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

Boston Edison
Pilgrim Nuclear Power Station
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August 29, 1997
BECo Ltr. 2.97-088

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Docket No. 50-293
License No. DPR-35

Subject: SEMI-ANNUAL RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT INCLUDING METEOROLOGICAL DATA FOR THE PERIOD JANUARY 1, 1997 THROUGH JUNE 30, 1997

In accordance with the requirements of 10 CFR 50.36a(a)(2), Pilgrim Nuclear Power Station Technical Specification Section 6.9.C.1, and Regulatory Guide 1.21, the Boston Edison Company submits the semi-annual Radioactive Effluent and Waste Disposal Report Including Meteorological Data for the period of January 1 through June 30, 1997.

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

Jack J Spangler
Nancy L. Desmond
FOR

RLC/dmc/97waste

cc: Mr. Hubert J. Miller
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PILGRIM NUCLEAR POWER STATION

Radioactive Effluent and Waste Disposal Report Including Meteorological Data

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January 01 through June 30, 1997

Boston Edison

Boston Edison

PILGRIM NUCLEAR POWER STATION

RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT INCLUDING METEOROLOGICAL DATA

JANUARY 01 THROUGH JUNE 30, 1997

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Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
January-June 1997

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BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT
INCLUDING METEOROLOGICAL DATA
JANUARY 01 THROUGH JUNE 30, 1997

INTRODUCTION

This report quantifies the radioactive gaseous, liquid, and radwaste releases, and summarizes the local meteorological data for the period from January 01 through June 30, 1997. 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 Material in Liquid and Gaseous Effluents from Light Water Cooled Nuclear Power Plants".

The quantity of radioactive material released from PNPS was determined from sample analyses and continuous on-line monitoring of gaseous releases from the main stack, reactor building vent, turbine building, and various decontamination facilities, and liquid releases into the discharge canal. Pilgrim Nuclear Power Station was in a refueling outage from mid-February through late April. Activities associated with refueling can affect effluent releases. Noble gas releases tend to decrease since the reactor is not operating, while releases of other gaseous and liquid effluents can increase as systems are worked on, equipment is decontaminated, and additional wastes are processed.

The quantity and volume of radioactive waste which was shipped offsite from PNPS for processing and burial were determined from data contained on the radwaste shipping documentation. The meteorological data were obtained from monitoring instruments located on the 220-foot meteorological tower located at Pilgrim Station.

GASEOUS EFFLUENTS

Gaseous radioactive releases for the reporting period are quantified in Tables 1A, 1B, and 1C. Radioactive noble gases released during the period totaled 120 Curies. Releases of radioactive particulates and iodines totaled 0.012 Curies, and tritium releases totaled 18 Curies. No gross alpha radioactivity was detected in gaseous effluents.

LIQUID EFFLUENTS

Liquid radioactive releases for the reporting period are quantified in Tables 2A and 2B. Liquid effluents released into the discharge canal contained 0.12 Curies of fission and activation products, and 18 Curies of tritium. No dissolved/entrained noble gases or gross alpha radioactivity were detected in liquid effluents.

SOLID WASTE

Solid radioactive waste shipped offsite for processing and disposal during the reporting period is described in Table 3. Approximately 88 cubic meters of solid waste, containing 12 Curies of radioactivity, were shipped during the reporting period.

METEOROLOGICAL DATA

Meteorological joint frequency distributions are listed in Tables 4A and 4B. The data recovery for the reporting period exceeded 91%. The predominant wind direction was from the west, which occurred approximately 14% of the time during the reporting period. The predominant stability class was Class D, which occurred about 35% of the time during the reporting period.

CONCLUSION

The PNPS Technical Specifications contain limiting conditions for operations and operational objectives to limit doses resulting from releases of radioactivity to the environment. None of the limiting conditions for operation or operational objectives associated with liquid or gaseous effluents were exceeded during the reporting period, as confirmed by conservative dose assessments performed at weekly and monthly intervals. Detailed dose assessments will be published in a supplement report due April 01, 1998. Conformance to the PNPS Technical Specification operational objectives ensures that releases of radioactivity in liquid and gaseous effluents are kept as low as reasonably achievable in accordance with 10 CFR Part 50, Appendix I. Compliance with the Technical Specifications also demonstrates that requirements of the Environmental Protection Agency's nuclear fuel cycle standard, 40CFR190.10, Subpart B, have been met.

1. INTRODUCTION

This report is issued for the period of January 01 through June 30, 1997 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 Material 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 gaseous and liquid 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 in 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 01, and is to contain impact assessments for both semiannual periods. Since Technical Specification limits for gaseous effluents listed in Table 1A are based on calculated doses, these values are not presented in the semiannual effluent release reports. These "Percent of Technical Specification Limit" values will be presented in the supplemental dose assessment report.

2. RADIOACTIVE EFFLUENT DATA

Radioactive gaseous and liquid releases for the reporting period are given in the standard NRC Regulatory Guide 1.21 format in Tables 1A, 1B, 1C, 2A, 2B, and supplemental information form. Pilgrim Nuclear Power Station was in a refueling outage from mid-February through late April. Activities associated with refueling can affect effluent releases. Noble gas releases tend to decrease since the reactor is not operating, while releases of other gaseous and liquid effluents can increase as systems are worked on, equipment is decontaminated, and additional wastes are processed.

2.1 Gaseous Effluents

Gaseous radioactivity is released from Pilgrim Station to the atmosphere from the main stack, reactor building vent, turbine building, and various decontamination facilities. Combined gaseous effluent releases from all release points are summarized in Table 1A. No alpha activity was detected on any of the particulate filters collected during the reporting period. The total gaseous releases for various categories of radionuclides, as well as the corresponding average release rates, can be summarized as follows:

- Noble gases: 120 Ci, 7.61 µCi/sec
- Particulates and iodines with half-life greater than 8 days: 0.0122 Ci, 0.000773 µCi/sec
- Tritium: 18.2 Ci, 1.15 µCi/sec

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

Ground-level effluent releases are detailed in Table 1C. Data in this table includes releases from the reactor building vent, turbine building, and assorted equipment decontamination facilities (e.g., hot machine shop, carbon dioxide pellet decon trailer, plastic media decon trailer, etc.) used during and after the refueling outage. Due to the close proximity of the reactor building, both of these release points are considered to be mixed-mode/ground level release points.

2.2 Liquid Effluents

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

Liquid effluent releases are summarized in Table 2A. Detailed breakdowns for individual radionuclides are listed in Table 2B. No dissolved/entrained gases or gross alpha radioactivity were detected in liquid effluents released during the reporting period. Total releases for the various categories of radionuclides, as well as their corresponding mean concentrations, can be summarized as follows:

- Total Effluent Volume: 1,870,000 Liters
- Total Dilution Volume: 3,000,000,000 Liters
- Fission/Activation products: 0.122 Ci, 0.0000000406 μCi/mL
- Tritium: 17.9 Ci, 0.00000595 μCi/mL
- Dissolved/entrained noble gases: Not Detected

Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Supplemental information
January-June 1997

FACILITY: PILGRIM NUCLEAR POWER STATION **LICENSE: 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-life: >8 days, tritium: 1500 mrem/yr to any organ at site boundary

d. Liquid effluents: 0.06 mrem/month for whole body and 0.2 mrem/month for any organ (without radwaste treatment)

2. EFFLUENT CONCENTRATION LIMITS

a. Fission and activation gases: 10CFR20 Appendix B Table II
b. Iodines: 10CFR20 Appendix B Table II
c. Particulates with half-life > 8 days: 10CFR20 Appendix B Table II
d. Liquid effluents: 2E-04 µCi/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:
b. Iodines:
c. Particulates:
d. Liquid effluents:

High purity germanium gamma spectroscopy for all gamma emitters; radiochemistry analysis for H-3, Fe-55 (liquid effluents), Sr-89, and Sr-90

5. BATCH RELEASES

	Jan-Mar 1997	Apr-Jun 1997
a. Liquid Effluents		
1. Total number of releases:	3.20E+01	3.70E+01
2. Total time period (minutes):	3.32E+03	2.68E+03
3. Maximum time period (minutes):	9.25E+02	2.40E+02
4. Average time period (minutes):	1.04E+02	7.25E+01
5. Minimum time period (minutes):	2.00E+01	2.00E+01
6. Average stream flow (Liters/min): during periods of release of effluents into a flowing stream	1.55E+05	9.29E+05
b. Gaseous Effluents	None	None

6. ABNORMAL RELEASES

a. Liquid Effluents	None	None
b. Gaseous Effluents	None	None

Table 1A
Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Gaseous Effluents - Summation of All Releases
January-June 1997

	Period: Jan-Mar 1997	Period: Apr-Jun 1997	Estimated Total Error
A. FISSION AND ACTIVATION GASES			
Total Release: Ci	5.53E+01	6.47E+01	±22%
Average Release Rate During Period: µCi/sec	7.01E+00	8.20E+00	
Percent of Technical Specification Limit	*	*	
B. IODINES			
Total Iodine-131 Release: Ci	4.69E-03	3.49E-04	±20%
Average Release Rate During Period: µCi/sec	5.95E-04	4.43E-05	
Percent of Technical Specification Limit	*	*	
C. PARTICULATES			
Total Release: Ci	8.70E-04	4.41E-04	±21%
Average Release Rate During Period: µCi/sec	1.10E-04	5.59E-05	
Percent of Technical Specification Limit	*	*	
Gross Alpha Radioactivity: Ci	NDA	NDA	
D. TRITIUM			
Total Release: Ci	1.12E+01	7.01E+00	±20%
Average Release Rate During Period: µCi/sec	1.42E+00	8.89E-01	
Percent of Technical Specification Limit	*	*	

Notes for Table 1A:

* Percent of Technical Specification limit values in above sections 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, 1998.

