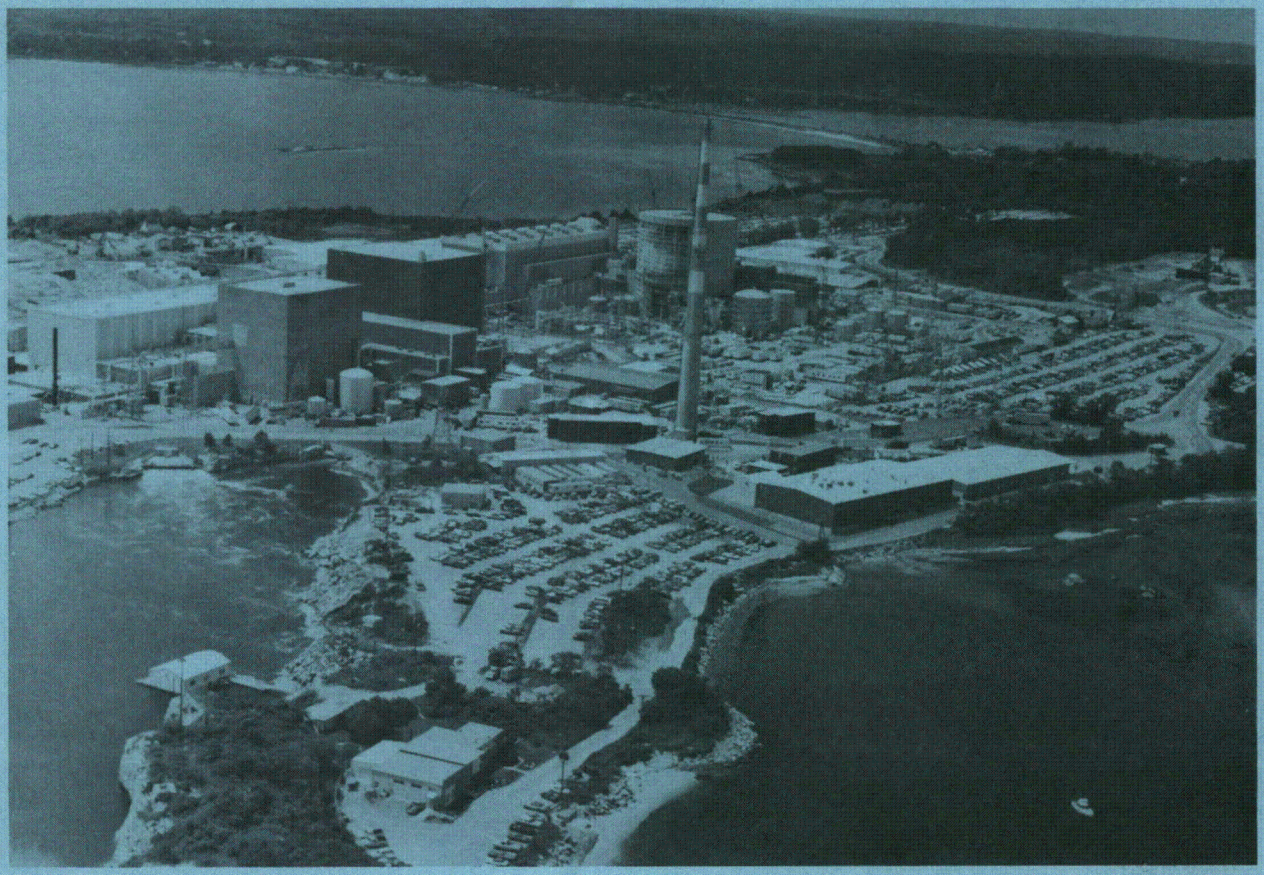
NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE NUCLEAR POWER STATION

UNITS NO. 1 & No. 2



SEMIANNUAL RADIOACTIVE EFFLUENTS RELEASE REPORT

JANUARY 1, 1984 - JUNE 30, 1984

OPERATING LICENSE No's. DPR-21 & DPR-65

DOCKET No's. 50-245 & 50-336

NORTHEAST UTILITIES

THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Seldon Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 666-6911

August 30, 1984
Docket Nos. 50-336
50-245
B11291

Dr. Thomas E. Murley, Regional Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Dr. Murley:

Millstone Nuclear Station, Unit Nos. 1 and 2
Semiannual Radioactive Effluents Release Report

In accordance with the requirements of 10CFR50.36a and the Technical Specifications, two (2) copies of the Semiannual Radioactive Effluents Release Report are herewith submitted.

The report has been prepared in accordance with the format of Regulatory Guide 1.21 and copies of the report are being forwarded in accordance with the provisions of Regulatory Guide 10.1.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

8/30/84

W. G. Counsil
Senior Vice President

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE NUCLEAR POWER STATION

UNITS NO. 1 & No. 2

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INTRODUCTION

1.0 This report is being submitted for Northeast Nuclear Energy Company's Millstone Nuclear Power Station, Units No. 1 and No. 2 in accordance with the requirements of 10CFR50.36a, and the Technical Specifications and in the format outlined by U.S. NRC Regulatory Guide 1.21.

During the period covered by this report, Unit No. 1 operated with a unit capacity factor of 55.6% and Unit No. 2 with a unit capacity factor of 82.6%. (Percent of design electrical rating.)

Unit No. 1 was shutdown for refueling from 4/14 to 6/28.
Unit No. 2 was shutdown for refueling from 1/1 to 1/11
and 2/13 to 2/18.

A single report is being submitted for both units as the two units share a number of items related to this report. However, release data and dose calculations are presented separately for each unit.

RADIOACTIVE EFFLUENT RELEASES

2.0 The plants were operated in accordance with the Technical Specifications. The liquid and airborne radioactive effluents are given in the attached tables as follows:

Table 2.1-1	Unit 1 Liquid Effluents-Summation
Table 2.1-2	Unit 1 Liquid Effluents-Batch Mode
Table 2.1-3	Unit 1 Gaseous Effluents-Summation
Table 2.1-4	Unit 1 Gaseous Effluents-Elevated Continuous
Table 2.2-1	Unit 2 Liquid Effluents-Summation
Table 2.2-2	Unit 2 Liquid Effluents-Continuous Mode
Table 2.2-3	Unit 2 Liquid Effluents-Batch Mode
Table 2.2-4	Unit 2 Gaseous Effluents Summation
Table 2.2-5	Unit 2 Gaseous Effluents-Mixed Continuous Mode - Unit 2 Ventilation
Table 2.2-6	Unit 2 Gaseous Effluents-Elevated Continuous Unit Steam Jet Air Ejectors (SJAE)
Table 2.2-7	Unit 2 Gaseous Effluents-Elevated Batch Unit 2 Containment Vents
Table 2.2-8	Unit 2 Gaseous Effluents-Elevated Batch Unit 2 Waste Gas Tanks
Table 2.3-1	Supplemental Information

Table 2.1-1

MILLSTONE NUCLEAR POWER STATION - UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	JAN.	FEB.	MARCH	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Products						
1. Total released(not including H-3,Gases, Alpha)	Ci	7.25 E-03	1.64 E-03	8.36 E-03	1.73 E-02	1.50E+01
2. Average diluted concentration during period	uCi/ml	1.91 E-09	4.44 E-10	1.60 E-09	1.36 E-09	
3. Percent of applicable limit **	%				0.010	
** Based on limit of 1.5 mrem whole body dose per quarter - E.T.S. 2.4.1.2.D						
B. Tritium						
1. Total Released	Ci	2.49 E-01	6.28 E-03	5.14 E-01	7.69 E-01	1.50E+01
2. Average diluted concentration during period	uCi/ml	6.55 E-08	1.70 E-09	9.85 E-08	6.06 E-08	
C. Dissolved and Entrained Gases						
1. Total Released	Ci	1.13 E-02	3.63 E-06	1.96 E-05	1.13 E-02	1.50E+01
2. Average diluted concentration during period	uCi/ml	2.97 E-09	9.84 E-13	3.75 E-12	8.90 E-12	
D. Gross Alpha Radioactivity						
1. Total Released	Ci	≤ 1.70 E-05	≤ 6.36 E-06	≤ 1.77 E-05	-------	1.50E+01
E. Volume of waste released(Prior to dilution)	liters	2.83 E+05	1.59 E+05	2.08 E+05	6.50 E+05	1.00E+01
F. Volume of dilution water used during period	liters	3.80 E+09	3.69 E+09	5.22 E+09	1.27 E+10	1.00E+01

Table 2.1-1 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	APRIL	MAY	JUNE	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Products						
1. Total released(not including H-3,Gases, Alpha)	Ci	1.95E-03	2.34E-03	1.17E-02	1.60E-02	1.50E+01
2. Average diluted concentration during period	uCi/ml	1.15E-09	1.81E-08	1.04E-08	5.41E-09	
3. Percent of applicable limit **	%				0.015	
B. Tritium						
1. Total Released	Ci	5.20E-01	4.88E-01	4.55E+00	5.56E+00	1.50E+01
2. Average diluted concentration during period	uCi/ml	3.06E-07	3.78E-06	4.03E-06	1.88E-06	
C. Dissolved and Entrained Gases						
1. Total Released	Ci	6.18E-06	--------	1.78E-04	1.84E-04	1.50E+01
2. Average diluted concentration during period	uCi/ml	3.64E-12	--------	1.58E-10	6.22E-11	
D. Gross Alpha Radioactivity						
1. Total Released	Ci	≤ 9.60E-06	≤ 2.50E-05	≤ 6.48E-05	--------	1.50E+01
E. Volume of waste released(Prior to dilution)	liters	1.60E+05	5.00E+05	2.16E+06	2.82E+06	1.00E+01
F. Volume of dilution water used during period	liters	1.70E+09	1.29E+08	1.13E+09	2.96E+09	1.00E+01

** Based on limit of 1.5 mrem whole body dose per quarter E.T.S. 2.4.1.2.D

Table 2.1-2

MILLSTONE NUCLEAR POWER STATION UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT

YEAR 1984 LIQUID EFFLUENTS - BATCH MODE

Nuclides Released	Unit	JAN.	FEB.	MARCH	Quarterly Total
I-131	Ci	7.61 E-04	≤4.72 E-05	≤4.56 E-05	7.61 E-04
Ba,La-140	Ci	≤1.42 E-04	≤7.46 E-05	≤9.76 E-05	--------
Cs-134	Ci	4.07 E-05	1.76 E-05	8.40 E-05	1.42 E-04
Cs-137	Ci	1.57 E-03	6.18 E-04	1.97 E-03	4.16 E-03
Co-58	Ci				
Co-60	Ci	2.03 E-03	9.05 E-04	5.80 E-03	8.74 E-03
Mn-54	Ci	1.83 E-04	6.99 E-05	4.12 E-04	6.65 E-04
Cr-51	Ci	1.58 E-03			1.58 E-03
I-133	Ci	5.02 E-04			5.02 E-04
Ru-103	Ci	6.21 E-05			6.21 E-05
Ce-141	Ci	5.06 E-04			5.06 E-04
Sr-92	Ci		6.64 E-06		6.64 E-06
	Ci				
Sr-89	Ci	≤1.42 E-05	1.07 E-05	≤1.04 E-05	1.07 E-05
Sr-90	Ci	1.87 E-05	1.67 E-05	9.36 E-05	1.29 E-04
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
Total for period(above)	Ci	7.25 E-03	1.64 E-03	8.36 E-03	1.73 E-02
xenon-133	Ci	4.37 E-03		1.43 E-05	4.38 E-03
xenon-135	Ci	6.89 E-03	3.63 E-06	5.32 E-06	6.90 E-03
	Ci				

Table 2.1-2 Continued

MILLSTONE NUCLEAR POWER STATION UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT

YEAR 1984 LIQUID EFFLUENTS - BATCH MODE

Nuclides Released	Unit	APRIL	MAY	JUNE	Quarterly Total
I-131	Ci	9.60E-06	≤ 1.00E-04	7.38E-05	8.34E-05
Ba,La-140	Ci	≤8.00E-05	≤ 2.50E-04	≤1.08E-03	--------
Cs-134	Ci	6.08E-06	1.83E-05	6.44E-05	8.88E-05
Cs-137	Ci	1.86E-04	4.08E-04	2.16E-03	2.75E-03
Co-58	Ci	6.52E-05	2.38E-05	--------	8.90E-05
Co-60	Ci	1.11E-03	1.28E-03	6.65E-03	9.04E-03
Mn-54	Ci	6.36E-05	2.14E-04	8.70E-04	1.15E-03
Fe-59	Ci	9.18E-05	2.44E-05	-------	1.16E-04
Ru-103	Ci	2.23E-04	1.66E-04	6.25E-05	4.52E-04
Sb-124	Ci	1.02E-04	5.91E-05	1.18E-04	2.79E-04
Ru-106	Ci	8.53E-05	9.42E-05		1.80E-04
Cr-51	Ci		3.18E-05		3.18E-05
	Ci				
Sr-89	Ci	≤6.40E-06	≤1.50E-05	≤4.32E-05	--------
Sr-90	Ci	1.22E-05	1.58E-05	3.24E-05	6.04E-05
Nb-97	Ci			6.05E-05	6.05E-05
Sb-125	Ci			1.78E-04	1.78E-04
Rb-88	Ci			1.43E-03	1.43E-03
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
Total for period(above)	Ci	1.95E-03	2.34E-03	1.17E-02	1.60E-02
xenon-133	Ci	---------	--------	1.51E-04	1.51E-04
xenon-135	Ci	6.18E-06	--------	2.71E-05	3.33E-05
	Ci				

