	1	11	33	6	0	0	51
WNW	1	14	37	31	10	0	93
NW	0	9	32	34	10	0	94
NNW	3	6	3	4	11	2	35
VARIABLE	10	0	0	0	0	0	10

TOTAL 395
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 10

First Quarter Joint Frequency Tables

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UNIT I

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000
 STABILITY CLASS: 0
 ELEVATION: SPEED:SP1000 DIRECTION:DI1000 LAPSE:DT1500
 WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24 TOTAL
N	4	2	1	0	0	7
NNE	4	0	0	0	0	4
NE	4	0	0	0	0	4
ENE	3	0	0	0	0	3
E	2	1	0	0	0	3
ESE	6	3	0	0	0	9
SE	4	2	0	0	0	6
SSE	9	1	0	0	0	10
S	13	0	0	0	0	13
SSW	4	2	0	0	0	6
SU	6	0	0	0	0	6
USW	5	0	0	0	0	5
U	3	0	0	0	0	3
UNW	1	0	0	0	0	1
NW	0	0	0	0	0	0
NNW	0	2	5	1	0	8
VARIABLE	16	0	0	0	0	16
TOTAL SS						
PERIODS OF CALM(HOURS):						0
HOURS OF MISSING DATA:						10

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000
 STABILITY CLASS: ALL
 ELEVATION: SPEED:SP1000 DIRECTION:DI1000 LAPSE:DT1500
 WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24 TOTAL
N	17	17	8	1	0	41
NNE	9	14	0	0	0	23
NE	10	9	4	0	0	23
ENE	12	14	0	0	0	26
E	18	10	10	1	0	39
ESE	23	29	14	11	7	84
SE	21	20	8	9	3	61
SSE	21	18	8	8	0	49
S	29	16	8	0	0	53
SSW	19	14	6	1	0	40
SU	15	10	4	0	0	29
USW	11	10	3	0	0	24
U	11	34	48	14	0	107
UNW	7	27	57	47	15	153
NW	4	16	48	68	28	165
NNW	10	20	14	13	12	78
VARIABLE	57	0	0	0	0	57
TOTAL SS						
PERIODS OF CALM(HOURS):						0
HOURS OF MISSING DATA:						10

UNIT I

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS: E

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	4	5	2	0	0	0	11
NNE	0	5	0	0	0	0	5
NE	1	3	4	0	0	0	8
ENE	3	3	0	0	0	0	6
E	5	2	0	0	0	0	7
ESE	7	11	9	2	4	0	33
SE	8	4	3	4	1	0	20
SSE	3	6	5	0	0	0	14
S	6	7	3	0	0	0	16
SSW	4	2	0	1	0	0	7
SW	4	5	1	0	0	0	10
WSW	5	5	0	0	0	0	10
W	3	16	9	1	0	0	29
WNW	3	11	7	1	0	0	22
NW	2	4	8	6	0	0	20
NNW	1	1	4	4	1	0	11
VARIABLE	11	0	0	0	0	0	11

TOTAL 229

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 10

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS: F

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	2	5	1	0	0	0	8
NNE	4	2	0	0	0	0	6
NE	1	1	0	0	0	0	2
ENE	4	2	0	0	0	0	6
E	5	0	0	0	0	0	5
ESE	8	3	0	0	0	0	11
SE	5	3	0	0	0	0	8
SSE	5	4	0	0	0	0	9
S	8	0	0	0	0	0	8
SSW	4	1	0	0	0	0	5
SW	4	1	0	0	0	0	5
WSW	0	2	0	0	0	0	2
W	4	4	0	0	0	0	8
WNW	2	2	0	0	0	0	4
NW	1	2	2	2	0	0	7
NNW	4	5	2	1	0	0	12
VARIABLE	17	0	0	0	0	0	17

TOTAL 104

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 10

THREE MILE ISLAND NUCLEAR STATION
UNIT I JOINT FREQUENCY TABLES
FIRST QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 01 1 1 1-01 33124

STABILITY CLASS: A

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	3	4	0	1	1	2	11
NNE	0	1	0	0	0	0	1
NE	0	1	0	0	0	0	1
ENE	0	2	0	0	0	0	2
E	0	1	0	0	0	0	0
ESE	4	7	0	0	0	0	11
SE	6	3	1	0	0	0	10
SSE	4	2	0	0	0	0	6
S	4	0	4	0	0	0	16
SSW	3	0	12	3	0	0	26
SW	0	4	14	2	0	0	20
WSW	1	3	10	4	0	0	18
W	1	4	20	12	3	0	40
WNW	0	3	24	14	5	0	46
NW	3	3	27	20	17	4	82
NNW	5	0	8	18	2	3	45
VARIABLE	11	0	0	0	0	0	11

