



BOSTON EDISON

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

10 CFR 50.36a(a)(2)
PNPS TS Section 6.9.C.1
Reg. Guide 1.21

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Vice President Nuclear Operations
and Station Director

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
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Subject: SEMIANNUAL RADIOACTIVE EFFLUENT AND WASTE
DISPOSAL REPORT FOR THE PERIOD JULY 1
THROUGH DECEMBER 31, 1993

In accordance with the requirements of 10CFR50.36a(a)(2), Pilgrim Nuclear Power Station Technical Specification Section 6.9.C.1, and Regulatory Guide 1.21, the Boston Edison Company submits the Semiannual Radioactive Effluent and Waste Disposal Report Including Meteorological Data for the period of July 1 through December 31, 1993.

Please do not hesitate to contact me if there are any questions regarding this report.

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PILGRIM NUCLEAR POWER STATION

**Radioactive Effluent and
Waste Disposal Report
including
Meteorological Data**

July 1 through December 31, 1993



BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT
INCLUDING METEOROLOGICAL DATA
JULY 1 THROUGH DECEMBER 31, 1993

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EXECUTIVE SUMMARY

BOSTON EDISON COMPANY
Pilgrim Nuclear Power Station
Radioactive Effluent and Waste Disposal Report
including Meteorological Data
July 1 to December 31, 1993

INTRODUCTION

This report quantifies the radioactive gaseous, liquid, and radwaste releases, and summarizes the local meteorological data for the period from July 1 to December 31, 1993. This document has been prepared in accordance with the requirements set forth in the Pilgrim Nuclear Power Station (PNPS) Technical Specifications and Revision 1 of Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light Water Cooled Nuclear Power Plants."

Regulatory Guide 1.21 requires an assessment of the radiological impact on man resulting from radioactivity released in liquid and gaseous effluents. This assessment is to be performed using effluent and meteorological data collected during the semiannual period covered by the report. Due to the complexity of calculations involved with performing such an assessment, it was impractical to complete the assessment within the 60 day issuance requirement for the report. Therefore, PNPS Technical Specifications were modified in May 1988 (Amendment #116) to allow for submission of a supplemental report containing the radiological impact assessments. This report is to be issued by April 1, and is to contain impact assessments for both semiannual periods (January-June, July-December) for the previous year. Since Technical Specification limits for gaseous effluents listed in Table 1A are based on calculated dose, these values are not presented in the semiannual effluent release report. These "percent of technical specification limit" values will be presented in the supplemental report issued prior to April 1, 1994.

The quantity of radioactive material released from Pilgrim Station was determined from sample analyses of gaseous releases from the main stack and the reactor building vent, and liquid releases into the discharge canal. The quantity and volume of radioactive waste which was shipped off-site from Pilgrim Station for burial was determined from data contained on the radwaste shipping documentation. The meteorological data were obtained from instrumentation measurements from the 220 foot meteorological tower located at Pilgrim Station.

GASEOUS EFFLUENTS

The gaseous radioactive releases from July 1 to December 31, 1993 are quantified in Tables 1A, 1B and 1C. Radioactive noble gases released during the period totalled 517 curies. Releases of radioactive particulates and iodines from the main stack, reactor building vent, turbine building, and tool decontamination facility totalled 0.109 curies, and tritium releases totalled 9.79 curies. No gross alpha radioactivity was detected in gaseous effluents.

LIQUID EFFLUENTS

The liquid radioactive releases from July 1 to December 31, 1993 are quantified in Tables 2A and 2B. Liquid effluents into the discharge canal resulted in a total release to the environment (Cape Cod Bay) of 0.00293 curies of fission and activation products and 0.779 curies of tritium. Dissolved and entrained gases were not detected. No gross alpha radioactivity was detected.

SOLID WASTE

The solid radioactive waste shipped off-site for burial during the reporting period is described and quantified in Table 3. Approximately 65 cubic meters of solid waste was shipped off-site for burial with a total activity of approximately 504 curies (major nuclides: Co-60, Fe-55 and Mn-54). Pilgrim Station did not ship irradiated components off-site during the reporting period.

METEOROLOGICAL DATA

The meteorological data joint frequency distributions are listed in Tables 4A-1 and 4A-2. The percent data recovery for the period of July - December 1993 was 95.3% on the 33 foot elevation and 90.5% on the 220 foot elevation of the 220 foot meteorological tower at Pilgrim Station. Joint data recovery for the entire year of 1993 was 90.8% for the 33 foot level and 87.0% at the 220 foot level.

The predominant wind direction was from the south-southwest, which occurred approximately 15% of the time during this period. The predominant wind speed range at the 220 foot sensor was 13 to 18 mph, which occurred 36% of the time during this period. The predominant wind speed range at the 33 foot sensor was 4 to 7 mph, which occurred approximately 55% of the time. The predominant stability class was stability class D, which occurred about 35% of the time during this period.

CONCLUSION

The PNPS Technical Specifications contain limiting conditions for operations and operational objectives regarding radiological environmental releases. None of the limiting conditions for operation or operational objectives associated with liquid or gaseous effluents were exceeded during this reporting period, as confirmed by conservative dose assessments performed on a monthly basis during this period. Official dose assessments will be published in a supplement to this report due 90 days following January 1, 1994. Conformance to these PNPS Technical Specification operational objectives ensures that the releases of radioactive materials in gaseous and liquid effluents were kept as low as is reasonably achievable in accordance with the Nuclear Regulatory Commission's regulation 10CFR50, Appendix I. Furthermore, compliance with PNPS Technical Specifications demonstrates compliance with the Environmental Protection Agency's (EPA) federal environmental regulation 40CFR190.10, Subpart B.

1. INTRODUCTION

This report is issued for the period July 1 to December 31, 1993 in accordance with the Boston Edison Company's PNPS Technical Specifications and NRC Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light Water Cooled Nuclear Power Plants," Revision 1 (Reference 1).

Regulatory Guide 1.21 requires an assessment of the radiological impact on man resulting from radioactivity released in liquid and gaseous effluents. This assessment is to be performed using effluent and meteorological data collected during the semiannual period covered by the report. Due to the complexity of calculations involved with performing such an assessment, it was impractical to complete the assessment within the 60 day issuance requirement for the report. Therefore, PNPS Technical Specifications were modified in May 1988 (Amendment #116) to allow for submission of a supplemental report containing the radiological impact assessments. This report is to be issued by April 1, and is to contain impact assessments for both semiannual periods (January-June, July-December) for the previous year. Since Technical Specification limits for gaseous effluents listed in Table 1A are based on calculated dose, these values are not presented in the semiannual effluent release report. These "percent of technical specification limit" values will be presented in the supplemental report issued prior to April 1, 1994.

2. RADIOACTIVE EFFLUENT DATA

Radioactive liquid and gaseous releases (Reference 2) for the period July 1 to December 31, 1993 are given in the standard NRC Regulatory Guide 1.21 format in Tables 1A, 1B, 1C, 2A, 2B, and the supplemental information form.

2.1 Gaseous Effluents

Gaseous radioactivity is released from Pilgrim Station to the atmosphere from the main stack and the reactor building exhaust vent. These gaseous effluent releases for the reporting period are summarized in Table 1A. Noble gases released during the period totalled 517 curies, for an average release rate of 32.8 $\mu\text{Ci}/\text{sec}$. A total of 0.109 curies of radioactive iodines and particulates with half-lives greater than 8 days was released at an average release rate of 0.00691 $\mu\text{Ci}/\text{sec}$. No alpha radioactivity was detected on particulate filters during this reporting period. A total of 9.79 curies of tritium was released at an average release rate of 0.621 $\mu\text{Ci}/\text{sec}$.

The main stack is an elevated release point with a height of approximately 400 feet above mean sea level. The main stack is located about 700 feet west-northwest of the reactor building. The elevated releases for the reporting period are shown in Table 1B.

The majority of ground-level releases during the period occurred from the reactor building vent, but low levels of radionuclides were also detected in air exhausted from the turbine building and tool decontamination facility. The reactor building exhaust vent is considered a mixed-mode/ground-level release point with a height of approximately 182 feet above mean sea level. The exhaust vent is located on the west corner of the reactor building. Combined ground level releases from both the reactor building vent, turbine building, and tool decontamination facility for the reporting period are shown in Table 1C.

2.2 Liquid Effluents

Liquid radioactivity is released from Pilgrim Station to the Cape Cod Bay via the circulating water discharge canal. These effluent releases enter the Cape Cod Bay at the outfall of the canal which is located about 1100 feet north from the reactor building.

The liquid releases for the reporting period are summarized in Table 2A. A total of approximately 370 thousand liters of radioactive liquid waste (prior to dilution) containing 0.00293 curies of fission and activation products (excluding tritium, gases, and alpha-emitting nuclides) was discharged with a total dilution volume of approximately 2.3 billion liters of water. The liquid effluents were released at an average concentration of fission and activation products of $1.25E-9$ $\mu\text{Ci/ml}$. A total of 0.779 curies of tritium was released, resulting in an average concentration of $3.34E-7$ $\mu\text{Ci/ml}$. No dissolved and entrained gases were detected in liquid effluents during the period. Alpha radioactivity was not detected during this reporting period. Quarterly release estimates and principal radionuclides in the liquid effluents are given in Table 2B.

PILGRIM NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

SUPPLEMENTAL INFORMATION 1993
July - December 1993

Facility Pilgrim Nuclear Power Station Licensee DPR-35

1. Regulatory Limits

- a. Fission and activation gases: 500 mrem/yr total body and 3000 mrem/yr for skin at site boundary.
- b,c. Iodines, particulates with half-lives > 8 days, tritium: 1500 mrem/yr to any organ at site boundary.
- d. Liquid effluents: 0.06 mrem/month for total body and 0.20 mrem/month for any organ (without radwaste treatment).

2. Maximum Permissible Concentration

- a. Fission and activation gases: 10 CFR 20 Appendix B Table II
- b. Iodines: 10 CFR 20 Appendix B Table II
- c. Particulates, half-lives > 8 days: 10 CFR 20 Appendix B Table II
- d. Liquid effluents: 2E-4 μ Ci/ml for entrained noble gases; 10CFR20 Appendix B Table II values for all other radionuclides.

3. Average Energy: Not applicable

4. Measurements and Approximations of Total Radioactivity

- a. Fission and activation gases: High-purity Ge gamma spectroscopy for all gamma emitters; radiochemistry analysis for H-3, Fe-55 (liquids only), Sr-89, and Sr-90.
- b. Iodines:
- c. Particulates:
- d. Liquid effluents:

5. Batch Releases

- a. Liquid:
 - 1. Number of batch releases:
 - 2. Total time period for batch releases (minutes):
 - 3. Maximum time period for a batch release (minutes):
 - 4. Average time period for batch releases (minutes):
 - 5. Minimum time period for a batch release (minutes):
 - 6. Average stream flow during periods of release of effluents into a flowing stream (liters/min):

Quarter	
3rd	4th
49	11
1.66E+3	3.53E+2
90	60
33.9	32.1
20	20
1.16E+6	1.18E+6

- b. Gaseous: Not applicable

6. Abnormal Releases

- a. Liquid: None
- b. Gaseous: None

TABLE 1A
 PILGRIM NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1993
 GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES
 July - December 1993

Unit	Quarter 3rd	Quarter 4th	Est.Total Error, %
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A. Fission and Activation Gases

	Unit	Quarter 3rd	Quarter 4th	Est.Total Error, %
1. Total release	Ci	2.64E+2	2.53E+2	22%
2. Average release rate for period	uCi/sec	3.35E+1	3.21E+1	
3. Percent of Technical Specification limit	%	*	*	

B. Iodines

	Unit	Quarter 3rd	Quarter 4th	Est.Total Error, %
1. Total iodine-131 release	Ci	1.01E-2	5.42E-3	20%
2. Average release rate for period	uCi/sec	1.28E-3	6.87E-4	
3. Percent of Technical Specification limit	%	*	*	

C. Particulates

	Unit	Quarter 3rd	Quarter 4th	Est.Total Error, %
1. Particulates with half-lives > 8 days	Ci	3.02E-3	2.13E-3	21%
2. Average release rate for period	uCi/sec	3.83E-4	2.70E-4	
3. Percent of Technical Specification limit	%	*	*	
4. Gross alpha radioactivity	Ci	NDA	NDA	

D. Tritium

	Unit	Quarter 3rd	Quarter 4th	Est.Total Error, %
1. Total release rate for period	Ci	4.59E+0	5.20E+0	20%
2. Average release rate for period	uCi/sec	5.82E-1	6.59E-1	
3. Percent of Technical Specification limit	%	*	*	

Notes for Table 1A:

* Percent of Technical Specification Limit Values in Sections A.3, B.3, C.3, and D.3 are based on dose assessments not performed as part of this report. These will be provided in the annual supplemental dose assessment report to be issued prior to April 1, 1994.

