EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

Supplemental Information 1991 Third and Fourth Quarters

Facility: Seabrook Station Unit 1 Licensee: Public Service Company of New Hampshire, et.al.

1. Regulatory Limits

A. Gaseous Effluents

a. Fission and activation gases: 5.0 mrad per quarter gamma air dose, 10.0 mrad per quarter beta air dose.

b. Iodines: 7.5 mrem per quarter to any organ.

c. Particulates, half-lives > 8 days: Particulates and iodines are included in step b.

d. Tritium: 7.5 mrem per quarter to any organ.

e. Liquid Effluents: 1.5 mrem per quarter total body and 5 mrem per quarter to any organ.

2. Maximum Permissible Concentrations

Provide the MPC's used in determining allowable releases rates or concentrations.

a. Fission and activation gases: 1 MPC
b. Iodines: 1 MPC
c. Particulates, half-lives > 8 days: 1 MPC
d. Liquid effluents: 1 MPC

3. Average Energy

Not applicable.

4. Measurements and Approximations of Total Radioactivity

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

a. Fission and activation gases: Determined by gamma spectroscopy. Total error is based on stack flow error, analytical error and calculated sampling error.

b. Iodines: Determined by collection on charcoal with subsequent gamma spectroscopy analysis. Total error is based on stack flow error, analytical error and calculated sampling error.

c. Particulates: Determined by collection on fixed filter with subsequent gamma spectroscopy analysis. Strontium is determined by composite analysis of filters by liquid scintillation, gross alpha by proportional counter, and iron 55 by liquid scintillation. Total error is based on stack flow error, analytical error and calculated sampling error.

d. Liquid Effluents: Determined by gamma spectroscopy. A composite sample is analyzed for strontium by liquid scintillation, tritium by liquid scintillation, alpha by proportional counter, and iron 55 by liquid scintillation. Total error is based on the volume discharge error and analytical error.

5. Batch Releases

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

a. Liquid

1. Number of batch releases: 113
2. Total time for batch releases: 32710 minutes
3. Maximum time period for batch releases: 1270 minutes
4. Average time period for batch release: 289 minutes
5. Minimum time period for a batch release: 85 minutes
6. Average stream flow during periods of release of effluent into a flowing stream: 1.33 E06 liters per minute.

b. Gaseous

1. Number of batch releases: 43
2. Total time period for batch releases: 21400 minutes
3. Maximum time period for a batch release: 5460 minutes
4. Average time period for batch releases: 498 minutes
5. Minimum time period for a batch releases: 0.02 minutes

6. Abnormal Releases

a. Liquid

1. Number of releases: 0
2. Total activity releases: N/A

b. Gaseous

1. Number of releases: 0
2. Total activity released: N/A

TABLE 1A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1991

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

SEABROOK STATION	Unit 1	Quarter 3	Quarter 4	Est. Total Error, %
A. Fission & activation gases				
1. Total release	Ci	7.25 E-01	2.29 E-00	1.70 E+01
2. Average release rate for period	µCi/sec	9.12 E-02	2.88 E-01	
3. Percent of technical specification limit	%	5.00 E-04(1)	9.68 E-03(1)	
B. Iodines				
1. Total iodine-131	Ci	1.79 E-05	ND	1.50 E+01
2. Average release rate for period	µCi/sec	2.25 E-06	NA	
3. Percent of technical specification limit	%	7.59 E-02	1.36 E-02	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	1.08 E-03	2.08 E-05	1.80 E+01
2. Average release rate for period	µCi/sec	1.36 E-04	2.62 E-06	
3. Percent of technical specification limit	%	7.59 E-02	1.36 E-02	
4. Gross alpha radioactivity	Ci	ND	ND	
D. Tritium				
1. Total release	Ci	7.25 E-00	3.66 E-00	1.60 E+01
2. Average release rate for period	µCi/sec	9.13 E-01	4.60 E-01	
3. Percent of technical specification limit	%	7.59 E-02	1.95 E-02	

ND = none detected

(1) Based on the gamma air dose.

TABLE 1B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1991

GASEOUS EFFLUENTS-ELEVATED RELEASES

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit 1	Quarter 3	Quarter 4	Quarter 3	Quarter 4
1. Fission gases					
krypton-85	Ci	ND	ND	ND	E
krypton-85m	Ci	ND	ND	2.50 E-03	1.38 E-02
krypton-87	Ci	ND	ND	ND	3.23 E-02
krypton-88	Ci	ND	ND	ND	3.64 E-03
xenon-133	Ci	ND	ND	5.46 E-01	1.26 E-01
xenon-135	Ci	ND	ND	1.23 E-01	9.57 E-02
xenon-135m	Ci	ND	ND	ND	2.70 E-03
xenon-138	Ci	ND	ND	[illegible]	1.22 E-02
Others (specify)	Ci	E	E	E	E
	Ci	E	E	E	E
unidentified	Ci	ND	ND	ND	ND
Total for period	Ci	ND	ND	6.72 E-01	2.86 E-01
B. Iodines					
iodine-131	Ci	1.79 E-05	ND	ND	ND
iodine-133	Ci	ND	ND	ND	ND
iodine-135	Ci	ND	ND	ND	ND
Total for period	Ci	1.79 E-05	ND	ND	ND
C. Particulates					
strontium-89	Ci	ND	ND	ND	ND
strontium-90	Ci	ND	ND	ND	ND
cesium-134	Ci	ND	ND	ND	ND
cesium-137	Ci	ND	ND	ND	ND
barium-lanthanum-140	Ci	ND	ND	ND	ND
niobium-95	Ci	4.32 E-05	ND	ND	ND
cobalt-58	Ci	5.25 E-04	1.65 E-05	ND	ND
cobalt-60	Ci	6.80 E-05	ND	ND	ND
chromium-51	Ci	3.32 E-04	ND	ND	ND
iron-59	Ci	3.07 E-05	ND	ND	ND
manganese-54	Ci	6.22 E-05	ND	ND	ND
zirconium-95	Ci	2.08 E-05	ND	ND	ND
beryllium-7	Ci	ND	3.98 E-06	ND	ND

ND = none detected

TABLE 1C

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1991

GASEOUS EFFLUENTS-GROUND LEVEL RELEASES

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit 1	Quarter 3	Quarter 4	Quarter 3	Quarter 4
1. Fission gases					
krypton-85	Ci	ND	ND	ND	ND
krypton-85m	Ci	ND	ND	ND	ND
krypton-87	Ci	ND	ND	ND	ND
krypton-88	Ci	ND	ND	ND	ND
xenon-133	Ci	ND	ND	ND	ND
xenon-135	Ci	ND	ND	ND	ND
xenon-135m	Ci	ND	ND	ND	ND
xenon-138	Ci	ND	ND	ND	ND
Others (specify)	Ci	E	E	E	E
	Ci	E	E	E	E
	Ci	E	E	E	E
unidentified	Ci	E	E	E	E
Total for period	Ci	ND	ND	ND	ND
B. Iodines					
iodine-131	Ci	ND	ND	ND	ND
iodine-133	Ci	ND	ND	ND	ND
iodine-135	Ci	ND	ND	ND	ND
Total for period	Ci	ND	ND	ND	ND
C. Particulates					
strontium-89	Ci	ND	ND	ND	ND
strontium-90	Ci	ND	ND	ND	ND
cesium-134	Ci	ND	ND	ND	ND
cesium-137	Ci	ND	ND	ND	ND
barium-lanthanum-140	Ci	ND	ND	ND	ND
Others (specify)	Ci	E	E	E	E
cobalt-58	Ci	ND	ND	4.89 E-07	3.17 E-07
technetium-99m	Ci	ND	ND	2.84 E-07	ND
manganese-54	Ci	ND	ND	2.60 E-06	ND
unidentified	Ci	ND	ND	ND	ND