1. NDA stands for No Detectable Activity.
2. LLD for airborne gross alpha activity listed as NDA is 1E-11 µCi/cc.

Table 1B
Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Gaseous Effluents - Elevated Release
January-June 1997

Nuclide Released	Continuous Mode		Batch Mode	
	Jan-Mar 1997	Apr-Jun 1997	Jan-Mar 1997	Apr-Jun 1997
1. FISSION AND ACTIVATION GASES - Ci				
Kr-85m	1.04E+01	1.31E+01	N/A	N/A
Kr-87	NDA	5.11E+00	N/A	N/A
Kr-88	3.54E+00	1.97E+01	N/A	N/A
Xe-131m	NDA	NDA	N/A	N/A
Xe-133	4.00E+01	1.01E+01	N/A	N/A
Xe-135	1.39E+00	3.04E+00	N/A	N/A
Xe-135m	NDA	2.53E+00	N/A	N/A
Xe-137	NDA	1.12E+01	N/A	N/A
Xe-138	NDA	NDA	N/A	N/A
Total for period	5.53E+01	6.47E+01	N/A	N/A
2. IODINES - Ci				
I-131	7.85E-04	2.04E-04	N/A	N/A
I-133	7.86E-04	8.98E-04	N/A	N/A
Total for period	1.57E-03	1.10E-03	N/A	N/A
3. PARTICULATES - Ci				
Mn-54	1.53E-06	NDA	N/A	N/A
Co-60	1.97E-06	5.69E-06	N/A	N/A
Sr-89	8.60E-06	8.91E-05	N/A	N/A
Sr-90	NDA	NDA	N/A	N/A
Cs-134	NDA	NDA	N/A	N/A
Cs-137	NDA	1.61E-06	N/A	N/A
Ba/La-140	1.10E-05	2.42E-04	N/A	N/A
Total for period	2.31E-05	3.38E-04	N/A	N/A
4. TRITIUM - Ci				
H-3	2.51E-01	6.88E-01	N/A	N/A

Notes for Table 1B:

1. N/A stands for not applicable.
2. NDA stands for No Detectable Activity.
3. LLD for airborne radionuclides listed as NDA are as follows:
   Fission Gases: 1E-04 µCi/cc
   Iodines: 1E-12 µCi/cc
   Particulates: 1E-11 µCi/cc

Table 1C
Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Gaseous Effluents - Ground Level Release
January-June 1997

Nuclide Released	Continuous Mode		Batch Mode	
	Jan-Mar 1997	Apr-Jun 1997	Jan-Mar 1997	Apr-Jun 1997
1. FISSION AND ACTIVATION GASES - Ci				
Kr-85m	NDA	NDA	N/A	N/A
Kr-87	NDA	NDA	N/A	N/A
Kr-88	NDA	NDA	N/A	N/A
Xe-133	NDA	NDA	N/A	N/A
Xe-135	NDA	NDA	N/A	N/A
Xe-135m	NDA	NDA	N/A	N/A
Xe-138	NDA	NDA	N/A	N/A
Total for period	NDA	NDA	N/A	N/A
2. IODINES - Ci				
I-131	3.90E-03	1.45E-04	N/A	N/A
I-133	3.22E-03	9.52E-04	N/A	N/A
Total for period	7.12E-03	1.10E-03	N/A	N/A
3. PARTICULATES - Ci				
Cr-51	7.99E-05	NDA	N/A	N/A
Mn-54	2.48E-04	1.32E-05	N/A	N/A
Fe-59	8.93E-05	NDA	N/A	N/A
Co-58	1.25E-05	NDA	N/A	N/A
Co-60	2.92E-04	3.19E-05	N/A	N/A
Sr-89	4.20E-05	5.62E-05	N/A	N/A
Sr-90	NDA	NDA	N/A	N/A
Ru-103	1.13E-05	NDA	N/A	N/A
Cs-134	NDA	NDA	N/A	N/A
Cs-137	NDA	NDA	N/A	N/A
Ba/La-140	7.20E-05	NDA	N/A	N/A
Total for period	8.47E-04	1.03E-04	N/A	N/A
H-3	1.09E+01	6.32E+00	N/A	N/A

Notes for Table 1C:

1. N/A stands for not applicable.
2. NDA stands for No Detectable Activity.
3. LLD for airborne radionuclides listed as NDA are as follows:
   Fission Gases: 1E-04 µCi/cc
   Iodines: 1E-12 µCi/cc
   Particulates: 1E-11 µCi/cc

Table 2A
Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Liquid Effluents - Summation of All Releases
January-June 1997

	Period: Jan-Mar 1997	Period: Apr-Jun 1997	Estimated Total Error
A. FISSION AND ACTIVATION PRODUCTS			
Total Release (not including H-3, noble gas, or alpha): Ci	6.30E-02	5.91E-02	±12%
Average Diluted Concentration During Period: µCi/mL	1.22E-07	2.37E-08	
Percent of Effluent Concentration Limit*	2.51E+00%	2.79E-01%	
B. TRITIUM			
Total Release: Ci	4.47E+00	1.34E+01	±9.4%
Average Diluted Concentration During Period: µCi/mL	8.69E-06	5.38E-06	
Percent of Effluent Concentration Limit*	8.69E-01%	5.38E-01%	
C. DISSOLVED AND ENTRAINED GASES			
Total Release: Ci	NDA	NDA	±16%
Average Diluted Concentration During Period: µCi/mL	NDA	NDA	
Percent of Effluent Concentration Limit*	NDA	NDA	
D. GROSS ALPHA RADIOACTIVITY			
Total Release: Ci	NDA	NDA	±34%
E. VOLUME OF WASTE RELEASED PRIOR TO DILUTION			
Waste Volume: Liters	4.94E+05	1.38E+06	±5.7%
F. VOLUME OF DILUTION WATER USED DURING PERIOD			
Dilution Volume: Liters	5.14E+08	2.49E+09	±10%

Notes for Table 2A:

* Additional percent of Technical Specification limit values based on dose assessments will be provided in the annual supplemental dose assessment report to be issued prior to April 1, 1998.

1. NDA stands for No Detectable Activity.
2. LLD for dissolved and entrained gases listed as NDA is 1E-05 µCi/mL.
3. LLD for liquid gross alpha activity listed as NDA is 1E-07 µCi/mL.

Table 2B
Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Liquid Effluents
January-June 1997

Nuclide Released	Continuous Mode		Batch Mode	
	Jan-Mar 1997	Apr-Jun 1997	Jan-Mar 1997	Apr-Jun 1997
1. FISSION AND ACTIVATION PRODUCTS - Ci				
Cr-51	N/A	N/A	4.24E-03	3.67E-03
Mn-54	N/A	N/A	4.18E-03	1.60E-02
Fe-55	N/A	N/A	1.13E-02	1.70E-02
Fe-59	N/A	N/A	1.02E-03	4.44E-03
Co-58	N/A	N/A	2.37E-03	9.73E-04
Co-60	N/A	N/A	3.29E-02	1.59E-02
Zn-65	N/A	N/A	5.93E-03	1.26E-04
Sr-89	N/A	N/A	NDA	NDA
Sr-90	N/A	N/A	1.59E-06	3.19E-05
Zr/Nb-95	N/A	N/A	1.15E-04	2.23E-05
Mo-99/Tc-99m	N/A	N/A	NDA	NDA
Ru-103	N/A	N/A	4.58E-04	NDA
Ag-110m	N/A	N/A	2.69E-04	4.52E-04
Sb-124	N/A	N/A	9.98E-07	1.64E-04
I-131	N/A	N/A	NDA	NDA
I-133	N/A	N/A	NDA	NDA
Cs-134	N/A	N/A	NDA	NDA
Cs-137	N/A	N/A	2.01E-04	2.69E-04
Ba/La-140	N/A	N/A	NDA	NDA
Ce-141	N/A	N/A	6.82E-05	4.13E-05
Total for period	N/A	N/A	6.30E-02	5.91E-02
2. DISSOLVED AND ENTRAINED GASES - Ci				
Xe-133	N/A	N/A	NDA	NDA
Xe-135	N/A	N/A	NDA	NDA
Total for period	N/A	N/A	NDA	NDA

Notes for Table 2B:

1. N/A stands for not applicable.
2. NDA stands for No Detectable Activity.
3. LLD for liquid radionuclides listed as NDA are as follows:
   - Strontium: 5E-08 µCi/mL
   - Iodines: 1E-06 µCi/mL
   - Noble Gases: 1E-05 µCi/mL
   - All Others: 5E-07 µCi/mL

3. RADIOACTIVE WASTE DISPOSAL DATA

Radioactive wastes which were shipped offsite for processing and disposal during the reporting period are described in Table 3, in the standard NRC Regulatory Guide 1.21 format.

The total quantity of radioactivity in Curies and the total volume in cubic meters are summarized in Table 3 for the following waste categories:

- Spent resins, filter sludges, and evaporator bottoms;
- Dry compressible wastes, contaminated equipment, etc.;
- Irradiated components, control rods, etc.; and,
- Other.

During the reporting period there were no spent resins, filter sludges, etc. shipped from PNPS for processing and disposal. Dry compressible wastes and contaminated equipment buried during the period totaled 88 cubic meters and contained 12 Curies of radioactivity. No irradiated components were shipped during the reporting period. No shipments of irradiated fuel were made during the reporting period.

Estimates of major radionuclides, those comprising greater than 1% of the total activity in each waste category shipped, are listed in Table 3. One shipment to Barnwell, SC (Chem Nuclear Systems, Inc.), and 7 shipments to Oak Ridge, TN (Scientific Ecology Group), were made during the reporting period.

Table 3
Pilgrim Nuclear Power Station
Effluent and Waste Disposal Report
Solid Waste and Irradiated Fuel Shipments
January-June 1997

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

1. Estimate of volume and activity content by type of waste

Type of waste	Jan-Jun 1997		
	Volume - m³	Curies	Total Error
a. Spent resins, filters, filter sludges, evaporator bottoms, etc.	None	None	N/A
b. Dry compressible waste, contaminated equipment, etc.	8.84E+01	1.21E+01	± 25%
c. Irradiated components, control rods, etc.	None	None	N/A
d. Other (describe)	None	None	N/A

2. Estimate of major nuclide composition by type of waste[1]

Type of waste	Radionuclide	Abundance	Total Error
a. Spent resins, filters, filter sludges, evaporator bottoms, etc.	None	None	N/A
b. Dry compressible waste, contaminated equipment, etc.	Mn-54	4.97E+00%	± 25%
	Fe-55	6.69E+01%	± 25%
	Co-60	2.12E+01%	± 25%
	Ni-63	1.06E+00%	± 25%
	Cs-137	4.07E+00%	± 25%
c. Irradiated components, control rods, etc.	None	None	N/A
d. Other (describe)	None	None	N/A

[1] *"Major" is defined as any radionuclide comprising >1% of the total activity in the waste category.*

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
1	Tractor-trailer	Chem Nuclear Systems, Inc., Barnwell, SC
7	Tractor-trailer	Scientific Ecology Group,[2] Oak Ridge, TN

[2] *This processor provides volume reduction services for dry compressible waste, contaminated equipment, etc. Remaining radioactive wastes will be shipped to Chem Nuclear Systems, Inc. in Barnwell, SC, for final disposal.*

B. IRRADIATED FUEL SHIPMENTS & DISPOSITION

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

4. METEOROLOGICAL DATA

Meteorological data (Reference 2) are summarized for the reporting period in Tables 4A and 4B, in the standard joint frequency distribution format as given in NRC Regulatory Guide 1.21.