Table 2.1-3

MILLSTONE NUCLEAR POWER STATION - UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	JAN.	FEB.	MARCH	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Gases						
1. Total Released	Ci	2.81 E+02	2.57 E+02	4.06 E+02	9.44 E+02	2.50E+01
2. Average Release Rate For Period	uCi/sec	1.16 E+02	1.04 E+02	1.34 E+02	1.19 E+02	
3. Percent of Technical Specification Limit	%				*0.33%	
B. Iodines						
1. Total Iodine - 131	Ci	1.67 E-03	3.18 E-03	4.72 E-03	9.57 E-03	2.50E+01
2. Average Release Rate For Period	uCi/sec	6.90 E-04	1.29 E-03	1.56 E-03	1.21 E-03	
C. Particulates						
1. Particulates With Half-lives > 8 Days	Ci	3.14 E-03	4.33 E-03	5.42 E-03	1.29 E-02	2.50E+01
2. Average Release Rate For Period	uCi/sec	1.30 E-03	1.76 E-03	1.79 E-03	1.63 E-03	
3. Percent of Technical Specification Limit	%				*2.20 %	
4. Gross Alpha Radioactivity	Ci	6.83 E-07	4.15 E-07	2.41 E-07	1.34 E-06	
D. Tritium						
1. Total Released	Ci	6.11 E+00	6.45 E+00	9.20 E+00	2.18 E+01	2.50E+01
2. Average Release Rate For Period	uCi/sec	2.52 E+00	2.62 E+00	3.05 E+00	2.76 E+00	

* LIMIT AS PER E.T.S. EQUATION 2.4.2.2.B.1

* LIMIT AS PER E.T.S. EQUATION 2.4.2.2.B.2

Table 2.1-3 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	APRIL	MAY	JUNE	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Gases						
1. Total Released	Ci	1.56E+02	3.63E+01	8.30E+01	2.75E+02	2.50E+01
2. Average Release Rate For Period	uCi/sec	6.47E+01	1.50E+01	2.79E+01	3.52E+01	
3. Percent of Technical Specification Limit	%				* 5.56E-02	
*Limit as per E.T.S. equation 2,4,2,2,B,1						
B. Iodines						
1. Total Iodine - 131	Ci	6.32E-03	1.51E-04	1.05E-04	6.58E-03	2.50E+01
2. Average Release Rate For Period	uCi/sec	2.62E-03	6.24E-05	3.52E-05	8.43E-04	
C. Particulates						
1. Particulates With Half-lives > 8 Days	Ci	2.71E-03	5.74E-04	1.12E-03	4.41E-03	2.50E+01
2. Average Release Rate For Period	uCi/sec	1.12E-03	2.37E-04	3.76E-04	5.65E-04	
3. Percent of Technical Specification Limit	%				* 3.59%	
4. Gross Alpha Radioactivity	Ci	5.53E-07	7.48E-07	7.81E-07	2.08E-06	
*Limit as per E.T.S.equation 2,4,2,2,B,2						
D. Tritium						
1. Total Released	Ci	6.13E+00	2.97E+00	7.17E+00	1.63E+01	2.50E+01
2. Average Release Rate For Period	uCi/sec	2.54E+00	1.23E+00	2.41E+00	2.08E+00	

Table 2.1-4
MILLSTONE NUCLEAR POWER STATION - UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS-ELEVATED RELEASE - CONTINUOUS MODE

YEAR 1984

Nuclides Released	Unit	JAN	FEB	MARCH	Quarterly Total
1. Fission gases					
Xe-133	Ci	1.65 E+02	1.41 E+02	2.71 E+02	5.77 E+02
Kr-87	Ci	2.20 E+01	1.83 E+01	2.02 E+01	6.05 E+01
Kr-88	Ci				
Kr-85m	Ci		2.86 E+00	4.60 E+00	7.46 E+00
Xe-135	Ci	2.75 E+01	3.05 E+01	3.63 E+01	9.43 E+01
Xe-133	Ci		8.52 E+00		8.52 E+00
Kr-89	Ci				
Xe-137	Ci				
Xe-135m	Ci	6.661 E+01	5.54 E+01	7.37 E+01	1.96 E+02
Kr-83m	Ci				
Xe-133m	Ci				
Xe-131m	Ci				
Kr-85	Ci				
Ar-37	Ci				
Total For Period	Ci	2.81 E+02	2.57 E+02	4.06 E+02	9.44 E+02
2. Iodines					
iodine-131	Ci	1.53 E-03	2.97 E-03	4.43 E-03	8.93 E-03
iodine-133	Ci	1.06 E-02	2.43 E-02	2.91 E-02	6.40 E-02
iodine-135	Ci	1.88 E-02	4.90 E-02	4.19 E-02	1.10 E-01
Total for period	Ci	3.09 E-02	7.63 E-02	7.54 E-02	1.83 E-01
3. Particulates					
I-131	Ci	1.35 E-04	2.12 E-04	2.94 E-04	6.41 E-04
Ba,La-140	Ci	2.30 E-03	1.91 E-03	2.57 E-03	6.78 E-03
Mn-54	Ci	1.03 E-05	2.86 E-05	1.84 E-05	5.73 E-05
Co-58	Ci	9.09 E-06	3.11 E-05	3.76 E-05	7.78 E-05
Co-60	Ci	1.50 E-04	2.86 E-04	1.51 E-04	5.87 E-04
Cs-134	Ci				
Cs-137	Ci	4.79 E-05	7.65 E-05	3.37 E-05	1.58 E-04
Fe-5,	Ci				
Cr-51	Ci	1.19 E-04	1.49 E-03	2.00 E-03	3.61 E-03
	Ci				
Sr-89	Ci	3.69 E-04	2.88 E-04	3.14 E-04	9.71 E-04
Sr-90	Ci	1.94 E-06	3.46 E-06	2.66 E-06	8.06 E-06
	Ci				
	Ci				
	Ci				

Table 2.1-4 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 1

EFFLUENT AND WASTE DISPOSAL REPORT

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - CONTINUOUS MODE

Nuclides Released	Unit	APRIL	MAY	JUNE	Quarterly Total
1. Fission gases					
Xe-138	Ci	8.14E+01		4.70E+01	1.28E+02
Kr-87	Ci	8.86E+00			8.86E+00
Kr-88	Ci				
Kr-85m	Ci	3.25E+00			3.25E+00
Xe-135	Ci	1.38E+01		4.35E+00	1.82E+01
Xe-133	Ci	2.55E+01	3.63E+01	3.16E+01	9.34E+01
Kr-89	Ci				
Xe-137	Ci				
Xe-135m	Ci	2.29E+01			2.29E+01
Kr-83m	Ci				
Xe-133m	Ci				
Xe-131m	Ci				
Kr-85	Ci				
Ar-37	Ci				
Total For Period	Ci	1.56E+02	3.63E+01	8.30E+01	2.75E+02
2. Iodines					
iodine-131	Ci	6.20E-03	1.51E-04	4.15E-05	6.39E-03
iodine-133	Ci	4.64E-02	≤ 3.32E-05	≤ 2.08E-04	4.64E-02
iodine-135	Ci	7.13E-02	≤ 1.51E-04	≤ 4.15E-04	7.13E-02
Total for period	Ci	1.24E-01	1.51E-04	4.15E-05	1.24E-01
3. Particulates					
I-131	Ci	1.21E-04	≤3.33E-06	6.36E-05	1.85E-04
Ba,La-140	Ci	1.13E-03	≤ 5.66E-06	≤ 1.34E-05	1.13E-03
Mn-54	Ci	6.22E-05	4.98E-05	9.24E-05	2.04E-04
Co-58	Ci	1.98E-05	.4.77E-06	----------	2.46E-05
Co-60	Ci	3.28E-04	4.39E-04	6.38E-04	1.41E-03
Cs-134	Ci				
Cs-137	Ci	2.71E-05	7.43E-05	6.24E-05	1.64E-04
Fe-5,	Ci				
Cr-51	Ci	8.62E-04	----------	----------	8.62E-04
Nb-95	Ci	---------	----------	1.95E-05	1.95E-05
Sr-89	Ci	1.59E-04	3.68E-06	2.39E-04	4.02E-04
Sr-90	Ci	2.32E-06	2.71E-06	2.05E-06	7.08E-06
	Ci				
	Ci				
	Ci				

Table 2.2-1

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

Units	1 Jan.	2 Feb.	3 March	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Products					
1. Total released(not including H-3,Gases, Alpha)	Ci	5.77E-01	5.67E-01	3.47E-01	1.49E + 00	1.50E+01
2. Average diluted concentration during period	uCi/ml	9.80E-09	6.86E-09	3.40E-09	6.11E-09	
3. Percent of applicable limit **	%				0.63	
** Based on limit of 1.5 mrem whole body dose per quarter = ETS 2.4.1.2.D						
B. Tritium						
1. Total Released	Ci	5.45E + 00	1.27E + 01	2.92E + 01	4.74E +01	1.50E+01
2. Average diluted concentration during period	uCi/ml	9.25E-08	1.54E-07	2.86E-07	1.94E-07	
C. Dissolved and Entrained Gases						
1. Total Released	Ci	9.81E-02	4.70E-01	4.75E-01	1.04E + 00	1.50E+01
2. Average diluted concentration during period	uCi/ml	1.67E-09	5.68E-09	4.66E-09	4.26E-09	
D. Gross Alpha Radioactivity						
1. Total Released	Ci	≤ 4.34E-04	≤ 4.48E-04	≤ 2.02E-03	----------	1.50E+01
E. Volume of waste released(Prior to dilution)	liters	2.74E + 07	2.73E + 07	5.63E + 07	1.11E + 08	1.00E+01
F. Volume of dilution water used during period	liters	5.89E + 10	8.27E +10	1.02E + 11	2.44E + 11	1.00E+01

Table 2.2-1 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	APRIL	MAY	JUNE	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Products						
1. Total released(not including H-3,Gases, Alpha)	Ci	2.06E-01	3.72E-01	2.80E-01	8.58E-01	1.50E+01
2. Average diluted concentration during period	uCi/ml	2.50E-09	4.44E-09	2.67E-09	3.20E-09	
3. Percent of applicable limit **	%				0.93	
B. Tritium						
1. Total Released	Ci	4.38E+00	4.58E+01	2.69E+01	7.71E+01	1.50E+01
2. Average diluted concentration during period	uCi/ml	5.32E-08	5.47E-07	2.49E-07	2.83E-07	
C. Dissolved and Entrained Gases						
1. Total Released	Ci	2.18E-01	1.58E-01	6.49E-01	1.03E+00	1.50E+01
2. Average diluted concentration during period	uCi/ml	2.65E-09	1.89E-09	6.18E-09	3.57E-09	
D. Gross Alpha Radioactivity						
1. Total Released	Ci	4.20E-03	2.99E-03	4.41E-03	-------	1.50E+01
E. Volume of waste released(Prior to dilution)	liters	7.72E+07	5.86E+07	8.95E+07	2.25E+08	1.00E+01
F. Volume of dilution water used during period	liters	8.23E+10	8.38E+10	1.05E+11	2.71E+11	1.00E+01

** Based on limit of 1.5 mrem whole body dose per quarter ETS 2.4.1.2.D

Table 2.2-2

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT

YEAR 1984 LIQUID EFFLUENTS-CONTINUOUS MODE Steam Generator Blowdown

Nuclides Released	Unit	1 Jan.	2 Feb.	3 March	Quarterly Total
CS-134	Ci	4.46E-02	9.18E-02	---------	1.36E-01
CS-137	Ci	8.72E-02	1.59E-01	5.34E-03	2.52E-01
CO-58	Ci	6.55E-04	1.47E-03	---------	2.13E-03
CO-60	Ci	1.11E-02	3.42E-02	1.43E-02	5.96E-02
MN-54	Ci	7.30E-05	1.73E-03	--------	1.80E-03
NA-24	Ci	3.91E-03	--------	-------	3.91E-03
CU-64	Ci	1.73E-01	--------	-------	1.73E-01
I-131	Ci	≤ 2.79E-07	6.16E-02	8.28E-04	6.24E-02
I-133	Ci	--------	5.33E-02	--------	5.33E-02
I-135	Ci	--------	1.29E-02	--------	1.29E-02
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
SR-89	Ci	≤ 1.03E-03	≤ 7.44E-04	3.37E-03	3.37E-03
SR-90	Ci	≤ 2.05E-04	≤ 1.86E-04	≤ 3.75E-04	--------
Total for period	Ci	3.21E-01	4.16E-01	2.39E-02	7.60E-01
Gross Aplha	Ci	≤ 6.84E-04	≤ 7.44E-04	≤ 3.75E-03	--------
H-3	Ci	7.55E-01	1.07E+00	5.03E-01	2.33E+00
Total for period (above)	Ci				
xenon-133	Ci	≤ 4.82E-07	4.16E-02	1.02E-02	5.18E-02
xenon-135	Ci	1.83E-03	6.97E-04	1.77E-03	4.30E-03
KR-85	Ci	9.40E-02	5.13E-02	--------	1.45E-01