ND = none detected

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1991

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit 1	Quarter 3	Quarter 4	Est. Total Error, %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	1.62 E-02	8.09 E-02	6.00 E+00
2. Average diluted concentration during period	µCi/ml	4.71 E-11	1.38 E-10	
3. Percent of applicable limit	%	2.76 E-02(1)	4.90 E-02(1)	
B. Tritium				
1. Total release	Ci	1.48 E+02	4.86 E+01	8.00 E+00
2. Average diluted concentration during period	µCi/ml	3.16 E-07	6.77 E-08	
3. Percent of applicable limit	%	2.76 E-02(1)	4.90 E-02(1)	
C. Dissolved and entrained gases				
1. Total release	Ci	ND	ND	1.90 E+01
2. Average diluted concentration during period	µCi/ml	NA	NA	
3. Percent of applicable limit	%	NA	NA	
D. Gross alpha radioactivity				
1. Total release	Ci	ND	ND	1.00 E+01
E. Volume of waste released (prior to dilution)	liters	5.12 E+07	7.80 E+07	1.30 E+00
F. Volume of dilution water used during period	liters	1.24 E+11	1.90 E+11	9.00 E+00

ND = none detected

(1) Based on the maximum organ dose.

TABLE 2B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1991

LIQUID EFFLUENTS

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit 1	Quarter 3	Quarter 4	Quarter 3	Quarter 4
strontium-89	Ci	ND	ND	ND	ND
strontium-90	Ci	ND	ND	ND	ND
cesium-134	Ci	ND	ND	ND	ND
cesium-137	Ci	ND	6.86 E-05	ND	ND
iodine-131	Ci	ND	ND	ND	ND
cobalt-58	Ci	5.13 E-03	7.29 E-02	9.11 E-03	1.03 E-02
cobalt-60	Ci	1.46 E-04	2.24 E-03	3.62 E-04	4.18 E-04
iron-59	Ci	ND	2.05 E-04	3.32 E-04	3.99 E-04
zinc-65	Ci	ND	ND	ND	ND
manganese-54	Ci	9.72 E-05	1.22 E-03	1.85 E-04	2.53 E-03
chromium-51	Ci	ND	ND	7.30 E-04	ND
zirconium-niobium-95	Ci	ND	3.67 E-05	9.18 E-05	2.53 E-05
molybdenum-99	Ci	ND	ND	ND	ND
technetium-99m	Ci	ND	ND	ND	ND
barium-lanthanum-140	Ci	ND	ND	ND	ND
cerium-141	Ci	ND	ND	ND	ND
Colbalt-57	Ci	6.64 E-06	ND	ND	ND
Sodium-24	Ci	ND	ND	ND	1.46 E-05
Iron-55	Ci	5.99 E-05	ND	ND	2.73 E-03
Antimony-124	Ci	ND	ND	6.97 E-05	8.85 E-04
Antimony-125	Ci	ND	ND	3.01 E-04	5.37 E-03
Bromine-82	Ci	ND	ND	5.87 E-06	ND
Total for period (above)	Ci	5.44 E-03	7.66 E-02	1.12 E-02	2.27 E-02
xenon-133	Ci	ND	ND	ND	ND
xenon-135	Ci	ND	ND	ND	ND

ND = none detected

TABLE 3

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1991

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (Not irradiated fuel)

1. Type of waste - NONE	Unit	First 6-month Period	Est. Total Error, %
a Spent resins, filter sludges, evaporator bottoms, etc	m^3 Ci	E E	E
b Dry compressible waste, contaminated equip, etc	m^3 Ci	E E	E
c Irradiated components, control rods etc	m^3 Ci	E E	E
d Other (described)	m^3 Ci	E E	E

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

a.	N/A		
b.			
c.			
d.			

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
NONE		

B. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments	Mode of Transportation	Destination
NONE		

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS A CLASS FREQUENCY (PERCENT) = .59

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4-7	0	0	0	0	4	0	2	0	0	0	0	1	0	0	0	0	0	7
(1)	.00	.00	.00	.00	7.84	.00	3.92	.00	.00	.00	.00	1.96	.00	.00	.00	.00	.00	13.73
(2)	.00	.00	.00	.00	.05	.00	.02	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.08
8-12	0	0	0	6	10	1	6	1	0	0	1	2	1	1	1	2	0	32
(1)	.00	.00	.00	11.76	19.61	1.96	11.76	1.96	.00	.00	1.96	3.92	1.96	1.96	1.96	3.92	.00	62.75
(2)	.00	.00	.00	.07	.12	.01	.07	.01	.00	.00	.01	.02	.01	.01	.01	.02	.00	.37
13-18	0	0	2	4	0	0	2	0	0	0	0	0	0	2	2	0	0	12
(1)	.00	.00	3.92	7.84	.00	.00	3.92	.00	.00	.00	.00	.00	.00	3.92	3.92	.00	.00	23.53
(2)	.00	.00	.02	.05	.00	.00	.02	.00	.00	.00	.00	.00	.00	.02	.02	.00	.00	.14
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	0	0	2	10	14	1	10	1	0	0	1	3	1	3	3	2	0	51
(1)	.00	.00	3.92	19.61	27.45	1.96	19.61	1.96	.00	.00	1.96	5.88	1.96	5.88	5.88	3.92	.00	100.00
(2)	.00	.00	.02	.12	.16	.01	.12	.01	.00	.00	.01	.03	.01	.03	.03	.02	.00	.59

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS B CLASS FREQUENCY (PERCENT) = 2.40

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.48	.00	.00	.48	.00	.00	.00	.00	.48	.00	.00	1.44
(2)	.00	.00	.00	.00	.00	.00	.01	.00	.00	.01	.00	.00	.00	.00	.01	.00	.00	.03
4-7	1	0	0	1	10	3	2	1	0	0	0	1	4	3	1	1	0	28
(1)	.48	.00	.00	.48	4.78	1.44	.96	.48	.00	.00	.00	.48	1.91	1.44	.48	.48	.00	13.40
(2)	.01	.00	.00	.01	.12	.03	.02	.01	.00	.00	.00	.01	.05	.03	.01	.01	.00	.32
8-12	1	2	7	15	13	8	9	5	0	2	6	17	19	14	13	4	0	135
(1)	.48	.96	3.35	7.18	6.22	3.83	4.31	2.39	.00	.96	2.87	8.13	9.09	6.70	6.22	1.91	.00	64.59
(2)	.01	.02	.08	.17	.15	.09	.10	.06	.00	.02	.07	.20	.22	.16	.15	.05	.00	1.55
13-18	1	0	1	3	0	0	1	0	0	1	1	3	2	7	20	1	0	41
(1)	.48	.00	.48	1.44	.00	.00	.48	.00	.00	.48	.48	1.44	.96	3.35	9.57	.48	.00	19.62
(2)	.01	.00	.01	.03	.00	.00	.01	.00	.00	.01	.01	.03	.02	.08	.23	.01	.00	.47
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.48	.48	.00	.00	.96
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.02
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	3	2	8	19	23	11	13	6	0	4	7	21	25	25	36	6	0	209
(1)	1.44	.96	3.83	9.09	11.00	5.26	6.22	2.87	.00	1.91	3.35	10.05	11.96	11.96	17.22	2.87	.00	100.00
(2)	.03	.02	.09	.22	.26	.13	.15	.07	.00	.05	.08	.24	.29	.29	.41	.07	.00	2.40