The predominant meteorological conditions observed during the reporting period can be summarized with their corresponding frequencies as follows:

- Stability Class: Class D, 35%
- Wind Direction (from): West, 14%
- 33-ft Wind Speed: 4-7 mph, 47%
- 220-ft Wind Speed 13-18 mph, 31%

There were a limited number of instances when data collection from the 220-ft meteorological tower was not continuous. Typically, such data losses were attributed to loss of power, malfunction of the sensors, and/or malfunction of the digital dataloggers. Data recovery for the period was about 90% for the 33-ft level, and 94% for the 220-ft level of the tower.

Table 4A
Distributions of Wind Directions and Speeds for the 33-ft Level of the 220-ft Tower

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS A — CLASS FREQUENCY (PERCENT) = 11.65

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	1	0	0	0	0	1	1	0	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	.41	.00	.00	.00	.00	.41	.41	.00	.00	.00	1.24
(2)	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05	.05	.00	.00	.00	.14
4-7	8	8	2	6	1	4	2	1	2	0	2	3	21	23	13	5	0	101
(1)	3.31	3.31	.83	2.48	.41	1.65	.83	.41	.83	.00	.83	1.24	8.68	9.50	5.37	2.07	.00	41.74
(2)	.39	.39	.10	.29	.05	.19	.10	.05	.10	.00	.10	.14	1.01	1.11	.63	.24	.00	4.86
8-12	6	1	1	1	5	1	1	1	10	4	8	5	34	28	7	8	0	121
(1)	2.48	.41	.41	.41	2.07	.41	.41	.41	4.13	1.65	3.31	2.07	14.05	11.57	2.89	3.31	.00	50.00
(2)	.29	.05	.05	.05	.24	.05	.05	.05	.48	.19	.39	.24	1.64	1.35	.34	.39	.00	5.83
13-18	0	0	0	0	0	0	0	0	0	1	3	0	9	4	0	0	0	17
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.41	1.24	.00	3.72	1.65	.00	.00	.00	7.02
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14	.00	.43	.19	.00	.00	.00	.82
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	.0	.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	14	9	3	7	6	5	3	3	12	5	13	8	65	56	20	13	0	242
(1)	5.79	3.72	1.24	2.89	2.48	2.07	1.24	1.24	4.96	2.07	5.37	3.31	26.86	23.14	8.26	5.37	.00	100.00
(2)	.67	.43	.14	.34	.29	.24	.14	.14	.58	.24	.63	.39	3.13	2.70	.96	.63	.00	11.65

33.0 FT WIND DATA: STABILITY CLASS B — CLASS FREQUENCY (PERCENT) = 3.47

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	1	0	0	0	1	0	0	0	0	1	0	0	1	0	0	5
(1)	.00	1.39	1.39	.00	.00	.00	1.39	.00	.00	.00	.00	1.39	.00	.00	1.39	.00	.00	6.94
(2)	.00	.05	.05	.00	.00	.00	.05	.00	.00	.00	.00	.05	.00	.00	.05	.00	.00	.24
4-7	0	3	5	0	0	2	2	1	0	1	0	5	5	3	2	3	0	32
(1)	.00	4.17	6.94	.00	.00	2.78	2.78	1.39	.00	1.39	.00	6.94	6.94	4.17	2.78	4.17	.00	44.44
(2)	.00	.14	.24	.00	.00	.10	.10	.05	.00	.05	.00	.24	.24	.14	.10	.14	.00	1.54
8-12	0	0	5	1	0	0	0	0	4	1	2	3	6	4	1	1	0	28
(1)	.00	.00	6.94	1.39	.00	.00	.00	.00	5.56	1.39	2.78	4.17	8.33	5.56	1.39	1.39	.00	38.89
(2)	.00	.00	.24	.05	.00	.00	.00	.00	.19	.05	.10	.14	.29	.19	.05	.05	.00	1.35
13-18	0	1	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	7
(1)	.00	1.39	4.17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.17	.00	.00	.00	9.72
(2)	.00	.05	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.34
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	5	14	1	0	2	3	1	4	2	2	9	11	10	4	4	0	72
(1)	.00	6.94	19.44	1.39	.00	2.78	4.17	1.39	5.56	2.78	2.78	12.50	15.28	13.89	5.56	5.56	.00	100.00
(2)	.00	.24	.67	.05	.00	.10	.14	.05	.19	.10	.10	.43	.53	.48	.19	.19	.00	3.47

(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 0.95 MPH)

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS C — CLASS FREQUENCY (PERCENT) = 4.91

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	2	0	0	0	0	0	0	1	1	0	0	1	0	5
(1)	.00	.00	.00	.00	1.96	.00	.00	.00	.00	.00	.00	.98	.98	.00	.00	.98	.00	4.90
(2)	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.05	.00	.24
4-7	1	0	2	3	0	0	0	2	0	1	3	3	1	8	1	2	0	27
(1)	.98	.00	1.96	2.94	.00	.00	.00	1.96	.00	.98	2.94	2.94	.98	7.84	.98	1.96	.00	26.47
(2)	.05	.00	.10	.14	.00	.00	.00	.10	.00	.05	.14	.14	.05	.39	.05	.10	.00	1.30
8-12	2	3	6	5	2	0	0	2	5	6	5	3	11	1	1	0	0	52
(1)	1.96	2.94	5.88	4.90	1.96	.00	.00	1.96	4.90	5.88	4.90	2.94	10.78	.98	.98	.00	.00	50.98
(2)	.10	.14	.29	.24	.10	.00	.00	.10	.24	.29	.24	.14	.53	.05	.05	.00	.00	2.50
13-18	0	5	5	0	0	0	0	0	0	6	1	0	0	1	0	0	0	18
(1)	.00	4.90	4.90	.00	.00	.00	.00	.00	.00	5.88	.98	.00	.00	.98	.00	.00	.00	17.65
(2)	.00	.24	.24	.00	.00	.00	.00	.00	.00	.29	.05	.00	.00	.05	.00	.00	.00	.87
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	3	8	13	8	4	0	0	4	5	13	9	7	13	10	2	3	1	102
(1)	2.94	7.84	12.75	7.84	3.92	.00	.00	3.92	4.90	12.75	8.82	6.86	12.75	9.80	1.96	2.94	.00	100.00
(2)	.14	.39	.63	.39	.19	.00	.00	.19	.24	.63	.43	.34	.63	.48	.10	.14	.00	4.91

33.0 FT WIND DATA: STABILITY CLASS D — CLASS FREQUENCY (PERCENT) = 39.62

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	1	2	2	3	4	3	1	3	2	2	4	3	5	1	0	37
(1)	.00	.12	.12	.24	.24	.36	.49	.36	.12	.36	.24	.24	.49	.36	.61	.12	.00	4.50
(2)	.00	.05	.05	.10	.10	.14	.19	.14	.05	.14	.10	.10	.19	.14	.24	.05	.00	1.78
4-7	8	6	7	14	25	15	13	19	20	12	20	49	46	14	22	7	0	297
(1)	.97	.73	.85	1.70	3.04	1.82	1.58	2.31	2.43	1.46	2.43	5.95	5.59	1.70	2.67	.85	.00	36.09
(2)	.39	.29	.34	.67	1.20	.72	.63	.91	.96	.58	.96	2.36	2.21	.67	1.06	.34	.00	14.30
8-12	8	13	14	12	5	11	4	9	23	43	21	21	108	54	19	7	0	372
(1)	.97	1.58	1.70	1.46	.61	1.34	.49	1.09	2.79	5.22	2.55	2.55	13.12	6.56	2.31	.85	.00	45.20
(2)	.39	.63	.67	.58	.24	.53	.19	.43	1.11	2.07	1.01	1.01	5.20	2.60	.91	.34	.00	17.91
13-18	4	10	7	7	0	0	1	4	1	26	3	2	34	7	0	0	0	106
(1)	.49	1.22	.85	.85	.00	.00	.12	.49	.12	3.16	.36	.24	4.13	.85	.00	.00	.00	12.88
(2)	.19	.48	.34	.34	.00	.00	.05	.19	.05	1.25	.14	.10	1.64	.34	.00	.00	.00	5.10
19-24	0	1	4	0	0	0	0	0	0	0	0	0	6	0	0	0	0	11
(1)	.00	.12	.49	.00	.00	.00	.00	.00	.00	.00	.00	.00	.73	.00	.00	.00	.00	1.34
(2)	.00	.05	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00	.00	.00	.00	.53
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	31	33	35	32	29	22	35	45	84	46	74	198	78	46	15	0	823
(1)	2.43	3.77	4.01	4.25	3.89	3.52	2.67	4.25	5.47	10.21	5.59	8.99	24.06	9.48	5.59	1.82	.00	100.00
(2)	.96	1.49	1.59	1.69	1.54	1.40	1.06	1.69	2.17	4.04	2.21	3.56	9.53	3.76	2.21	.72	.00	39.62

(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 0.95 MPH)