1. NDA is no detectable activity.
2. LLD for gross alpha listed as NDA is 1E-11 μ Ci/ml.

TABLE 1B
 PILGRIM NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1993
 GASEOUS EFFLUENTS-ELEVATED RELEASE
 July - December 1993

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 3rd	Quarter 4th	Quarter N/A	Quarter N/A

1. Fission and Activation Gases

Kr-85m	Ci	1.17E+1	1.13E+1		
Kr-87	Ci	5.06E+0	NDA		
Kr-88	Ci	7.14E+0	4.44E+0		
Xe-133	Ci	2.69E+1	2.19E+1		
Xe-135	Ci	9.11E+0	3.88E+0		
Xe-135m	Ci	3.40E+1	2.24E+1		
Xe-138	Ci	1.15E+2	6.60E+1		
Total for period	Ci	2.09E+2	1.30E+2		

2. Iodines

I-131	Ci	8.47E-3	3.28E-3		
I-133	Ci	1.90E-2	1.56E-2		
Total for period	Ci	2.75E-2	1.89E-2		

3. Particulates

Mn-54	Ci	3.79E-6	NDA		
Co-60	Ci	1.06E-5	NDA		
Sr-89	Ci	6.96E-4	1.32E-4		
Sr-90	Ci	3.87E-6	1.49E-6		
Cs-134	Ci	NDA	NDA		
Cs-137	Ci	3.18E-5	NDA		
Ba/La-140	Ci	1.36E-3	5.68E-4		
Total for period	Ci	2.11E-3	7.01E-4		

4. Tritium

H-3	Ci	2.19E-1	1.36E-1		
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Notes for Table 1B:

1. NDA is no detectable activity.
2. LLDs for nuclides listed as NDA are as follows:

Fission gases: 1E-4 μ Ci/ml
 Iodines: 1E-12 μ Ci/ml
 Particulates: 1E-11 μ Ci/ml

TABLE 1C
 PILGRIM NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1993
 GASEOUS EFFLUENTS-GROUND LEVEL RELEASE
 July - December 1993

Nuclides Released	CONTINUOUS MODE				BATCH MODE	
	Unit	Quarter	Quarter	Quarter	Quarter	
		3rd	4th	N/A	N/A	

1. Fission and Activation Gases

Kr-85m	Ci	NDA	NDA		
Kr-87	Ci	NDA	NDA		
Kr-88	Ci	NDA	NDA		
Xe-133	Ci	NDA	1.28E+1		
Xe-135	Ci	5.45E+1	1.10E+2		
Xe-135m	Ci	NDA	NDA		
Xe-138	Ci	NDA	NDA		
Total for period	Ci	5.45E+1	1.23E+2		

2. Iodines

I-131	Ci	1.62E-3	2.14E-3		
I-133	Ci	1.44E-2	3.92E-2		
Total for period	Ci	1.61E-2	4.13E-2		

3. Particulates

Sr-89	Ci	4.11E-4	5.18E-4		
Sr-90	Ci	NDA	NDA		
Cs-134	Ci	NDA	NDA		
Cs-137	Ci	NDA	NDA		
Ba/La-140	Ci	4.97E-4	9.01E-4		
Total for period	Ci	9.08E-4	1.43E-3		

4. Tritium

H-3	Ci	4.37E+0	5.06E+0		
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Notes for Table 1C:

1. NDA is no detectable activity.
2. LLDs for nuclides listed as NDA are as follows:

Fission gases: 1E-4 μ Ci/ml
 Iodines: 1E-12 μ Ci/ml
 Particulates: 1E-11 μ Ci/ml

TABLE 2A
 EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1993
 LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES
 July - December 1993

Unit	Quarter 3rd	Quarter 4th	Est.Total Error,%
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A. Fission and Activation Products

1. Total release (not including tritium, noble gases, or alpha)	Ci	2.30E-3	6.28E-4	12%
2. Average diluted concentration during period	uCi/ml	1.20E-9	1.51E-9	
3. Percent of applicable MPC limit*	%	7.91E-3	9.87E-3	

B. Tritium

1. Total release	Ci	7.78E-1	1.02E-3	9.4%
2. Average diluted concentration during period	uCi/ml	4.05E-7	2.46E-9	
3. Percent of applicable MPC limit*	%	1.35E-2	8.19E-5	

C. Dissolved and Entrained Gases

1. Total release	Ci	NDA	NDA	16%
2. Average release rate for period during period	uCi/ml	NDA	NDA	
3. Percent of applicable MPC limit*	%	0.00E+0	0.00E+0	

D. Gross Alpha Radioactivity

1. Total release	Ci	NDA	NDA	34%
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E. Volume of Waste Released (prior to dilution)

liters	3.51E+5	1.86E+4	5.7%
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F. Volume of Dilution Water Used During Period

liters	1.92E+9	4.15E+8	10%
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Notes for Table 2A:

* Additional percent of Technical Specification Limit Values based on resulting dose will be provided in the annual supplemental dose assessment report to be issued prior to April 1, 1994.

1. NDA is no detectable activity.
2. LLD for gross alpha listed as NDA is 1E-7 μ Ci/ml.
3. LLD for dissolved and entrained gases listed as NDA is 1E-5 μ Ci/ml.

TABLE 2B
 PILGRIM NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1993
 LIQUID EFFLUENTS
 July - December 1993

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter	Quarter	Quarter	Quarter
		Not Applicable		3rd	4th

1. Fission and activation products

Cr-51	Ci	N/A	N/A	NDA	NDA
Mn-54	Ci	N/A	N/A	4.06E-4	4.96E-5
Fe-55	Ci	N/A	N/A	1.39E-4	4.20E-5
Fe-59	Ci	N/A	N/A	NDA	NDA
Co-58	Ci	N/A	N/A	1.70E-4	4.51E-5
Co-60	Ci	N/A	N/A	1.23E-3	3.92E-4
Zn-65	Ci	N/A	N/A	NDA	2.37E-6
Sr-89	Ci	N/A	N/A	1.13E-4	1.77E-5
Sr-90	Ci	N/A	N/A	1.65E-5	3.24E-6
Zr/Nb-95	Ci	N/A	N/A	NDA	NDA
Mo-99/Tc-99m	Ci	N/A	N/A	NDA	NDA
Ru-103	Ci	N/A	N/A	NDA	NDA
Aq-110m	Ci	N/A	N/A	NDA	NDA
I-131	Ci	N/A	N/A	2.65E-7	1.93E-6
Cs-134	Ci	N/A	N/A	NDA	NDA
Cs-137	Ci	N/A	N/A	2.25E-4	6.77E-5
Ba/La-140	Ci	N/A	N/A	NDA	6.09E-6
Ce-141	Ci	N/A	N/A	NDA	5.19E-7
Ce/Pr-144	Ci	N/A	N/A	NDA	NDA
Total for period	Ci	N/A	N/A	2.30E-3	6.28E-4

2. Dissolved and entrained gases

Xe-133	Ci	N/A	N/A	NDA	NDA
Xe-135	Ci	N/A	N/A	NDA	NDA
Total for period	Ci	N/A	N/A	NDA	NDA

Notes for Table 2B:

- 1) NDA is no detectable activity.
- 2) LLDs for nuclides listed as NDA are as follows:

Sr-89	5E-8 $\mu\text{Ci/ml}$
I-131	1E-6 $\mu\text{Ci/ml}$
Xe-133, Xe-135	1E-5 $\mu\text{Ci/ml}$
All others	5E-7 $\mu\text{Ci/ml}$

3. RADIOACTIVE WASTE DISPOSAL DATA

Radioactive wastes (Reference 2) which were shipped off-site for burial during the period July 1 to December 31, 1993 are given in Table 3, in the standard NRC Regulatory Guide 1.21 format.

The semiannual total quantity of radioactivity in curies and the total volume in cubic meters for the following categories or waste types are listed in Table 3:

- a. Spent resins, filter sludges, evaporator bottoms;
- b. Dry compressible waste, contaminated equipment, etc.;
- c. Irradiated components, control rods, etc.; and,
- d. Other.

During July 1 to December 31, 1993 approximately 32 cubic meters of spent resins, filter sludges, etc. with a total activity of about 503 curies were shipped from Pilgrim Station to an approved burial site. Approximately 33 cubic meters of dry compressible waste or contaminated equipment containing about 0.9 curies of activity was shipped off-site for burial during this period. Irradiated components and other miscellaneous low-level waste were not disposed of during this reporting period. Irradiated fuel shipments were not made during this period.

Eighteen shipments to Barnwell, SC (Chem Nuclear Systems, Inc.), nineteen shipments to Oak Ridge, TN (thirteen to Scientific Ecology Group; six to Quadrex Corp.), and six shipments to Wampum, PA (Alaron Corp.) were made during the period July 1 to December 31, 1993. Estimates of major radionuclides shipped off-site are listed in Table 3.

TABLE 3

PILGRIM NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1993)
JULY - DECEMBER 1993

A. SOLID WASTE SHIPPED OFF-SITE FOR BURIAL OR DISPOSAL. (NOT IRRADIATED FUEL)

1. TYPE OF WASTE

	6 MONTH PERIOD		
	VOLUME m ³	ACTIVITY Ci	EST. TOTAL ERROR %
a. Spent resins, filter sludges, evaporator bottoms, etc.	3.25E+01	5.03E+02	± 25
b. Dry compressible waste,	3.26E+01	8.98E-01	± 25
c. Irradiated components, control rods, etc.	0.00E+00	0.00E+00	N/A
d. Other miscellaneous low- level waste (describe)	0.00E+00	0.00E+00	N/A
TOTAL COMBINED WASTE	6.51E+01	5.04E+02	± 25

2. Estimate of major composition. (By type of waste)

a. Spent resin, filter sludges, evaporator bottoms, etc.

<u>NUCLIDE NAME</u>	<u>CURIES</u>	<u>PERCENT ABUNDANCE</u>
H-3	9.01E-03	2.00E-03
C-14	1.50E-01	3.00E-02
Cr-51	1.40E-01	2.80E-02
Mn-54	3.70E+01	7.37E+00
Fe-55	2.23E+02	4.44E+01
Co-58	9.72E+00	1.93E+00
Fe-59	5.59E-02	1.10E-02
Ni-59	1.70E-04	<1.00E-03
Co-60	2.26E+02	4.50E+01
Ni-63	1.87E+00	3.72E-01
Sr-90	3.44E-01	6.80E-02
I-131	6.83E-02	1.40E-02
Ce-141	1.20E-01	2.40E-02
Ce-144	2.68E-01	5.30E-02
Cs-137	3.55E+00	7.06E-01
Pu-238	8.31E-04	<1.00E-03
Pu-239/240	1.46E-03	<1.00E-03
Pu-241	9.86E-02	2.00E-02
Am-241	1.13E-03	<1.00E-03
Cm-242	2.06E-03	<1.00E-03
Cm-243/244	5.80E-06	<1.00E-03
Total	5.03E+02	

b. Dry compressible waste, contaminated equipment etc.