TOTAL 344

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 01 1 1 1-01 33124

STABILITY CLASS: B

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

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

TOTAL 56

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 30

ENTER C TO CONTINUE

THREE MILE ISLAND NUCLEAR STATION
UNIT 1 JOINT FREQUENCY TABLES
FIRST QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 01 1 1 1-01 33124
STABILITY CLASS: C
ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	0	0	0
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	2	0	0	0	0	2
E	2	0	0	1	0	0	3
ESE	2	3	0	0	0	0	5
SE	1	3	1	0	0	0	5
SSE	0	0	0	0	0	0	0
S	0	3	3	0	0	0	6
SSW	0	1	3	1	0	0	5
SW	0	0	2	0	0	0	2
WSW	0	1	1	0	0	0	2
W	1	0	7	7	0	0	15
WNW	0	0	5	10	2	0	17
NW	0	1	2	6	0	0	17
NNW	1	1	1	3	0	1	7
VARIABLE	0	0	0	0	0	0	0

TOTAL 87
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 01 1 1 1-01 33124
STABILITY CLASS: D
ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	0	3	3	2	0	0	16
NNE	3	5	0	0	0	0	8
NE	6	4	0	0	0	0	10
ENE	5	6	0	0	0	0	11
E	0	12	10	0	0	0	30
ESE	5	10	4	0	3	0	31
SE	6	10	6	5	2	0	29
SSE	4	11	10	1	0	0	26
S	11	10	0	0	0	0	30
SSW	11	11	5	2	0	0	29
SW	4	8	5	1	0	0	18
WSW	5	14	5	0	0	0	24
W	3	25	50	20	3	0	110
WNW	4	20	87	67	18	0	205
NW	2	13	54	57	27	0	153
NNW	5	0	15	5	12	0	54
VARIABLE	10	0	0	0	0	0	10

TOTAL 793
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 30

ENTER C TO CONTINUE

THREE MILE ISLAND NUCLEAR STATION
UNIT I JOINT FREQUENCY TABLES
FIRST QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 1 1 1-81 33124

STABILITY CLASS: E

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	7	16	4	0	0	0	27
NNE	0	6	0	0	0	0	6
NE	4	3	4	0	0	0	11
ENE	6	4	0	0	0	0	10
E	6	3	0	0	0	0	9
ESE	14	14	16	4	4	0	52
SE	11	9	4	4	1	0	29
SSE	5	8	5	0	0	0	18
S	12	14	6	7	0	0	39
SSW	7	7	8	4	0	0	26
SW	8	15	11	0	0	0	34
WSW	8	18	3	0	0	0	29
W	7	35	26	2	0	0	70
WNW	8	19	20	4	0	0	51
NW	6	10	18	9	1	0	44
NNW	8	9	6	7	2	0	32
VARIABLE	15	0	0	0	0	0	15

TOTAL 487
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 1 1 1-81 33124

STABILITY CLASS: F

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	4	7	1	0	0	0	12
NNE	4	2	0	0	0	0	6
NE	3	1	0	0	0	0	4
ENE	7	3	0	0	0	0	10
E	8	2	0	0	0	0	10
ESE	13	4	0	0	0	0	17
SE	9	4	0	0	0	0	13
SSE	10	6	0	0	0	0	16
S	11	0	1	0	0	0	12
SSW	5	2	1	0	0	0	8
SW	8	3	2	0	0	0	13
WSW	2	5	0	0	0	0	7
W	7	9	2	0	0	0	18
WNW	4	4	1	0	0	0	9
NW	3	4	4	2	0	0	13
NNW	9	10	4	1	0	0	24
VARIABLE	27	0	0	0	0	0	27