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 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	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	2	1	4	14	11	8	14	11	14	12	6	2	5	0	105
(1)	.13	.00	.00	.26	.13	.52	1.84	1.44	1.05	1.84	1.44	1.84	1.57	.79	.26	.66	.00	13.78
(2)	.05	.00	.00	.10	.05	.19	.67	.53	.39	.67	.53	.67	.58	.29	.10	.24	.00	5.06
4-7	5	2	0	7	11	7	14	23	33	32	64	94	42	16	12	5	0	367
(1)	.66	.26	.00	.92	1.44	.92	1.84	3.02	4.33	4.20	8.40	12.34	5.51	2.10	1.57	.66	.00	48.16
(2)	.24	.10	.00	.34	.53	.34	.67	1.11	1.59	1.54	3.08	4.53	2.02	.77	.58	.24	.00	17.67
8-12	0	0	0	0	3	6	15	16	26	64	19	37	32	7	2	4	0	231
(1)	.00	.00	.00	.00	.39	.79	1.97	2.10	3.41	8.40	2.49	4.86	4.20	.92	.26	.52	.00	30.31
(2)	.00	.00	.00	.00	.14	.29	.72	.77	1.25	3.08	.91	1.78	1.54	.34	.10	.19	.00	11.12
13-18	0	0	0	0	1	3	4	9	14	20	1	0	3	1	0	0	0	56
(1)	.00	.00	.00	.00	.13	.39	.52	1.18	1.84	2.62	.13	.00	.39	.13	.00	.00	.00	7.35
(2)	.00	.00	.00	.00	.0	.14	.19	.43	.67	.96	.05	.00	.14	.05	.00	.00	.00	2.70
19-24	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.39	.00	.00	.00	.00	.00	.00	.00	.00	.39
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.14
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	6	2	0	9	16	20	47	59	84	130	95	145	89	30	16	14	0	762
(1)	.79	.26	.00	1.18	2.10	2.62	6.17	7.74	11.02	17.06	12.47	19.03	11.68	3.94	2.10	1.84	.0	100.00
(2)	.29	.10	.00	.43	.77	.96	2.26	2.84	4.04	6.26	4.57	6.98	4.29	1.44	.77	.67	.00	36.69

33.0 FT WIND DATA: STABILITY CLASS F — CLASS FREQUENCY (PERCENT) = 3.13

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	3	2	1	1	2	2	1	0	0	2	0	14
(1)	.00	.00	.00	.00	.00	.00	4.62	3.08	1.54	1.54	3.08	3.08	1.54	.00	.00	3.08	.00	21.54
(2)	.0	.00	.00	.00	.00	.00	.14	.10	.05	.05	.10	.10	.05	.00	.00	.10	.00	.67
4-7	1	0	0	0	0	0	1	0	1	12	15	6	2	0	3	0	0	41
(1)	1.54	.00	.00	.00	.00	.00	1.54	.00	1.54	18.46	23.08	9.23	3.08	.00	4.62	.00	.00	63.08
(2)	.05	.00	.00	.00	.00	.00	.05	.00	.05	.58	.72	.29	.10	.00	.14	.00	.00	1.97
8-12	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	5
(1)	3.08	.00	.00	.00	.00	.00	.00	.00	1.54	1.54	.00	.00	1.54	.00	.00	.00	.00	7.69
(2)	.10	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.05	.00	.00	.00	.00	.24
13-18	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
(1)	3.08	4.62	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.69
(2)	.10	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
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	5	3	0	0	0	0	4	2	3	14	17	8	4	0	3	2	0	65
(1)	7.69	4.62	.00	.00	.00	.00	6.15	3.08	4.62	21.54	26.15	12.31	6.15	.00	4.62	3.08	.00	100.00
(2)	.24	.14	.00	.00	.00	.00	.19	.10	.14	.67	.82	.38	.19	.00	.14	.10	.00	3.13

(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 0.95 MPH)

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS G CLASS FREQUENCY (PERCENT) = .53

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	1	0	0	0	1	0	0	1	0	0	0	0	0	3
(1)	.00	.00	.00	.00	9.09	.00	.00	.00	9.09	.00	.00	9.09	.00	.00	.00	.00	.00	27.27
(2)	.00	.00	.00	.00	.05	.00	.00	.00	.05	.00	.00	.05	.00	.00	.00	.00	.00	.14
4-7	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	5
(1)	.00	.00	.00	.00	.00	.00	.00	.00	27.27	.00	.00	.00	.00	.00	18.18	.00	.00	45.45
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.10	.00	.00	.24
8-12	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.09	9.09	.00	.00	.00	.00	.00	.00	18.18
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.10
13-18	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	.00	9.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.09
(2)	.00	.05	.00	.00	.00	.00	.00	.00	.00	.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	0	1	0	0	1	0	0	0	4	1	1	1	0	0	2	0	0	11
(1)	.00	9.09	.00	.00	9.09	.00	.00	.00	36.36	9.09	9.09	9.09	.00	.00	18.18	.00	.00	100.00
(2)	.00	.05	.00	.00	.05	.00	.00	.00	.19	.05	.05	.05	.00	.00	.10	.00	.00	.53

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	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	2	2	4	6	7	22	17	11	18	15	21	19	10	8	9	0	172
(1)	.05	.10	.10	.19	.29	.34	1.06	.82	.53	.87	.72	1.01	.91	.48	.39	.43	.00	8.28
(2)	.05	.10	.10	.19	.29	.34	1.06	.82	.53	.87	.72	1.01	.91	.48	.39	.43	.00	8.28
4-7	23	19	16	30	37	28	32	46	59	58	104	160	117	64	55	22	0	870
(1)	1.11	.91	.77	1.44	1.78	1.35	1.54	2.21	2.84	2.79	5.01	7.70	5.63	3.08	2.65	1.06	.00	41.89
(2)	1.11	.91	.77	1.44	1.78	1.35	1.54	2.21	2.84	2.79	5.01	7.70	5.63	3.08	2.65	1.06	.00	41.89
8-12	18	17	26	19	15	18	20	28	69	120	56	69	192	94	30	20	0	811
(1)	.87	.81	1.25	.91	.72	.87	.96	1.35	3.32	5.78	2.70	3.32	9.24	4.53	1.44	.96	.00	39.05
(2)	.87	.82	1.25	.91	.72	.87	.96	1.35	3.32	5.78	2.70	3.32	9.24	4.53	1.44	.96	.00	39.05
13-18	6	20	15	7	1	3	5	13	15	53	8	2	46	16	0	0	0	210
(1)	.29	.96	.72	.34	.05	.14	.24	.63	.72	2.55	.39	.10	2.21	.77	.00	.00	.00	10.11
(2)	.29	.96	.72	.34	.05	.14	.24	.63	.72	2.55	.39	.10	2.21	.77	.00	.00	.00	10.11
19-24	0	[illegible]	4	0	0	0	0	0	3	0	0	0	6	0	0	0	0	14
(1)	.00	.05	.19	.00	.00	.00	.00	.00	.14	.00	.00	.00	.29	.00	.00	.00	.00	.67
(2)	.00	.05	.19	.00	.00	.00	.00	.00	.14	.00	.00	.00	.29	.00	.00	.00	.00	.67
GT 24	0	0	0	0	0	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	[illegible]	.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	48	59	63	60	59	56	79	104	157	249	183	252	380	184	93	51	0	2077
(1)	2.31	2.84	3.03	2.89	2.84	2.70	3.80	5.01	7.56	11.99	8.81	12.13	18.30	8.86	4.48	2.46	.00	100.00
(2)	2.31	2.84	3.03	2.89	2.84	2.70	3.80	5.01	7.56	11.99	8.81	12.13	18.30	8.86	4.48	2.46	.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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS A — CLASS FREQUENCY (PERCENT) = 11.66

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	0	.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	23	17	10	4	2	4	1	1	1	0	3	6	3	4	10	[illegible]	92
(1)	1.49	11.39	8.42	4.95	1.98	.99	1.98	.50	.50	.50	.00	1.49	2.97	1.49	1.98	4.95	.00	45.54
(2)	.16	1.26	.93	.55	.22	.11	.22	.05	.05	.05	.00	.16	.33	.16	.22	.55	.00	5.05
8-12	1	12	15	0	4	3	1	0	11	7	0	0	11	18	10	2	0	95
(1)	.50	5.94	7.43	.00	1.98	1.49	.50	.00	5.45	3.47	.00	.00	5.45	8.91	4.95	.99	.00	47.03
(2)	.05	.66	.82	.00	.22	.16	.05	.00	.60	.38	.00	.00	.60	.99	.55	.11	.00	5.21
13-18	0	0	0	0	0	0	0	0	8	5	0	0	1	1	0	0	0	15
(1)	.00	.00	.00	.00	.00	.00	.00	.00	3.96	2.48	.00	.00	.50	.50	.00	.00	.00	7.43
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.44	.27	.00	.00	.05	.05	.00	.00	.00	.82
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	35	32	10	8	5	5	1	20	13	0	3	18	22	14	12	0	202
(1)	1.98	17.33	15.84	4.95	3.96	2.48	2.48	.50	9.90	6.44	.00	1.49	8.91	10.89	6.93	5.94	.00	100.00
(2)	.22	1.92	1.76	.55	.44	.27	.27	.05	1.10	.71	.00	.16	.99	1.21	.77	.66	.00	11.08

33.0 FT WIND DATA: STABILITY CLASS B — CLASS FREQUENCY (PERCENT) = 2.58

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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	2.13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.13
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
4-7	2	4	4	1	3	1	0	0	2	0	1	2	3	2	3	1	0	29
(1)	4.26	8.51	8.51	2.13	6.38	2.13	.00	.00	4.26	.00	2.13	4.26	6.38	4.26	6.38	2.13	.00	61.70
(2)	.11	.22	.22	.05	.16	.05	.00	.00	.11	.00	.05	.11	.16	.11	.16	.05	.00	1.59
8-12	0	2	2	0	0	2	0	1	0	2	0	0	3	1	1	0	0	14
(1)	.00	4.26	4.26	.00	.00	4.26	.00	2.13	.00	4.26	.00	.00	6.38	2.13	2.13	.00	.00	29.79
(2)	.00	.11	.11	.00	.00	.11	.00	.05	.00	.11	.00	.00	.16	.05	.05	.00	.00	.77
13-18	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	.00	2.13	4.26	.00	.00	.00	.00	.00	.00	.00	6.38
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.11	.00	.00	.00	.00	.00	.00	.00	.16
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	3	6	6	1	3	3	0	1	3	4	1	2	6	3	4	1	0	47
(1)	6.38	12.77	12.77	2.13	6.38	6.38	.00	2.13	6.38	8.51	2.13	4.26	12.77	6.38	8.51	2.13	.00	100.00
(2)	.16	.33	.33	.05	.16	.16	.00	.05	.16	.22	.05	.11	.33	.16	.22	.05	.00	2.58