<u>NUCLIDE NAME</u>	<u>CURIES</u>	<u>PERCENT ABUNDANCE</u>
Cr-51	1.30E-02	1.45E+00
Mn-54	5.19E-02	5.78E+00
Fe-55	5.23E-01	5.82E+01
Co-58	9.34E-03	1.04E+00
Co-60	2.08E-01	2.32E+01
Fe-59	1.25E-02	1.39E+00
Ni-59	8.98E-05	1.00E-02
Ni-63	1.29E-02	1.44E+00
Sr-89	1.17E-03	1.30E-01
Sr-90	7.19E-04	8.00E-02
Nb-95	4.13E-03	4.60E-01
Ru-103	1.26E-03	1.40E-01
Cs-134	1.71E-03	1.90E-01
Cs-137	3.95E-02	4.40E+00
Ce-144	1.60E-02	1.78E+00
Pu-238	8.98E-05	1.00E-02
Pu-239/240	8.98E-05	1.00E-02
Pu-241	1.80E-03	2.00E-01
Am-241	8.98E-05	1.00E-02
Cm-242	8.98E-05	1.00E-02
Cm-243/244	8.98E-05	1.00E-02
Total	8.98E-01	

c. Irradiated components, control rods, etc.

<u>NUCLIDE NAME</u>	<u>CURIES</u>	<u>PERCENT ABUNDANCE</u>
Total	0.000	0.000

d. Other (describe miscellaneous low level waste).

<u>NUCLIDE NAME</u>	<u>CURIES</u>	<u>PERCENT ABUNDANCE</u>
Total	0.000	0.000

3. Solid Waste Disposition

<u>NUMBER OF SHIPMENTS</u>	<u>MODE OF TRANSPORTATION</u>	<u>DESTINATION</u>
18	Tractor-Trailer	Chem Nuclear Systems, Inc. Barnwell, SC
13	Tractor-Trailer	Scientific Ecology Group Oak Ridge, TN/ Barnwell, SC; Beatty, NV+
6	Tractor-Trailer	Quadrex, Oak Ridge, TN/ Barnwell, SC; Beatty, NV*
6	Tractor-Trailer	Alaron, Wampum, PA/ Barnwell, SC++

+ Contaminated wastes are shipped to Scientific Ecology Group, Oak Ridge, TN for volume reduction processing. After processing, the remaining wastes are shipped to either Chem Nuclear Systems, Inc., Barnwell, SC or U.S. Ecology, Inc., Beatty, Nevada for burial under Boston Edison's burial allocation.

* Contaminated wastes are shipped to Quadrex Corp., Oak Ridge, TN for volume reduction/salvage. After processing, the remaining wastes are shipped to Chem Nuclear Systems, Inc., Barnwell, SC or U.S. Ecology, Inc., Beatty, NV for burial under Boston Edison's burial allocation.

++ Contaminated wastes are shipped to Alaron Corp., Wampum, PA for volume reduction/salvage. After processing, the remaining wastes are shipped to Chem Nuclear Systems, Inc., Barnwell, SC for burial under Boston Edison's burial allocation.

B. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

<u>NUMBER OF SHIPMENTS</u>	<u>MODE OF TRANSPORTATION</u>	<u>DESTINATION</u>
NONE	N/A	N/A

4. METEOROLOGICAL DATA

Meteorological data (Reference 3) for the period July 1 to December 31, 1993 is given in Tables 4A-1 and 4A-2 in the standard joint frequency distribution format as given in NRC Regulatory Guide 1.21.

The predominant wind direction was from the south-southwest, which occurred about 15% of the time during this period. The predominant wind speed range at the 220 foot sensor was 13 to 18 mph, which occurred with a frequency of 36% during this period. The predominant wind speed range at the 33 foot sensor was 4 to 7 mph, which occurred approximately 55% of the time. The predominant stability class was stability class D, which occurred about 35% of the time during this period.

There were instances where the data recorded by the 220 foot tower were not continuous. Typically, data losses were due to loss of power, malfunction of the sensors, and/or malfunction of the digital dataloggers. Problems were also encountered with the mainframe computer used to archive meteorological data, which resulted in some periods during which digital data were not captured. However, strip chart traces of meteorological data were available in the PNPS control room during these instances of computer problems. A replacement datalogging system was installed in December 1993 throughout the entire Boston Edison meteorological monitoring system, which should result in increased data capture capabilities in the future. The net result is that the data recovery for the period was 95.3% on the 33 foot elevation and 90.5% on the 220 foot elevation of the 220 foot meteorological tower at Pilgrim Station.

When averaged over the entire period of January-December 1993, the annual joint data recovery was 90.8% at the 33 foot level and 87.0% at the 220 foot level. Although the data recovery at the 220 foot level during 1993 did not quite meet the 90% data recovery goal recommended in Safety Guide 23, the replacement system installed in December of 1993 should increase overall reliability and assist in meeting the data recovery goal in the future.

TABLE 4A-1

DISTRIBUTION OF WIND DIRECTIONS
AND SPEEDS FOR THE 33 FT. LEVEL
OF THE 220 FT. TOWER

PILGRIM JUL93-SEP93 MET DATA JCINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS A

CLASS FREQUENCY (PERCENT) = 13.26

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	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	5
(1)	.36	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.71	.71	.00	1.78
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.09	.00	.24
4-7	25	39	22	44	12	9	6	1	2	1	3	9	15	13	7	12	0	220
(1)	8.90	13.88	7.83	15.66	4.27	3.20	2.14	.36	.71	.36	1.07	3.20	5.34	4.63	2.49	4.27	.00	78.29
(2)	1.18	1.84	1.04	2.08	.57	.42	.28	.05	.09	.05	.14	.42	.71	.61	.33	.57	.00	10.38
8-12	0	0	0	0	0	0	0	0	15	32	5	1	0	0	1	0	0	54
(1)	.00	.00	.00	.00	.00	.00	.00	.00	5.34	11.39	1.78	.36	.00	.00	.36	.00	.00	19.22
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.71	1.51	.24	.05	.00	.00	.05	.00	.00	2.55
13-18	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.71	.00	.00	.00	.00	.00	.00	.00	.71
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.09
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	26	39	22	44	12	9	6	1	17	35	8	10	15	13	10	14	0	281
(1)	9.25	13.88	7.83	15.66	4.27	3.20	2.14	.36	6.05	12.46	2.85	3.56	5.34	4.63	3.56	4.98	.00	100.00
(2)	1.23	1.84	1.04	2.08	.57	.42	.28	.05	.80	1.65	.38	.47	.71	.61	.47	.66	.00	13.26

(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-1 (continued)

PILGR., SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS B

CLASS FREQUENCY (PERCENT) = 4.15

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	N	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	WNW	VRBL	TOTAL
CALM	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
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	1	0	0	0	0	0	1	0	0	0	0	0	0	1	1	3	0	7
(1)	1.14	.00	.00	.00	.00	.00	1.14	.00	.00	.00	.00	.00	.00	1.14	1.14	3.41	.00	7.95
(2)	.05	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05	.05	.14	.00	.33
4-7	3	4	3	10	9	2	2	0	1	5	0	5	9	3	0	4	0	60
(1)	3.41	4.55	3.41	11.36	10.23	2.27	2.27	.00	1.14	5.68	.00	5.68	10.23	3.41	.00	4.55	.00	68.18
(2)	.14	.19	.14	.47	.42	.09	.09	.00	.05	.24	.00	.24	.42	.14	.00	.19	.00	2.83
8-12	0	0		0	0	0	0	0	5	6	8	1	0	0	0	0	0	20
(1)	.00	.00		.00	.00	.00	.00	.00	5.68	6.82	9.09	1.14	.00	.00	.00	.00	.00	22.73
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.24	.28	.38	.05	.00	.00	.00	.00	.00	.94
13-18	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.14	.00	.00	.00	.00	.00	.00	.00	1.14
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05
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	4	3	10	9	2	3	0	6	12	8	6	9	4	1	7	0	88
(1)	4.55	4.55	3.41	11.36	10.23	2.27	3.41	.00	6.82	13.64	9.09	6.82	10.23	4.55	1.14	7.95	.00	100.00
(2)	.19	.19	.14	.47	.42	.09	.14	.00	.28	.57	.38	.28	.42	.19	.05	.33	.00	4.15

(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-1 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS C

CLASS FREQUENCY (PERCENT) = 3.49

WIND DIRECTION FROM

SPEED(MPH)	M	MNE	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	3	0	1	0	0	0	0	0	1	0	0	0	0	2	0	0	9
(1)	2.70	4.05	.00	1.35	.00	.00	.00	.00	.00	1.35	.00	.00	.00	.00	2.70	.00	.00	12.16
(2)	.09	.14	.00	.05	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.09	.00	.00	.42
4-7	2	3	6	4	6	2	5	0	1	3	3	3	5	1	2	2	0	48
(1)	2.70	4.05	8.11	5.41	8.11	2.70	6.76	.00	1.35	4.05	4.05	4.05	6.76	1.35	2.70	2.70	.00	64.86
(2)	.09	.14	.28	.19	.28	.09	.24	.00	.05	.14	.14	.14	.24	.05	.09	.09	.00	2.27
8-12	0	0	0	0	0	0	0	0	4	9	3	1	0	0	0	0	0	17
(1)	.00	.00	.00	.00	.00	.00	.00	.00	5.41	12.16	4.05	1.35	.00	.00	.00	.00	.00	22.97
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.19	.42	.14	.05	.00	.00	.00	.00	.00	.80
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	6	6	5	6	2	5	0	5	13	6	4	5	1	4	2	0	74
(1)	5.41	8.11	8.11	6.76	8.11	2.70	6.76	.00	6.76	17.57	8.11	5.41	6.76	1.35	5.41	2.70	.00	100.00
(2)	.19	.28	.28	.24	.28	.09	.24	.00	.24	.61	.28	.19	.24	.05	.19	.09	.00	3.49

(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-1 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS D

CLASS FREQUENCY (PERCENT) = 30.63

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	1	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	.15
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05
C-3	6	11	12	11	6	10	14	11	2	3	6	5	4	7	11	14	0	133
(1)	.92	1.69	1.85	1.69	.92	1.54	2.16	1.69	.31	.46	.92	.77	.62	1.08	1.69	2.16	.00	20.49
(2)	.28	.52	.57	.52	.28	.47	.66	.52	.09	.14	.28	.24	.19	.33	.52	.66	.00	6.28
4-7	10	18	26	22	30	29	18	16	43	70	21	21	16	7	5	8	0	360
(1)	1.54	2.77	4.01	3.39	4.62	4.47	2.77	2.47	6.63	10.79	3.24	3.24	2.47	1.08	.77	1.23	.00	55.47
(2)	.47	.85	1.23	1.04	1.42	1.37	.85	.76	2.03	3.30	.99	.99	.76	.33	.24	.38	.00	16.99
8-12	0	0	18	0	2	0	0	0	27	90	11	2	0	0	0	1	0	151
(1)	.00	.00	2.77	.00	.31	.00	.00	.00	4.16	13.87	1.69	.31	.00	.00	.00	.15	.00	23.27
(2)	.00	.00	.85	.00	.09	.00	.00	.00	1.27	4.25	.52	.09	.00	.00	.00	.05	.00	7.13
13-18	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	4
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.31	.31	.00	.00	.00	.00	.00	.00	.00	.62
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.09	.09	.00	.00	.00	.00	.00	.00	.00	.19
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	16	29	56	33	38	39	32	27	74	165	38	28	20	15	16	23	0	649
(1)	2.47	4.47	8.63	5.08	5.86	6.01	4.93	4.16	11.40	25.42	5.86	4.31	3.08	2.31	2.47	3.54	.00	100.00
(2)	.76	1.37	2.64	1.56	1.79	1.84	1.51	1.27	3.49	7.79	1.79	1.32	.94	.71	.76	1.09	.00	30.63

(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-1 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS E