Table 2.2-2 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT

STEAM GENERATOR BLOWDOWN

YEAR 1984

LIQUID EFFLUENTS-CONTINUOUS MODE

Nuclides Released	Unit	APRIL	MAY	JUNE	Quarterly Total
CO-60	Ci	7.62E-03	6.89E-03	1.98E-02	3.39E-02
Cs-137	Ci	1.52E-03	2.44E-03	1.19E-02	1.59E-02
I-131	Ci	2.20E-02	9.37E-03	7.11E-03	7.11E-03
BA/LA-140	Ci	7.93 03	1.40E-02	5.99E-03	-------
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
Sr-89	Ci	2.22E-03	1.12E-03	1.74E-03	-------
Sr-90	Ci	4.45E-04	5.58E-04	5.65E-04	-------
TOTAL FOR PERIOD	Ci	9.14E-03	9.33E-03	3.88E-02	5.73E-02
GROSS ALPHA	Ci	4.08E-03	2.79E-03	4.35E-03	-------
H-3	Ci	4.96E-01	4.17E-01	7.82E-01	1.70E+00
Total for period (above)	Ci				
xenon-133	Ci	3.32E-03	1.77E-02	9.78E-03	1.31E-02
xenon-135	Ci	1.24E-02	7.25E-03	1.25E-02	--------
Kr-85	Ci	--------	4.16E-01	8.79E-01	1.29E-00

Table 2.2-3

MILLSTONE NUCLEAR POWER STATION UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT

YEAR 1984 LIQUID EFFLUENTS - BATCH MODE Liquid Rad. Waste

Nuclides Released	Unit	1 Jan.	2 Feb.	3 March	Quarterly Total
I-131	Ci	≤ 6.99E-07	4.28E-03	1.18E-03	5.46E-03
Ba,La-140	Ci	≤ 1.57E-06	≤ 1.31E-06	≤ 9.72E-07	--------
Cs-134	Ci	2.79E-02	3.03E-02	7.16E-02	1.30E-01
Cs-137	Ci	4.97E-02	5.54E-02	1.40E-01	2.45E-01
Co-58	Ci	4.08E-03	1.31E-03	1.16E-02	1.70E-02
Co-60	Ci	1.50E-01	4.29E-02	9.53E-02	2.88E-01
Mn-54	Ci	1.16E-03	2.67E-04	2.00E-03	3.43E-03
AG-110M	Ci	7.53E-03	4.37E-03	---------	1.19E-02
NB-97	Ci	1.17E-02	6.53E-03	1.11E-04	1.83E-02
SR-92	Ci	2.64E-03	1.36E-03	3.24E-05	4.03E-03
SB-125	Ci	1.15E-03	2.18E-03	7.86E-05	3.41E-03
NB-95	Ci	1.23E-04	5.88E-04	---------	7.11E-04
CO-57	Ci	2.16E-05	-------	9.86E-05	1.20E-04
NA-24	Ci	5.11E-05	-------	9.86E-05	1.50E-04
RU-106	Ci	------	5.71E-04	-------	5.71E-04
I-133	Ci	--------	5.39E-04	8.87E-05	6.28E-04
CE-141	Ci	-------	5.22E-06	--------	5.22E-06
TC-99M	Ci	-------	1.52E-04	7.79E-06	1.60E-04
CS-136	Ci	--------	2.67E-05	1.01E-03	1.04E-03
CS-138	Ci	-------	-------	3.47E-05	3.47E-05
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
SR-89	Ci	≤1.38E-04	3.51E-04	≤5.64E-05	3.51E-04
SR-90	Ci	≤4.59E-05	≤1.51E-05	≤ 1.97E-05	--------
Total for period	Ci	2.56E-01	1.51E-01	3.23E-01	7.30E-01
Gross Alpha	Ci	≤1.84E-04	≤1.51E-04	≤ 2.82E-04	--------
H-3	Ci	4.69E + 00	1.16E + 01	2.87E +01	4.50E + 01
xenon-133	Ci	2.06E-03	3.67E-01	4.51E-01	8.20E-01
xenon-135	Ci	1.68E-04	9.35E-03	1.17E-02	2.12E-02
	Ci				

Table 2.2-3 Continued

MILLSTONE NUCLEAR POWER STATION UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT LIQUID RAD WASTE

YEAR 1984

LIQUID EFFLUENTS - BATCH MODE

Nuclides Released	Unit	APRIL	MAY	JUNE	Quarterly Total
I-131	Ci	3.71E-04	3.10E-03	1.15E-03	4.62E-03
Ba,La-140	Ci	1.02E-02	1.36E-03	1.08E-03	-------
Cs-134	Ci	4.37E-02	5.38E-02	3.72E-02	1.35E-01
Cs-137	Ci	8.79E-02	1.07E-01	7.56E-02	2.71E-01
Co-58	Ci	5.51E-03	9.15E-03	1.38E-03	1.60E-02
Co-60	Ci	5.80E-02	1.85E-01	1.19E-01	3.62E-01
Mn-54	Ci	1.38E-03	3.39E-03	9.43E-04	5.71E-03
Na-24	Ci	7.97E-05	1.94E-04	3.22E-04	5.96E-04
Cs-136	Ci	1.75E-04	---------	--------	.175E-04
Nb-97	Ci	1.49E-04	1.32E-03	3.21E-03	4.68E-03
Nb-95	Ci	1.37E-05	---------	---------	.137E-05
Sr-92	Ci	5.39E-06	2.89E-04	4.91E-04	7.85E-04
Co-57	Ci	--------	1.49E-04	--------	1.49E-04
I-133	Ci	-------	1.07E-04	--------	1.07E-04
Ag-110M	Ci			6.04E-04	6.04E-04
Cr-51	Ci			4.44E-04	4.44E-04
Ce-144	Ci			6.25E-04	6.25E-04
	Ci				
	Ci				
	Ci				
Sr-89	Ci	1.24E-04	8.49E-05	5.22E-05	-------
Sr-90	Ci	1.86E-05	5.09E-05	2.35E-05	5.09E-05
TOTAL FOR PERIOD	Ci	1.97E-01	3.63E-01	2.41E-01	8.01E-01
GROSS ALPHA	Ci	1.24E-04	1.98E-04	1.31E-04	--------
H-3	Ci	3.88E+00	4.54E+01	2.61E+01	7.54E+01
Total for period(above)	Ci				
xenon-133	Ci	2.09E-01	1.58E-01	6.37E-01	1.00E+00
xenon-135	Ci	5.95E-03	3.78E-04	2.25E-03	8.58E-03
	Ci				

Table 2.2-4

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	1 Jan.	2 Feb.	3 March	QUARTERLY TOTALS	Est. Total Error, %
A. Fission and Activation Gases						
1. Total Released	Ci	6.16E+00	1.64E+03	8.69E+02	2.52E+03	2.50E+01
2. Average Release Rate For Period	uCi/sec	2.30E+00	6.53E+02	3.24E+02	3.20E+02	
3. Percent of Technical Specification Limit	%	---	---	---	---	
B. Iodines						
1. Total Iodine - 131	Ci	1.63E-05	9.04E-03	4.14E-03	1.32E-02	2.50E+01
2. Average Release Rate For Period	uCi/sec	6.08E-06	3.60E-03	1.54E-03	1.68E-03	
C. Particulates						
1. Particulates With Half-lives > 8 Days	Ci	8.61E-06	8.96E-06	9.54E-06	2.71E-05	2.50E+01
2. Average Release Rate For Period	uCi/sec	3.21E-06	3.57E-06	3.56E-06	3.44E-06	
3. Percent of Technical Specification Limit	%	---	---	---	---	
4. Gross Alpha Radioactivity	Ci	≤ 3.93E-08	≤ 2.38E-08	≤ 2.17E-08	---	
D. Tritium						
1. Total Released	Ci	3.35E+00	4.96E+00	1.61E+01	2.44E+01	2.50E+01
2. Average Release Rate For Period	uCi/sec	1.25E+00	1.98E+00	6.01E+00	3.10E+00	

Table 2.2-4 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Year 1984

	Units	APRIL	MAY	JUNE	QUARTERLY TOTALS	Est. Total Error, %
. Fission and Activation Gases						
1. Total Released	Ci	1.70E+02	1.25E+02	2.37E+02	5.32E+02	2.50E+01
2. Average Release Rate For Period	uCi/sec	6.56E+01	4.66E+01	9.15E+01	6.79E+01	
3. Percent of Technical Specification Limit	%					
. Iodines						
1. Total Iodine - 131	Ci	2.94E-03	3.12E-03	2.47E-03	8.53E-03	2.50E+01
2. Average Release Rate For Period	uCi/sec	1.14E-03	1.16E-03	9.54E-04	1.08E-03	
. Particulates						
1. Particulates With Half-lives > 8 Days	Ci	1.89E-05	6.19E-05	8.70E-06	8.95E-05	2.50E+01
2. Average Release Rate For Period	uCi/sec	7.30E-06	2.30E-05	3.36E-06	1.12E-05	
3. Percent of Technical Specification Limit	%					
4. Gross Alpha Radioactivity	Ci	4.71E-08	2.72E-08	3.55E-08		
. Tritium						
1. Total Released	Ci	4.41E+00	8.63E+00	6.93E+00	2.00E+00	2.50E+01
2. Average Release Rate For Period	uCi/sec	1.70E+00	3.22E+00	2.68E+00	2.53E+00	

Table 2.2-5

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT Unit No. 2 Ventilation

YEAR 1984 GASEOUS EFFLUENTS - GROUND-LEVEL RELEASES - CONTINUOUS MODE

Nuclides Released	Unit	1 Jan.	2 Feb.	3 March	Quarterly Total
1. Fission gases					
Xe-133	Ci	6.16E+00	1.56E+03	8.20E+02	2.39E+03
	Ci				
	Ci				
Kr-85M	Ci	-------	5.02E+00	2.40E+00	7.41E+00
Xe-135	Ci	-------	5.89E+01	3.54E+01	9.42E+01
Xe-133M	Ci	-------	1.65E+01	9.98E+00	2.65E+01
Xe-135M	Ci	--------	--------	1.20E-03	1.20E-03
Kr-87	Ci	---------	--------	2.33E-03	2.33E-03
Kr-88	Ci	---------	--------	8.72E-03	8.72E-03
	Ci				
Total for period	Ci	6.16E+00	1.64E+03	8.68E+02	2.52E+03
2. Iodines					
iodine-131	Ci	1.63E-05	9.04E-03	4.14E-03	1.32E-02
iodine-133	Ci	2.26E-05	3.83E-03	2.43E-03	6.28E-03
iodine-135	Ci	5.87E-05	1.49E-03	4.89E-04	2.04E-03
Total for period	Ci	9.76E-05	1.44E-02	7.06E-03	2.16E-02
3. Particulates					
I-131	Ci	≤1.00E-06	3.47E-06	3.42E-06	6.89E-06
Ba,La-140	Ci	≤7.63E-07	≤5.31E-07	≤5.56E-07	---------
Co-58	Ci				
Co-60	Ci	6.31E-06	4.24E-06	5.22E-06	1.58E-05
Mn-54	Ci				
Cs-137	Ci	2.30E-06	1.25E-06	8.95E-07	4.45E-06
	Ci				
	Ci				
	Ci				
	Ci				
Sr-89	Ci	≤6.28E-08	≤4.40E-08	≤5.05E-08	----------
Sr-90	Ci	≤1.57E-08	≤2.20E-08	≤2.17E-08	----------
Total for period	Ci	8.61E-06	8.96E-06	9.54E-06	2.71E-05
H-3	Ci	3.35E+00	4.96E+00	1.61E+01	2.44E+01
Gross Alpha	Ci	≤3.93E-08	≤2.38E-08	≤2.17E-08	---------

Table 2.2-5 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT UNIT 2 Ventilation

YEAR 1984 GASEOUS EFFLUENTS - GROUND-LEVEL RELEASES - CONTINUOUS MODE

Nuclides Released	Unit	4 APRIL	5 AMY	6 JUNE	Quarterly Total
1. Fission gases					
Xe-133	Ci	1.62E+02	1.23E+02	1.37E+02	4.22E+02
Kr-85	Ci				
Ar-37	Ci				
Xe-135	Ci	4.64E+00	1.96E+00	2.97E+00	9.57E+00
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
Total for period	Ci	1.67E+02	1.25E+02	1.40E+02	4.32E+02
2. Iodines					
iodine-131	Ci	2.94E-03	3.12E-03	2.47E-03	8.53E-03
iodine-133	Ci	9.97E-04	9.02E-04	6.55E-04	2.55E-03
iodine-135	Ci	2.23E-04	5.30E-05	3.95E-05	3.16E-04
Total for period	Ci	4.16E-03	4.08E-03	3.165E-03	1.14E-02
3. Particulates					
I-131	Ci	5.62E-07	2.35E-07	2.70E-07	5.62E-07
Ba,La-140	Ci	4.70E-07	6.64E-07	5.95E-07	----------
Co-58	Ci				
Co-60	Ci	1.57E-05	1.37E-05	8.70E-06	3.81E-06
Mn-54	Ci				
Cs-137	Ci	2.63E-06	1.54E-06		4.17E-06
Sb-124	Ci		4.30E-06		4.30E-06
Rv-103	Ci		2.06E-05		2.06E-05
Rv-106	Ci		2.18E-05		2.18E-05
	Ci				
Sr-89	Ci	5.43E-08	4.35E-08	6.73E-08	
Sr-90	Ci	1.81E-08	2.18E-08	2.24E-08	
TOTAL FOR PERIOD	Ci	1.89E-05	6.19E-05	8.70E-06	8.95E-05
H-3	Ci	4.41E+00	8.63E+00	6.927E+00	2.00E+01
Gross Alpha	Ci	4.71E-08	2.72E-08	3.55E-08	

Table 2.2-6

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT S.J.A.E.