(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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS C — CLASS FREQUENCY (PERCENT) = 3.89

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	1	1	0	0	0	0	0	0	0	0	0	1	0	3
(1)	.00	.00	.00	.00	1.41	1.41	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.41	.00	4.23
(2)	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.16
4-7	0	3	3	3	7	6	1	0	1	3	0	2	2	3	0	2	0	36
(1)	.00	4.23	4.23	4.23	9.86	8.45	1.41	.00	1.41	4.23	.00	2.82	2.82	4.23	.00	2.82	.00	50.70
(2)	.00	.16	.16	.16	.38	.33	.05	.00	.05	.16	.00	.11	.11	.16	.00	.11	.00	1.97
8-12	0	2	2	0	0	0	0	0	3	8	1	0	2	2	1	0	0	21
(1)	.00	2.82	2.82	.00	.00	.00	.00	.00	4.23	11.27	1.41	.00	2.82	2.82	1.41	.00	.00	29.58
(2)	.00	.11	.11	.00	.00	.00	.00	.00	.16	.44	.05	.00	.11	.11	.05	.00	.00	1.15
13-18	0	4	3	0	0	0	0	0	1	2	1	0	0	0	0	0	0	11
(1)	.00	5.63	4.23	.00	.00	.00	.00	.00	1.41	2.82	1.41	.00	.00	.00	.00	.00	.00	15.49
(2)	.00	.22	.16	.00	.00	.00	.00	.00	.05	.11	.05	.00	.00	.00	.00	.00	.00	.60
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	9	8	3	8	7	1	0	5	13	2	2	4	5	1	3	0	71
(1)	.00	12.68	11.27	4.23	11.27	9.86	1.41	.00	7.04	18.31	2.82	2.82	5.63	7.04	1.41	4.23	.00	100.00
(2)	.00	.49	.44	.16	.44	.38	.05	.00	.27	.71	.11	.11	.22	.27	.05	.16	.00	3.89

33.0 FT WIND DATA: STABILITY CLASS D — CLASS FREQUENCY (PERCENT) = 30.88

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	4	2	2	2	5	2	1	7	3	1	2	7	3	8	4	0	56
(1)	.00	.71	.36	.36	.36	.89	.36	.18	1.24	.53	.71	.36	1.24	.53	1.42	.71	.00	9.95
(2)	.00	.22	.11	.11	.11	.27	.11	.05	.38	.16	.22	.11	.38	.16	.44	.22	.00	3.07
4-7	5	19	39	11	14	17	10	22	29	26	9	16	8	10	11	18	0	264
(1)	.89	3.37	6.93	1.95	2.49	3.02	1.78	3.91	5.15	4.62	1.60	2.84	1.42	1.78	1.95	3.20	.00	46.89
(2)	.27	1.04	2.14	.60	.77	.93	.55	1.21	1.59	1.43	.49	.88	.44	.55	.60	.99	.00	14.48
8-12	1	18	21	1	2	11	1	8	57	32	12	9	16	9	1	1	0	200
(1)	.18	3.20	3.73	.18	.36	1.95	.18	1.42	10.12	5.68	2.13	1.60	2.84	1.60	.18	.18	.00	35.52
(2)	.05	.99	1.15	.05	.11	.60	.05	.44	3.13	1.76	.66	.49	.88	.49	.05	.05	.00	10.97
13-18	2	6	5	0	0	2	0	5	6	8	0	0	1	0	0	0	0	35
(1)	.36	1.07	.89	.00	.00	.36	.00	.89	1.07	1.42	.00	.00	.18	.00	.00	.00	.00	6.22
(2)	.11	.33	.27	.00	.00	.11	.00	.27	.33	.44	.00	.00	.05	.00	.00	.00	.00	1.92
19-24	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
(1)	.71	.71	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.42
(2)	.22	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.44
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	12	51	67	14	18	35	13	36	99	69	25	27	32	22	20	23	0	563
(1)	2.13	9.06	11.90	2.49	3.20	6.22	2.31	6.39	17.58	12.26	4.44	4.80	5.68	3.91	3.55	4.09	.00	100.00
(2)	.66	2.80	3.68	.77	.99	1.92	.71	1.97	5.43	3.78	1.37	1.48	1.76	1.21	1.10	1.26	.00	30.88

(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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS E — CLASS FREQUENCY (PERCENT) = 32.25

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	3	6	5	5	6	5	6	6	3	5	12	12	9	7	5	0	97
(1)	.34	.51	1.02	.85	.85	1.02	.85	1.02	1.02	.51	.85	2.04	2.04	1.53	1.19	.85	.00	16.50
(2)	.11	.16	.33	.27	.27	.33	.27	.33	.33	.16	.27	.66	.66	.49	.38	.27	.00	5.32
4-7	2	4	5	9	19	21	16	7	25	29	37	52	23	23	17	10	0	299
(1)	.34	.68	.85	1.53	3.23	3.57	2.72	1.19	4.25	4.93	6.29	8.84	3.91	3.91	2.89	1.70	.00	50.85
(2)	.11	.22	.27	.49	1.04	1.15	.88	.38	1.37	1.59	2.03	2.85	1.26	1.26	.93	.55	.00	16.40
8-12	0	3	0	0	3	0	0	4	38	58	29	17	15	10	2	4	0	183
(1)	.00	.51	.00	.00	.51	.00	.00	.68	6.46	9.86	4.93	2.89	2.55	1.70	.34	.68	.00	31.12
(2)	.00	.16	.00	.00	.16	.00	.00	.22	2.08	3.18	1.59	.93	.82	.55	.11	.22	.00	10.04
13-18	1	0	0	0	0	0	0	0	3	4	1	0	0	0	0	0	0	9
(1)	.17	.00	.00	.00	.00	.00	.00	.00	.51	.68	.17	.00	.00	.00	.00	.00	.00	1.53
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.16	.22	.05	.00	.00	.00	.00	.00	.00	.49
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	5	10	11	14	27	27	21	17	72	94	72	81	50	42	26	19	0	588
(1)	.85	1.70	1.87	2.38	4.59	4.59	3.57	2.89	12.24	15.99	12.24	13.78	8.50	7.14	4.42	3.23	.00	100.00
(2)	.27	.55	.60	.77	1.48	1.48	1.15	.93	3.95	5.16	3.95	4.44	2.74	2.30	1.43	1.04	.00	32.25

33.0 FT WIND DATA: STABILITY CLASS F — CLASS FREQUENCY (PERCENT) = 12.34

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	1	0	0	0	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.44	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.44
(2)	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
C-3	0	1	1	1	2	1	0	3	6	5	2	10	5	1	0	0	0	38
(1)	.00	.44	.44	.44	.89	.44	.00	1.33	2.67	2.22	.89	4.44	2.22	.44	.00	.00	.00	16.89
(2)	.00	.05	.05	.05	.11	.05	.00	.11	.33	.27	.11	.55	.27	.05	.00	.00	.00	2.08
4-7	0	1	0	4	8	3	3	2	2	14	43	22	20	8	0	2	0	132
(1)	.00	.44	.00	1.78	3.56	1.33	1.33	.89	.89	6.22	19.11	9.78	8.89	3.56	.00	.89	.00	58.67
(2)	.00	.05	.00	.22	.44	.16	.16	.11	.11	.77	2.36	1.21	1.10	.44	.00	.11	.00	7.24
8-12	0	0	0	0	1	0	0	0	2	24	18	1	7	0	0	0	0	53
(1)	.00	.00	.00	.00	.44	.00	.00	.00	.89	10.67	8.00	.44	3.11	.00	.00	.00	.00	23.56
(2)	.00	.00	.00	.00	.05	.00	.00	.00	.11	1.32	.99	.05	.38	.00	.00	.00	.00	2.91
13-18	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	.44	.00	.00	.00	.00	.00	.00	.44
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.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	0	2	1	5	11	4	4	5	10	43	64	33	32	9	0	2	0	225
(1)	.00	.89	.44	2.22	4.89	1.78	1.78	2.22	4.44	19.11	28.44	14.67	14.22	4.00	.00	.89	.00	100.00
(2)	.00	.11	.05	.27	.60	.22	.22	.27	.55	2.36	3.51	1.81	1.76	.49	.00	.11	.00	12.34

(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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA: STABILITY CLASS G — CLASS FREQUENCY (PERCENT) = 6.97

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	6	2	2	1	0	1	0	2	3	2	0	0	0	0	19
(1)	.00	.00	.00	4.72	1.57	1.57	.79	.00	.79	.00	1.57	2.36	1.57	.00	.00	.00	.00	14.96
(2)	.00	.00	.00	.33	.11	.11	.05	.00	.05	.00	.11	.16	.11	.00	.00	.00	.00	1.04
4-7	0	0	3	23	9	1	1	0	0	2	21	12	11	1	2	0	0	86
(1)	.00	.00	2.36	18.11	7.09	.79	.79	.00	.00	1.57	16.54	9.45	8.66	.79	1.57	.00	.00	67.72
(2)	.00	.00	.16	1.26	.49	.05	.05	.00	.00	.11	1.15	.66	.60	.05	.11	.00	.00	4.72
8-12	0	0	0	0	0	0	0	0	0	5	15	0	2	0	0	0	0	22
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.94	11.81	.00	1.57	.00	.00	.00	.00	17.32
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27	.82	.00	.11	.00	.00	.00	.00	1.21
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	3	29	11	3	2	0	1	7	38	15	15	1	2	0	0	127
(1)	.00	.00	2.36	22.83	8.66	2.36	1.57	.00	.79	5.51	29.92	11.81	11.81	.79	1.57	.00	.00	100.00
(2)	.00	.00	.16	1.59	.60	.16	.11	.00	.05	.38	2.08	.82	.82	.05	.11	.00	.00	6.97