CLASS FREQUENCY (PERCENT) = 31.81

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	4
(1)	.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	.00	.15	.00	.00	.59
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.05	.00	.00	.19
C-3	16	12	10	9	9	5	17	17	28	8	14	5	4	13	11	6	0	184
(1)	2.37	1.78	1.48	1.34	1.34	.74	2.52	2.52	4.15	1.19	2.08	.74	.59	1.93	1.63	.89	.00	27.30
(2)	.76	.57	.47	.42	.42	.24	.80	.80	1.32	.38	.66	.24	.19	.61	.52	.28	.00	8.68
4-7	7	15	6	18	20	8	4	4	40	87	55	63	22	15	16	15	0	395
(1)	1.04	2.23	.89	2.67	2.97	1.19	.59	.59	5.93	12.91	8.16	9.35	3.26	2.23	2.37	2.23	.00	58.61
(2)	.33	.71	.28	.85	.94	.38	.19	.19	1.89	4.11	2.60	2.97	1.04	.71	.76	.71	.00	18.64
8-12	0	1	0	0	0	0	0	1	5	57	23	1	0	1	0	1	0	90
(1)	.00	.15	.00	.00	.00	.00	.00	.15	.74	8.46	3.41	.15	.00	.15	.00	.15	.00	13.35
(2)	.00	.05	.00	.00	.00	.00	.00	.05	.24	2.69	1.09	.05	.00	.05	.00	.05	.00	4.25
13-18	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	.15	.00	.00	.00	.00	.00	.00	.00	.00	.15
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05
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	24	28	16	27	29	13	21	22	74	152	92	69	28	29	28	22	0	674
(1)	3.56	4.15	2.37	4.01	4.30	1.93	3.12	3.26	10.98	22.55	13.65	10.24	4.15	4.30	4.15	3.26	.00	100.00
(2)	1.13	1.32	.76	1.27	1.37	.61	.99	1.04	3.49	7.17	4.34	3.26	1.32	1.37	1.32	1.04	.00	31.81

(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-1 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA STABILITY CLASS F CLASS FREQUENCY (PERCENT) = 13.87

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	2	0	4	0	3	3	6	16	13	16	25	17	2	2	1	0	110
(1)	.00	.68	.00	1.36	.00	1.02	1.02	2.04	5.44	4.42	5.44	8.50	5.78	.68	.68	.34	.00	37.41
(2)	.00	.09	.00	.19	.00	.14	.14	.28	.76	.61	.76	1.18	.80	.09	.09	.05	.00	5.19
4-7	0	0	0	1	0	1	0	0	9	22	92	22	4	1	5	0	0	157
(1)	.00	.00	.00	.34	.00	.34	.00	.00	3.06	7.48	31.29	7.48	1.36	.34	1.70	.00	.00	53.40
(2)	.00	.00	.00	.05	.00	.05	.00	.00	.42	1.04	4.34	1.04	.19	.05	.24	.00	.00	7.41
8-12	0	0	0	0	0	0	0	0	0	12	15	0	0	0	0	0	0	27
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.08	5.10	.00	.00	.00	.00	.00	.00	9.18
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.57	.71	.00	.00	.00	.00	.00	.00	1.27
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	0	2	0	5	0	4	3	6	25	47	123	47	21	3	7	1	0	294
(1)	.00	.68	.00	1.70	.00	1.36	1.02	2.04	8.50	15.99	41.84	15.99	7.14	1.02	2.38	.34	.00	100.00
(2)	.00	.09	.00	.24	.00	.19	.14	.28	1.18	2.22	5.80	2.22	.99	.14	.33	.05	.00	13.87

(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-1 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS G

CLASS FREQUENCY (PERCENT) = 2.78

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	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	11	8	2	0	0	0	0	22
(1)	.00	.00	.00	.00	.00	.00	.00	.00	1.69	.00	18.64	13.56	3.39	.00	.00	.00	.00	37.29
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.52	.38	.09	.00	.00	.00	.00	1.04
4-7	0	0	0	0	1	0	0	0	0	4	29	3	0	0	0	0	0	37
(1)	.00	.00	.00	.00	1.69	.00	.00	.00	.00	6.78	49.15	5.08	.00	.00	.00	.00	.00	62.71
(2)	.00	.00	.00	.00	.05	.00	.00	.00	.00	.19	1.37	.14	.00	.00	.00	.00	.00	1.75
8-12	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
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	0	0	0	0	1	0	0	0	1	4	40	11	2	0	0	0	0	59
(1)	.00	.00	.00	.00	1.69	.00	.00	.00	1.69	6.78	67.80	18.64	3.39	.00	.00	.00	.00	100.00
(2)	.00	.00	.00	.00	.05	.00	.00	.00	.05	.19	1.89	.52	.09	.00	.00	.00	.00	2.78

(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-1 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS ALL

CLASS FREQUENCY (PERCENT) = 100.00

WIND DIRECTION FROM

SPEED(MPH)	W	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	1	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	5
(1)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.05	.00	.00	.24
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.05	.00	.00	.24
C-3	26	28	22	25	15	18	35	34	47	25	47	43	27	23	29	26	0	470
(1)	1.23	1.32	1.04	1.18	.71	.85	1.65	1.60	2.22	1.18	2.22	2.03	1.27	1.09	1.37	1.23	.00	22.18
(2)	1.23	1.32	1.04	1.18	.71	.85	1.65	1.60	2.22	1.18	2.22	2.03	1.27	1.09	1.37	1.23	.00	22.18
4-7	47	79	63	99	78	51	35	21	96	192	203	126	71	40	35	41	0	1277
(1)	2.22	3.73	2.97	4.67	3.68	2.41	1.65	.99	4.53	9.06	9.58	5.95	3.35	1.89	1.65	1.93	.00	60.26
(2)	2.22	3.73	2.97	4.67	3.68	2.41	1.65	.99	4.53	9.06	9.58	5.95	3.35	1.89	1.65	1.93	.00	60.26
8-12	0	1	18	0	2	0	0	1	56	206	65	6	0	1	1	2	0	359
(1)	.00	.05	.85	.00	.09	.00	.00	.05	2.64	9.72	3.07	.28	.00	.05	.05	.09	.00	16.94
(2)	.00	.05	.85	.00	.09	.00	.00	.05	2.64	9.72	3.07	.28	.00	.05	.05	.09	.00	16.94
13-18	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	8
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.14	.24	.00	.00	.00	.00	.00	.00	.00	.38
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.14	.24	.00	.00	.00	.00	.00	.00	.00	.38
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	74	108	103	124	95	69	70	56	202	428	315	175	100	65	66	69	0	2119
(1)	3.49	5.10	4.86	5.85	4.48	3.26	3.30	2.64	9.53	20.20	14.87	8.26	4.72	3.07	3.11	3.26	.00	100.00
(2)	3.49	5.10	4.86	5.85	4.48	3.26	3.30	2.64	9.53	20.20	14.87	8.26	4.72	3.07	3.11	3.26	.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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS A

CLASS FREQUENCY (PERCENT) = 5.03

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	2	0	0	0	0	1	0	0	1	0	5
(1)	.00	.00	.00	.00	.00	.00	.95	1.90	.00	.00	.00	.00	.95	.00	.00	.95	.00	4.76
(2)	.00	.00	.00	.00	.00	.00	.05	.10	.00	.00	.00	.00	.05	.00	.00	.05	.00	.24
4-7	13	7	5	2	2	0	1	0	0	0	0	0	6	14	11	5	0	66
(1)	12.38	6.67	4.76	1.90	1.90	.00	.95	.00	.00	.00	.00	.00	5.71	13.33	10.48	4.76	.00	62.86
(2)	.62	.34	.24	.10	.10	.00	.05	.00	.00	.00	.00	.00	.29	.67	.53	.24	.00	3.16
8-12	12	0	0	0	0	1	0	0	0	2	1	3	2	4	1	1	0	27
(1)	11.43	.00	.00	.00	.00	.95	.00	.00	.00	1.90	.95	2.86	1.90	3.81	.95	.95	.00	25.71
(2)	.57	.00	.00	.00	.00	.05	.00	.00	.00	.10	.05	.14	.10	.19	.05	.05	.00	1.29
13-18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
(1)	2.86	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.86
(2)	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
19-24	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
(1)	.00	3.81	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.81
(2)	.00	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19
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	28	11	5	2	2	1	2	2	0	2	1	3	9	18	12	7	0	105
(1)	26.67	10.48	4.76	1.90	1.90	.95	1.90	1.90	.00	1.90	.95	2.86	8.57	17.14	11.43	6.67	.00	100.00
(2)	1.34	.53	.24	.10	.10	.05	.10	.10	.00	.10	.05	.14	.43	.86	.57	.34	.00	5.03

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS B

CLASS FREQUENCY (PERCENT) = 3.30

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	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	3
(1)	.00	1.45	.00	.00	1.45	.00	.00	.00	.00	.00	.00	.00	.00	1.45	.00	.00	.00	4.35
(2)	.00	.05	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.14
4-7	2	1	4	3	2	0	1	0	0	2	1	0	5	2	4	2	0	29
(1)	2.90	1.45	5.80	4.35	2.90	.00	1.45	.00	.00	2.90	1.45	.00	7.25	1.90	5.80	2.90	.00	42.03
(2)	.10	.05	.19	.14	.10	.00	.05	.00	.00	.10	.05	.00	.24	.10	.19	.10	.00	1.39
8-12	0	3	0	2	0	2	0	0	0	4	2	7	2	1	0	2	0	25
(1)	.00	4.35	.00	2.90	.00	2.90	.00	.00	.00	5.80	2.90	10.14	2.90	1.45	.00	2.90	.00	36.23
(2)	.00	.14	.00	.10	.00	.10	.00	.00	.00	.19	.10	.34	.10	.05	.00	.10	.00	1.20
13-18	0	2	0	0	0	2	1	0	0	3	0	0	0	0	0	0	0	8
(1)	.00	2.90	.00	.00	.00	2.90	1.45	.00	.00	4.35	.00	.00	.00	.00	.00	.00	.00	11.59
(2)	.00	.10	.00	.00	.00	.10	.05	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.38
19-24	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
(1)	.00	5.80	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.80
(2)	.00	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19
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	2	11	4	5	3	4	2	0	0	9	3	7	7	4	4	4	0	69
(1)	2.90	15.94	5.80	7.25	4.35	5.80	2.90	.00	.00	13.04	4.35	10.14	10.14	5.80	5.80	5.80	.00	100.00
(2)	.10	.53	.19	.24	.14	.19	.10	.00	.00	.43	.14	.34	.34	.19	.19	.19	.00	3.30

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA STABILITY CLASS C CLASS FREQUENCY (PERCENT) = 5.31

WIND DIRECTION FROM

SPEED(MPH)	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
(1)	.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
C-3	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
(1)	.90	.00	.00	.00	.00	.00	.90	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.80
(2)	.05	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
4-7	3	2	2	3	2	2	3	0	0	1	7	1	7	5	3	0	41
(1)	2.70	1.80	1.80	2.70	1.80	1.80	2.70	.00	.00	.90	6.31	.90	6.31	4.50	2.70	.00	36.94
(2)	.14	.10	.10	.14	.10	.10	.14	.01	.00	.05	.34	.05	.34	.24	.14	.00	1.96
8-12	1	7	2	1	0	1	0	0	4	8	12	1	3	0	2	1	43
(1)	.90	6.31	1.80	.90	.00	.90	.00	.00	3.60	7.21	10.81	.90	2.70	.00	1.80	.90	38.74
(2)	.05	.34	.10	.05	.00	.05	.00	.00	.19	.38	.57	.05	.14	.00	.10	.05	2.06
13-18	0	10	0	2	0	0	0	0	1	5	0	2	1	0	0	0	21
(1)	.00	9.01	.00	1.80	.00	.00	.00	.00	.90	4.50	.00	1.80	.90	.00	.00	.00	18.92
(2)	.00	.48	.00	.10	.00	.00	.00	.00	.05	.24	.00	.10	.05	.00	.00	.00	1.01
19-24	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
(1)	.00	2.70	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.90	.00	.00	.00	3.60
(2)	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.19
GT 24	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
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	5	22	4	6	2	3	4	0	5	14	19	4	12	5	5	1	111
(1)	4.50	19.82	3.60	5.41	1.80	2.70	3.60	.00	4.50	12.61	17.12	3.60	10.81	4.50	4.50	.90	100.00
(2)	.24	1.05	.19	.29	.10	.14	.19	.00	.24	.67	.91	.19	.57	.24	.24	.05	5.31