TOTAL 192
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 30

THREE MILE ISLAND NUCLEAR STATION
UNIT I JOINT FREQUENCY TABLES
FIRST QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 01 1 1 1-01 33124
STABILITY CLASS: G
ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	6	2	1	0	0	0	9
NNE	5	0	0	0	0	0	5
NE	4	0	0	0	0	0	4
ENE	5	1	0	0	0	0	6
E	6	1	0	0	0	0	7
ESE	12	4	0	0	0	0	16
SE	11	5	0	0	0	0	16
SSE	18	1	0	0	0	0	19
S	21	0	0	0	0	0	21
SSW	17	2	0	0	0	0	19
SW	10	0	0	0	0	0	10
WSW	8	6	0	0	0	0	14
W	4	3	0	0	0	0	7
WNW	1	4	0	0	0	0	5
NW	0	2	0	0	0	0	2
NNW	1	4	5	1	0	0	11
VARIABLE	23	0	0	0	0	0	23

TOTAL 171
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 30

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 01 1 1 1-01 33124
STABILITY CLASS: ALL
ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	20	33	0	3	1	2	77
NNE	12	15	0	0	0	0	27
NE	17	0	4	0	0	0	30
ENE	23	18	0	0	0	0	41
E	30	10	10	1	0	0	60
ESE	54	45	21	13	7	0	140
SE	46	34	12	0	3	0	124
SSE	42	20	16	2	0	0	80
S	60	36	24	7	0	0	127
SSW	43	31	31	10	0	0	115
SW	30	30	35	3	0	0	98
WSW	24	47	10	4	0	0	84
W	23	77	118	52	6	0	276
WNW	17	60	145	00	25	0	346
NW	14	34	106	105	56	4	310
NNW	20	43	30	37	17	13	178
VARIABLE	05	0	0	0	0	0	05

TOTAL 2130
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 30

Joint Frequency Tables of Wind Speed and Direction 100ft
versus Delta Temperature 150-33ft
for Specific Dates - Second Quarter 1981

UNIT I

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: A

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	1	3	2	0	0	0	6
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	2	0	0	0	0	2
E	1	3	1	0	0	0	5
ESE	1	0	2	0	0	0	3
SE	0	1	5	0	0	0	6
SSE	1	2	1	0	0	0	4
S	1	2	0	0	0	0	3
SSW	1	1	4	0	0	0	6
SW	2	4	7	0	0	0	13
WSW	3	0	2	0	0	0	5
W	0	2	3	0	0	0	5
WNW	5	2	0	3	0	0	10
NW	1	4	11	7	2	0	25
NNW	4	10	4	0	0	0	18
VARIABLE	5	0	0	0	0	0	5

TOTAL 111

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 2

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: B

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	0	0	0
NNE	1	0	0	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	1	0	0	0	1
SE	0	0	0	2	0	0	2
SSE	0	2	0	0	0	0	2
S	0	0	1	0	0	0	1
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	1	0	0	0	1
WNW	0	1	0	0	0	0	1
NW	0	0	0	0	0	0	0
NNW	0	2	0	0	0	0	2
VARIABLE	1	0	0	0	0	0	1

TOTAL 9

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 2

Second Quarter Joint Frequency Tables

2 of 4

UNIT I

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: C

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT100A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
-------------------	-----	-----	------	-------	-------	-----	-------

M	2	1	0	0	0	0	3
MNE	0	0	0	0	0	0	0
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	2	1	0	0	0	3
SSE	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	1	0	0	0	0	1
WSW	0	0	0	0	0	0	0
W	0	0	1	0	0	0	1
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	1	0	0	0	0	1
VARIABLE	2	0	0	0	0	0	2

TOTAL 10
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 2

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: D

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT100A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
-------------------	-----	-----	------	-------	-------	-----	-------

N	0	0	0	0	0	0	0
NNE	1	0	0	0	0	0	1
NE	2	0	0	0	0	0	2
ENE	0	1	0	0	0	0	1
E	1	7	2	0	0	0	10
ESE	1	3	1	0	0	0	5
SE	1	4	1	0	0	0	6
SSE	2	2	0	0	0	0	4
S	1	5	1	0	0	0	7
SSW	0	1	2	0	0	0	3
SW	0	2	2	0	0	0	4
WSW	0	0	1	0	0	0	1
W	0	1	0	0	0	0	1
WNW	0	0	3	1	0	0	4
NW	1	2	1	5	2	0	11
NNW	0	4	1	0	0	0	5
VARIABLE	2	0	0	0	0	0	2