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - CONTINUOUS MODE

Nuclides Released	Unit	1 Jan.	2 Feb.	3 March	Quarterly Total
1. Fission gases					
Xe-138	Ci	---------	5.54E-04	1.08E-02	1.14E-02
Kr-87	Ci	---------	2.39E-03	1.14E-02	1.38E-02
Kr-88	Ci	---------	5.57E-03	2.23E-02	2.79E-02
Kr-85m	Ci	---------	4.46E-03	1.50E-02	1.95E-02
Xe-135	Ci	3.96E-04	2.31E-02	6.22E-02	8.57E-02
Xe-133	Ci	1.17E-03	1.36E-01	5.49E-01	6.86E-01
Kr-89	Ci				
Xe-137	Ci				
Xe-135m	Ci	9.62E-04	1.59E-02	2.83E-02	4.52E-02
Kr-83m	Ci				
Xe-133m	Ci	--------	2.74E-03	1.19E-02	1.46E-02
Xe-131m	Ci				
Kr-85	Ci				
Ar- 41	Ci	---------	9.97E-05	---------	9.97E-05
Total For Period	Ci	2.53E-03	1.91E-01	7.11E-01	9.04E-01
2. Iodines					
iodine-131	Ci				
iodine-133	Ci				
iodine-135	Ci				
Total for period	Ci				
3. Particulates					
I-131	Ci				
Ba,La-140	Ci				
Mn-54	Ci				
Co-58	Ci				
Co-60	Ci				
Cs-134	Ci				
Cs-137	Ci				
Fe-59	Ci				
	Ci				
	Ci				
Sr-89	Ci				
Sr-90	Ci				
	Ci				
H-3	Ci	2.07E-04	1.16E-03	2.34E-03	3.71E-03
	Ci				

Table 2.2-6 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2 S.J.A.E.

EFFLUENT AND WASTE DISPOSAL REPORT

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - CONTINUOUS MODE

Nuclides Released	Unit	APRIL 4	MAY 5	JUNE 6	Quarterly Total
1. Fission gases					
Xe-133	Ci	2.37E-03	1.05E-03	5.85E-04	4.01E-03
Kr-87	Ci	2.69E-03	1.98E-03	1.42E-03	6.09E-03
Kr-88	Ci	5.47E-03	3.63E-03	2.54E-03	1.16E-02
Kr-85m	Ci	3.41E-03	2.26E-03	1.79E-03	7.46E-03
Xe-135	Ci	2.31E-02	1.46E-02	1.16E-02	4.93E-02
Xe-133	Ci	2.15E-01	.163E-01	1.59E-01	5.37E-01
Kr-89	Ci	----------	--------	--------	--------
Xe-137	Ci	----------	-------	---------	--------
Xe-135m	Ci	7.08E-03	2.97E-03	2.81E-03	1.29E-02
Kr-83m	Ci	----------	-------	-------	-------
Xe-133m	Ci	3.45E-03	2.20E-03	2.06E-03	7.71E-03
Xe-131m	Ci		1.36E-03	---------	1.36E-03
Kr-85	Ci			8.70E-03	8.70E-03
Ar-37	Ci				
Total For Period	Ci	2.63E-01	1.93E-01	1.905E-01	6.47E-01
2. Iodines					
iodine-131	Ci				
iodine-133	Ci				
iodine-135	Ci				
Total for period	Ci				
3. Particulates					
I-131	Ci				
Ba,La-140	Ci				
Mn-54	Ci				
Co-58	Ci				
Co-60	Ci				
Cs-134	Ci				
Cs-137	Ci				
Fe-5,	Ci				
	Ci				
	Ci				
Sr-89	Ci				
Sr-90	Ci				
	Ci				
H-3	Ci	2.45E-04	2.27E-04	3.33E-04	8.05E-04
	Ci				

Table 2.2-7

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT Containment Vents

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - BATCH MODE

Nuclides Released	Unit	JANUARY	FEBRUARY	MARCH	Quarterly Total
1. Fission gases					
Xe-133	Ci	2.07E-2	4.07E+0	9.54E+0	1.36E+1
Xe-133m	Ci	--	2.14E-2	6.54E-2	8.68E-2
Xe-135	Ci	2.59E-4	1.26E-2	3.38E-2	4.67E-2
	Ci				
	Ci				
Kr85m	Ci	--	7.9E-4	1.75E-4	9.65E-4
	Ci				
Ar41	Ci	3.05E-3	4.43E-3	5.04E-3	1.25E-2
	Ci				
	Ci				
Total for period	Ci	2.40E-2	4.11E+0	9.64E+0	1.37E+1
2. Iodines					
iodine-131	Ci	--	1.13E-5	1.39E-5	2.52E-5
iodine-133	Ci	--	2.98E-6	6.95E-7	3.68E-6
iodine-135	Ci	--	--	--	--
Total for period	Ci	--	1.43E-5	1.46E-5	2.89E-5
3. Particulates					
Rb-88	Ci	--	8.62E-5	1.68E-4	2.54E-4
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
H-3	Ci	2.90E-4	2.42E-3	7.90E-3	1.06E-2
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				

Table 2.2-7 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT Containment Vents

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - BATCH MODE

Nuclides Released	Unit	APRIL	MAY	JUNE	Quarterly Total
1. Fission gases					
Xe-133	Ci	7.28E+0	7.59E+0	1.24E+1	2.73E+1
Xe-133m	Ci	3.34E-2	4.62E-2	7.54E-2	1.55E-1
Xe-135	Ci	2.73E-2	3.78E-2	5.04E-2	1.16E-1
Xe131m	Ci	--	1.13E-1	3.7E-2	1.5E-1
	Ci				
Kr-85m	Ci	--	2.06E-3	1.45E-3	3.51E-3
	Ci				
Ar-41	Ci	1.80E-3	1.54E-3	4.24E-3	7.58E-3
	Ci				
	Ci				
Total for period	Ci	7.34E+0	7.79E+0	1.26E+1	2.77E+1
2. Iodines					
iodine-131	Ci	1.36E-5	9.13E-6	1.65E-5	3.92E-5
iodine-133	Ci	4.20E-7	--	--	4.2E-7
iodine-135	Ci	--	--	--	
Total for period	Ci	1.40E-5	9.13E-6	1.65E-5	3.97E-5
3. Particulates					
Rb88	Ci	1.08E-4	3.66E-4	4.79E-4	9.53E-4
Co60	Ci	--	--	1.92E-6	1.92E-6
	Ci				
	Ci				
	Ci				
	Ci				
H-3	Ci	4.41E-3	6.15E-3	7.39E-2	8.45E-2
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				

Table 2.2-8

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT W.G.D.T.

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - BATCH MODE

Nuclides Released	Unit	Jan. 1	Feb. 2	March 3	Quarterly Total
1. Fission gases					
Xe-133	Ci				
Xe-135	Ci				
Xe-131m	Ci				
Xe-135m	Ci				
Kr-85	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
Total for period	Ci				
2. Iodines					
iodine-131	Ci	NO DISCHARGES THIS PERIOD	NO DISCHARGES THIS PERIOD	NO DISCHARGES THIS PERIOD	
iodine-133	Ci				
iodine-135	Ci				
Total for period	Ci				
3. Particulates					
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
H-3	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				

Table 2.2-8 Continued

MILLSTONE NUCLEAR POWER STATION - UNIT No. 2

EFFLUENT AND WASTE DISPOSAL REPORT W.G.D.T.

YEAR 1984 GASEOUS EFFLUENTS-ELEVATED RELEASE - BATCH MODE

Nuclides Released	Unit	4 APRIL	5 MAY	6 JUNE	Quarterly Total
1. Fission gases					
Xe-133	Ci	1.68E+00	1.24E-05	2.887E-01	1.97E+00
Xe-135	Ci	1.49E-01	-------	2.854E-05	1.49E-01
Xe-135m	Ci	1.42E-03	5.92E-03	5.517E-03	6.25E-02
Kr-85	Ci	----------	-------		
Xe-133m	Ci	8.30E-01	1.33E-01	6.266E-01	1.59E+00
Kr-85m	Ci	8.73E-03		3.189E-04	9.05E-03
Kr-87	Ci	1.52E-02			1.52E-02
Kr-88	Ci	4.35E-04			4.35E-04
	Ci	2.05E-03			2.05E-03
Total for period	Ci	2.69E+00	1.39E-01	9.711E-01	3.80E+00
2. Iodines					
iodine-131	Ci				
iodine-133	Ci				
iodine-135	Ci				
Total for period	Ci				
3. Particulates					
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
H-3	Ci	6.82E-04	6.55E-05	3.709E-03	4.46E-03
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				
	Ci				

TABLE 2.3-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
SUPPLEMENTAL INFORMATION

FACILITY: Millstone Unit No's. 1 and 2

1. REGULATORY LIMITS

   a. Noble Gases

$$Q_{is}\ (3.2\overline{E}_{i\gamma} + 0.04\ \overline{E}_{i\beta}\ ) + Q_V\ (23\overline{E}_{i\gamma} + 58\ \overline{E}_{i\beta}\ ) \leq 1$$

   where

   Q_{is} = release rate from the main stack of Unit 1 in Ci/sec (elevated releases)

   Q_V = release rate from unit 2 vent in Ci/sec (mixed release)

   i = the individual nuclide

   $\overline{E}_{i\gamma}$ = the average gamma energy per disintegration (MeV)

   $\overline{E}_{i\beta}$ = the average beta energy per disintegration (MeV)

   b. All radioiodines and particulates with half lives greater than eight days.

$$7.9 \times 10^4\ Q_S + 3.04 \times 10^6\ Q_V \leq 1$$

   c. Liquid effluents

   1.5 mrem and 5.0 mrem per calendar quarter per unit excluding noble gases for whole body and organs, respectively.

2. MAXIMUM PERMISSIBLE CONCENTRATIONS

   All maximum permissible concentrations for airborne and liquid releases are as specified in 10CFR20, Appendix B, Table II for the soluble form of the nuclide.

3. AVERAGE ENERGY

   Millstone Environmental Technical Specifications, Table 2.4-5.

Table 2.3-1 (continued)

4. MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY

a. Unit 1 Stack - Gaseous Releases

(1) Fission and Activiation Gases

Stack monitors continuously record the effluent activity and flow rate. During periods when the augmented off-gas system is not operable, the radiation monitor reading is related to uCi by off-gas sampling at the steam jet air ejectors and subsequent isotopic analysis. The isotopic activity at the SJAE is mathematically decayed to establish the activity in the stack using the known holdup time. During periods of augmented off-gas system operation, samples are taken directly from the stack with a subsequent isotopic analysis. In both cases, the calculated activity in the stack is then correlated to the monitor reading. The isotopic concentrations at the release point are multiplied by the total stack flow to obtain total uCi release for each isotope.

(2) Iodines and Particulates

Charcoal cartridges and particulate filters are used to collect iodines and particulates, respectively. The filters are then analyzed for isotopic content using a gamma spectrometer; particulate filters are also analyzed for strontium. Isotopic

concentrations are multiplied by the release flow rate to determine the total amount of activity released.

b. Unit 1 & Unit 2 Liquid Effluents

There are eight tanks which are used to discharge liquids containing radioactvity to the environs; they are:

Unit 1 - Decontamination Solution Tank
Unit 1 - Floor Drain Sample Tanks (2)
Unit 1 - Waste Sample Tanks (2)
Unit 2 - Clean Waste Monitor Tanks (2)
Unit 2 - Aerated Waste Monitor Tank

Prior to release, a tank is recirculated for two equivalent tank volumes, a sample is drawn and analyzed on the Ge(Li) gamma spectrometer for individual radionuclide composition. An aliquot of the sample is analyzed for tritium. Isotopic concentrations are multiplied by the volume released to obtain the total activity released.

A proportional aliquot of each discharge is retained for composite analysis for strontium and gross alpha.

c. Unit 2 Vent

Total effluent volume from the Unit 2 Vent per month is multiplied by

the isotopic concentrations as measured by gamma spectrometer Ge(Li) analysis of grab samples of gases, iodine and particulates to obtain total uCi released from the Vent.

d. Unit 2 Containment Purges

Grab samples are taken for gaseous, particulate, and iodine. These are analyzed on Ge(Li) gamma spectrometer and concentrations computed. Computed concentrations are then multiplied by the purge volume for total uCi released.

Tritium collection is accomplished by the gas washing bottle method. The sample is counted on a liquid scintillation counter. Concentration is computed using worst possible case, 100% humidity. Concentration is multiplied by volume purged to give total uCi released.

e. Unit 2 Steam Generator Blowdown

Grab samples are taken of steam generator blowdown water, and are analyzed by gamma spectrometry, Ge(Li). Total volume of blowdown is multiplied by the isotopic concentrations to determine the total activity released via blowdown. The calculated activity released out of the blowdown tank vent is accounted for pending the point of blowdown sampling.

Tritium is determined through liquid scintillation counting and strontiums are analyzed by radiochemical separations and appropriate

counting techniques.

f. Unit 2 Steam Generator Blowdown Tank Vent

A decontamination factor (DF) across the steam generator blowdown tank vent has been determined for iodines by comparison of the results of gamma spectrometry, Ge(Li), analysis of steam generator blowdown water and grab samples of condensed steam exiting the blowdown tank vent. This DF was then applied to the total iodine releases via the steam generator blowdown water to determine the iodine releases out of the blowdown tank vent. An additional factor of 0.33 was utilized to account for the fraction of blowdown volume actually flashing to steam in the blowdown tank.

g. Estimates of Errors

Estimates of errors associated with radioactivity measurements were made using the following guidelines:

(1) Sampling and Data Collection - 10% accounts for variation in personnel obtaining required data.