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS C CLASS FREQUENCY (PERCENT) = 5.21

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	2	0	0	2	0	0	0	0	0	0	0	3	2	0	0	0	0	9
(1)	.44	.00	.00	.44	.00	.00	.00	.00	.00	.00	.00	.66	.44	.00	.00	.00	.00	1.99
(2)	.02	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.03	.02	.00	.00	.00	.00	.10
4-7	3	2	0	3	14	9	4	1	1	1	8	10	19	14	16	7	0	112
(1)	.66	.44	.00	.66	3.09	1.99	.88	.22	.22	.22	1.77	2.21	4.19	3.09	3.53	1.55	.00	24.72
(2)	.03	.02	.00	.03	.16	.10	.05	.01	.01	.01	.09	.12	.22	.16	.18	.08	.00	1.29
8-12	9	3	7	33	11	8	24	6	1	3	22	22	35	32	19	10	0	245
(1)	1.99	.66	1.55	7.28	2.43	1.77	5.30	1.32	.22	.66	4.86	4.86	7.73	7.06	4.19	2.21	.00	54.08
(2)	.10	.03	.08	.38	.13	.09	.28	.07	.01	.03	.25	.25	.40	.37	.22	.12	.00	2.82
13-18	1	0	9	2	0	0	1	1	0	1	8	6	4	13	26	1	0	73
(1)	.22	.00	1.99	.44	.00	.00	.22	.22	.00	.22	1.77	1.32	.88	2.87	5.74	.22	.00	16.11
(2)	.01	.00	.10	.02	.00	.00	.01	.01	.00	.01	.09	.07	.05	.15	.30	.01	.00	.84
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	14
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.55	1.55	.00	.00	3.09
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.08	.00	.00	.16
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	15	5	16	40	25	17	29	8	2	5	38	41	60	66	68	18	0	453
(1)	3.31	1.10	3.53	8.83	5.52	3.75	6.40	1.77	.44	1.10	8.39	9.05	13.25	14.57	15.01	3.97	.00	100.00
(2)	.17	.06	.18	.46	.29	.20	.33	.09	.02	.06	.44	.47	.69	.76	.78	.21	.00	5.21

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS D CLASS FREQUENCY (PERCENT) = 48.61

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
(2)	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
C-3	24	23	16	21	18	5	7	13	24	19	17	18	38	28	28	36	0	335
(1)	.57	.54	.38	.50	.43	.12	.17	.31	.57	.45	.40	.43	.90	.66	.66	.85	.00	7.93
(2)	.28	.26	.18	.24	.21	.06	.08	.15	.28	.22	.20	.21	.44	.32	.32	.41	.00	3.85
4-7	112	65	89	79	103	66	120	91	52	91	116	161	184	192	179	110	0	1810
(1)	2.65	1.54	2.11	1.87	2.44	1.56	2.84	2.15	1.23	2.15	2.74	3.81	4.35	4.54	4.24	2.60	.00	42.83
(2)	1.29	.75	1.02	.91	1.18	.76	1.38	1.05	.60	1.05	1.33	1.85	2.12	2.21	2.06	1.27	.00	20.82
8-12	52	56	100	101	63	32	70	41	18	64	147	180	165	213	183	42	0	1527
(1)	1.23	1.33	2.37	2.39	1.49	.76	1.66	.97	.43	1.51	3.48	4.26	3.90	5.04	4.33	.99	.00	36.13
(2)	.60	.64	1.15	1.16	.72	.37	.81	.47	.21	.74	1.69	2.07	1.90	2.45	2.11	.48	.00	17.57
13-18	9	18	85	14	14	5	0	6	1	2	29	17	41	93	116	4	0	454
(1)	.21	.43	2.01	.33	.33	.12	.00	.14	.02	.05	.69	.40	.97	2.20	2.74	.09	.00	10.74
(2)	.10	.21	.98	.16	.16	.06	.00	.07	.01	.02	.33	.20	.47	1.07	1.33	.05	.00	5.22
19-24	0	0	21	3	16	0	0	0	0	0	1	2	10	12	12	1	0	78
(1)	.00	.00	.50	.07	.38	.00	.00	.00	.00	.00	.02	.05	.24	.28	.28	.02	.00	1.85
(2)	.00	.00	.24	.03	.18	.00	.00	.00	.00	.00	.01	.02	.12	.14	.14	.01	.00	.90
GT 24	0	0	18	0	3	0	0	0	0	0	0	0	0	0	0	0	0	21
(1)	.00	.00	.43	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.50
(2)	.00	.00	.21	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
ALL SPEEDS	197	162	329	218	218	108	197	151	95	176	310	378	438	538	518	193	0	4226
(1)	4.66	3.83	7.79	5.16	5.16	2.56	4.66	3.57	2.25	4.16	7.34	8.94	10.36	12.73	12.26	4.57	.00	100.00
(2)	2.27	1.86	3.78	2.51	2.51	1.24	2.27	1.74	1.09	2.02	3.57	4.35	5.04	6.19	5.96	2.22	.00	48.61

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS E CLASS FREQUENCY (PERCENT) = 27.39

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.04	.00	.00	.08
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00	.02
C-3	30	33	17	18	13	18	16	10	42	62	54	55	73	62	41	34	0	578
(1)	1.26	1.39	.71	.76	.55	.76	.67	.42	1.76	2.60	2.27	2.31	3.07	2.60	1.72	1.43	.00	24.28
(2)	.35	.38	.20	.21	.15	.21	.18	.12	.48	.71	.62	.63	.84	.71	.47	.39	.00	6.65
4-7	36	18	19	26	34	15	23	28	69	124	135	281	223	173	100	46	0	1350
(1)	1.51	.76	.80	1.09	1.43	.63	.97	1.18	2.90	5.21	5.67	11.80	9.37	7.27	4.20	1.93	.00	56.70
(2)	.41	.21	.22	.30	.39	.17	.26	.32	.79	1.43	1.55	3.23	2.57	1.99	1.15	.53	.00	15.53
8-12	6	7	15	7	6	2	5	5	1	22	78	123	46	56	26	3	0	408
(1)	.25	.29	.63	.29	.25	.08	.21	.21	.04	.92	3.28	5.17	1.93	2.35	1.09	.13	.00	17.14
(2)	.07	.08	.17	.08	.07	.02	.06	.06	.01	.25	.90	1.41	.53	.64	.30	.03	.00	4.69
13-18	1	0	4	5	0	1	0	0	1	1	6	4	4	4	3	0	0	34
(1)	.04	.00	.17	.21	.00	.04	.00	.00	.04	.04	.25	.17	.17	.17	.13	.00	.00	1.43
(2)	.01	.00	.05	.06	.00	.01	.00	.00	.01	.01	.07	.05	.05	.05	.03	.00	.00	.39
19-24	0	0	0	0	2	0	0	0	0	0	0	0	0	2	1	0	0	5
(1)	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00	.08	.04	.00	.00	.21
(2)	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.02	.01	.00	.00	.06
GT 24	0	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0	4
(1)	.00	.00	.08	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.17
(2)	.00	.00	.02	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.05
ALL SPEEDS	73	58	57	56	56	36	44	43	113	209	274	463	346	297	173	83	0	2381
(1)	3.07	2.44	2.39	2.35	2.35	1.51	1.85	1.81	4.75	8.78	11.51	19.45	14.53	12.47	7.27	3.49	.00	100.00
(2)	.84	.67	.66	.64	.64	.41	.51	.49	1.30	2.40	3.15	5.33	3.98	3.42	1.99	.95	.00	27.39