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS D

CLASS FREQUENCY (PERCENT) = 39.21

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	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	5	1	3	3	2	3	4	5	4	2	2	5	8	5	4	5	0	61
(1)	.61	.12	.37	.37	.24	.37	.49	.61	.49	.24	.24	.61	.98	.61	.49	.61	.00	7.45
(2)	.24	.05	.14	.14	.10	.14	.19	.24	.19	.10	.10	.24	.38	.24	.19	.24	.00	2.92
4-7	9	4	3	2	8	19	13	16	18	39	21	31	33	35	34	18	0	303
(1)	1.10	.49	.37	.24	.98	2.32	1.59	1.95	2.20	4.76	2.56	3.79	4.03	4.27	4.15	2.20	.00	37.00
(2)	.43	.19	.14	.10	.38	.91	.62	.77	.86	1.87	1.01	1.48	1.58	1.68	1.63	.86	.00	14.50
8-12	11	43	14	9	13	14	16	7	33	33	29	29	36	22	33	13	0	355
(1)	1.34	5.25	1.71	1.10	1.59	1.71	1.95	.85	4.03	4.03	3.54	3.54	4.40	2.69	4.03	1.59	.00	43.35
(2)	.53	2.06	.67	.43	.62	.67	.77	.34	1.58	1.58	1.39	1.39	1.72	1.05	1.58	.62	.00	16.99
13-18	9	40	3	1	0	1	1	2	1	9	5	5	5	3	0	13	0	98
(1)	1.10	4.88	.37	.12	.00	.12	.12	.24	.12	1.10	.61	.61	.61	.37	.00	1.59	.00	11.97
(2)	.43	1.91	.14	.05	.00	.05	.05	.10	.05	.43	.24	.24	.24	.14	.00	.62	.00	4.69
19-24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
(1)	.00	.24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
(2)	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
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	34	90	23	15	23	37	34	30	56	83	57	70	82	65	71	49	0	819
(1)	4.15	10.99	2.81	1.83	2.81	4.52	4.15	3.66	6.84	10.13	6.96	8.55	10.01	7.94	8.67	5.98	.00	100.00
(2)	1.63	4.31	1.10	.72	1.10	1.77	1.63	1.44	2.68	3.97	2.73	3.35	3.93	3.11	3.40	2.35	.00	39.21

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS E

CLASS FREQUENCY (PERCENT) = 36.29

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	1	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.00	.13	.00	.00	.00	.00	.26
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.10
C-3	1	2	1	0	3	0	9	28	32	9	10	11	19	9	5	3	0	142
(1)	.13	.26	.13	.00	.40	.00	1.19	3.69	4.22	1.19	1.32	1.45	2.51	1.19	.66	.40	.00	18.73
(2)	.05	.10	.05	.00	.14	.00	.43	1.34	1.53	.43	.48	.53	.91	.43	.24	.14	.00	6.80
4-7	16	12	7	5	8	8	9	31	55	71	36	77	53	14	24	14	0	440
(1)	2.11	1.58	.92	.66	1.06	1.06	1.19	4.09	7.26	9.37	4.75	10.16	6.99	1.85	3.17	1.85	.00	58.05
(2)	.77	.57	.34	.24	.38	.38	.43	1.48	2.63	3.40	1.72	3.69	2.54	.67	1.15	.67	.00	21.06
8-12	2	0	0	3	6	6	9	5	13	40	24	28	18	0	6	2	0	162
(1)	.26	.00	.00	.40	.79	.79	1.19	.66	1.72	5.28	3.17	3.69	2.37	.00	.79	.26	.00	21.37
(2)	.10	.00	.00	.14	.29	.29	.43	.24	.62	1.91	1.15	1.34	.86	.00	.29	.10	.00	7.75
13-18	1	0	0	0	0	0	0	5	1	2	1	1	1	0	0	0	0	12
(1)	.13	.00	.00	.00	.00	.00	.00	.66	.13	.26	.13	.13	.13	.00	.00	.00	.00	1.58
(2)	.05	.00	.00	.00	.00	.00	.00	.24	.05	.10	.05	.05	.05	.00	.00	.00	.00	.57
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	20	14	8	8	17	14	27	69	101	122	72	117	92	23	35	19	0	758
(1)	2.64	1.85	1.06	1.06	2.24	1.85	3.56	9.10	13.32	16.09	9.50	15.44	12.14	3.03	4.62	2.51	.00	100.00
(2)	.96	.67	.38	.38	.81	.67	1.29	3.30	4.83	5.84	3.45	5.60	4.40	1.10	1.68	.91	.00	36.29

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS F

CLASS FREQUENCY (PERCENT) = 9.14

WIND DIRECTION FROM

SPEED(MPH)	W	WNE	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	3	9	4	12	5	10	2	2	0	0	0	47
(1)	.00	.00	.00	.00	.00	.00	1.57	4.71	2.09	6.28	2.62	5.24	1.05	1.05	.00	.00	.00	24.61
(2)	.00	.00	.00	.00	.00	.00	.14	.43	.19	.57	.24	.48	.10	.10	.00	.00	.00	2.25
4-7	0	0	0	0	0	0	1	7	14	15	52	26	4	2	0	0	0	121
(1)	.00	.00	.00	.00	.00	.00	.52	3.66	7.33	7.85	27.23	13.61	2.09	1.05	.00	.00	.00	63.35
(2)	.00	.00	.00	.00	.00	.00	.05	.34	.67	.72	2.49	1.24	.19	.10	.00	.00	.00	5.79
8-12	0	0	0	0	0	0	0	0	0	0	21	1	1	0	0	0	0	23
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10.99	.52	.52	.00	.00	.00	.00	12.04
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.01	.05	.05	.00	.00	.00	.00	1.10
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	0	0	0	0	0	0	4	16	18	27	78	37	7	4	0	0	0	191
(1)	.00	.00	.00	.00	.00	.00	2.09	8.38	9.42	14.14	40.84	19.37	3.66	2.09	.00	.00	.00	100.00
(2)	.00	.00	.00	.00	.00	.00	.19	.77	.86	1.29	3.73	1.77	.34	.19	.00	.00	.00	9.14

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS G

CLASS FREQUENCY (PERCENT) = 1.72

WIND DIRECTION FROM

SPEED(MPH)	N	NWE	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	1	0	0	0	0	0	0	2	4	0	0	1	0	0	8
(1)	.00	.00	.00	2.78	.00	.00	.00	.00	.00	.00	5.56	11.11	.00	.00	2.78	.00	.00	22.22
(2)	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.10	.19	.00	.00	.05	.00	.00	.38
4-7	0	0	0	0	0	0	0	0	0	3	16	3	2	0	0	0	0	24
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.33	44.44	8.33	5.56	.00	.00	.00	.00	66.67
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.77	.14	.10	.00	.00	.00	.00	1.15
8-12	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	11.11	.00	.00	.00	.00	.00	.00	11.11
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.00	.19
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	0	0	0	1	0	0	0	0	0	3	22	7	2	0	1	0	0	36
(1)	.00	.00	.00	2.78	.00	.00	.00	.00	.00	8.33	61.11	19.44	5.56	.00	2.78	.00	.00	100.00
(2)	.00	.00	.00	.05	.00	.00	.00	.00	.00	.14	1.05	.34	.10	.00	.05	.00	.00	1.72

(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-1 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 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	0	0	0	0	0	0	1	0	1	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.10
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.10
C-3	7	4	4	4	6	3	18	44	40	23	19	30	30	17	10	9	0	268
(1)	.34	.19	.19	.19	.29	.14	.86	2.11	1.91	1.10	.91	1.44	1.44	.81	.48	.43	.00	12.83
(2)	.34	.19	.19	.19	.29	.14	.86	2.11	1.91	1.10	.91	1.44	1.44	.81	.48	.43	.00	12.83
4-7	43	26	21	15	22	29	28	54	87	131	133	138	110	72	76	39	0	1024
(1)	2.06	1.24	1.01	.72	1.05	1.39	1.34	2.58	4.16	6.27	6.37	6.61	5.27	3.45	3.64	1.87	.00	49.02
(2)	2.06	1.24	1.01	.72	1.05	1.39	1.34	2.58	4.16	6.27	6.37	6.61	5.27	3.45	3.64	1.87	.00	49.02
8-12	26	53	16	15	19	24	25	12	50	87	93	69	62	27	42	19	0	639
(1)	1.24	2.54	.77	.72	.91	1.15	1.20	.57	2.39	4.16	4.45	3.30	2.97	1.29	2.01	.91	.00	30.59
(2)	1.24	2.54	.77	.72	.91	1.15	1.20	.57	2.39	4.16	4.45	3.30	2.97	1.29	2.01	.91	.00	30.59
13-18	13	52	3	3	0	3	2	7	3	19	6	8	7	3	0	13	0	142
(1)	.62	2.49	.14	.14	.00	.14	.10	.34	.14	.91	.29	.38	.34	.14	.00	.62	.00	6.80
(2)	.62	2.49	.14	.14	.00	.14	.10	.34	.14	.91	.29	.38	.34	.14	.00	.62	.00	6.80
19-24	0	13	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	14
(1)	.00	.62	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.67
(2)	.00	.62	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.67
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	89	148	44	37	47	59	73	117	180	260	252	245	211	119	128	80	0	2089
(1)	4.26	7.08	2.11	1.77	2.25	2.82	3.49	5.60	8.62	12.45	12.06	11.73	10.10	5.70	6.13	3.83	.00	100.00
(2)	4.26	7.08	2.11	1.77	2.25	2.82	3.49	5.60	8.62	12.45	12.06	11.73	10.10	5.70	6.13	3.83	.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-2

DISTRIBUTION OF WIND DIRECTIONS
AND SPEEDS FOR THE 220 FT. LEVEL
OF THE 220 FT. TOWER

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS A

CLASS FREQUENCY (PERCENT) = 13.29

WIND DIRECTION FROM

SPEED(MPH)	M	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	2	0	0	0	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.72	.00	.00	.00	.00	.00	.00	.00	.00	.72
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.10
4-7	10	4	6	8	8	0	0	0	1	1	1	1	1	6	1	2	0	50
(1)	3.62	1.45	2.17	2.90	2.90	.00	.00	.00	.36	.36	.36	.36	.36	2.17	.36	.72	.00	18.12
(2)	.48	.19	.29	.39	.39	.00	.00	.00	.05	.05	.05	.05	.05	.29	.05	.10	.00	2.41
8-12	27	9	5	9	24	6	1	0	2	5	1	4	4	3	2	4	0	106
(1)	9.78	3.26	1.81	3.26	8.70	2.17	.36	.00	.72	1.81	.36	1.45	1.45	1.09	.72	1.45	.00	38.41
(2)	1.30	.43	.24	.43	1.16	.29	.05	.00	.10	.24	.05	.19	.19	.14	.10	.19	.00	5.11
13-18	8	5	2	1	0	7	7	1	10	19	3	2	8	6	4	11	0	94
(1)	2.90	1.81	.72	.36	.00	2.54	2.54	.36	3.62	6.88	1.09	.72	2.90	2.17	1.45	3.99	.00	34.06
(2)	.39	.24	.10	.05	.00	.34	.34	.05	.48	.92	.14	.10	.39	.29	.19	.53	.00	4.53
19-24	1	2	0	0	0	0	0	0	1	8	4	0	0	2	2	4	0	24
(1)	.36	.72	.00	.00	.00	.00	.00	.00	.36	2.90	1.45	.00	.00	.72	.72	1.45	.00	8.70
(2)	.05	.10	.00	.00	.00	.00	.00	.00	.05	.39	.19	.00	.00	.10	.10	.19	.00	1.16
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	46	20	13	18	32	13	8	1	16	33	9	7	13	17	9	21	0	276
(1)	16.67	7.25	4.71	6.52	11.59	4.71	2.90	.36	5.80	11.96	3.26	2.54	4.71	6.16	3.26	7.61	.00	100.00
(2)	2.22	.96	.63	.87	1.54	.63	.39	.05	.77	1.59	.43	.34	.63	.82	.43	1.01	.00	13.29

(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-2 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS B