(2) Calibration - 5% instrument calibration to NBS standards.

(3) Counting of Samples - 10% maximum error due to counting statistics.

(4) Flow and Level Measurements - 10% maximum errors on volumes released.

Table 2.3-1 (continued)

5. BATCH RELEASES

	Unit 1 Liquids	Unit 2 Liquids	Unit 2 Waste Gas Tanks	Unit 2 Cont. Vents
a. Number of batch releases	133	443	5	32
b. Total time (minutes)	21,338	96,215	1225	5460
c. Max time-One batch (minutes)	218	1130	393	255
d. Average time (minutes)	160	217	245	170
e. Min time-One batch (minutes)	9	5	100	85

Liquids - Average stream flow - Not applicable - Ocean site

6. ABNORMAL RELEASES

None

3.0 Radioactive Solid Waste

The units were operated in accordance with Environmental Technical Specification Section 2.4.3. Summaries of solid waste shipments for each unit are given in the attached Tables 3.1 and 3.2.

TABLE 3.1

EFFLUENT AND WASTE DISPOSAL SEMI ANNUAL REPORT

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

MILLSTONE UNIT 1

(January 1, 1984 - June 30, 1984)

1.	Type of Waste	Unit	6-Month Period	Est. Total Error, %
a)	Spent Resins, Filter Sludges, Evaporator Bottoms, Etc.	M^3 Ci	9.66 E+1 1.46 E+3	2.5 E+1
b)	Dry Compressable Waste, Comtaminated Equipment, Etc.	M^3 Ci	3.93 E+2 1.74 E+1	3.0 E+1
c)	Irradiated Components, Control Rods, Etc.	M^3 Ci	None	NA
d)	Other (Describe)	M^3 Ci	None	NA

2. Estimate of Major Nuclide Composition (By Type of Waste)

a)	^{60}CO	% 3.92 E+1
	^{137}CS	% 6.5 EO
	^{55}FE	% 1.54 E+1
	^{54}MN	% 7.3 EO
	^{89}SR	% 4.0 E-2
	^{51}CR	% 1.16 E+1
	^{134}CS	% 9.0 E-1
	^{58}CO	% 5.5 EO
	^{140}BA	% 1.6 EO
	^{140}LA	% 1.50 EO
	^{144}CE, ^{131}I, ^{141}CE, ^{90}SR, ^{99M}TC, ^{65}ZN, ^{97}NB, ^{59}FE, ^{95}ZR, ^{95}NB, ^{103}RU, ^{63}NI	% 2.51 EO
b)	^{60}Co	% 4.08 E+1
	^{55}FE	% 1.17 E+1
	^{137}CS	% 3.56 EO
	^{54}MN	% 4.26 EO
	^{134}CS	% 1.19 EO
	^{89}SR	% 1.89 EO
	^{63}NI, ^{90}SR, ^{58}Co, ^{51}CR	% 6.66 EO

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
15	Truck (Sole Use Vehicle)	Barnwell, S.C.

B. Irradiated Fuel Shipments

None

Table 3.2

MILLSTONE UNIT 2

(January 1, 1984 - June 30, 1984)

A. Solid waste shipped offsite 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	2.4 E+1 ✓ 4.09 E+3	
b)	Dry Compressable Waste, Contaminated Equipment, Etc.	M^3 Ci	*Note	*Note
c)	Irradiated Components, Control Rods, Etc.	M^3 Ci	None	NA
d)	Other (Describe)	M^3 Ci	None	NA

*Note: Millstone Unit 2 Type (b) waste is included in Millstone Unit 1 Report.

2. Estimate of major nuclide composition (by type of waste).

a)	^{60}Co	% 3.70 E+1
	^{55}Fe	% 2.19 E+1
	^{58}Co	% 3.51 EO
	^{137}Cs	% 2.14 E+1
	^{134}Cs	% 1.23 E+1
	^{63}Ni	% 2.50 EO
	^{89}Sr	% 2.6 E-2

^{54}Mn	% 7.05E-1
^{14}C	% 6.22 E-4
^{57}Co	% 3.99 E-2
^{3}H	% 8.36 E-3
$^{239/240}$Pu	% 1.25 E-5
^{242}Cm	% 1.71 E-4
^{244}Cm	% 1.51 E-8
^{238}Pu	% 7.93 E-8
^{51}Cr	% 1.39 E-1
^{90}Sr	% 1.6 E-2
^{99}Tc	% 2.92 E-4
^{129}I	% 9.69 E-6
^{237}Np	% 1.94 E-8
^{241}Pu	% 1.17 E-3
^{10}Be	% 2.77 E-11
^{32}P	% 1.07 E-10
TRU	% 3.65 E-5

33 P	% 6.29-6
35 S	% 7.17 E-5
36 Cl	% 2.0 E-2
59 Fe	% 1.0 E-2
59 Ni	% 1.1 E-2
65 Zn	% 1.41 E-11

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
7	Truck (Sole Use Vehicle)	Barnwell, S.C.

B. Irradiated Fuel Shipments

None

METEOROLOGY - JOINT FREQUENCY DISTRIBUTION

4.0 The joint-frequency distribution for the continuous and batch releases are given in the tables at the end of this report.

OFFSITE DOSE ESTIMATES

5.0 In accordance with the requirements of the Technical Specifications and Regulatory Guide 1.21, the offsite dose to humans from the gaseous and liquid radioactive effluents of Millstone have been estimated.

These estimations are performed using measured effluent data, measured meteorological data, and calculational models developed by the U.S. Nuclear Regulatory Commission.

The dose estimates generally tend to be conservative due to the use of conservative assumptions in the calculational models. More realistic estimates of the offsite dose are obtained by analysis of the environmental monitoring data. A comparison of the doses estimated by each of the above methods will be presented in the Annual Radiological Environmental Monitoring Report due to be published during the first half of 1985.

1. Dose Models

   a. Airborne Effluents

      Maximum individual doses and population doses due to the release of noble gases, radiodines and particulates were calculated using the computer code GASPAR[1], with the exception of Unit 1 noble gas doses. The maximum individual dose due to direct exposure from the Unit 1 noble gas plume was calculated using the computer code AIREM[2].

      The Gaspar code uses the semi-infinite cloud model to implement

the dose models of U.S.N.R.C. Regulatory Guide 1.109 (October, 1977)

The values of average effluent concentration (X/Q) and average relative deposition (D/Q) used in the GASPAR code were generated using a meteorological computer code which implements the assumptions given in Section C of NRC Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routing Releases from Light-Water-Cooled Reactors."

Releases from the Millstone Unit 1 375-foot stack are considered to be elevated at all times. The Pasquill stability classes were determined using the temperature gradient between the 33-foot and 447-foot levels of the meteorological tower.

Releases from the Unit 2, 145 foot vent stack were considered as a mixed mode release (partially elevated and partially ground). The Pasquill stability classes were determined using the temperature gradient between the 33-foot and the 142-foot levels of the meteorological tower.

The GASPAR code was run separately for continuous releases from the MP2 vent (building ventilation) and steam generator blowdown tank flashed gases, MP2 batch releases from the MP1 stack (containment vents) and MP2 batch releases from the MP1 stack (waste gas tanks). Doses due to MP2 steam jet air ejector

continuous releases from the MP1 stack were calculated using either the computer code AIREM or GASPAR. The resulting doses were then summed to determine the total Unit 2 dose.

The Unit 1 releases are from a 375-foot elevated stack and the use of the GASPAR semi-infinite cloud model would lead to an under-estimate of the dose due to direct exposure from the plume at distances within 2 miles of the stack. Therefore, the AIREM code was implemented to determine the maximum individual exposure from an overhead finite gamma cloud.

The AIREM code uses a sector averaged Gaussian diffusion model and includes ground and inversion lid reflections, radionuclide decay, first daughter in-growth, ground deposition and cloud depletion, and contributions to dose from radionuclides in clouds at all azimuths. The finite cloud model used is a modified version of R. E. Cooper's EGAD code [3].

b. Liquid Effluents

Maximum individual and population doses due to the release of radioactive liquid effluents were calculated using the computer code LADTAP[4]. The code implements the dose models and parameters given in Regulatory Guide 1.109 (October 1977).

2. Results

a. Airborne Effluents

Maximum individual and population doses are presented in Tables 5.1.1 and 5.1.2.

For population doses, the GASPAR code calculates the dose to the whole body, GI-tract, bone, liver, kidney, thyroid, lung and skin from each of the following pathways: direct exposure from the plume, direct exposure from ground depositon, inhalation, vegetation, cow's milk and meat.

The values presented in the attached table are a total from all pathways, but only the whole body, skin and maximum organ dose are presented. The maximum organ dose in all cases was to the thyroid, and thus, the dose to all other organs was less than that shown for the thyroid.

For the dose to the maximum individual, the GASPAR program calculates the dose to the same organs listed above for the following pathways: direct exposure to the plume (except for Unit 1 finite cloud doses), exposure from ground deposition, inhalation, vegetation, meat, cow's milk and goat's milk. The doses are calculated for adults, teenagers, children and infants separately. Again, the maximum organ dose was to the thyroid.

For the ground deposition and inhalation pathways, the maximum individual dose is calculated at the offsite location of maximum decayed X/Q where a potential for dose exists.

For the vegetation pathway, the maximum individual dose is calculated at the vegetable garden of highest D/Q. For the meat, cow's milk and goat's milk pathways, the calculated dose is included as the maximum individuals dose only at locations

and times where these pathways actually exist. Doses were calculated at the cow farm and goat farm of maximum deposition. The doses presented in Tables 5.1.1 and 5.1.2, are the maximum doses observed.

The AIREM code calculates the individual whole body and skin dose for each sector-segment. The maximum individual dose is obtained by taking the maximum AIREM result at the offsite location where a potential for dose exists and multiplying by a factor of 0.7 to compensate for building shielding and occupancy.

b. Liquid Effluents

The calculated doses are presented in Tables 5.1.1 and 5.1.2.

The LADTAP code performs calculations for the following pathways: fish, shellfish, algae, drinking water, irrigated food, shoreline activity, swimming and boating. At Millstone, the algae, drinking water and irrigated food pathways do not exist, and thus, only the other pathways are included in the totals given in Tables 5.1.1 and 5.1.2.

Doses are calculated for the whole body, skin thyroid, GI-LLI, bone, liver, kidney and lungs.

Tables 5.1.1 and 5.1.2 present the doses to the whole body, thyroid, and the maximum organ dose, which was to the Gastro-

Intestinal tract - lower large intestine (GI-LLI). The dose to other organs was always less than the dose to the GI tract. doses given are adult doses.

Calculations are performed for adults, teenagers, children and infants separately. Unless otherwise noted in the table, the

3. Analysis of Results

The doses are well below permissible levels and are of little significance as far as effects on the general population. For perspective, Table 5.2 presents a comparison between the doses due to plant operation and doses received from other sources such as the naturally occurring background levels. The Table also presents the legally allowed levels.

Clearly the plant effects are insignificant when compared to radiation received from other sources.

FOOTNOTES

(1) GASPAR Dose Code, K. F. Eckerman, Radiological Assessment Branch, U.S. Nuclear Regulatory Commission, Washington, D.C., - Revised 2/20/76.

(2) AIREM Program Manual - A computer Code for Calculating Doses, Population Doses; and Ground Depositions due to Atmospheric Emissions of Radionuclides, J. A. Marlin, Jr., C. B. Nelson and P. A. Cuny, U.S. EPA Office of Radiation Programs, Washington, D.C., May, 1974.

(3) Cooper, R. E., EGAD - A Computer Program to Compute Dose Integrals from External Gamma Emitters, DF-1304. Mathematics and Computers (TID-4500, VC32), Savannah River Laboratory, Aiken, S.C., September, 1972.

(4) LADTAP - U. S. Nuclear Regulatory Commission; Washington, D. C.