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIC

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS F CLASS FREQUENCY (PERCENT) = 9.78

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	2	2	1	1	0	0	0	0	0	0	1	2	0	0	0	0	0	9
(1)	.24	.24	.12	.12	.00	.00	.00	.00	.00	.00	.12	.24	.00	.00	.00	.00	.00	1.06
(2)	.02	.02	.01	.01	.00	.00	.00	.00	.00	.00	.01	.02	.00	.00	.00	.00	.00	.10
C-3	11	11	9	12	4	6	3	5	13	28	45	52	70	77	46	21	0	413
(1)	1.29	1.29	1.06	1.41	.47	.71	.35	.59	1.53	3.29	5.29	6.12	8.24	9.06	5.41	2.47	.00	48.59
(2)	.13	.13	.10	.14	.05	.07	.03	.06	.15	.32	.52	.60	.81	.89	.53	.24	.00	4.75
4-7	4	1	1	4	6	3	2	1	8	12	34	90	96	63	81	11	0	417
(1)	.47	.12	.12	.47	.71	.35	.24	.12	.94	1.41	4.00	10.59	11.29	7.41	9.53	1.29	.00	49.06
(2)	.05	.01	.01	.05	.07	.03	.02	.01	.09	.14	.39	1.04	1.10	.72	.93	.13	.00	4.80
8-12	0	1	0	0	0	0	0	0	0	0	0	4	3	1	1	1	0	11
(1)	.00	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.47	.35	.12	.12	.12	.00	1.29
(2)	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.03	.01	.01	.01	.00	.13
13-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	17	15	11	17	10	9	5	6	21	40	80	148	169	141	128	33	0	850
(1)	2.00	1.76	1.29	2.00	1.18	1.06	.59	.71	2.47	4.71	9.41	17.41	19.88	16.59	15.06	3.88	.00	100.00
(2)	.20	.17	.13	.20	.12	.10	.06	.07	.24	.46	.92	1.70	1.94	1.62	1.47	.38	.00	9.78

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS G CLASS FREQUENCY (PERCENT) = 6.02

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	1	1	0	1	0	0	0	0	0	1	2	1	1	1	0	0	9
(1)	.00	.19	.19	.00	.19	.00	.00	.00	.00	.00	.19	.38	.19	.19	.19	.00	.00	1.72
(2)	.00	.01	.01	.00	.01	.00	.00	.00	.00	.00	.01	.02	.01	.01	.01	.00	.00	.10
C-3	3	4	9	8	1	2	2	2	7	4	26	66	86	95	37	7	0	359
(1)	.57	.76	1.72	1.53	.19	.38	.38	.38	1.34	.76	4.97	12.62	16.44	18.16	7.07	1.34	.00	68.64
(2)	.03	.05	.10	.09	.01	.02	.02	.02	.08	.05	.30	.76	.99	1.09	.43	.08	.00	4.13
4-7	1	0	0	2	5	0	0	1	3	2	11	29	31	39	27	2	0	153
(1)	.19	.00	.00	.38	.96	.00	.00	.19	.57	.38	2.10	5.54	5.93	7.46	5.16	.38	.00	29.25
(2)	.01	.00	.00	.02	.06	.00	.00	.01	.03	.02	.13	.33	.36	.45	.31	.02	.00	1.76
8-12	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.38
(2)	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.02
13-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	4	5	10	10	8	2	2	3	10	6	38	98	118	135	65	9	0	523
(1)	.76	.96	1.91	1.91	1.53	.38	.38	.57	1.91	1.15	7.27	18.74	22.56	25.81	12.43	1.72	.00	100.00
(2)	.05	.06	.12	.12	.09	.02	.02	.03	.12	.07	.44	1.13	1.36	1.55	.75	.10	.00	6.02

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

43.0 FT WIND DATA STABILITY CLASS ALL CLASS FREQUENCY (PERCENT) = 100.00

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	2	3	2	1	2	0	0	0	0	0	3	4	1	1	2	0	0	21
(1)	.02	.03	.02	.01	.02	.00	.00	.00	.00	.00	.03	.05	.01	.01	.02	.00	.00	.24
(2)	.02	.03	.02	.01	.02	.00	.00	.00	.00	.00	.03	.05	.01	.01	.02	.00	.00	.24
C-3	70	71	51	61	36	31	29	30	86	114	142	194	269	262	153	98	0	1697
(1)	.81	.82	.59	.70	.41	.36	.33	.35	.99	1.31	1.63	2.23	3.09	3.01	1.76	1.13	.00	19.52
(2)	.81	.82	.59	.70	.41	.36	.33	.35	.99	1.31	1.63	2.23	3.09	3.01	1.76	1.13	.00	19.52
4-7	157	86	109	115	176	96	153	123	133	230	304	573	557	484	404	177	0	3577
(1)	1.81	.99	1.25	1.32	2.02	1.10	1.76	1.41	1.53	2.65	3.50	6.59	6.41	5.57	4.65	2.04	.00	44.60
(2)	1.81	.99	1.25	1.32	2.02	1.10	1.76	1.41	1.53	2.65	3.50	6.59	6.41	5.57	4.65	2.04	.00	44.60
8-12	68	69	129	162	104	51	114	58	20	91	254	349	269	317	243	62	0	2360
(1)	.78	.79	1.48	1.86	1.20	.59	1.31	.67	.23	1.05	2.92	4.01	3.09	3.65	2.80	.71	.00	27.15
(2)	.78	.79	1.48	1.86	1.20	.59	1.31	.67	.23	1.05	2.92	4.01	3.09	3.65	2.80	.71	.00	27.15
13-18	12	18	101	28	14	6	4	7	2	5	44	30	51	119	167	6	0	614
(1)	.14	.21	1.16	.32	.16	.07	.05	.08	.02	.06	.51	.35	.59	1.37	1.92	.07	.00	7.06
(2)	.14	.21	1.16	.32	.16	.07	.05	.08	.02	.06	.51	.35	.59	1.37	1.92	.07	.00	7.06
19-24	0	0	21	3	18	0	0	0	0	0	1	2	10	22	21	1	0	99
(1)	.00	.00	.24	.03	.21	.00	.00	.00	.00	.00	.01	.02	.12	.25	.24	.01	.00	1.14
(2)	.00	.00	.24	.03	.21	.00	.00	.00	.00	.00	.01	.02	.12	.25	.24	.01	.00	1.14
GT 24	0	0	20	0	4	0	0	0	0	0	0	0	0	0	1	0	0	25
(1)	.00	.00	.23	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.29
(2)	.00	.00	.23	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.29
ALL SPEEDS	309	247	433	370	354	184	300	218	241	440	748	1152	1157	1205	991	344	0	8693
(1)	3.55	2.84	4.98	4.26	4.07	2.12	3.45	2.51	2.77	5.06	8.60	13.25	13.31	13.86	11.40	3.96	.00	100.00
(2)	3.55	2.84	4.98	4.26	4.07	2.12	3.45	2.51	2.77	5.06	8.60	13.25	13.31	13.86	11.40	3.96	.00	100.00