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	1	0	0	0	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
(2)	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
C-3	3	8	9	14	12	15	8	10	20	11	13	27	26	13	15	10	0	214
(1)	.16	.44	.49	.77	.66	.82	.44	.55	1.10	.60	.71	1.48	1.43	.71	.82	.55	.00	11.74
(2)	.16	.44	.49	.77	.66	.82	.44	.55	1.10	.60	.71	1.48	1.43	.71	.82	.55	.00	11.74
4-7	12	54	71	61	64	51	35	32	60	75	111	109	73	50	37	43	0	938
(1)	.66	2.96	3.89	3.35	3.51	2.80	1.92	1.76	3.29	4.11	6.09	5.98	4.00	2.74	2.03	2.36	.00	51.45
(2)	.66	2.96	3.89	3.35	3.51	2.80	1.92	1.76	3.29	4.11	6.09	5.98	4.00	2.74	2.03	2.36	.00	51.45
8-12	2	37	40	1	10	16	2	13	111	136	75	27	56	40	15	7	0	588
(1)	.11	2.03	2.19	.05	.55	.88	.11	.71	6.09	7.46	4.11	1.48	3.07	2.19	.82	.38	.00	32.25
(2)	.11	2.03	2.19	.05	.55	.88	.11	.71	6.09	7.46	4.11	1.48	3.07	2.19	.82	.38	.00	32.25
13-18	3	10	8	0	0	2	0	5	19	21	3	0	2	1	0	0	0	74
(1)	.16	.55	.44	.00	.00	.11	.00	.27	1.04	1.15	.16	.00	.11	.05	.00	.00	.00	4.06
(2)	.16	.55	.44	.00	.00	.11	.00	.27	1.04	1.15	.16	.00	.11	.05	.00	.00	.00	4.06
19-24	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
(1)	.22	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.44
(2)	.22	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.44
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	113	128	76	86	84	46	60	210	243	202	163	157	104	67	60	0	1823
(1)	1.32	6.20	7.02	4.17	4.72	4.61	2.52	3.29	11.52	13.33	11.08	8.94	8.61	5.70	3.68	3.29	.00	100.00
(2)	1.32	6.20	7.02	4.17	4.72	4.61	2.52	3.29	11.52	13.33	11.08	8.94	8.61	5.70	3.68	3.29	.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 0.95 MPH)

Table 4B
Distributions of Wind Directions and Speeds for the 220-ft Level of the 220-ft Tower

PILGRIM JAN97-MAR97 ALL DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS A — CLASS FREQUENCY (PERCENT) = 11.69

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	1	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.41	.00	.00	.00	.41
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05
4-7	1	2	0	1	0	0	0	0	1	0	0	0	0	2	2	2	0	11
(1)	.41	.83	.00	.41	.00	.00	.00	.00	.41	.00	.00	.00	.00	.83	.83	.83	.00	4.55
(2)	.05	.10	.00	.05	.00	.00	.00	.00	.05	.00	.00	.00	.00	.10	.10	.10	.00	.53
8-12	4	2	1	1	8	0	2	2	2	0	0	3	10	14	8	2	0	59
(1)	1.65	.83	.41	.41	3.31	.00	.83	.83	.83	.00	.00	1.24	4.13	5.79	3.31	.83	.00	24.38
(2)	.19	.10	.05	.05	.39	.00	.10	.10	.10	.00	.00	.14	.48	.68	.39	.10	.00	2.85
13-18	5	2	1	0	1	0	4	0	10	1	11	3	15	24	5	5	0	87
(1)	2.07	.83	.41	.00	.41	.00	1.65	.00	4.13	.41	4.55	1.24	6.20	9.92	2.07	2.07	.00	35.95
(2)	.24	.10	.05	.00	.05	.00	.19	.00	.48	.05	.53	.14	.72	1.16	.24	.24	.00	4.20
19-24	4	0	0	0	1	0	0	0	0	0	5	2	4	18	6	5	0	45
(1)	1.65	.00	.00	.00	.41	.00	.00	.00	.00	.00	2.07	.83	1.65	7.44	2.48	2.07	.00	18.60
(2)	.19	.00	.00	.00	.05	.00	.00	.00	.00	.00	.24	.10	.19	.87	.29	.24	.00	2.17
GT 24	2	0	0	0	0	0	0	0	0	0	0	0	5	22	3	7	0	39
(1)	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.07	9.09	1.24	2.89	.00	16.12
(2)	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	1.06	.14	.34	.00	1.88
ALL SPEEDS	16	6	2	2	10	0	6	2	13	1	16	8	34	81	24	21	0	242
(1)	6.61	2.48	.83	.83	4.13	.00	2.48	.83	5.37	.41	6.61	3.31	14.05	33.47	9.92	8.68	.00	100.00
(2)	.77	.29	.10	.10	.48	.00	.29	.10	.63	.05	.77	.39	1.64	3.91	1.16	1.01	.00	11.69

220.0 FT WIND DATA: STABILITY CLASS B — CLASS FREQUENCY (PERCENT) = 3.49

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	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	4
(1)	.00	1.39	1.39	.00	.00	.00	.00	.00	.00	.00	.00	1.39	.00	1.39	.00	.00	.00	5.56
(2)	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.19
4-7	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	4
(1)	.00	1.39	1.39	.00	.00	.00	.00	.00	.00	.00	.00	1.39	.00	.00	1.39	.00	.00	5.56
(2)	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.00	.00	.19
8-12	1	3	1	0	0	0	1	1	0	0	0	2	2	2	2	1	0	16
(1)	1.39	4.17	1.39	.00	.00	.00	1.39	1.39	.00	.00	.00	2.78	2.78	2.78	2.78	1.39	.00	22.22
(2)	.05	.14	.05	.00	.00	.00	.05	.05	.00	.00	.00	.10	.10	.10	.10	.05	.00	.77
13-18	0	2	2	1	0	1	2	0	5	1	0	1	1	2	2	1	0	21
(1)	.00	2.78	2.78	1.39	.00	1.39	2.78	.00	6.94	1.39	.00	1.39	1.39	2.78	2.78	1.39	.00	29.17
(2)	.00	.10	.10	.05	.00	.05	.10	.00	.24	.05	.00	.05	.05	.10	.10	.05	.00	1.01
19-24	1	1	1	0	0	0	0	0	0	1	2	3	3	4	0	2	0	18
(1)	1.39	1.39	1.39	.00	.00	.00	.00	.00	.00	1.39	2.78	4.17	4.17	5.56	.00	2.78	.00	25.00
(2)	.05	.05	.05	.00	.00	.00	.00	.00	.00	.05	.10	.14	.14	.19	.00	.10	.00	.87
GT 24	0	1	2	0	0	0	0	0	0	0	0	0	1	4	1	0	0	9
(1)	.00	1.39	2.78	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.39	5.56	1.39	.00	.00	12.50
(2)	.00	.05	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.19	.05	.00	.00	.43
ALL SPEEDS	2	9	8	1	0	1	3	1	5	2	2	8	7	13	6	4	0	72
(1)	2.78	12.50	11.11	1.39	.00	1.39	4.17	1.39	6.94	2.78	2.78	11.11	9.72	18.06	8.33	5.56	.00	100.00
(2)	.10	.43	.39	.05	.00	.05	.14	.05	.24	.10	.10	.39	.34	.63	.29	.19	.00	3.48

(1)= PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
(2)= PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD
C = CALM (WIND SPEED LESS THAN OR EQUAL TO 0.95 MPH)

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS C — CLASS FREQUENCY (PERCENT) = 4.93

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	1	0	1	0	0	0	0	2
	(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.98	.00	.98	.00	.00	.00	.00	1.96
	(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.10
4-7		0	0	2	1	1	1	0	0	0	0	0	1	0	1	1	1	0	9
	(1)	.00	.00	1.96	.98	.98	.98	.00	.00	.00	.00	.00	.98	.00	.98	.98	.98	.00	8.82
	(2)	.00	.00	.10	.05	.05	.05	.00	.00	.00	.00	.00	.05	.00	.05	.05	.05	.00	.43
8-12		0	0	1	0	1	0	0	0	0	2	0	2	0	2	1	2	0	11
	(1)	.00	.00	.98	.00	.98	.00	.00	.00	.00	1.96	.00	1.96	.00	1.96	.98	1.96	.00	10.78
	(2)	.00	.00	.05	.00	.05	.00	.00	.00	.00	.10	.00	.10	.00	.10	.05	.10	.00	.53
13-18		0	3	2	3	1	0	0	4	3	5	3	2	5	3	1	1	0	36
	(1)	.00	2.94	1.96	2.94	.98	.00	.00	3.92	2.94	4.90	2.94	1.96	4.90	2.94	.98	.98	.00	35.29
	(2)	.00	.14	.10	.14	.05	.00	.00	.19	.14	.24	.14	.10	.24	.14	.05	.05	.00	1.74
19-24		2	3	2	1	1	0	0	0	0	3	3	1	6	1	0	2	0	25
	(1)	1.96	2.94	1.96	.98	.98	.00	.00	.00	.00	2.94	2.94	.98	5.88	.98	.00	1.96	.00	24.51
	(2)	.10	.14	.10	.05	.05	.00	.00	.00	.00	.14	.14	.05	.29	.05	.00	.10	.00	1.21
GT 24		2	2	5	0	0	0	0	0	0	1	4	0	1	3	1	0	0	19
	(1)	1.96	1.96	4.90	.00	.00	.00	.00	.00	.00	.98	3.92	.00	.98	2.94	.98	.00	.00	18.63
	(2)	.10	.10	.24	.00	.00	.00	.00	.00	.00	.05	.19	.00	.05	.14	.05	.00	.00	.92
ALL SPEEDS		4	8	12	5	4	1	0	4	3	11	11	6	13	10	4	6	0	102
	(1)	3.92	7.84	11.76	4.90	3.92	.98	.00	3.92	2.94	10.78	10.78	5.88	12.75	9.80	3.92	5.88	.00	100.00
	(2)	.19	.39	.58	.24	.19	.05	.00	.19	.14	.53	.53	.29	.63	.48	.19	.29	.00	4.93