TABLE 5.1.1

Off-Site Dose Estimates

Millstone Unit No. 1

			1984	
A.	Airborne Effluents	Units	Jan-March	April-June
	1. Maximum Individual Dose	Millirem		
	a. Whole Body		9.1(-3) (a)(b)	2.9(-3) (d)
	b. Skin		9.1(-3) (b)	2.9(-3) (d)
	c. Thyroid		6.3(-4) (c)	5.9(-2) (e)
	2. Population Dose 0-50 Miles	Person-Rem		
	a. Whole Body		4.6(-1)	1.67(-1)
	b. Skin		1.0(0)	3.50(-1)
	c. Thyroid		4.1(-2)	2.07(-1)
	3. Average Dose 0-50 Miles	Millirem		
	a. Whole Body		1.7(-4)	6.0(-5)
	b. Skin		3.6(-4)	1.3(-4)
	c. Thyroid		1.5(-5)	7.5(-5)
B.	Liquid Effluents			
	1. Maximum Individual Dose	Millirem		
	a. Whole Body		1.6(-4)	2.3(-4) (f)
	b. Max Organ (GI-LLI)		3.1(-4)	6.0(-4)
	c. Thyroid		1.7(-4)	1.6(-4)
	2. Population Dose 0-50 Miles	Person-Rem		
	a. Whole Body		1.4(-3)	2.0(-3)
	b. Max Organ (GI-LLI)		1.7(-3)	3.3(-3)
	c. Thyroid		1.3(-3)	1.5(-3)
	3. Average Dose 0-50 Miles	Millirem		
	a. Whole Body		5.1(-7)	7.2(-7)
	b. Max Organ (GI-LLI)		6.1(-7)	1.2(-6)
	c. Thyroid		4.7(-7)	5.4(-7)

(a) $1.3(-2) = 1.3 \times 10^{-2}$
(b) at the critical location 1100 meters ENE
(c) to the child at the critical location: 2540 meters E
(d) at the critical location: 780 meters NE
(e) to the infant at the critical location: 4000 meters W
(f) adult dose; other liquid doses are to the teenager

TABLE 5.1.2

Off-Site Dose Estimates

Millstone Unit No. 2

			1984	
A.	Airborne Effluents	Units	Jan-March	April-June
	1. Maximum Individual Dose	Millirem		
	a. Whole Body		4.9(-2) (a) (b)	3.7(-2) (e)
	b. Skin		1.3(-1) (b)	6.6(-2) (e)
	c. Thyroid		1.9(-2) (c)	6.9(-1) (f)
	2. Population Dose 0-50 Miles	Person-Rem		
	a. Whole Body		1.8(-1)	7.7(-2)
	b. Skin		5.9(-1)	2.0(-1)
	c. Thyroid		7.5(-2)	9.1(-1)
	3. Average Dose 0-50 Miles	Millirem		
	a. Whole Body		6.5(-5)	2.8(-5)
	b. Skin		2.1(-4)	3.3(-4)
	c. Thyroid		2.7(-5)	7.2(-5)
B.	Liquid Effluents			
	1. Maximum Individual Dose	Millirem		
	a. Whole Body		9.4(-3)	1.4(-2)
	b. Max Organ (GI-LLI)		1.7(-2)	2.3(-2)
	c. Thyroid		1.2(-2)	9.8(-3)
	2. Population Dose 0-50 Miles	Person-Rem		
	a. Whole Body		8.0(-2)	1.2(-1)
	b. Max Organ (GI-LLI)		8.7(-2)	1.2(-1)
	c. Thyroid		8.0(-2)	8.7(-2)
	3. Average Dose 0-50 Miles	Millirem		
	a. Whole Body		2.9(-5)	4.3(-5)
	b. Max Organ (GI-LLI)		3.1(-5)	4.3(-5)
	c. Thyroid		2.9(-5)	3.1(-5)

(a) $4.9(-2) = 4.9 \times 10^{-2}$
(b) to the teenager at the critical location: 610 meters NE
(c) to the child at the critical location: 610 meters NE
(d) all liquid doses to the teenager
(e) to the child at the critical location: 620 meters NE
(f) to the infant at the critical location: 2400 meters NNE

TABLE 5.2

Comparison of Whole Body Doses

I. Doses Due to Millstone (Jan-June 1984)	6 Month Dose	
A. Maximum Individual - Unit 1 Liquids	0.00039	mrem
B. Maximum Individual - Unit 1 Gases	0.012	mrem
C. Maximum Individual -Unit 2 Liquids	0.0234	mrem
D. Maximum Individual - Unit 2 Gases	0.086	mrem
E. Average Individual (0-50 miles) - Unit 1 Liquids	0.000001	mrem
F. Average Individual (0-50 miles) - Unit 1 Gases	0.000230	mrem
G. Average Individual (0-50 miles) - Unit 2 Liquids	0.000072	mrem
H. Average Individual (0-50 miles) - Unit 2 Gases	0.000093	mrem

II. Legal Limits from Nuclear Power Plants	Annual Limit	
A. Maximum Individual	25	mrem

III. Doses from Other Sources	6 Month Dose	
A. Natural Background in Connecticut-Cosmic, Terrestrial and Food Products	62	mrem
B. Radioactivity from Building Materials (varies from Wood to Stone House)	6-17	mrem
C. Medical Use (per capita)	51	mrem
D. Air Travel (round trip - Cross Country)	4	mrem

MILLSTONE NO. 1

METEOROLOGICAL

JOINT FREQUENCY

DATA FOR

CONTINUOUS RELEASES

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	2	4	0	0	0	6
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	1	0	0	1
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	1	0	1	0	0	2
NNW	0	0	0	1	0	0	0	0	1
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	4	4	2	0	0	

NO. OF VALID OBSERVATION = 10 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 2

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	2	5	4	0	0	0	11
NE	0	0	1	0	1	0	0	0	2
ENE	0	0	0	1	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	3	0	0	0	3
WSW	0	0	0	3	0	1	0	0	4
W	0	0	0	2	4	1	0	0	7
WNW	0	0	0	5	5	3	0	0	13
NW	0	0	5	12	16	7	0	0	40
NNW	0	0	5	16	8	0	0	0	29
N	0	0	0	8	2	0	0	0	10
ALL SECTOR	0	0	13	53	43	12	0	0	

NO. OF VALID OBSERVATION = 121 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 7

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	2	6	20	38	59	29	2	0	156
NE	3	5	26	6	10	1	0	0	51
ENE	1	4	14	14	8	4	0	0	45
E	0	1	11	10	10	17	3	1	53
ESE	2	3	13	6	2	0	0	0	26
SE	0	9	5	8	1	1	0	0	24
SSE	5	4	8	5	0	0	0	0	22
S	2	4	6	5	1	0	0	0	18
SSW	1	7	7	3	1	1	0	0	20
SW	2	5	10	7	15	5	1	0	45
WSW	1	6	22	35	23	17	4	0	108
W	1	4	22	46	49	14	0	0	136
WNW	0	7	28	53	20	12	1	0	121
NW	1	8	18	67	47	16	2	0	159
NNW	1	8	16	39	51	14	0	0	129
N	0	9	8	42	13	9	0	0	81
ALL SECTOR	22	90	234	384	310	140	13	1	

NO. OF VALID OBSERVATION = 1195 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 12

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	6	4	4	4	0	0	0	18
NE	0	3	5	2	4	0	0	0	14
ENE	0	3	3	2	6	0	0	0	14
E	0	3	5	5	1	4	0	0	18
ESE	0	2	9	2	5	6	2	0	26
SE	1	1	8	3	3	6	1	0	23
SSE	1	8	6	4	3	4	0	0	26
S	0	4	9	8	5	5	7	0	38
SSW	0	3	8	12	9	7	3	0	42
SW	1	2	9	15	9	7	1	0	44
WSW	0	1	9	27	11	6	1	0	55
W	1	3	8	15	5	5	0	0	37
WNW	0	4	2	10	2	0	0	0	18
NW	2	2	16	11	1	0	0	0	32
NNW	0	5	11	10	5	2	0	0	33
N	0	4	5	9	5	0	0	0	23
ALL SECTOR	6	54	117	139	78	52	15	0	

NO. OF VALID OBSERVATION = 461 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 1

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	1	1	0	0	0	0	0	2
NE	2	2	3	1	0	0	0	0	8
ENE	0	4	3	0	0	0	0	0	7
E	1	4	0	0	0	0	0	0	5
ESE	1	0	1	1	1	0	0	0	4
SE	0	1	6	0	0	5	1	1	14
SSE	1	0	0	0	0	5	0	1	7
S	0	1	1	1	0	1	5	0	9
SSW	1	0	1	0	0	1	6	0	9
SW	0	0	4	6	0	0	0	0	10
WSW	0	5	6	9	2	0	0	0	22
W	0	2	3	4	0	0	0	0	9
WNW	0	3	2	0	0	0	0	0	5
NW	0	1	5	1	1	0	0	0	8
NNW	1	0	1	1	0	0	0	0	3
N	0	3	0	2	0	0	0	0	5
ALL SECTOR	7	27	37	26	4	12	12	2	

NO. OF VALID OBSERVATION = 128 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	1	0	1
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	1	0	0	1	0	0	0	0	2
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	1	0	0	1	0	0	1	0	

NO. OF VALID OBSERVATION = 3 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	2	13	27	49	71	29	2	0	193
NE	5	10	35	9	15	1	0	0	75
ENE	1	11	20	17	14	5	0	0	68
E	1	8	16	15	11	21	3	1	76
ESE	3	5	23	10	8	6	2	0	57
SE	1	11	19	11	4	12	3	1	62
SSE	7	12	14	9	3	9	0	1	55
S	2	10	16	14	6	6	12	0	66
SSW	2	10	16	15	10	9	9	0	71
SW	3	7	24	28	27	12	2	0	103
WSW	2	12	37	75	36	24	5	0	191
W	2	9	33	67	58	20	0	0	189
WNW	0	14	32	68	27	15	1	0	157
NW	3	11	44	92	65	24	2	0	241
NNW	2	13	33	67	64	16	0	0	195
N	0	16	13	61	20	9	0	0	119
ALL SECTOR	36	172	402	607	439	218	41	3	

NO. OF POSSIBLE OBSERVATIONS = 2184 NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 1916 NO. OF MISSING WD/WS = 264
NO. OF VALID OBSERVATIONS = 1920 NO. OF CALMS (WS LT 0.5M/SEC) = 2 NO. OF MISSING DELTA T = 244

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	2	0	0	2
NNW	0	0	0	2	0	0	0	0	2
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	1	2	0	2	0	0	

NO. OF VALID OBSERVATION = 5 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	1	1	1	0	0	0	0	3
NE	0	0	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	1	0	0	0	0	0	1
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	4	0	0	4
NNW	0	0	2	4	1	1	0	0	8
N	0	0	1	2	0	0	0	0	3
ALL SECTOR	0	1	6	7	1	5	0	0	

NO. OF VALID OBSERVATION = 20 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	4	3	0	0	0	0	7
NE	0	1	1	2	0	0	0	0	4
ENE	0	0	0	0	0	0	0	0	0
E	0	3	0	2	4	0	0	0	9
ESE	0	0	2	5	0	0	0	0	7
SE	0	1	0	2	0	0	0	0	3
SSE	0	1	0	1	0	0	0	0	2
S	0	0	1	0	0	0	0	0	1
SSW	0	0	1	0	0	0	0	0	1
SW	0	0	0	1	0	0	0	0	1
WSW	0	0	0	1	0	0	0	0	1
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	1	0	0	0	0	1
NW	0	0	2	6	2	0	0	0	10
NNW	0	0	8	11	5	6	0	0	30
N	0	0	5	11	1	0	0	0	17
ALL SECTOR	0	6	24	46	12	6	0	0	

NO. OF VALID OBSERVATION = 94 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 6

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	3	9	15	7	7	0	0	41
NE	0	7	5	5	3	2	0	0	22
ENE	1	5	9	10	14	7	0	0	46
E	1	3	7	17	22	19	5	0	74
ESE	0	3	5	16	9	2	0	0	35
SE	1	7	10	6	3	0	0	0	27
SSE	2	7	9	11	1	0	0	0	30
S	0	2	9	3	0	1	0	0	15
SSW	1	2	15	2	2	0	0	0	22
SW	1	1	4	11	1	0	0	0	18
WSW	0	5	7	9	10	3	3	0	37
W	2	2	7	16	6	0	1	0	34
WNW	1	3	8	17	10	6	1	0	46
NW	0	3	12	30	17	3	0	0	65
NNW	0	2	16	37	24	14	0	0	93
N	1	1	12	23	16	7	0	0	60
ALL SECTOR	11	56	144	228	145	71	10	0	

NO. OF VALID OBSERVATION = 665 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 8

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	1	1	3	4	2	1	0	0	12
NE	1	2	1	0	2	0	0	0	6
ENE	2	3	5	1	2	0	0	0	13
E	2	6	3	3	1	1	0	0	16
ESE	0	7	4	7	5	2	3	6	34
SE	2	9	4	4	5	5	8	4	41
SSE	4	5	22	12	7	7	0	0	57
S	2	7	29	17	5	3	0	0	63
SSW	2	8	29	44	30	29	4	0	146
SW	0	10	44	48	31	10	1	0	144
WSW	3	7	23	48	36	19	6	0	142
W	0	5	17	29	14	6	0	0	71
WNW	0	4	7	14	12	0	0	0	37
NW	1	7	11	17	8	1	0	0	45
NNW	1	4	6	12	13	5	0	0	41
N	2	1	2	9	8	1	0	0	23
ALL SECTOR	23	86	210	269	181	90	22	10	

NO. OF VALID OBSERVATION = 892 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 5

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	2	1	2	1	0	0	6
NE	0	1	0	0	0	1	0	0	2
ENE	0	1	0	2	0	0	0	0	3
E	0	3	2	0	0	0	0	0	5
ESE	0	3	0	2	0	0	0	0	5
SE	0	1	2	2	0	0	0	0	5
SSE	0	1	1	3	0	0	2	0	7
S	0	3	3	7	1	8	2	0	24
SSW	1	0	7	11	4	3	4	0	30
SW	1	4	11	16	13	3	0	0	48
WSW	0	2	4	33	24	14	0	0	77
W	0	5	16	11	4	0	0	0	36
WNW	1	4	8	7	2	0	0	0	22
NW	1	3	4	8	1	3	0	0	20
NNW	1	4	2	3	1	0	0	0	11
N	2	1	2	3	3	0	0	0	11
ALL SECTOR	7	36	64	109	55	33	8	0	

NO. OF VALID OBSERVATION = 313 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 11

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	1	0	0	0	1
NE	0	0	0	1	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	1	0	3	0	0	0	4
SW	0	0	1	0	0	3	0	0	4
WSW	0	0	0	3	1	8	0	0	12
W	0	1	1	1	0	1	0	0	4
WNW	0	1	1	1	2	0	0	0	5
NW	0	1	2	3	3	1	0	0	10
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	3	6	9	10	13	0	0	

NO. OF VALID OBSERVATION = 41 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 14