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS A CLASS FREQUENCY (PERCENT) = .59

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4-7	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3
(1)	.00	.00	.00	.00	3.92	.00	.00	.00	.00	.00	.00	.00	1.96	.00	.00	.00	.00	5.88
(2)	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.03
8-12	0	0	0	2	12	0	4	0	0	0	0	0	1	0	0	1	0	20
(1)	.00	.00	.00	3.92	23.53	.00	7.84	.00	.00	.00	.00	.00	1.96	.00	.00	1.96	.00	39.22
(2)	.00	.00	.00	.02	.14	.00	.05	.00	.00	.00	.00	.00	.01	.00	.00	.01	.00	.23
13-18	0	0	1	8	1	1	4	2	0	0	0	2	1	1	3	1	0	25
(1)	.00	.00	1.96	15.69	1.96	1.96	7.84	3.92	.00	.00	.00	3.92	1.96	1.96	5.88	1.96	.00	49.02
(2)	.00	.00	.01	.09	.01	.01	.05	.02	.00	.00	.00	.02	.01	.01	.03	.01	.00	.29
19-24	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	1.96	.00	.00	.00	.00	.00	1.96	1.96	.00	.00	5.88
(2)	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.01	.01	.00	.00	.03
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	0	0	1	10	15	1	8	3	0	0	0	2	3	2	4	2	0	51
(1)	.00	.00	1.96	19.61	29.41	1.96	15.69	5.88	.00	.00	.00	3.92	5.88	3.92	7.84	3.92	.00	100.00
(2)	.00	.00	.01	.12	.17	.01	.09	.03	.00	.00	.00	.02	.03	.02	.05	.02	.00	.59

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS B CLASS FREQUENCY (PERCENT) = 2.44

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.48	.00	.00	.00	.00	.00	.00	.00	.00	.48
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01
4-7	1	0	0	1	5	0	0	0	0	0	1	1	1	0	2	0	0	12
(1)	.48	.00	.00	.48	2.39	.00	.00	.00	.00	.00	.48	.48	.48	.00	.96	.00	.00	5.74
(2)	.01	.00	.00	.01	.06	.00	.00	.00	.00	.00	.01	.01	.01	.00	.02	.00	.00	.14
8-12	0	1	6	10	15	6	10	2	0	1	0	7	9	8	4	2	0	81
(1)	.00	.48	2.87	4.78	7.18	2.87	4.78	.96	.00	.48	.00	3.35	4.31	3.83	1.91	.96	.00	38.76
(2)	.00	.01	.07	.12	.17	.07	.12	.02	.00	.01	.00	.08	.10	.09	.05	.02	.00	.94
13-18	1	3	3	8	0	3	4	5	0	1	6	11	12	14	15	1	0	87
(1)	.48	1.44	1.44	3.83	.00	1.44	1.91	2.39	.00	.48	2.87	5.26	5.74	6.70	7.18	.48	.00	41.63
(2)	.01	.03	.03	.09	.00	.03	.05	.06	.00	.01	.07	.13	.14	.16	.17	.01	.00	1.01
19-24	0	0	0	0	0	0	0	0	0	0	1	2	2	6	13	2	0	26
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.48	.96	.96	2.87	6.22	.96	.00	12.44
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.07	.15	.02	.00	.30
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.48	.48	.00	.00	.96
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.02
ALL SPEEDS	2	4	9	19	20	9	14	7	1	2	8	21	24	29	35	5	0	209
(1)	.96	1.91	4.31	9.09	9.57	4.31	6.70	3.35	.48	.96	3.83	10.05	11.48	13.88	16.75	2.39	.00	100.00
(2)	.02	.05	.10	.22	.23	.10	.16	.08	.01	.02	.09	.24	.28	.34	.41	.06	.00	2.44

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

+ C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS C CLASS FREQUENCY (PERCENT) = 5.28

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2	0	5
(1)	.22	.00	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.00	.00	.44	.00	1.10
(2)	.01	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.02	.00	.06
4-7	1	3	0	1	3	3	1	1	0	0	4	4	1	8	7	5	0	42
(1)	.22	.66	.00	.22	.66	.66	.22	.22	.00	.00	.88	.88	.22	1.77	1.55	1.10	.00	9.27
(2)	.01	.03	.00	.01	.03	.03	.01	.01	.00	.00	.05	.05	.01	.09	.08	.06	.00	.49
8-12	6	3	8	30	17	9	19	6	1	3	8	21	25	30	19	7	0	212
(1)	1.32	.66	1.77	6.62	3.75	1.99	4.19	1.32	.22	.66	1.77	4.64	5.52	6.62	4.19	1.55	.00	46.80
(2)	.07	.03	.09	.35	.20	.10	.22	.07	.01	.03	.09	.24	.29	.35	.22	.08	.00	2.47
13-18	2	3	10	5	0	0	8	11	0	2	16	21	25	18	16	5	0	142
(1)	.44	.66	2.21	1.10	.00	.00	1.77	2.43	.00	.44	3.53	4.64	5.52	3.97	3.53	1.10	.00	31.35
(2)	.02	.03	.12	.06	.00	.00	.09	.13	.00	.02	.19	.24	.29	.21	.19	.06	.00	1.66
19-24	2	1	0	0	0	0	0	0	0	0	4	2	4	9	15	0	0	37
(1)	.44	.22	.00	.00	.00	.00	.00	.00	.00	.00	.88	.44	.88	1.99	3.31	.00	.00	8.17
(2)	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.05	.02	.05	.10	.17	.00	.00	.43
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	8	7	0	0	15
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.77	1.55	.00	.00	3.31
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.06	.00	.00	.17
ALL SPEEDS	12	10	19	36	20	12	28	18	1	5	32	48	56	73	64	19	0	453
(1)	2.65	2.21	4.19	7.95	4.42	2.65	6.18	3.97	.22	1.10	7.06	10.60	12.36	16.11	14.13	4.19	.00	100.00
(2)	.14	.12	.22	.42	.23	.14	.33	.21	.01	.06	.37	.56	.65	.85	.75	.22	.00	5.28

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS D CLASS FREQUENCY (PERCENT) = 48.44