CLASS FREQUENCY (PERCENT) = 4.05

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	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.19	.00	.00	.00	.00	.00	.00	.00	1.19
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05
4-7	3	2	1	6	3	0	2	0	0	0	0	2	0	1	0	2	0	22
(1)	3.57	2.38	1.19	7.14	3.57	.00	2.38	.00	.00	.00	.00	2.38	.00	1.19	.00	2.38	.00	26.19
(2)	.14	.10	.05	.29	.14	.00	.10	.00	.00	.00	.00	.10	.00	.05	.00	.10	.00	1.06
8-12	1	1	0	1	1	5	2	0	0	4	0	0	4	2	1	3	0	25
(1)	1.19	1.19	.00	1.19	1.19	5.95	2.38	.00	.00	4.76	.00	.00	4.76	2.38	1.19	3.57	.00	29.76
(2)	.05	.05	.00	.05	.05	.24	.10	.00	.00	.19	.00	.00	.19	.10	.05	.14	.00	1.20
13-18	1	1	0	0	1	2	1	0	5	4	6	3	0	3	0	0	0	27
(1)	1.19	1.19	.00	.00	1.19	2.38	1.19	.00	5.95	4.76	7.14	3.57	.00	3.57	.00	.00	.00	32.14
(2)	.05	.05	.00	.00	.05	.10	.05	.00	.24	.19	.29	.14	.00	.14	.00	.00	.00	1.30
19-24	0	1	0	0	0	0	0	0	0	2	2	0	1	0	0	1	0	7
(1)	.00	1.19	.00	.00	.00	.00	.00	.00	.00	2.38	2.38	.00	1.19	.00	.00	1.19	.00	8.33
(2)	.00	.05	.00	.00	.00	.00	.00	.00	.00	.10	.10	.00	.05	.00	.00	.05	.00	.34
GT 24	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	1.19	.00	.00	.00	.00	.00	1.19	.00	2.38
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05	.00	.10
ALL SPEEDS	5	5	1	7	5	7	5	0	5	12	8	5	5	6	1	7	0	84
(1)	5.95	5.95	1.19	8.33	5.95	8.33	5.95	.00	5.95	14.29	9.52	5.95	5.95	7.14	1.19	8.33	.00	100.00
(2)	.24	.24	.05	.34	.24	.34	.24	.00	.24	.58	.39	.24	.24	.29	.05	.34	.00	4.05

(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-2 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA STABILITY CLASS C CLASS FREQUENCY (PERCENT) = 3.42

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	3	4	4	1	1	2	0	0	0	0	1	0	0	1	1	2	0	20
(1)	4.23	5.63	5.63	1.41	1.41	2.82	.00	.00	.00	.00	1.41	.00	.00	1.41	1.41	2.82	.00	28.17
(2)	.14	.19	.19	.05	.05	.10	.00	.00	.00	.00	.05	.00	.00	.05	.05	.10	.00	.96
8-12	0	1	0	1	3	3	3	0	1	2	0	3	1	1	0	1	0	20
(1)	.00	1.41	.00	1.41	4.23	4.23	4.23	.00	1.41	2.82	.00	4.23	1.41	1.41	.00	1.41	.00	28.17
(2)	.00	.05	.00	.05	.14	.14	.14	.00	.05	.10	.00	.14	.05	.05	.00	.05	.00	.96
13-18	1	0	0	0	0	2	2	0	4	5	2	1	2	1	0	1	0	21
(1)	1.41	.00	.00	.00	.00	2.82	2.82	.00	5.63	7.04	2.82	1.41	2.82	1.41	.00	1.41	.00	29.58
(2)	.05	.00	.00	.00	.00	.10	.10	.00	.19	.24	.10	.05	.10	.05	.00	.05	.00	1.01
19-24	0	0	0	0	0	0	0	0	1	2	3	0	1	0	1	2	0	10
(1)	.00	.00	.00	.00	.00	.00	.00	.00	1.41	2.82	4.23	.00	1.41	.00	1.41	2.82	.00	14.08
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.10	.14	.00	.05	.00	.05	.10	.00	.48
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	4	2	4	7	5	0	6	9	6	4	4	3	2	6	0	71
(1)	5.63	7.04	5.63	2.82	5.63	9.86	7.04	.00	8.45	12.68	8.45	5.63	5.63	4.23	2.82	8.45	.00	100.00
(2)	.19	.24	.19	.10	.19	.34	.24	.00	.29	.43	.29	.19	.19	.14	.10	.29	.00	3.42

(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-2 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS D

CLASS FREQUENCY (PERCENT) = 30.15

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	2	2	1	0	1	0	0	2	0	1	0	2	0	2	0	15
(1)	.32	.00	.32	.32	.16	.00	.16	.00	.00	.32	.00	.16	.00	.32	.00	.32	.00	2.40
(2)	.10	.00	.10	.10	.05	.00	.05	.00	.00	.10	.00	.05	.00	.10	.00	.10	.00	.72
4-7	9	10	11	7	11	13	12	2	4	2	7	6	3	5	3	4	0	109
(1)	1.44	1.60	1.76	1.12	1.76	2.08	1.92	.32	.64	.32	1.12	.96	.48	.80	.48	.64	.00	17.41
(2)	.43	.48	.53	.34	.53	.63	.58	.10	.19	.10	.34	.29	.14	.24	.14	.19	.00	5.25
8-12	9	9	8	4	11	33	35	20	14	25	4	5	5	4	4	7	0	197
(1)	1.44	1.44	1.28	.64	1.76	5.27	5.59	3.19	2.24	3.99	.64	.80	.80	.64	.64	1.12	.00	31.47
(2)	.43	.43	.39	.19	.53	1.59	1.69	.96	.67	1.20	.19	.24	.24	.19	.19	.34	.00	9.49
13-18	8	8	11	3	2	6	3	3	29	85	21	5	7	9	5	8	0	213
(1)	1.28	1.28	1.76	.48	.32	.96	.48	.48	4.63	13.58	3.35	.80	1.12	1.44	.80	1.28	.00	34.03
(2)	.39	.39	.53	.14	.10	.29	.14	.14	1.40	4.09	1.01	.24	.34	.43	.24	.39	.00	10.26
19-24	0	8	7	0	0	0	6	0	8	38	12	0	0	2	2	3	0	86
(1)	.00	1.28	1.12	.00	.00	.00	.96	.00	1.28	6.07	1.92	.00	.00	.32	.32	.48	.00	13.74
(2)	.00	.39	.34	.00	.00	.00	.29	.00	.39	1.83	.58	.00	.00	.10	.10	.14	.00	4.14
GT 24	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	0	6
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.32	.32	.00	.00	.00	.00	.00	.32	.00	.96
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.10	.10	.00	.00	.00	.00	.00	.10	.00	.29
ALL SPEEDS	28	35	39	16	25	52	57	25	57	154	44	17	15	22	14	26	0	626
(1)	4.47	5.59	6.23	2.56	3.99	8.31	9.11	3.99	9.11	24.60	7.03	2.72	2.40	3.51	2.24	4.15	.00	100.00
(2)	1.35	1.69	1.88	.77	1.20	2.50	2.75	1.20	2.75	7.42	2.12	.82	.72	1.06	.67	1.25	.00	30.15

(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-2 (continued)

*ILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA STABILITY CLASS E CLASS FREQUENCY (PERCENT) = 32.03

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	2	1	6	1	0	1	1	0	1	1	0	0	1	2	0	17
(1)	.00	.00	.30	.15	.90	.15	.00	.15	.15	.00	.15	.15	.00	.00	.15	.30	.00	2.56
(2)	.00	.00	.10	.05	.29	.05	.00	.05	.05	.00	.05	.05	.00	.00	.05	.10	.00	.82
4-7	6	8	14	6	7	10	5	6	4	6	7	3	3	4	2	3	0	94
(1)	.90	1.20	2.11	.90	1.05	1.50	.75	.90	.60	.90	1.05	.45	.45	.60	.30	.45	.00	14.14
(2)	.20	.39	.67	.29	.34	.48	.24	.29	.19	.29	.34	.14	.14	.19	.10	.14	.00	4.53
8-12	6	3	5	4	6	23	14	15	17	15	11	6	4	7	6	8	0	150
(1)	.90	.45	.75	.60	.90	3.46	2.11	2.26	2.56	2.26	1.65	.90	.60	1.05	.90	1.20	.00	22.56
(2)	.29	.14	.24	.19	.29	1.11	.67	.72	.82	.72	.53	.29	.19	.34	.29	.39	.00	7.23
13-18	20	5	2	1	5	2	5	5	15	78	35	30	27	18	20	13	0	281
(1)	3.01	.75	.30	.15	.75	.30	.75	.75	2.26	11.73	5.26	4.51	4.06	2.71	3.01	1.95	.00	42.26
(2)	.96	.24	.10	.05	.24	.10	.24	.24	.72	3.76	1.69	1.45	1.30	.87	.96	.63	.00	13.54
19-24	5	1	0	0	0	0	1	1	2	39	32	5	15	9	4	6	0	120
(1)	.75	.15	.00	.00	.00	.00	.15	.15	.30	5.86	4.81	.75	2.26	1.35	.60	.90	.00	18.05
(2)	.24	.05	.00	.00	.00	.00	.05	.05	.10	1.88	1.54	.24	.72	.43	.19	.29	.00	5.78
GT 24	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.30	.00	.00	.00	.00	.00	.15	.00	.00	.45
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.05	.00	.00	.14
ALL SPEEDS	37	17	23	12	24	36	25	28	41	138	86	45	49	38	34	32	0	665
(1)	5.56	2.56	3.46	1.80	3.61	5.41	3.76	4.21	6.17	20.75	12.93	6.77	7.37	5.71	5.11	4.81	.00	100.00
(2)	1.78	.82	1.11	.58	1.16	1.73	1.20	1.35	1.97	6.65	4.14	2.17	2.36	1.83	1.64	1.54	.00	32.03

(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-2 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS F

CLASS FREQUENCY (PERCENT) = 14.21

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	2	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.68	.00	.68
(2)	.00	.00	.00	.90	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.10
C-3	0	3	0	0	0	1	0	3	0	1	0	0	0	0	2	1	0	11
(1)	.00	1.02	.00	.00	.00	.34	.00	1.02	.00	.34	.00	.00	.00	.00	.68	.34	.00	3.73
(2)	.00	.14	.00	.00	.00	.05	.00	.14	.00	.05	.00	.00	.00	.00	.10	.05	.00	.53
4-7	3	3	0	1	5	5	4	6	2	4	4	4	0	1	4	2	0	48
(1)	1.02	1.02	.00	.34	1.69	1.69	1.36	2.03	.68	1.36	1.36	1.36	.00	.34	1.36	.68	.00	16.27
(2)	.14	.14	.00	.05	.24	.24	.19	.29	.10	.19	.19	.19	.00	.05	.19	.10	.00	2.31
8-12	1	0	1	0	2	4	2	6	4	5	9	16	12	10	14	0	0	86
(1)	.34	.00	.34	.00	.68	1.36	.68	2.03	1.36	1.69	3.05	5.42	4.07	3.39	4.75	.00	.00	29.15
(2)	.05	.00	.05	.00	.10	.19	.10	.29	.19	.24	.43	.77	.58	.48	.67	.00	.00	4.14
13-18	1	0	1	0	0	0	0	1	8	7	26	26	29	13	5	1	0	118
(1)	.34	.00	.34	.00	.00	.00	.00	.34	2.71	2.37	8.81	8.81	9.83	4.41	1.69	.34	.00	40.00
(2)	.05	.00	.05	.00	.00	.00	.00	.05	.39	.34	1.25	1.25	1.40	.63	.24	.05	.00	5.68
19-24	0	0	0	0	0	0	0	0	0	9	9	4	3	0	3	2	0	30
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.05	3.05	1.36	1.02	.00	1.02	.68	.00	10.17
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.43	.43	.19	.14	.00	.14	.10	.00	1.45
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	5	6	2	1	7	10	6	16	14	26	48	50	44	24	28	8	0	295
(1)	1.69	2.03	.68	.34	2.37	3.39	2.03	5.42	4.75	8.81	16.27	16.95	14.92	8.14	9.49	2.71	.00	100.00
(2)	.24	.29	.10	.05	.34	.48	.29	.77	.67	1.25	2.31	2.41	2.12	1.16	1.35	.39	.00	14.21

(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-2 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS G