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	1	5	19	24	12	9	0	0	70
NE	1	11	8	8	5	3	0	0	36
ENE	3	9	14	13	16	7	0	0	62
E	3	15	12	22	27	20	5	0	104
ESE	0	13	11	30	14	4	3	6	81
SE	3	18	16	14	8	5	8	4	76
SSE	6	14	34	27	9	7	2	0	99
S	2	12	42	27	6	12	2	0	103
SSW	4	10	54	57	39	32	8	0	204
SW	2	15	60	76	45	16	1	0	215
WSW	3	14	34	94	71	44	9	0	269
W	2	13	41	57	24	7	1	0	145
WNW	2	12	24	40	26	6	1	0	111
NW	2	14	31	64	31	14	0	0	156
NNW	2	10	34	69	44	26	0	0	185
N	5	3	22	48	28	8	0	0	114
ALL SECTOR	41	188	456	670	405	220	40	10	

NO. OF POSSIBLE OBSERVATIONS = 2184
NO. OF VALID OBSERVATIONS = 2032
NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 2028
NO. OF CALMS (WS LT 0.5M/SEC) = 2
NO. OF MISSING WD/WS = 152
NO. OF MISSING DELTA T = 110

MILLTONE NO. 2

METEOROLOGICAL

JOINT FREQUENCY

DATA FOR

CONTINUOUS RELEASES

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL - MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	1	0	0	0	0	0	1
NE	0	0	1	2	1	0	0	0	4
ENE	0	0	0	3	0	0	0	0	3
E	0	0	0	3	2	0	0	0	5
ESE	0	0	1	2	0	0	0	0	3
SE	0	0	0	0	0	0	0	0	0
SSE	1	0	0	1	0	0	0	0	2
S	0	0	1	0	0	0	0	0	1
SSW	0	0	1	0	1	0	0	0	2
SW	0	1	1	2	5	1	1	0	11
WSW	0	0	0	2	4	3	0	0	9
W	0	0	0	6	4	6	0	0	16
WNW	0	1	1	11	4	3	0	0	20
NW	1	1	1	11	4	1	0	0	19
NNW	1	1	1	2	0	0	0	0	5
N	0	0	2	0	0	0	0	0	2
ALL SECTOR	3	4	11	45	25	14	1	0	

NO. OF VALID OBSERVATION = 104 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 5

MILLSTONE NUCLEAR POWER STATION / UNIT 3

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	6	2	1	1	0	0	10
NE	0	2	6	0	0	0	0	0	8
ENE	0	0	2	3	1	0	0	0	6
E	0	0	0	0	1	2	0	0	3
ESE	0	0	1	1	0	0	0	0	2
SE	0	0	3	1	0	0	0	0	4
SSE	0	0	1	0	0	0	0	0	1
S	0	0	1	0	1	0	0	0	2
SSW	0	0	0	1	0	0	0	0	1
SW	0	0	1	4	4	1	0	0	10
WSW	0	0	0	5	3	3	0	0	11
W	0	0	1	6	0	1	0	0	8
WNW	0	0	4	11	7	2	0	0	24
NW	0	0	5	19	4	0	0	0	28
NNW	0	0	4	12	0	0	0	0	16
N	0	0	3	2	0	2	0	0	7
ALL SECTOR	0	2	38	67	22	12	0	0	

NO. OF VALID OBSERVATION = 142 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 4

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	2	12	9	0	3	0	0	26
NE	0	3	4	1	0	0	0	0	8
ENE	0	2	1	1	2	0	0	0	6
E	0	1	0	1	0	0	0	0	2
ESE	0	2	1	0	1	0	0	0	4
SE	0	0	1	2	0	0	0	0	3
SSE	0	0	0	0	0	0	0	0	0
S	0	1	1	0	0	0	0	0	2
SSW	0	0	1	0	0	0	0	0	1
SW	0	0	0	6	4	1	0	0	11
WSW	0	0	5	12	7	1	0	0	25
W	0	1	7	17	16	1	0	0	42
WNW	0	0	9	8	4	2	0	0	23
NW	0	2	14	14	3	0	0	0	33
NNW	0	1	6	15	3	0	0	0	25
N	0	1	10	6	2	0	0	0	19
ALL SECTOR	0	16	72	92	42	8	0	0	

NO. OF VALID OBSERVATION = 230 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 21

MILLSTONE NUCLEAR POWER STATION / UNIT

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	4	17	27	67	22	2	0	0	139
NE	2	13	13	2	1	0	0	0	31
ENE	1	10	7	6	1	0	0	0	25
E	1	4	9	10	10	6	3	0	43
ESE	0	5	6	2	1	0	0	0	14
SE	0	5	12	4	1	0	0	0	22
SSE	2	8	6	4	0	0	0	0	20
S	1	3	8	1	0	0	0	0	13
SSW	0	6	9	1	0	0	0	0	16
SW	4	3	5	6	12	1	0	0	31
WSW	3	5	12	23	11	4	0	0	58
W	2	23	39	18	6	1	0	0	89
WNW	0	21	33	27	6	1	0	0	88
NW	1	9	36	34	10	0	0	0	90
NNW	3	12	37	53	7	1	0	0	111
N	1	7	25	42	9	0	0	0	84
ALL SECTOR	23	151	284	300	97	16	3	0	

NO. OF VALID OBSERVATION = 875 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 28

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	1	4	2	4	4	1	0	0	16
NE	0	5	2	4	1	0	0	0	12
ENE	1	5	5	3	6	0	0	0	20
E	0	3	6	4	9	4	0	0	26
ESE	1	0	5	6	1	2	0	0	15
SE	1	8	4	2	0	0	0	0	15
SSE	0	1	7	0	6	1	0	0	15
S	2	0	3	0	1	0	0	0	6
SSW	0	4	5	4	4	1	0	0	18
SW	1	9	3	3	2	1	0	0	19
WSW	2	8	12	8	6	1	0	0	37
W	2	15	9	5	3	0	0	0	34
WNW	2	7	5	1	2	1	0	0	18
NW	0	4	11	1	2	0	0	0	18
NNW	0	4	18	2	1	0	0	0	25
N	0	6	9	1	0	0	0	0	16
ALL SECTOR	13	83	106	48	48	12	0	0	

NO. OF VALID OBSERVATION = 312 NO. OF CALMS (WS LT 0.5M/SEC) = 2 NO. OF MISSING WD/WS = 17

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRISUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	1	2	0	1	0	0	0	4
NE	0	0	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0
E	0	0	2	0	0	0	0	0	2
ESE	0	0	3	3	0	1	0	0	7
SE	1	2	2	1	0	0	0	0	6
SSE	0	3	0	1	5	5	0	0	14
S	2	5	4	0	1	2	0	0	14
SSW	0	4	3	2	5	1	0	0	15
SW	2	6	7	2	4	1	0	0	22
WSW	2	2	5	1	0	0	0	0	10
W	1	1	5	1	0	0	0	0	8
WNW	1	2	0	0	0	0	0	0	3
NW	1	4	2	0	0	0	0	0	7
NNW	0	2	1	1	1	0	0	0	5
N	0	4	0	0	0	0	0	0	4
ALL SECTOR	10	36	37	12	17	10	0	0	

NO. OF VALID OBSERVATION = 123 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 4

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	3	2	0	0	0	0	0	5
NE	0	5	2	0	0	0	0	0	7
ENE	1	0	1	0	0	0	0	0	2
E	1	2	2	0	0	0	0	0	5
ESE	0	0	1	0	0	1	0	0	2
SE	0	0	0	0	0	1	0	0	1
SSE	1	1	0	0	1	1	0	0	4
S	0	0	0	0	3	2	0	0	5
SSW	1	1	0	0	2	1	0	0	5
SW	1	0	2	0	0	0	0	0	3
WSW	0	5	4	5	1	0	0	0	15
W	1	0	5	0	0	0	0	0	6
WNW	0	1	0	0	0	0	0	0	1
NW	0	2	0	0	0	0	0	0	2
NNW	1	1	0	0	0	0	0	0	2
N	0	4	0	0	0	0	0	0	4
ALL SECTOR	7	25	19	5	7	6	0	0	

NO. OF VALID OBSERVATION = 69 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 6

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 JAN 84/0015 - 31 MAR 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	5	27	52	82	28	7	0	0	201
NE	2	28	29	9	3	0	0	0	71
ENE	3	17	16	16	10	0	0	0	62
E	2	10	19	18	22	12	3	0	86
ESE	1	7	18	14	3	4	0	0	47
SE	2	15	22	10	1	1	0	0	51
SSE	4	13	14	6	12	7	0	0	56
S	5	9	18	1	6	4	0	0	43
SSW	1	16	19	8	12	3	0	0	59
SW	8	19	19	23	31	6	1	0	107
WSW	7	20	39	56	32	12	0	0	166
W	6	40	66	53	29	9	0	0	203
WNW	3	32	52	58	23	9	0	0	177
NW	3	22	69	79	23	1	0	0	197
NNW	3	21	67	86	12	1	0	0	190
N	1	22	49	51	11	2	0	0	136
ALL SECTOR	56	318	568	570	258	78	4	0	

NO. OF POSSIBLE OBSERVATIONS = 2184 NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 1849 NO. OF MISSING WD/WS = 326
NO. OF VALID OBSERVATIONS = 1858 NO. OF CALMS (WS LT 0.5M/SEC) = 6 NO. OF MISSING DELTA T = 244

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	6	5	5	2	0	0	0	18
NE	0	0	5	2	0	0	0	0	7
ENE	0	0	0	0	0	0	0	0	0
E	0	0	3	6	6	1	0	0	16
ESE	0	1	1	5	2	0	0	0	9
SE	0	0	2	4	0	0	0	0	6
SSE	1	3	1	0	0	0	0	0	5
S	1	0	3	0	0	0	0	0	4
SSW	1	0	3	1	0	0	0	0	5
SW	0	0	1	1	0	0	0	0	2
WSW	0	1	1	2	0	0	0	0	4
W	0	2	0	0	0	0	0	0	2
WNW	0	2	0	0	0	0	0	0	2
NW	0	1	3	4	2	2	0	0	12
NNW	0	0	9	8	3	0	0	0	20
N	0	2	8	14	1	0	0	0	25
ALL SECTOR	3	18	45	52	16	3	0	0	

NO. OF VALID OBSERVATION = 137 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 4

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	2	7	0	0	0	0	9
NE	0	0	1	0	0	1	0	0	2
ENE	0	1	0	1	0	0	0	0	2
E	0	3	2	3	4	0	0	0	12
ESE	0	0	3	5	0	0	0	0	8
SE	0	2	2	1	1	0	0	0	6
SSE	0	2	0	2	0	0	0	0	4
S	0	0	0	0	0	0	0	0	0
SSW	0	1	0	0	0	0	0	0	1
SW	0	1	2	2	0	0	0	0	5
WSW	0	0	2	2	1	1	0	0	6
W	2	1	0	0	0	0	0	0	3
WNW	0	1	0	0	0	0	0	0	1
NW	0	1	5	4	0	0	0	0	10
NNW	0	1	7	6	13	0	0	0	27
N	0	1	7	19	3	0	0	0	30
ALL SECTOR	2	15	33	52	22	2	0	0	

NO. OF VALID OBSERVATION = 126 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 10

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	3	3	9	2	0	0	0	17
NE	1	2	2	1	0	0	0	0	6
ENE	1	1	1	0	0	0	0	0	3
E	0	1	3	11	2	2	0	0	19
ESE	0	5	7	2	1	0	0	0	15
SE	0	2	3	3	0	0	0	0	8
SSE	0	4	2	0	0	0	0	0	6
S	0	1	4	0	0	0	0	0	5
SSW	0	3	2	0	0	0	0	0	5
SW	0	0	0	0	0	0	0	0	0
WSW	0	3	1	4	4	0	0	0	12
W	1	0	0	2	0	0	0	0	3
WNW	0	1	0	1	0	0	0	0	2
NW	0	2	3	2	1	0	0	0	8
NNW	0	1	14	12	4	0	0	0	31
N	0	2	13	8	1	0	0	0	24
ALL SECTOR	3	31	58	55	15	2	0	0	

NO. OF VALID OBSERVATION = 164 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 19

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	3	3	7	9	1	0	0	0	23
NE	1	4	4	7	1	0	0	0	17
ENE	2	7	8	19	6	0	0	0	42
E	4	5	8	19	13	7	0	0	56
ESE	2	5	9	3	3	0	0	0	22
SE	2	4	9	5	0	0	0	0	20
SSE	1	5	12	8	0	0	0	0	26
S	1	5	8	0	1	0	0	0	15
SSW	0	6	8	1	0	1	0	0	16
SW	0	2	6	3	0	0	0	0	11
WSW	1	7	8	11	6	7	0	0	40
W	0	7	9	5	0	0	0	0	21
WNW	1	8	9	4	1	0	0	0	23
NW	0	6	24	18	4	0	0	0	52
NNW	1	10	31	13	2	0	0	0	57
N	1	3	17	9	0	0	0	0	30
ALL SECTOR	20	87	177	134	38	15	0	0	

NO. OF VALID OBSERVATION = 471 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 64