220.0 FT WIND DATA: STABILITY CLASS D — CLASS FREQUENCY (PERCENT) = 39.45

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	1	0	0	0	2	0	0	0	1	0	0	0	4
	(1)	.00	.00	.00	.00	.00	.12	.00	.00	.00	.24	.00	.00	.00	.12	.00	.00	.00	.49
	(2)	.00	.00	.00	.00	.00	.05	.00	.00	.00	.10	.00	.00	.00	.05	.00	.00	.00	.19
4-7		0	2	4	5	7	3	3	2	0	1	0	4	4	3	3	0	0	41
	(1)	.00	.24	.49	.61	.86	.37	.37	.24	.00	.12	.00	.49	.49	.37	.37	.00	.00	5.02
	(2)	.00	.10	.19	.24	.34	.14	.14	.10	.00	.05	.00	.19	.19	.14	.14	.00	.00	1.98
8-12		5	0	1	4	14	7	10	10	8	9	5	9	9	7	6	3	0	107
	(1)	.61	.00	.12	.49	1.71	.86	1.22	1.22	.98	1.10	.61	1.10	1.10	.86	.73	.37	.00	13.10
	(2)	.24	.00	.05	.19	.68	.34	.48	.48	.39	.43	.24	.43	.43	.34	.29	.14	.00	5.17
13-18		7	5	4	13	10	7	5	8	14	11	23	29	47	21	17	16	0	237
	(1)	.86	.61	.49	1.59	1.22	.86	.61	.98	1.71	1.35	2.82	3.55	5.75	2.57	2.08	1.96	.00	29.01
	(2)	.34	.24	.19	.63	.48	.34	.24	.39	.68	.53	1.11	1.40	2.27	1.01	.82	.77	.00	11.44
19-24		6	6	8	12	7	6	5	6	5	32	26	9	53	40	17	9	0	247
	(1)	.73	.73	.98	1.47	.86	.73	.61	.73	.61	3.92	3.18	1.10	6.49	4.90	2.08	1.10	.00	30.23
	(2)	.29	.29	.39	.58	.34	.29	.24	.29	.24	1.55	1.26	.43	2.56	1.93	.82	.43	.00	11.93
GT 24		7	5	8	5	2	2	4	2	1	17	8	3	47	48	14	8	0	181
	(1)	.86	.61	.98	.61	.24	.24	.49	.24	.12	2.08	.98	.37	5.75	5.88	1.71	.98	.00	22.15
	(2)	.34	.24	.39	.24	.10	.10	.19	.10	.05	.82	.39	.14	2.27	2.32	.68	.39	.00	8.74
ALL SPEEDS		25	18	25	39	40	26	27	28	28	72	62	54	160	120	57	36	0	817
	(1)	3.06	2.20	3.06	4.77	4.90	3.18	3.30	3.43	3.43	8.81	7.59	6.61	19.58	14.69	6.98	4.41	.00	100.00
	(2)	1.21	.87	1.21	1.88	1.93	1.26	1.30	1.35	1.35	3.48	2.99	2.61	7.73	5.79	2.75	1.74	.00	39.45

(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 0.95 MPH)

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS E — CLASS FREQUENCY (PERCENT) = 36.79

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	2	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00	.00	.00	.00	.26
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.10
C-3	0	0	0	2	2	0	0	0	0	0	1	0	1	1	1	0	0	8
(1)	.00	.00	.00	.26	.26	.00	.00	.00	.00	.00	.13	.00	.13	.13	.13	.00	.00	1.05
(2)	.00	.00	.00	.10	.10	.00	.00	.00	.00	.00	.05	.00	.05	.05	.05	.00	.00	.39
4-7	0	0	1	1	5	5	3	2	2	3	3	3	2	3	6	6	0	45
(1)	.00	.00	.13	.13	.66	.66	.39	.26	.26	.39	.39	.39	.26	.39	.79	.79	.00	5.91
(2)	.00	.00	.05	.05	.24	.24	.14	.10	.10	.14	.14	.14	.10	.14	.29	.29	.00	2.17
8-12	3	1	1	6	3	7	6	3	16	11	22	11	12	15	2	2	0	121
(1)	.39	.13	.13	.79	.39	.92	.79	.39	2.10	1.44	2.89	1.44	1.57	1.97	.26	.26	.00	15.88
(2)	.14	.05	.05	.29	.14	.34	.29	.14	.77	.53	1.06	.53	.58	.72	.10	.10	.00	5.84
13-18	4	1	1	3	6	9	11	16	10	35	60	30	67	30	9	6	0	300
(1)	.52	.13	.13	.39	.79	1.18	1.44	2.10	1.31	4.59	7.87	3.94	8.79	3.94	1.18	1.05	.00	39.37
(2)	.19	.05	.05	.14	.29	.43	.53	.77	.48	1.69	2.90	1.45	3.24	1.45	.43	.39	.00	14.49
19-24	0	0	0	0	1	3	8	12	5	25	30	6	41	26	4	10	0	191
(1)	.00	.00	.00	.00	.13	.39	1.05	1.57	.66	3.28	3.94	.79	5.38	3.41	.52	1.31	.00	25.07
(2)	.00	.00	.00	.00	.05	.14	.39	.58	.24	1.21	1.45	.29	1.98	1.26	.19	.48	.00	9.22
GT 24	0	0	0	0	0	3	13	12	10	25	8	0	8	10	2	4	0	95
(1)	.00	.00	.00	.00	.00	.39	1.71	1.57	1.31	3.28	1.05	.00	1.05	1.31	.26	.52	.00	12.47
(2)	.00	.00	.00	.00	.00	.14	.63	.58	.48	1.21	.39	.00	.39	.48	.10	.19	.00	4.59
ALL SPEEDS	7	2	3	12	17	27	41	45	43	119	124	52	131	85	24	30	0	762
(1)	.92	.26	.39	1.57	2.23	3.54	5.38	5.91	5.64	15.62	16.27	6.82	17.19	11.15	3.15	3.94	.00	100.00
(2)	.34	.10	.14	.58	.82	1.30	1.98	2.17	2.08	5.75	5.99	2.51	6.33	4.10	1.16	1.45	.00	36.79

220.0 FT WIND DATA: STABILITY CLASS F — CLASS FREQUENCY (PERCENT) = 3.14

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	1	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.54	.00	.00	.00	.00	.00	.00	1.54
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05
4-7	0	0	0	0	1	0	0	1	0	1	0	0	2	0	0	0	0	5
(1)	.00	.00	.00	.00	1.54	.00	.00	1.54	.00	1.54	.00	.00	3.08	.00	.00	.00	.00	7.69
(2)	.00	.00	.00	.00	.05	.00	.00	.05	.00	.05	.00	.00	.10	.00	.00	.00	.00	.24
8-12	1	0	0	0	0	2	0	0	1	6	1	0	1	6	0	0	0	18
(1)	1.54	.00	.00	.00	.00	3.08	.00	.00	1.54	9.23	1.54	.00	1.54	9.23	.00	.00	.00	27.69
(2)	.05	.00	.00	.00	.00	.10	.00	.00	.05	.29	.05	.00	.05	.29	.00	.00	.00	.87
13-18	0	0	0	0	2	0	0	1	0	3	6	4	4	2	0	3	0	25
(1)	.00	.00	.00	.00	3.08	.00	.00	1.54	.00	4.62	9.23	6.15	6.15	3.08	.00	4.62	.00	38.46
(2)	.00	.00	.00	.00	.10	.00	.00	.05	.00	.14	.29	.19	.19	.10	.00	.14	.00	1.21
19-24	1	0	0	0	0	0	0	0	0	1	0	0	4	1	0	2	0	9
(1)	1.54	.00	.00	.00	.00	.00	.00	.00	.00	1.54	.00	.00	6.15	1.54	.00	3.08	.00	13.85
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.19	.05	.00	.10	.00	.43
GT 24	3	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	7
(1)	4.62	4.62	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.54	.00	.00	.00	.00	10.77
(2)	.14	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.34
ALL SPEEDS	5	3	0	0	3	2	0	2	1	11	8	4	12	9	0	5	0	65
(1)	7.69	4.62	.00	.00	4.62	3.08	.00	3.08	1.54	16.92	12.31	6.15	18.46	13.85	.00	7.69	.00	100.00
(2)	.24	.14	.00	.00	.14	.10	.00	.10	.05	.53	.39	.19	.58	.43	.00	.24	.00	3.14

(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 0.95 MPH)

PILGRIM JAN97-MAR97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS G CLASS FREQUENCY (PERCENT) = .53

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	1	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.09	.00	.00	.00	9.09
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05
4-7	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	9.09	9.09	.00	.00	.00	.00	.00	.00	.00	.00	18.18
(2)	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.10
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	2	1	0	0	0	0	0	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	.00	18.18	9.09	.00	.00	.00	.00	.00	.00	.00	27.27
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	.00	.00	.00	.00	.00	.00	.00	.14
19-24	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	4
(1)	9.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.09	9.09	.00	.00	9.09	.00	36.36
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.05	.00	.19
GT 24	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	.00	9.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.09
(2)	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
ALL SPEEDS	1	1	0	0	0	0	0	1	3	1	0	1	1	1	0	1	0	11
(1)	9.09	9.09	.00	.00	.00	.00	.00	9.09	27.27	9.09	.00	9.09	9.09	9.09	.00	9.09	.00	100.00
(2)	.05	.05	.00	.00	.00	.00	.00	.05	.14	.05	.00	.05	.05	.05	.00	.05	.00	.53