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	16	6	7	8	12	4	2	5	5	15	11	7	13	10	10	7	0	138
(1)	.39	.14	.17	.19	.29	.10	.05	.12	.12	.36	.26	.17	.31	.24	.24	.17	.00	3.32
(2)	.19	.07	.08	.09	.14	.05	.02	.06	.06	.17	.13	.08	.15	.12	.12	.08	.00	1.61
4-7	63	49	53	67	46	55	62	44	38	48	57	56	67	84	67	79	0	935
(1)	1.52	1.18	1.28	1.61	1.11	1.32	1.49	1.06	.91	1.16	1.37	1.35	1.61	2.02	1.61	1.90	.00	22.50
(2)	.73	.57	.62	.78	.54	.64	.72	.51	.44	.56	.66	.65	.78	.98	.78	.92	.00	10.90
8-12	90	49	89	85	56	51	91	73	47	78	117	150	150	175	151	66	0	1518
(1)	2.17	1.18	2.14	2.05	1.35	1.23	2.19	1.76	1.13	1.88	2.82	3.61	3.61	4.21	3.63	1.59	.00	36.53
(2)	1.05	.57	1.04	.99	.65	.59	1.06	.85	.55	.91	1.36	1.75	1.75	2.04	1.76	.77	.00	17.70
13-18	38	52	70	31	22	10	34	36	15	35	111	136	127	184	158	25	0	1084
(1)	.91	1.25	1.68	.75	.53	.24	.82	.87	.36	.84	2.67	3.27	3.06	4.43	3.80	.60	.00	26.09
(2)	.44	.61	.82	.36	.26	.12	.40	.42	.17	.41	1.29	1.59	1.48	2.15	1.84	.29	.00	12.64
19-24	11	37	47	7	9	4	1	8	0	0	22	8	41	70	78	5	0	348
(1)	.26	.89	1.13	.17	.22	.10	.02	.19	.00	.00	.53	.19	.99	1.68	1.88	.12	.00	8.38
(2)	.13	.43	.55	.08	.10	.05	.01	.09	.00	.00	.26	.09	.48	.82	.91	.06	.00	4.06
GT 24	1	16	42	3	15	1	0	0	0	1	1	2	18	20	12	0	0	132
(1)	.02	.39	1.01	.07	.36	.02	.00	.00	.00	.02	.02	.05	.43	.48	.29	.00	.00	3.18
(2)	.01	.19	.49	.03	.17	.01	.00	.00	.00	.01	.01	.02	.21	.23	.14	.00	.00	1.54
ALL SPEEDS	219	209	308	201	160	125	190	166	105	177	319	359	416	543	476	182	0	4155
(1)	5.27	5.03	7.41	4.84	3.85	3.01	4.57	4.00	2.53	4.26	7.68	8.64	10.01	13.07	11.46	4.38	.00	100.00
(2)	2.55	2.44	3.59	2.34	1.87	1.46	2.22	1.94	1.22	2.06	3.72	4.19	4.85	6.33	5.55	2.12	.00	48.44

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS E CLASS FREQUENCY (PERCENT) = 27.48

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.04	.00	.08
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.01	.00	.02
C-3	7	6	8	10	5	3	1	8	6	11	10	3	3	5	5	6	0	97
(1)	.30	.25	.34	.42	.21	.13	.04	.34	.25	.47	.42	.13	.13	.21	.21	.25	.00	4.12
(2)	.08	.07	.09	.12	.06	.03	.01	.09	.07	.13	.12	.03	.03	.06	.06	.07	.00	1.13
4-7	29	25	23	15	13	16	26	25	33	47	36	27	33	35	36	20	0	439
(1)	1.23	1.06	.98	.64	.55	.68	1.10	1.06	1.40	1.99	1.53	1.15	1.40	1.48	1.53	.85	.00	18.63
(2)	.34	.29	.27	.17	.15	.19	.30	.29	.38	.55	.42	.31	.38	.41	.42	.23	.00	5.12
8-12	32	32	22	14	11	7	18	25	69	120	137	168	136	130	108	36	0	1065
(1)	1.36	1.36	.93	.59	.47	.30	.76	1.06	2.93	5.09	5.81	7.13	5.77	5.52	4.58	1.53	.00	45.18
(2)	.37	.37	.26	.16	.13	.08	.21	.29	.80	1.40	1.60	1.96	1.59	1.52	1.26	.42	.00	12.42
13-18	16	14	11	5	6	2	4	8	6	32	120	202	98	111	52	7	0	694
(1)	.68	.59	.47	.21	.25	.08	.17	.34	.25	1.36	5.09	8.57	4.16	4.71	2.21	.30	.00	29.44
(2)	.19	.16	.13	.06	.07	.02	.05	.09	.07	.37	1.40	2.36	1.14	1.29	.61	.08	.00	8.09
19-24	2	2	5	3	0	0	0	0	0	1	7	6	14	5	4	0	0	49
(1)	.08	.08	.21	.13	.00	.00	.00	.00	.00	.04	.30	.25	.59	.21	.17	.00	.00	2.08
(2)	.02	.02	.06	.03	.00	.00	.00	.00	.00	.01	.08	.07	.16	.06	.05	.00	.00	.57
GT 24	0	0	2	0	3	1	0	0	0	1	0	0	0	2	2	0	0	11
(1)	.00	.00	.08	.00	.13	.04	.00	.00	.00	.04	.00	.00	.00	.08	.08	.00	.00	.47
(2)	.00	.00	.02	.00	.03	.01	.00	.00	.00	.01	.00	.00	.00	.02	.02	.00	.00	.13
ALL SPEEDS	86	79	71	47	38	29	49	66	114	213	310	406	284	288	207	70	0	2357
(1)	3.65	3.35	3.01	1.99	1.61	1.23	2.08	2.80	4.84	9.04	13.15	17.23	12.05	12.22	8.78	2.97	.00	100.00
(2)	1.00	.92	.83	.55	.44	.34	.57	.77	1.33	2.48	3.61	4.73	3.31	3.36	2.41	.82	.00	27.48

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS F CLASS FREQUENCY (PERCENT) = 9.71

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
(2)	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
C-3	4	1	5	3	0	5	0	1	2	2	4	2	1	4	2	3	0	39
(1)	.48	.12	.60	.36	.00	.60	.00	.12	.24	.24	.48	.24	.12	.48	.24	.36	.00	4.69
(2)	.05	.01	.06	.03	.00	.06	.00	.01	.02	.02	.05	.02	.01	.05	.02	.03	.00	.45
4-7	16	5	12	4	5	5	8	10	10	10	34	11	21	7	13	10	0	181
(1)	1.92	.60	1.44	.48	.60	.60	.96	1.20	1.20	1.20	4.08	1.32	2.52	.84	1.56	1.20	.00	21.73
(2)	.19	.06	.14	.05	.06	.06	.09	.12	.12	.12	.40	.13	.24	.08	.15	.12	.00	2.11
8-12	32	9	4	1	1	1	1	8	9	40	41	43	60	61	69	29	0	409
(1)	3.84	1.08	.48	.12	.12	.12	.12	.96	1.08	4.80	4.92	5.16	7.20	7.32	8.28	3.48	.00	49.10
(2)	.37	.10	.05	.01	.01	.01	.01	.09	.10	.47	.43	.50	.70	.71	.80	.34	.00	4.77
13-18	5	2	0	0	1	1	0	1	1	8	21	40	47	40	30	5	0	202
(1)	.60	.24	.00	.00	.12	.12	.00	.12	.12	.96	2.52	4.80	5.64	4.80	3.60	.60	.00	24.25
(2)	.06	.02	.00	.00	.01	.01	.00	.01	.01	.09	.24	.47	.55	.47	.35	.06	.00	2.36
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
# L SPEEDS	57	17	21	8	9	12	9	20	22	60	100	96	129	112	114	47	0	833
(1)	6.84	2.04	2.52	.96	1.08	1.44	1.08	2.40	2.64	7.20	12.00	11.52	15.49	13.45	13.69	5.64	.00	100.00
(2)	.66	.20	.24	.09	.10	.14	.10	.23	.26	.70	1.17	1.12	1.50	1.31	1.33	.55	.00	9.71