CLASS FREQUENCY (PERCENT) = 2.84

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	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
(1)	1.69	.00	.00	1.69	.00	.00	.00	1.69	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.08
(2)	.05	.00	.00	.05	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
4-7	1	0	0	0	4	0	0	1	0	0	2	2	1	3	2	0	0	16
(1)	1.69	.00	.00	.00	6.78	.00	.00	1.69	.00	.00	3.39	3.39	1.69	5.08	3.39	.00	.00	27.12
(2)	.05	.00	.00	.00	.19	.00	.00	.05	.00	.00	.10	.10	.05	.14	.10	.00	.00	.77
8-12	0	0	0	1	0	0	0	1	0	1	6	4	8	2	2	1	0	26
(1)	.00	.00	.00	1.69	.00	.00	.00	1.69	.00	1.69	10.17	6.78	13.56	3.39	3.39	1.69	.00	44.07
(2)	.00	.00	.00	.05	.00	.00	.00	.05	.00	.05	.29	.19	.39	.10	.10	.05	.00	1.25
13-18	0	0	0	0	0	0	0	0	0	1	2	2	6	3	0	0	0	14
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.69	3.39	3.39	10.17	5.08	.00	.00	.00	23.73
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.10	.10	.29	.14	.00	.00	.00	.67
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	2	0	0	2	4	0	0	3	0	2	10	8	15	8	4	1	0	59
(1)	3.39	.00	.00	3.39	6.78	.00	.00	5.08	.00	3.39	16.95	13.56	25.42	13.56	6.78	1.69	.00	100.00
(2)	.10	.00	.00	.10	.19	.00	.00	.14	.00	.10	.48	.39	.72	.39	.19	.05	.00	2.84

(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-2 (continued)

PILGRIM JUL93-SEP93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS ALL

CLASS FREQUENCY (PERCENT) = 100.00

WIND DIRECTION FROM

SPEED(MPH)	W	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	2	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.10
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.10
C-3	3	3	4	4	7	2	1	5	3	4	1	2	0	2	3	5	0	49
(1)	.14	.14	.19	.19	.34	.10	.05	.24	.14	.19	.05	.10	.00	.10	.14	.24	.00	2.36
(2)	.14	.14	.19	.19	.34	.10	.05	.24	.14	.19	.05	.10	.00	.10	.14	.24	.00	2.36
4-7	35	31	36	29	39	30	23	15	11	13	22	18	8	21	13	15	0	359
(1)	1.69	1.49	1.73	1.40	1.88	1.45	1.11	.72	.53	.63	1.06	.87	.39	1.01	.63	.72	.00	17.29
(2)	1.69	1.49	1.73	1.40	1.88	1.45	1.11	.72	.53	.63	1.06	.87	.39	1.01	.63	.72	.00	17.29
8-12	44	23	19	20	47	74	57	42	38	57	31	38	38	29	29	24	0	610
(1)	2.12	1.11	.92	.96	2.26	3.56	2.75	2.02	1.83	2.75	1.49	1.83	1.83	1.40	1.40	1.16	.00	29.38
(2)	2.12	1.11	.92	.96	2.26	3.56	2.75	2.02	1.83	2.75	1.49	1.83	1.83	1.40	1.40	1.16	.00	29.38
13-18	39	19	16	5	8	19	18	10	71	199	95	69	79	53	34	34	0	768
(1)	1.88	.92	.77	.24	.39	.92	.87	.48	3.42	9.59	4.58	3.32	3.81	2.55	1.64	1.64	.00	36.99
(2)	1.88	.92	.77	.24	.39	.92	.87	.48	3.42	9.59	4.58	3.32	3.81	2.55	1.64	1.64	.00	36.99
19-24	6	12	7	0	0	0	7	1	12	98	62	9	20	13	12	18	0	277
(1)	.29	.58	.34	.00	.00	.00	.34	.05	.58	4.72	2.99	.43	.96	.63	.58	.87	.00	13.34
(2)	.29	.58	.34	.00	.00	.00	.34	.05	.58	4.72	2.99	.43	.96	.63	.58	.87	.00	13.34
GT 24	0	0	0	0	0	0	0	0	4	3	0	0	0	0	1	3	0	11
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.19	.14	.00	.00	.00	.00	.05	.14	.00	.53
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.19	.14	.00	.00	.00	.00	.05	.14	.00	.53
ALL SPEEDS	127	88	82	58	101	125	106	73	139	374	211	136	145	118	92	101	0	2076
(1)	6.12	4.24	3.95	2.79	4.87	6.02	5.11	3.52	6.70	18.02	10.16	6.55	6.98	5.68	4.43	4.87	.00	100.00
(2)	6.12	4.24	3.95	2.79	4.87	6.02	5.11	3.52	6.70	18.02	10.16	6.55	6.98	5.68	4.43	4.87	.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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA STABILITY CLASS A 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	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	2	1	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	8
(1)	2.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	2.00	1.00	.00	8.00
(2)	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.10	.05	.00	.42
8-12	2	4	3	1	3	1	3	0	0	0	0	0	1	2	2	0	0	22
(1)	2.00	4.00	3.00	1.00	3.00	1.00	3.00	.00	.00	.00	.00	.00	1.00	2.00	2.00	.00	.00	22.00
(2)	.10	.21	.16	.05	.16	.05	.16	.00	.00	.00	.00	.00	.05	.10	.10	.00	.00	1.15
13-18	7	0	0	0	1	1	0	0	0	0	0	1	6	7	4	5	0	32
(1)	7.00	.00	.00	.00	1.00	1.00	.00	.00	.00	.00	.00	1.00	6.00	7.00	4.00	5.00	.00	32.00
(2)	.36	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.05	.31	.36	.21	.26	.00	1.67
19-24	0	0	0	0	0	0	0	0	0	0	2	0	2	8	2	5	0	19
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	.00	2.00	8.00	2.00	5.00	.00	19.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.10	.42	.10	.26	.00	.99
GT 24	8	2	0	0	0	0	0	0	0	0	0	0	0	1	0	8	0	19
(1)	8.00	2.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.00	.00	8.00	.00	19.00
(2)	.42	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.42	.00	.99
ALL SPEEDS	19	7	3	1	4	2	3	0	0	0	2	1	9	20	10	19	0	100
(1)	19.00	7.00	3.00	1.00	4.00	2.00	3.00	.00	.00	.00	2.00	1.00	9.00	20.00	10.00	19.00	.00	100.00
(2)	.99	.36	.16	.05	.21	.10	.16	.00	.00	.00	.10	.05	.47	1.04	.52	.99	.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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS B

CLASS FREQUENCY (PERCENT) = 3.23

WIND DIRECTION FROM

SPEED(MPH)	W	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	2	0	1	2	2	0	0	0	0	0	0	0	0	1	2	0	0	10
(1)	3.23	.00	1.61	3.23	3.23	.00	.00	.00	.00	.00	.00	.00	.00	1.61	3.23	.00	.00	16.13
(2)	.10	.00	.05	.10	.10	.00	.00	.00	.00	.00	.00	.00	.00	.05	.10	.00	.00	.52
8-12	0	1	3	1	1	1	1	0	0	2	0	1	1	0	1	1	0	14
(1)	.00	1.61	4.84	1.61	1.61	1.61	1.61	.00	.00	3.23	.00	1.61	1.61	.00	1.61	1.61	.00	22.58
(2)	.00	.05	.16	.05	.05	.05	.05	.00	.00	.10	.00	.05	.05	.00	.05	.05	.00	.73
13-18	0	0	1	0	0	2	0	0	0	3	1	6	2	0	0	0	0	15
(1)	.00	.00	1.61	.00	.00	3.23	.00	.00	.00	4.84	1.61	9.68	3.23	.00	.00	.00	.00	24.19
(2)	.00	.00	.05	.00	.00	.10	.00	.00	.00	.16	.05	.31	.10	.00	.00	.00	.00	.78
19-24	1	0	0	0	0	0	0	0	0	3	1	0	2	1	0	1	0	9
(1)	1.61	.00	.00	.00	.00	.00	.00	.00	.00	4.84	1.61	.00	3.23	1.61	.00	1.61	.00	14.52
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.16	.05	.00	.10	.05	.00	.05	.00	.47
GT 24	7	1	0	0	0	2	1	0	0	1	0	0	0	0	1	1	0	14
(1)	11.29	1.61	.00	.00	.00	3.23	1.61	.00	.00	1.61	.00	.00	.00	.00	1.61	1.61	.00	22.58
(2)	.36	.05	.00	.00	.00	.10	.05	.00	.00	.05	.00	.00	.00	.00	.05	.05	.00	.73
ALL SPEEDS	10	2	5	3	3	5	2	0	0	9	2	7	5	2	4	3	0	62
(1)	16.13	3.23	8.06	4.84	4.84	8.06	3.23	.00	.00	14.52	3.23	11.29	8.06	3.23	6.45	4.84	.00	100.00
(2)	.52	.10	.26	.16	.16	.26	.10	.00	.00	.47	.10	.36	.26	.10	.21	.16	.00	3.23

(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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS C

CLASS FREQUENCY (PERCENT) = 5.58

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	1	1	2	0	1	0	0	0	0	0	0	0	1	0	0	0	6
(1)	.00	.93	.93	1.87	.00	.93	.00	.00	.00	.00	.00	.00	.00	.93	.00	.00	.00	5.61
(2)	.00	.05	.05	.10	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.31
8-12	2	0	1	1	0	3	2	0	0	4	4	2	4	1	0	0	0	24
(1)	1.87	.00	.93	.93	.00	2.80	1.87	.00	.00	3.74	3.74	1.87	3.74	.93	.00	.00	.00	22.43
(2)	.10	.00	.05	.05	.00	.16	.10	.00	.00	.21	.21	.10	.21	.05	.00	.00	.00	1.25
13-18	5	0	1	1	0	2	1	0	1	4	9	0	3	2	0	0	0	29
(1)	4.67	.00	.93	.93	.00	1.87	.93	.00	.93	3.74	8.41	.00	2.80	1.87	.00	.00	.00	27.10
(2)	.26	.00	.05	.05	.00	.10	.05	.00	.05	.21	.47	.00	.16	.10	.00	.00	.00	1.51
19-24	4	2	0	0	0	0	0	0	3	3	3	0	1	1	2	1	0	20
(1)	3.74	1.87	.00	.00	.00	.00	.00	.00	2.80	2.80	2.80	.00	.93	.93	1.87	.93	.00	18.69
(2)	.21	.10	.00	.00	.00	.00	.00	.00	.16	.16	.16	.00	.05	.05	.10	.05	.00	1.04
GT 24	7	7	0	2	0	0	0	0	1	1	4	2	2	0	2	0	0	28
(1)	6.54	6.54	.00	1.87	.00	.00	.00	.00	.93	.93	3.74	1.87	1.87	.00	1.87	.00	.00	26.17
(2)	.36	.36	.00	.10	.00	.00	.00	.00	.05	.05	.21	.10	.10	.00	.10	.00	.00	1.46
ALL SPEEDS	18	10	3	6	0	6	3	0	5	12	20	4	10	5	4	1	0	107
(1)	16.82	9.35	2.80	5.61	.00	5.61	2.80	.00	4.67	11.21	18.69	3.74	9.35	4.67	3.74	.93	.00	100.00
(2)	.94	.52	.16	.31	.00	.31	.16	.00	.26	.63	1.04	.21	.52	.26	.21	.05	.00	5.58

(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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA