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	1	0	3	2	0	0	0	0	6
NE	0	1	1	1	0	0	0	0	3
ENE	0	2	1	3	1	0	0	0	7
E	0	4	2	1	1	1	0	0	9
ESE	3	2	3	3	1	7	9	0	28
SE	1	2	9	5	0	1	0	0	18
SSE	3	6	6	7	3	0	0	0	25
S	1	10	9	3	1	0	0	0	24
SSW	1	9	8	10	4	0	0	0	32
SW	4	8	13	16	1	1	0	0	43
WSW	3	16	20	25	11	2	0	0	77
W	1	10	14	5	1	1	0	0	32
WNW	0	12	12	10	1	0	1	0	36
NW	1	7	7	2	0	0	0	0	17
NNW	1	3	8	6	0	0	0	0	18
N	0	2	5	1	0	0	0	0	8
ALL SECTOR	20	94	121	100	25	13	10	0	

NO. OF VALID OBSERVATION = 383 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 80

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	2	0	0	0	0	0	0	2
NE	2	3	1	0	0	0	0	0	6
ENE	1	2	0	0	0	0	0	0	3
E	0	0	0	0	0	0	0	0	0
ESE	0	2	0	0	0	0	0	0	2
SE	2	1	6	5	0	2	0	0	16
SSE	2	4	4	3	1	0	0	0	14
S	1	4	9	5	7	1	0	0	27
SSW	0	8	9	14	12	9	0	0	52
SW	1	7	13	11	5	0	0	0	37
WSW	0	5	15	19	5	1	0	0	45
W	2	14	17	5	1	1	0	0	40
WNW	0	1	9	2	1	0	0	0	13
NW	2	4	3	2	0	0	0	0	11
NNW	1	5	4	0	0	0	0	0	10
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	14	62	90	66	32	14	0	0	

NO. OF VALID OBSERVATION = 279 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING WD/WS = 68

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	1	0	0	0	0	0	0	0	1
NE	0	2	2	0	0	0	0	0	4
ENE	1	0	0	0	0	0	0	0	1
E	0	1	0	0	0	0	0	0	1
ESE	0	0	0	0	0	0	0	0	0
SE	0	2	1	0	0	0	0	0	3
SSE	0	2	0	2	1	0	0	0	5
S	0	0	1	7	1	1	0	0	10
SSW	1	2	1	1	4	4	0	0	13
SW	1	2	9	14	5	0	0	0	31
WSW	1	10	8	44	17	0	0	0	80
W	0	11	15	18	0	0	0	0	44
WNW	1	2	9	1	0	0	0	0	13
NW	1	5	4	1	0	0	0	0	11
NNW	3	4	1	0	0	0	0	0	8
N	1	1	0	0	0	0	0	0	2
ALL SECTOR	11	44	51	88	28	5	0	0	

NO. OF VALID OBSERVATION = 227 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 44

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 142 FT
DELTA T INTERVAL = 142 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 1 APR 84/0015 - 30 JUN 84/2315
DATA ACQUISITION INTERVAL = MINUTES 00-15 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	5	14	20	32	5	0	0	0	76
NE	4	12	16	11	1	1	0	0	45
ENE	5	13	10	23	7	0	0	0	58
E	4	14	18	40	26	11	0	0	113
ESE	5	15	23	18	7	7	9	0	84
SE	5	13	32	23	1	3	0	0	77
SSE	7	26	25	22	5	0	0	0	85
S	4	20	34	15	10	2	0	0	85
SSW	3	29	31	27	20	14	0	0	124
SW	6	20	44	47	11	1	0	0	129
WSW	5	42	55	107	44	11	0	0	264
W	6	45	55	35	2	2	0	0	145
WNW	2	27	39	18	3	0	1	0	90
NW	4	26	49	33	7	2	0	0	121
NNW	6	24	74	45	22	0	0	0	171
N	2	11	50	51	5	0	0	0	119
ALL SECTOR	73	351	575	547	176	54	10	0	

NO. OF POSSIBLE OBSERVATIONS = 2184 NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 1786 NO. OF MISSING WD/WS = 397
NO. OF VALID OBSERVATIONS = 1787 NO. OF CALMS (WS LT 0.5M/SEC) = 1 NO. OF MISSING DELTA T = 108

MILLTONE NO. 2

METEOROLOGICAL

JOINT FREQUENCY

DATA FOR

CONTAINMENT VENTS

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES · CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0[illegible]5 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	1	0	0	0	0	1
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	1	0	0	0	0	

NO. OF VALID OBSERVATION = 1 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	1	4	0	0	0	5
NNW	0	0	0	0	1	0	0	0	1
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	1	5	0	0	0	

NO. OF VALID OBSERVATION = 6 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	1	0	0	0	0	0	0	1
ENE	0	2	0	0	1	5	0	0	8
E	0	0	0	0	1	17	4	0	22
ESE	0	4	3	0	0	0	0	0	7
SE	0	4	0	0	0	0	0	0	4
SSE	0	1	9	0	0	0	0	0	10
S	0	0	1	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	1	2	0	3
WSW	0	0	0	0	0	0	3	0	3
W	0	0	1	0	0	0	0	0	1
WNW	0	0	2	0	0	0	0	0	2
NW	0	0	4	2	1	0	0	0	7
NNW	0	0	1	2	0	0	0	0	3
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	12	21	4	3	23	9	0	

NO. OF VALID OBSERVATION = 72 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	2	5	0	0	0	0	0	7
ENE	0	1	2	0	0	1	0	0	4
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	2	0	0	2
W	0	0	0	0	0	10	0	0	10
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	3	7	0	0	13	0	0	

NO. OF VALID OBSERVATION = 23 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 1

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	2	1	0	0	0	0	0	3
ENE	0	2	0	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	4	1	0	0	0	0	0	

NO. OF VALID OBSERVATION = 5 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 16 JAN 84/0845 - 29 MAR 84/1430
DATA ACQUISITION INTERVAL = MINUTES 00-45 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	5	6	0	0	0	0	0	11
ENE	0	5	2	0	1	6	0	0	14
E	0	0	0	0	1	17	4	0	22
ESE	0	4	3	0	0	0	0	0	7
SE	0	4	0	0	0	0	0	0	4
SSE	0	1	9	0	0	0	0	0	10
S	0	0	1	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	1	2	0	3
WSW	0	0	0	0	0	2	3	0	5
W	0	0	1	0	0	10	0	0	11
WNW	0	0	2	0	0	0	0	0	2
NW	0	0	4	4	5	0	0	0	13
NNW	0	0	1	2	1	0	0	0	4
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	19	29	6	8	36	9	0	

NO. OF POSSIBLE OBSERVATIONS = 157 NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 107 NO. OF MISSING WD/WS = 50
NO. OF VALID OBSERVATIONS = 107 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING DELTA T = 50

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	2	2	0	0	0	0	0	4
SE	0	2	0	0	0	0	0	0	2
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	4	0	0	0	0	4
ALL SECTOR	0	4	2	4	0	0	0	0	

NO. OF VALID OBSERVATION = 10 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	4	3	0	0	0	0	7
NE	0	1	7	3	0	0	0	0	11
ENE	3	1	2	6	2	0	0	0	14
E	1	0	4	6	1	0	0	0	12
ESE	1	0	1	0	0	0	0	0	2
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	1	2	0	0	0	0	0	3
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	7	2	2	2	0	0	13
W	0	0	2	2	0	0	0	0	4
WNW	0	0	0	3	3	0	0	0	6
NW	0	1	0	0	0	0	0	0	1
NNW	0	1	0	0	0	0	0	0	1
N	0	0	0	8	0	0	0	0	8
ALL SECTOR	5	5	29	33	8	2	0	0	

NO. OF VALID OBSERVATION = 82 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	2	0	0	0	0	0	2
NE	0	1	1	0	0	0	0	0	2
ENE	0	0	0	1	0	0	0	0	1
E	1	0	1	0	0	0	0	0	2
ESE	1	2	0	0	0	0	0	3	6
SE	2	3	0	0	0	0	0	4	9
SSE	2	0	0	0	0	0	0	0	2
S	1	0	1	0	0	0	0	0	2
SSW	0	0	1	1	0	0	0	0	2
SW	0	4	8	2	9	4	0	0	27
WSW	1	4	11	1	2	0	0	0	19
W	1	1	0	1	0	0	0	0	3
WNW	1	0	4	6	3	0	0	0	14
NW	1	3	6	8	0	0	0	0	18
NNW	0	1	0	1	0	0	0	0	2
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	11	19	35	21	14	4	0	7	

NO. OF VALID OBSERVATION = 111 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	3	0	0	0	0	0	3
SSW	0	0	0	2	0	0	0	0	2
SW	0	0	0	0	4	0	0	0	4
WSW	0	0	0	6	6	1	0	0	13
W	0	0	0	1	0	0	0	0	1
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	1	2	0	0	0	0	3
NNW	0	0	0	1	0	0	0	0	1
N	0	0	0	1	0	0	0	0	1
ALL SECTOR	0	0	4	14	10	1	0	0	

NO. OF VALID OBSERVATION = 29 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 1

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	4	0	0	4
WSW	0	0	0	0	0	2	0	0	2
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	6	0	0	

NO. OF VALID OBSERVATION = 6 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 5 APR 84/1300 - 30 JUN 84/2330
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	6	4	0	0	0	0	10
NE	0	2	8	3	0	0	0	0	13
ENE	3	1	2	7	2	0	0	0	15
E	2	0	5	6	1	0	0	0	14
ESE	2	4	3	0	0	0	0	3	12
SE	2	5	0	0	0	0	0	4	11
SSE	2	0	0	0	0	0	0	0	2
S	1	0	4	0	0	0	0	0	5
SSW	0	1	3	3	0	0	0	0	7
SW	0	4	8	2	13	8	0	0	35
WSW	1	4	18	9	10	5	0	0	47
W	1	1	2	4	0	0	0	0	8
WNW	1	0	4	9	6	0	0	0	20
NW	1	4	7	10	0	0	0	0	22
NNW	0	2	0	2	0	0	0	0	4
N	0	0	0	13	0	0	0	0	13
ALL SECTOR	16	28	70	72	32	13	0	7	

NO. OF POSSIBLE OBSERVATIONS = 239 NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 238 NO. OF MISSING WD/WS = 1
NO. OF VALID OBSERVATIONS = 238 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING DELTA T = 0

MILLTONE NO. 2

METEOROLOGICAL

JOINT FREQUENCY

DATA FOR

WASTE GAS TANK RELEASES

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY A -- DELTA T LESS THAN OR EQUAL TO -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY B -- DELTA T LESS THAN OR EQUAL TO -1.7 AND GREATER THAN -1.9 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY C -- DELTA T LESS THAN OR EQUAL TO -1.5 AND GREATER THAN -1.7 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	2	1	0	0	0	0	3
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	1	3	0	0	0	0	4
ALL SECTOR	0	0	3	4	0	0	0	0	

NO. OF VALID OBSERVATION = 7 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY D -- DELTA T LESS THAN OR EQUAL TO -0.5 AND GREATER THAN -1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	3	2	0	0	0	0	5
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	10	0	0	0	0	10
SE	0	0	3	8	0	0	0	0	11
SSE	0	0	0	13	4	0	0	0	17
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	6	33	4	0	0	0	

NO. OF VALID OBSERVATION = 43 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY E -- DELTA T LESS THAN OR EQUAL TO 1.5 AND GREATER THAN -0.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	5	2	6	0	0	13
SSE	0	0	1	4	0	0	0	0	5
S	0	0	1	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	2	9	2	6	0	0	

NO. OF VALID OBSERVATION = 19 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY F -- DELTA T LESS THAN OR EQUAL TO 4.0 AND GREATER THAN 1.5 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	0	0	0	0	0	

NO. OF VALID OBSERVATION = 0 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

PASQUILL STABILITY G -- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	2	0	0	0	0	2
WNW	0	0	0	4	6	0	0	0	10
NW	0	0	0	0	1	0	0	0	1
NNW	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0	0	0	0	0
ALL SECTOR	0	0	0	6	7	0	0	0	

NO. OF VALID OBSERVATION = 13 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING WD/WS = 0

MILLSTONE NUCLEAR POWER STATION / UNIT 2

WIND SPEED/WIND DIRECTION/STABILITY JOINT FREQUENCY DISTRIBUTION

WIND LEVEL = 447 FT
DELTA T INTERVAL = 447 - 33 FT
PASQUILL STABILITY CLASSES / CLASS DETERMINATION METHOD = DELTA T
DATA PERIOD = 11 APR 84/0900 - 4 JUN 84/2300
DATA ACQUISITION INTERVAL = MINUTES 00-00 OF EACH HOUR

ALL STABILITY CLASSES

	SPEED IN METERS PER SECOND								
DIRECTION	0.5-1.5	1.6-3.3	3.4-5.5	5.6-8.2	8.3-10.8	10.9-15.0	15.1-20.0	GT 20.1	ALL
NNE	0	0	5	3	0	0	0	0	8
NE	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0
ESE	0	0	0	10	0	0	0	0	10
SE	0	0	3	13	2	6	0	0	24
SSE	0	0	1	17	4	0	0	0	22
S	0	0	1	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0
W	0	0	0	2	0	0	0	0	2
WNW	0	0	0	4	6	0	0	0	10
NW	0	0	0	0	1	0	0	0	1
NNW	0	0	0	0	0	0	0	0	0
N	0	0	1	3	0	0	0	0	4
ALL SECTOR	0	0	11	52	13	6	0	0	

NO. OF POSSIBLE OBSERVATIONS = 82 NO. OF VALID NON-CALM CONCURRENT WD/WS/DT = 82 NO. OF MISSING WD/WS = 0
NO. OF VALID OBSERVATIONS = 82 NO. OF CALMS (WS LT 0.5M/SEC) = 0 NO. OF MISSING DELTA T = 0