TOTAL 65
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 2

UNIT I

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS: E

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	4	0	0	0	0	0	4
NNE	3	0	0	0	0	0	3
NE	1	2	0	0	0	0	3
ENE	2	1	0	0	0	0	3
E	5	4	1	0	0	0	10
ESE	3	4	0	0	0	0	7
SE	1	5	4	0	0	0	10
SSE	6	16	0	0	0	0	22
S	5	4	0	0	0	0	9
SSW	2	11	3	0	0	0	16
SW	3	3	7	1	0	0	14
WSW	4	2	1	0	0	0	7
W	4	5	2	2	0	0	13
WNW	0	0	10	1	0	0	11
NW	1	4	2	1	0	0	8
NNW	0	6	0	0	0	0	6
VARIABLE	10	0	0	0	0	0	10

TOTAL 146

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 2

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS: F

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

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

TOTAL 69

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 2

Second Quarter Joint Frequency Tables

UNIT I

4 of 4

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: G

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

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

TOTAL 27

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 2

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 0000-0000

STABILITY CLASS: ALL

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	7	4	2	0	0	0	13
NNE	6	1	0	0	0	0	7
NE	4	3	0	0	0	0	7
ENE	6	5	0	0	0	0	11
E	10	14	4	0	0	0	28
ESE	15	10	4	0	0	0	29
SE	9	14	11	0	0	0	34
SSE	13	24	1	0	0	0	38
S	13	12	2	0	0	0	27
SSW	8	16	9	0	0	0	32
SW	9	10	16	1	0	0	36
WSW	8	2	4	0	0	0	14
W	12	18	9	2	0	0	35
WNW	11	5	14	5	0	0	35
NW	9	13	14	13	4	0	53
NNW	9	24	5	0	0	0	38
VARIABLE	31	0	0	0	0	0	31

TOTAL 437

PERIODS OF CALM(HOURS): 0

HOURS OF MISSING DATA: 2

THREE MILE ISLAND NUCLEAR STATION
UNIT 1 JOINT FREQUENCY TABLES
SECOND QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 83024
STABILITY CLASS: A
ELEVATION: SPEED:SPI00A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	2	13	8	2	2	0	27
NNE	1	2	0	0	0	0	3
NE	0	1	0	0	0	0	1
ENE	3	6	1	0	0	0	10
E	4	6	2	0	0	0	12
ESE	1	6	6	0	0	0	13
SE	0	14	13	0	0	0	27
SSE	5	6	2	0	0	0	13
S	3	16	3	0	0	0	22
SSW	8	16	17	1	0	0	42
SW	0	15	14	0	0	0	30
WSW	7	7	3	0	0	0	17
W	2	5	6	2	0	0	15
WNW	7	6	13	15	2	0	43
NW	4	18	40	30	6	0	107
NNW	0	31	37	8	3	0	88
VARIABLE	23	0	0	0	7	0	23

TOTAL 478
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 52

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 83024
STABILITY CLASS: B
ELEVATION: SPEED:SPI00A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

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

TOTAL 33
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 52

THREE MILE ISLAND NUCLEAR STATION
UNIT 1 JOINT FREQUENCY TABLES
SECOND QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 63024
STABILITY CLASS: C
ELEVATION: SPEED: SP102A DIRECTION: DI100A LAPSE: DT150A
WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	2	1	0	1	0	0	4
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	0	2	0	0	0	0	2
ESE	1	2	0	0	0	0	3
SE	1	2	2	0	0	0	5
SSE	1	1	0	0	0	0	2
S	0	0	1	0	0	0	1
SSW	0	1	1	0	0	0	2
SV	0	1	1	0	0	0	2
WSW	1	1	0	0	0	0	2
W	2	0	3	0	0	0	5
WNW	0	2	2	0	0	0	4
NW	0	0	1	2	3	0	6
NNW	0	2	2	4	1	0	9
VARIABLE	3	0	0	0	0	0	3
TOTAL	48						
PERIODS OF CALM(HOURS):	0						0
HOURS OF MISSING DATA:	52						52

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 63024
STABILITY CLASS: D
ELEVATION: SPEED: SP102A DIRECTION: DI100A LAPSE: DT150A
WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	0	4	0	3	1	0	8
NNE	4	1	0	0	0	0	5
NE	6	3	0	0	0	0	9
ENE	2	13	0	0	0	0	15
E	11	24	6	0	0	0	41
ESE	6	33	17	0	0	0	56
SE	4	25	37	1	0	0	67
SSE	4	8	4	1	0	0	17
S	3	12	6	4	0	0	25
SSW	8	10	12	0	0	0	30
SV	6	8	10	2	0	0	26
WSW	4	6	6	0	0	0	16
W	2	8	5	5	1	0	21
WNW	1	9	10	26	8	2	56
NW	3	6	17	22	11	1	60
NNW	1	4	0	0	0	0	22
VARIABLE	20	0	0	0	0	0	20
TOTAL	474						
PERIODS OF CALM(HOURS):	0						0
HOURS OF MISSING DATA:	52						52