STABILITY CLASS D

CLASS FREQUENCY (PERCENT) = 38.98

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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
(1)	.27	.13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40
(2)	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16
4-7	4	2	2	1	2	7	4	4	1	1	3	6	1	3	1	3	0	45
(1)	.53	.27	.27	.13	.27	.94	.53	.53	.13	.13	.40	.80	.13	.40	.13	.40	.00	6.02
(2)	.21	.10	.10	.05	.10	.36	.21	.21	.05	.05	.16	.31	.05	.16	.05	.16	.00	2.34
8-12	1	0	0	2	5	7	13	10	13	13	12	11	13	9	10	4	0	123
(1)	.13	.00	.00	.27	.67	.94	1.74	1.34	1.74	1.74	1.60	1.47	1.74	1.20	1.34	.53	.00	16.44
(2)	.05	.00	.00	.10	.26	.36	.68	.52	.68	.68	.63	.57	.68	.47	.52	.21	.00	6.41
13-18	4	8	2	4	5	12	2	11	19	36	31	14	19	15	16	14	0	212
(1)	.53	1.07	.27	.53	.67	1.60	.27	1.47	2.54	4.81	4.14	1.87	2.54	2.01	2.14	1.87	.00	28.34
(2)	.21	.42	.10	.21	.26	.63	.10	.57	.99	1.88	1.62	.73	.99	.78	.83	.73	.00	11.05
19-24	4	15	3	2	12	7	10	8	7	14	15	12	23	13	28	6	0	179
(1)	.53	2.01	.40	.27	1.60	.94	1.34	1.07	.94	1.87	2.01	1.60	3.07	1.74	3.74	.80	.00	23.93
(2)	.21	.78	.16	.10	.63	.36	.52	.42	.36	.73	.78	.63	1.20	.68	1.46	.31	.00	9.33
GT 24	33	31	4	9	3	2	8	2	1	9	5	4	17	21	17	20	0	186
(1)	4.41	4.14	.53	1.20	.40	.27	1.07	.27	.13	1.20	.67	.53	2.27	2.81	2.27	2.67	.00	24.87
(2)	1.72	1.62	.21	.47	.16	.10	.42	.10	.05	.47	.26	.21	.89	1.09	.89	1.04	.00	9.69
ALL SPEEDS	48	57	11	18	27	35	37	35	41	73	66	47	75	61	72	47	0	748
(1)	6.42	7.62	1.47	2.41	3.61	4.68	4.95	4.68	5.48	9.76	8.82	6.28	9.76	8.16	9.63	6.28	.00	100.00
(2)	2.50	2.97	.57	.94	1.41	1.82	1.93	1.82	2.14	3.80	3.44	2.45	3.80	3.18	3.75	2.45	.00	38.98

(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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA STABILITY CLASS E CLASS FREQUENCY (PERCENT) = 36.69

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	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	1	0	0	0	1	1	0	1	0	0	0	0	0	2	0	0	7
(1)	.14	.14	.00	.00	.00	.14	.14	.00	.14	.00	.00	.00	.00	.00	.28	.00	.00	.99
(2)	.05	.05	.00	.00	.00	.05	.05	.00	.05	.00	.00	.00	.00	.00	.10	.00	.00	.36
4-7	2	2	2	0	0	3	3	5	8	9	2	3	2	0	4	3	0	48
(1)	.28	.28	.28	.00	.00	.43	.43	.71	.14	1.28	.28	.43	.28	.00	.57	.43	.00	6.82
(2)	.10	.10	.10	.00	.00	.16	.16	.26	.42	.47	.10	.16	.10	.00	.21	.16	.00	2.50
8-12	3	6	5	4	3	7	20	14	12	24	9	11	13	7	8	10	0	156
(1)	.43	.85	.71	.57	.43	.99	2.84	1.99	1.70	3.11	1.28	1.56	1.85	.99	1.14	1.42	.00	22.16
(2)	.16	.31	.26	.21	.16	.36	1.04	.73	.63	1.25	.47	.57	.68	.36	.42	.52	.00	8.13
13-18	8	2	1	2	6	5	8	34	29	63	32	32	36	13	15	10	0	296
(1)	1.14	.28	.14	.28	.85	.71	1.14	4.83	4.12	8.95	4.55	4.55	5.11	1.85	2.13	1.42	.00	42.05
(2)	.42	.10	.05	.10	.31	.26	.42	1.77	1.51	3.28	1.67	1.67	1.88	.68	.78	.52	.00	15.42
19-24	4	0	0	3	5	6	8	4	9	21	38	22	20	19	9	9	0	173
(1)	.57	.00	.00	.43	.71	.85	1.14	.57	.71	2.98	5.40	3.13	2.84	2.70	1.28	1.28	.00	24.57
(2)	.21	.00	.00	.16	.26	.31	.42	.21	.26	1.09	1.98	1.15	1.04	.99	.47	.47	.00	9.02
GT 24	0	0	0	0	0	1	6	2	0	1	4	0	4	3	3	0	0	24
(1)	.00	.00	.00	.00	.00	.14	.85	.28	.00	.14	.57	.00	.57	.43	.43	.00	.00	3.41
(2)	.00	.00	.00	.00	.00	.05	.31	.10	.00	.05	.21	.00	.21	.16	.16	.00	.00	1.25
ALL SPEEDS	18	11	8	9	14	23	46	59	55	118	85	68	75	42	41	32	0	704
(1)	2.56	1.56	1.14	1.28	1.99	3.27	6.53	8.38	7.81	16.76	12.07	9.66	10.65	5.97	5.82	4.55	.00	100.00
(2)	.94	.57	.42	.47	.73	1.20	2.40	3.07	2.87	6.15	4.43	3.54	3.91	2.19	2.14	1.67	.00	36.69

(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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA STABILITY CLASS F CLASS FREQUENCY (PERCENT) = 8.70

WIND DIRECTION FROM

SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WV	MNW	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	2	0	0	1	0	0	0	0	0	1	0	0	0	4
(1)	.00	.00	.00	.00	1.20	.00	.00	.60	.00	.00	.00	.00	.00	.60	.00	.00	.00	2.40
(2)	.00	.00	.00	.00	.10	.00	.00	.05	.00	.00	.00	.00	.00	.05	.00	.00	.00	.21
4-7	0	0	1	0	0	0	1	1	1	0	0	2	0	0	0	1	0	7
(1)	.00	.00	.60	.00	.00	.00	.60	.60	.60	.00	.00	1.20	.00	.00	.00	.60	.00	4.19
(2)	.00	.00	.05	.00	.00	.00	.05	.05	.05	.00	.00	.10	.00	.00	.00	.05	.00	.36
8-12	0	0	0	1	1	7	2	4	4	10	6	1	12	7	2	1	0	58
(1)	.00	.00	.00	.60	.60	4.19	1.20	2.40	2.40	5.99	3.59	.60	7.19	4.19	1.20	.60	.00	34.73
(2)	.00	.00	.00	.05	.05	.36	.10	.21	.21	.52	.31	.05	.63	.36	.10	.05	.00	3.02
13-18	0	0	0	0	0	1	6	9	6	2	17	17	14	7	2	0	0	81
(1)	.00	.00	.00	.00	.00	.60	3.59	5.39	3.59	1.20	10.18	10.18	8.38	4.19	1.20	.00	.00	48.50
(2)	.00	.00	.00	.00	.00	.05	.31	.47	.31	.10	.89	.89	.73	.36	.10	.00	.00	4.22
19-24	0	0	0	0	0	0	0	0	0	0	12	3	0	2	0	0	0	17
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.19	1.80	.00	1.20	.00	.00	.00	10.18
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.63	.16	.00	.10	.00	.00	.00	.89
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	1	3	8	9	15	11	12	35	23	26	17	4	2	0	167
(1)	.00	.00	.60	.60	1.80	4.79	5.39	8.98	6.59	7.19	20.96	13.77	15.57	10.18	2.40	1.20	.00	100.00
(2)	.00	.00	.05	.05	.16	.42	.47	.78	.57	.63	1.82	1.20	1.35	.89	.21	.10	.00	8.70

(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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA STABILITY CLASS G CLASS FREQUENCY (PERCENT) = 1.62

WIND DIRECTION FROM

SPEED(MPH)	M	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	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	1	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.23	.00	.00	.00	.00	3.23
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05
4-7	3	0	0	0	0	0	0	0	0	2	1	0	1	1	0	0	0	8
(1)	9.68	.00	.00	.00	.00	.00	.00	.00	.00	6.45	3.23	.00	3.23	3.23	.00	.00	.00	25.81
(2)	.16	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	.00	.05	.05	.00	.00	.00	.42
8-12	0	0	0	0	0	0	0	0	1	1	1	0	6	1	1	1	0	12
(1)	.00	.00	.00	.00	.00	.00	.00	.00	3.23	3.23	3.23	.00	19.35	3.23	3.23	3.23	.00	38.71
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.05	.00	.31	.05	.05	.05	.00	.63
13-18	0	0	0	0	0	0	0	0	0	1	3	1	2	0	1	1	0	9
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.23	9.68	3.23	6.45	.00	3.23	3.23	.00	29.03
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.16	.05	.10	.00	.05	.05	.00	.47
19-24	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.23	.00	.00	.00	.00	.00	.00	3.23
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05
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	0	0	0	0	0	0	0	1	4	6	1	10	2	2	2	0	31
(1)	9.68	.00	.00	.00	.00	.00	.00	.00	3.23	12.90	19.35	3.23	32.26	6.45	6.45	6.45	.00	100.00
(2)	.16	.00	.00	.00	.00	.00	.00	.00	.05	.21	.31	.05	.52	.10	.10	.10	.00	1.62

(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-2 (continued)

PILGRIM OCT93-DEC93 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 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	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	2	0	0	2	1	1	1	1	0	0	0	1	1	2	0	0	15
(1)	.16	.10	.00	.00	.10	.05	.05	.05	.05	.00	.00	.00	.05	.05	.10	.00	.00	.78
(2)	.16	.10	.00	.00	.10	.05	.05	.05	.05	.00	.00	.00	.05	.05	.10	.00	.00	.78
4-7	13	6	7	5	4	11	8	10	10	12	6	11	4	8	9	8	0	132
(1)	.68	.31	.36	.26	.21	.57	.42	.52	.52	.63	.31	.57	.21	.42	.47	.42	.00	6.88
(2)	.68	.31	.36	.26	.21	.57	.42	.52	.52	.63	.31	.57	.21	.42	.47	.42	.00	6.88
8-12	8	11	12	10	13	26	41	28	30	54	32	26	50	27	24	17	0	409
(1)	.42	.57	.63	.52	.68	1.35	2.14	1.46	1.56	2.81	1.67	1.35	2.61	1.41	1.25	.89	.00	21.31
(2)	.42	.57	.63	.52	.68	1.35	2.14	1.46	1.56	2.81	1.67	1.35	2.61	1.41	1.25	.89	.00	21.31
13-18	24	10	5	7	12	23	17	54	55	109	93	71	82	44	38	30	0	674
(1)	1.25	.52	.26	.36	.63	1.20	.89	2.81	2.87	5.68	4.85	3.70	4.27	2.29	1.98	1.56	.00	35.12
(2)	1.25	.52	.26	.36	.63	1.20	.89	2.81	2.87	5.68	4.85	3.70	4.27	2.29	1.98	1.56	.00	35.12
19-24	13	17	3	5	17	13	18	12	15	41	72	37	48	44	41	22	0	418
(1)	.68	.89	.16	.26	.89	.68	.94	.63	.78	2.14	3.75	1.93	2.50	2.29	2.14	1.15	.00	21.78
(2)	.68	.89	.16	.26	.89	.68	.94	.63	.78	2.14	3.75	1.93	2.50	2.29	2.14	1.15	.00	21.78
GT 24	55	41	4	11	3	5	15	4	2	12	13	6	23	25	23	29	0	271
(1)	2.87	2.14	.21	.57	.16	.26	.78	.21	.10	.63	.68	.31	1.20	1.30	1.20	1.51	.00	14.12
(2)	2.87	2.14	.21	.57	.16	.26	.78	.21	.10	.63	.68	.31	1.20	1.30	1.20	1.51	.00	14.12
ALL SPEEDS	116	87	31	38	51	79	100	109	113	228	216	151	208	149	137	106	0	1919
(1)	6.04	4.53	1.62	1.98	2.66	4.12	5.21	5.68	5.89	11.88	11.26	7.87	10.84	7.76	7.14	5.52	.00	100.00
(2)	6.04	4.53	1.62	1.98	2.66	4.12	5.21	5.68	5.89	11.88	11.26	7.87	10.84	7.76	7.14	5.52	.00	100.00

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5. OFF-SITE DOSE CALCULATION MANUAL REVISIONS

The PNPS Off-site Dose Calculation Manual (ODCM) was not revised during the time frame of July - December, 1993.

6. REFERENCES

1. U. S. Nuclear Regulatory Commission, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants", Regulatory Guide 1.21, Revision 1, June 1974.
2. J. W. Moylan memorandum to D. A. Montt, "Summary of Solid Waste Shipment Data for July - December 1993", dated January 18, 1994.
3. T. Messier memorandum to K. J. Sejkora, "PNPS Meteorological Data Joint Frequency Distribution Tables July - December 1993", dated February 10, 1994.

KJS/gmh