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS G CLASS FREQUENCY (PERCENT) = 6.05

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	3	1	2	0	2	1	1	2	2	3	2	3	2	3	4	3	0	34
(1)	.58	.19	.39	.00	.39	.19	.19	.39	.39	.58	.39	.58	.39	.58	.77	.58	.00	6.55
(2)	.03	.01	.02	.00	.02	.01	.01	.02	.02	.03	.02	.03	.02	.03	.05	.03	.00	.40
4-7	10	3	5	2	7	1	4	13	3	14	17	13	16	18	10	11	0	147
(1)	1.93	.58	.96	.39	1.35	.19	.77	2.50	.58	2.70	3.28	2.50	3.08	3.47	1.93	2.12	.00	28.32
(2)	.12	.03	.06	.02	.08	.01	.05	.15	.03	.16	.20	.15	.19	.21	.12	.13	.00	1.71
8-12	17	4	4	1	0	1	4	2	13	15	16	16	47	50	49	23	0	262
(1)	3.28	.77	.77	.19	.00	.19	.77	.39	2.50	2.89	3.08	3.08	9.06	9.63	9.44	4.43	.00	50.48
(2)	.20	.05	.05	.01	.00	.01	.05	.02	.15	.17	.19	.19	.55	.58	.57	.27	.00	3.05
13-18	2	0	0	0	0	0	0	0	0	2	5	15	16	11	14	10	0	75
(1)	.39	.00	.00	.00	.00	.00	.00	.00	.00	.39	.96	2.89	3.08	2.12	2.70	1.93	.00	14.45
(2)	.02	.00	.00	.00	.00	.00	.00	.00	.00	.02	.06	.17	.19	.13	.16	.12	.00	.87
19-24	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	.19
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.01
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	32	8	11	3	9	3	9	17	18	34	40	47	82	82	77	47	0	519
(1)	6.17	1.54	2.12	.58	1.73	.58	1.73	3.28	3.47	6.55	7.71	9.06	15.80	15.80	14.84	9.06	.00	100.00
(2)	.37	.09	.13	.03	.10	.03	.10	.20	.21	.40	.47	.55	.96	.96	.90	.55	.00	6.05

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

TABLE 4A

SEABROOK JAN91-DEC91 MET DATA JOINT FREQUENCY DISTRIBUTION (210-FOOT TOWER)

209.0 FT WIND DATA STABILITY CLASS ALL CLASS FREQUENCY (PERCENT) = 100.00

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	1	0	4
(1)	.00	.00	.00	.00	.02	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.01	.00	.05
(2)	.00	.00	.00	.00	.02	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.01	.00	.05
C-3	31	14	23	21	19	13	4	16	16	31	27	15	20	22	21	21	0	314
(1)	.36	.16	.27	.24	.22	.15	.05	.19	.19	.36	.31	.17	.23	.26	.24	.24	.00	3.66
(2)	.36	.16	.27	.24	.22	.15	.05	.19	.19	.36	.31	.17	.23	.26	.24	.24	.00	3.66
4-7	120	85	93	90	81	80	101	93	84	119	149	112	140	152	135	125	0	*759
(1)	1.40	.99	1.08	1.05	.94	.93	1.18	1.08	.98	1.39	1.74	1.31	1.63	1.77	1.57	1.46	.00	20.51
(2)	1.40	.99	1.08	1.05	.94	.93	1.18	1.08	.98	1.39	1.74	1.31	1.63	1.77	1.57	1.46	.00	20.51
8-12	177	98	133	143	112	75	147	116	139	257	319	405	428	454	400	164	0	3567
(1)	2.06	1.14	1.55	1.67	1.31	.87	1.71	1.35	1.62	3.00	3.72	4.72	4.99	5.29	4.66	1.91	.00	41.59
(2)	2.06	1.14	1.55	1.67	1.31	.87	1.71	1.35	1.62	3.00	3.72	4.72	4.99	5.29	4.66	1.91	.00	41.59
13-18	64	74	95	57	30	17	54	63	22	80	279	427	326	379	288	54	0	2309
(1)	.75	.86	1.11	.66	.35	.20	.63	.73	.26	.93	3.25	4.98	3.80	4.42	3.36	.63	.00	26.92
(2)	.75	.86	1.11	.66	.35	.20	.63	.73	.26	.93	3.25	4.98	3.80	4.42	3.36	.63	.00	26.92
19-24	15	40	52	10	9	4	1	9	0	1	34	18	62	91	111	7	0	464
(1)	.17	.47	.61	.12	.10	.05	.01	.10	.00	.01	.40	.21	.72	1.06	1.29	.08	.00	5.41
(2)	.17	.47	.61	.12	.10	.05	.01	.10	.00	.01	.40	.21	.72	1.06	1.29	.08	.00	5.41
GT 24	1	16	44	3	18	2	0	0	0	2	1	2	18	31	22	0	0	160
(1)	.01	.19	.51	.03	.21	.02	.00	.00	.00	.02	.01	.02	.21	.36	.26	.00	.00	1.87
(2)	.01	.19	.51	.03	.21	.02	.00	.00	.00	.02	.01	.02	.21	.36	.26	.00	.00	1.87
ALL SPEEDS	408	327	440	324	271	191	307	297	261	491	809	979	994	1129	977	372	0	8577
(1)	4.76	3.81	5.13	3.78	3.16	2.23	3.58	3.46	3.04	5.72	9.43	11.41	11.59	13.16	11.39	4.34	.00	100.00
(2)	4.76	3.81	5.13	3.78	3.16	2.23	3.58	3.46	3.04	5.72	9.43	11.41	11.59	13.16	11.39	4.34	.00	100.00

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

C= CALM (WIND SPEED LESS THAN OR EQUAL TO .95 MPH)

APPENDIX A

Off-Site Dose Calculation Manual

Requirement: Technical Specification 6.13.2.b requires that licensee initiated changes to the Off-Site Dose Calculation Manual (ODCM) be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made effective. Changes made to the Radiological Environmental Monitoring Program (REMP) in accordance with Technical Specification 3.12.1 and 3.12.2 are to be included.

Response: The following changes were made to the ODCM and REMP during the reporting period. It is noted that the REMP is contained within the ODCM:

- ODCM - July 1991 - Revision 8 - This change to Section B of the ODCM incorporated comments contained in USNRC Letter to T. C. Feigenbaum, "Seabrook Offsite Dose Calculation Manual (TAC No. 77672)," dated January 31, 1991.

- ODCM - December 1991 - Revision 10 - This change to Section A and Section B of the ODCM incorporated recommendations made in USNRC Letter to T. C. Feigenbaum, "Seabrook Offsite Dose Calculation Manual (TAC No. 77672)," dated July 17, 1991.

- REMP - October 1991 - Revision 9 - Milk sample station TM-15 was added to the locations in Table B.4-1 and Figure B.4-2. The derived committed dose from the 1991 Land Use Census identified location TM-15 as having a dose 21% greater than a current sample location. The criteria for adding a sample location to the program is a dose greater than 20%. Location TM-15 however does not meet the distance criteria of ODCM Table A.5-1. A footnote has been added to Ingestion Pathway location TM-15 located in Table B.4-1 to indicate that it is not a required sample location as defined in Part A (Table A.5-1).

A copy of ODCM Revisions 8, 9 and 10 are enclosed in Appendix H.