ENTER C TO CON

THREE MILE ISLAND NUCLEAR STATION
UNIT I JOINT FREQUENCY TABLES
SECOND QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 63024

STABILITY CLASS: E

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	7	6	9	1	1	0	24
NNE	10	5	3	0	0	0	18
NE	4	10	0	0	0	0	14
ENE	7	12	1	0	0	0	20
E	17	19	3	0	0	0	39
ESE	15	24	9	1	0	0	49
SE	3	20	24	1	0	0	48
SSE	15	32	12	0	0	0	59
S	12	15	12	2	0	0	41
SSW	10	37	13	5	0	0	65
SW	7	32	22	2	0	0	63
WSW	16	23	4	2	0	0	45
W	17	27	5	3	0	0	52
WNW	7	18	32	10	1	0	68
NW	7	13	12	10	2	0	53
NNW	5	16	11	1	0	0	33
VARIABLE	38	0	0	0	0	0	38

TOTAL 601
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 52

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 63024

STABILITY CLASS: F

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	5	8	1	0	0	0	14
NNE	8	4	0	0	0	0	12
NE	1	2	0	0	0	0	3
ENE	9	3	0	0	0	0	12
E	7	5	0	0	0	0	12
ESE	14	10	1	0	0	0	25
SE	14	6	0	0	0	0	20
SSE	14	3	0	0	0	0	17
S	16	3	0	0	0	0	19
SSW	7	3	0	0	0	0	10
SW	6	5	0	0	0	0	11
WSW	5	5	1	0	0	0	11
W	11	10	7	0	0	0	37
WNW	8	13	3	0	0	0	24
NW	7	7	6	0	0	0	20
NNW	9	13	3	0	0	0	25
VARIABLE	30	0	0	0	0	0	30

TOTAL 272
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 52

ENTER C TO CONTINUE

THREE MILE ISLAND NUCLEAR STATION
UNIT I JOINT FREQUENCY TABLES
SECOND QUARTER 1981

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HOURS AT EACH WIND SPEED AND DIRECTION

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 4 1 1-81 83024

PERIOD OF RECORD: 81 4 1 1-81 63024

STABILITY CLASS: G

STABILITY CLASS: ALL

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

WIND SPEED(MPH)

WIND SPEED(MPH)

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	6	0	0	0	0	0	6
NNE	3	0	0	0	0	0	3
NE	1	0	0	0	0	0	1
ENE	3	1	0	0	0	0	4
E	7	0	0	0	0	0	7
ESE	0	5	0	0	0	0	14
SE	8	3	0	0	0	0	11
SSE	10	1	0	0	0	0	11
S	8	1	0	0	0	0	9
SSW	11	0	0	0	0	0	11
SW	6	1	0	0	0	0	7
WSW	5	2	0	0	0	0	7
W	6	4	1	0	0	0	11
WNW	11	3	0	0	0	0	14
NW	4	2	0	0	0	0	6
NNW	7	5	2	0	0	0	14
VARIABLE	14	0	0	0	0	0	14

TOTAL 136
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 52

WIND DIRECTION	1-3	3-4	8-12	13-18	19-24	>24	TOTAL
N	22	32	18	7	4	0	83
NNE	27	12	3	0	0	0	42
NE	12	16	0	0	0	0	28
ENE	25	36	2	0	0	0	63
E	46	67	11	0	0	0	114
ESE	46	80	38	1	0	0	165
SE	31	70	75	2	0	0	179
SSE	50	54	18	1	0	0	123
S	42	47	26	6	0	0	121
SSW	44	67	43	7	0	0	161
SW	34	64	40	4	0	0	151
WSW	38	44	14	2	0	0	98
W	40	63	28	10	1	0	142
WNW	34	52	60	52	11	2	211
NW	25	46	86	76	22	1	256
NNW	31	72	65	22	4	1	195
VARIABLE	120	0	0	0	0	0	120

TOTAL 2132
PERIODS OF CALM(HOURS): 0
HOURS OF MISSING DATA: 52

ENTER C TO CONTINUE