APPENDIX B

Process Control Program

Requirement: Technical Specification 6.12.2.a requires that licensee initiated changes to the Process Control Program be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the changes(s) were made.

Response: No changes were made to the Process Control Program during the reporting period.

APPENDIX C

Radioactive Liquid Effluent Monitoring Instrumentation

Requirement: Radioactive liquid effluent monitoring instrumentation channels are required to be operable in accordance with Technical Specification 3.3.3.9.b. With less than the minimum number of channels operable for 30 days, Technical Specification 3.3.3.9.b requires that an explanation for the delay in correcting the inoperability be provided the next Semiannual Effluent Release Report pursuant to Technical Specification 6.8.1.4.

Response: A review of the Action Statement Status tracking system archive indicated Technical Specification 3.3.3.9 was never entered for more than 30 consecutive days during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX D

Radioactive Gaseous Effluent Monitoring Instrumentation

Requirement: Radioactive Gaseous Effluent Monitoring Instrumentation channels are required to be operable in accordance with Technical Specification 3.3.3.10.b. With less than the minimum number of channels operable for 30 days, Technical Specification 3.3.3.10.b requires that an explanation for the delay in correcting the inoperability be provided in the next Semiannual Effluent Release Report pursuant to Technical Specification 6.8.1.4.

Response: A review of the Action Statement Status tracking system archive indicated Technical Specification 3.3.3.10 was never entered for more than 30 consecutive days during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX E

Liquid Holdup Tanks

Requirement: Technical Specification 3.11.1.4 limits the quantity of radioactive material contained in any temporary unprotected outdoor tank. With the quantity of radioactive material in any temporary unprotected outdoor tank exceeding the limits of Technical Specification 3.11.1.4, a description of the events leading in this condition is required in the next Semiannual Effluent Release Report pursuant to Technical Specification 6.8.1.4.

Response: No temporary tanks exceeding the limits of Technical Specification 3.11.1.4 were in use during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX F

Radwaste [illegible] eatment Systems

Requirement: Technical Specification 6.14.1.a requires that licensee initiated changes to the Radwaste Treatment Systems (liquid, gaseous, and solid) be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change was made.

Response: No major changes were made to the Radwaste Treatment Systems (liquid, gaseous and solid) during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX G

Unplanned Releases

Requirement: Technical Specification 6.8.1.4 requires a list and description of unplanned releases of radioactive materials in gaseous and liquid effluents made during the reporting period from the site to UNRESTRICTED AREAS.

Response: An unplanned release of radioactivity occurred on September 30, 1991, when Reactor Coolant System water was inadvertently introduced into the Demineralized Water System. The radioactive contamination of the Demineralized Water System resulted in liquid releases via the ocean cooling water system.

Seabrook Station Technical Specification liquid effluent limitations were not exceeded during this event.

APPENDIX A

Off-Site Dose Calculation Manual

Requirement: Technical Specification 5.13.2.b requires that licensee initiated changes to the Off-Site Dose Calculation Manual (ODCM) be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made effective. Changes made to the Radiological Environmental Monitoring Program (REMP) in accordance with Technical Specification 3.12.1 and 3.12.2 are to be included.

Response: The following changes were made to the ODCM and REMP during the reporting period. It is noted that the REMP is contained within the ODCM.

- ODCM - July 1991 - Revision 8 - This change to Section B of the ODCM incorporated comments contained in USNRC Letter to T. C. Feigenbaum, "Seabrook Offsite Dose Calculation Manual (TAC No. 77672)," dated January 31, 1991.

- ODCM - December 1991 - Revision 10 - This change to Section A and Section B of the ODCM incorporated recommendations made in USNRC Letter to T. C. Feigenbaum, "Seabrook Offsite Dose Calculation Manual (TAC No. 77672)," dated July 17, 1991.

- REMP - October 1991 - Revision 9 - Milk sample station TM-15 was added to the locations in Table B.4-1 and Figure B.4-2. The derived committed dose from the 1991 Land Use Census identified location TM-15 as having a dose 21% greater than a current sample location. The criteria for adding a sample location to the program is a dose greater than 20%. Location TM-15 however does not meet the distance criteria of ODCM Table A.5-1. A footnote has been added to Ingestion Pathway location TM-15 located in Table B.4-1 to indicate that it is <u>not</u> a required sample location as defined in Part A (Table A.5-1).

A copy of ODCM Revisions 8, 9 and 10 are enclosed in Appendix H.

APPENDIX B

Process Control Program

Requirement: Technical Specification 6.12.2.a requires that licensee initiated changes to the Process Control Program be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the changes(s) were made.

Response: No changes were made to the Process Control Program during the reporting period.

APPENDIX C

Radioactive Liquid Effluent Monitoring Instrumentation

Requirement: Radioactive liquid effluent monitoring instrumentation channels are required to be operable in accordance with Technical Specification 3.3.3.9.b. With less than the minimum number of channels operable for 30 days, Technical Specification 3.3.3.9.b requires that an explanation for the delay in correcting the inoperability be provided the next Semiannual Effluent Release Report pursuant to Technical Specification 6.8.1.3.

Response: A review of the Action Statement Status tracking system archive indicated Technical Specification 3.3.3.9 was never entered for more than 30 consecutive days during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX D

Radioactive Gaseous Effluent Monitoring Instrumentation

Requirement: Radioactive Gaseous Effluent Monitoring Instrumentation channels are required to be operable in accordance with Technical Specification 3.3.3.10.b. With less than the minimum number of channels operable for 30 days, Technical Specification 3.3.3.10.b requires that an explanation for the delay in correcting the inoperability be provided in the next Semiannual Effluent Release Report pursuant to Technical Specification 6.8.1.4.

Response: A review of the Action Statement Status tracking system archive indicated Technical Specification 3.3.3.10 was never entered for more than 30 consecutive days during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX E

Liquid Holdup Tanks

Requirement: Technical Specification 3.11.1.4 limits the quantity of radioactive material contained in any temporary unprotected outdoor tank. With the quantity of radioactive material in any temporary unprotected outdoor tank exceeding the limits of Technical Specification 3.11.1.4, a description of the events leading in this condition is required in the next Semiannual Effluent Release Report pursuant to Technical Specification 6.8.1.4.

Response: No temporary tanks exceeding the limits of Technical Specification 3.11.1.4 were in use during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX F

Radwaste Treatment Systems

Requirement: Technical Specification 6.14.1.a requires that licensee initiated changes to the Radwaste Treatment Systems (liquid, gaseous, and solid) be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change was made.

Response: No major changes were made to the Radwaste Treatment Systems (liquid, gaseous and solid) during the reporting period (July 1, 1991 through December 31, 1991).

APPENDIX G

Unplanned Releases

Requirement: Technical Specification 6.8.1.4 requires a list and description of unplanned releases of radioactive materials in gaseous and liquid effluents made during the reporting period from the site to UNRESTRICTED AREAS.

Response: An unplanned release of radioactivity occurred on September 30, 1991, when Reactor Coolant System water was inadvertently introduced into the Demineralized Water System. The radioactive contamination of the Demineralized Water System resulted in liquid releases via the ocean cooling water system.

Seabrook Station Technical Specification liquid effluent limitations were not exceeded during this event.

APPENDIX H

NEW HAMPSHIRE YANKEE
OFFSITE DOSE CALCULATION MANUAL

REVISIONS 8, 9 and 10