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	2	0	0	0	0	0	2
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.10
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.10
C-3	0	1	1	2	2	1	0	0	0	2	3	1	2	5	1	0	0	21
(1)	.00	.05	.05	.10	.10	.05	.00	.00	.00	.10	.14	.05	.10	.24	.05	.00	.00	1.01
(2)	.00	.05	.05	.10	.10	.05	.00	.00	.00	.10	.14	.05	.10	.24	.05	.00	.00	1.01
4-7	1	5	8	8	14	9	6	6	4	5	3	9	8	9	13	9	0	117
(1)	.05	.24	.39	.39	.68	.43	.29	.29	.19	.24	.14	.43	.39	.43	.63	.43	.00	5.65
(2)	.05	.24	.39	.39	.68	.43	.29	.29	.19	.24	.14	.43	.39	.43	.63	.43	.00	5.65
8-12	14	6	5	11	26	16	19	16	27	28	28	27	34	46	19	10	0	332
(1)	.68	.29	.24	.53	1.26	.77	.92	.77	1.30	1.35	1.35	1.30	1.64	2.22	.92	.48	.00	16.03
(2)	.68	.29	.24	.53	1.26	.77	.92	.77	1.30	1.35	1.35	1.30	1.64	2.22	.92	.48	.00	16.03
13-18	16	13	10	20	20	17	22	29	44	57	103	69	139	82	34	34	0	709
(1)	.77	.63	.48	.97	.97	.82	1.06	1.40	2.12	2.75	4.97	3.33	6.71	3.96	1.64	1.64	.00	34.23
(2)	.77	.63	.48	.97	.97	.82	1.06	1.40	2.12	2.75	4.97	3.33	6.71	3.96	1.64	1.64	.00	34.23
19-24	15	10	11	13	10	9	13	18	10	82	66	22	112	90	27	31	0	539
(1)	.72	.48	.53	.63	.48	.43	.63	.87	.48	3.96	3.19	1.06	5.41	4.35	1.30	1.50	.00	26.03
(2)	.72	.48	.53	.63	.48	.43	.63	.87	.48	3.96	3.19	1.06	5.41	4.35	1.30	1.50	.00	26.03
GT 24	14	12	15	5	2	5	17	14	11	43	20	3	63	97	21	19	0	351
(1)	.68	.58	.72	.24	.10	.24	.82	.68	.53	2.08	.97	.14	3.04	4.20	1.01	.92	.00	16.95
(2)	.68	.58	.72	.24	.10	.24	.82	.68	.53	2.08	.97	.14	3.04	4.20	1.01	.92	.00	16.95
ALL SPEEDS	60	47	50	59	74	57	77	83	96	217	223	133	358	319	115	103	0	2071
(1)	2.90	2.27	2.41	2.85	3.57	2.75	3.72	4.01	4.64	10.48	10.77	6.42	17.29	15.40	5.55	4.97	.00	100.00
(2)	2.90	2.27	2.41	2.85	3.57	2.75	3.72	4.01	4.64	10.48	10.77	6.42	17.29	15.40	5.55	4.97	.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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS A CLASS FREQUENCY (PERCENT) = 11.54

	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	1	6	1	1	1	1	0	0	1	0	6	2	0	0	1	1	0	16
(1)	.43	2.59	.43	.43	.43	.43	.00	.00	.43	.00	.00	.86	.00	.00	.43	.43	.00	6.90
(2)	.05	.30	.05	.05	.05	.05	.00	.00	.05	.00	.00	.10	.00	.00	.05	.05	.00	.80
8-12	1	17	5	1	8	5	4	1	0	3	0	3	4	1	4	4	0	61
(1)	.43	7.33	2.16	.43	3.45	2.16	1.72	.43	.00	1.29	.00	1.29	1.72	.43	1.72	1.72	.00	26.29
(2)	.05	.85	.25	.05	.40	.25	.20	.05	.00	.15	.00	.15	.20	.05	.20	.20	.00	3.03
13-18	2	14	5	0	1	5	1	0	11	1	1	0	4	6	2	8	0	61
(1)	.86	6.03	2.16	.00	.43	2.16	.43	.00	4.74	.43	.43	.00	1.72	2.59	.86	3.45	.00	26.29
(2)	.10	.70	.25	.00	.05	.25	.05	.00	.55	.05	.05	.00	.20	.30	.10	.40	.00	3.03
19-24	0	9	4	0	0	0	1	0	10	5	0	0	9	8	2	7	0	65
(1)	.00	3.88	1.72	.00	.00	.00	.43	.00	4.31	2.16	.00	.00	3.88	3.45	5.17	3.02	.00	28.02
(2)	.00	.45	.20	.00	.00	.00	.05	.00	.5[illegible]	.25	.00	.00	.45	.40	.6[illegible]	.35	.00	3.23
GT 24	0	0	0	0	0	0	0	0	1	4	0	0	5	10		1	0	29
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.43	1.72	.00	.00	2.16	4.31	3.[illegible]5	.43	.00	12.50
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.20	.00	.00	.25	.50	.40	.05	.00	1.44
ALL SPEEDS	4	46	15	2	10	11	6	1	23	13	1	5	22	25	27	21	0	232
(1)	1.72	19.83	6.47	.86	4.31	4.74	2.59	.43	9.91	5.60	.43	2.16	9.48	10.78	11.64	9.05	.00	100.00
(2)	.20	2.29	.75	.10	.50	.55	.30	.05	1.14	.65	.05	.25	.09	1.24	1.34	1.04	.00	11.54

220.0 FT WIND DATA: STABILITY CLASS B CLASS FREQUENCY (PERCENT) = 2.79

	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	1	3	0	1	0	0	1	0	0	0	0	1	1	0	1	5	0	14
(1)	1.79	5.36	.00	1.79	.00	.00	1.79	.00	.00	.00	.00	1.79	1.79	.00	1.79	8.93	.00	25.00
(2)	.05	.15	.00	.05	.00	.00	.05	.00	.00	.00	.00	.05	.05	.00	.05	.25	.00	.70
8-12	0	1	1	0	3	0	1	1	0	0	0	1	1	3	0	2	0	14
(1)	.00	1.79	1.79	.00	5.36	.00	1.79	1.79	.00	.00	.00	1.79	1.79	5.36	.00	3.57	.00	25.00
(2)	.00	.05	.05	.00	.15	.00	.05	.05	.00	.00	.00	.05	.05	.15	.00	.10	.00	.70
13-18	0	1	1	0	0	2	1	1	2	0	0	1	1	2	1	0	0	13
(1)	.00	1.79	1.79	.00	.00	3.57	1.79	1.79	3.57	.00	.00	1.79	1.79	3.57	1.79	.00	.00	23.21
(2)	.00	.05	.05	.00	.00	.10	.05	.05	.10	.00	.00	.05	.05	.10	.05	.00	.00	.65
19-24	0	2	1	0	0	0	0	0	0	3	0	0	2	2	1	0	0	11
(1)	.00	3.57	1.79	.00	.00	.00	.00	.00	.00	5.36	.00	.00	3.57	3.57	1.79	.00	.00	19.64
(2)	.00	.10	.05	.00	.00	.00	.00	.00	.00	.15	.00	.00	.10	.10	.05	.00	.00	.55
GT 24	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	4
(1)	.00	.00	.00	.00	.00	.00	.00	.00	1.79	.00	.00	1.79	.00	.00	1.79	1.79	.00	7.14
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.00	.00	.05	.05	.00	.20
ALL SPEEDS	1	7	3	1	3	2	3	2	3	3	0	4	5	7	4	8	0	56
(1)	1.79	12.[illegible]	5.36	1.79	5.36	3.57	5.36	3.57	5.36	5.36	.00	7.14	8.93	12.50	7.14	14.29	.00	100.00
(2)	.05	.[illegible]	.15	.05	.15	.10	.15	.10	.15	.15	.00	.20	.25	.35	.20	.40	.00	2.79

(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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS C CLASS FREQUENCY (PERCENT) = 3.83

	WIND DIRECTION FROM																	
SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4-7	0	0	2	1	2	2	0	0	0	0	0	1	1	1	0	1	0	11
(1)	.00	.00	2.60	1.30	2.60	2.60	.00	.00	.00	.00	.00	1.30	1.30	1.30	.00	1.30	.00	14.29
(2)	.00	.00	.10	.05	.10	.10	.00	.00	.00	.00	.00	.05	.05	.05	.00	.05	.00	.55
8-12	0	2	0	2	1	5	2	1	2	2	0	0	1	2	0	3	0	23
(1)	.00	2.60	.00	2.60	1.30	6.49	2.60	1.30	2.60	2.60	.00	.00	1.30	2.60	.00	3.90	.00	29.87
(2)	.00	.10	.00	.10	.05	.25	.10	.05	.10	.10	.00	.00	.05	.10	.00	.15	.00	1.14
13-18	0	0	1	0	0	1	1	1	2	5	0	0	1	1	0	1	0	14
(1)	.00	.00	1.30	.00	.00	1.30	1.30	1.30	2.60	6.49	.00	.00	1.30	1.30	.00	1.30	.00	18.18
(2)	.00	.00	.05	.00	.00	.05	.05	.05	.10	.25	.00	.00	.05	.05	.00	.05	.00	.70
19-24	1	1	1	0	0	0	0	1	2	3	2	0	1	3	1	0	0	16
(1)	1.30	1.30	1.30	.00	.00	.00	.00	1.30	2.60	3.90	2.60	.00	1.30	3.90	1.30	.00	.00	20.78
(2)	.05	.05	.05	.00	.00	.00	.00	.05	.10	.15	.10	.00	.05	.15	.05	.00	.00	.80
GT 24	0	6	2	0	0	0	0	0	1	1	0	0	1	0	1	1	0	13
(1)	.00	7.79	2.60	.00	.00	.00	.00	.00	1.30	1.30	.00	.00	1.30	.00	1.30	1.30	.00	16.88
(2)	.00	.30	.10	.00	.00	.00	.00	.00	.05	.05	.00	.00	.05	.00	.05	.05	.00	.65
ALL SPEEDS	1	9	6	3	3	8	3	3	7	11	2	1	5	7	2	6	0	77
(1)	1.30	11.69	7.79	3.90	3.90	10.39	3.90	3.90	9.09	14.29	2.60	1.30	6.49	9.09	2.60	7.79	.00	100.00
(2)	.05	.45	.30	.15	.15	.40	.15	.15	.35	.55	.10	.05	.25	.35	.10	.30	.00	3.83

220.0 FT WIND DATA: STABILITY CLASS D CLASS FREQUENCY (PERCENT) = 30.70

	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	1	0	1	1	1	1	0	1	0	0	1	1	0	0	0	8
(1)	.00	.00	.16	.00	.16	.16	.16	.16	.00	.16	.00	.00	.16	.16	.00	.00	.00	1.30
(2)	.00	.00	.05	.00	.05	.05	.05	.05	.00	.05	.00	.00	.05	.05	.00	.00	.00	.40
4-7	2	7	8	3	3	7	4	1	7	2	3	6	3	0	5	7	0	68
(1)	.32	1.13	1.30	.49	.49	1.13	.65	.16	1.13	.32	.49	.97	.49	.00	.81	1.13	.00	11.02
(2)	.10	.35	.40	.15	.15	.35	.20	.05	.35	.10	.15	.30	.15	.00	.25	.35	.00	3.38
8-12	3	15	12	9	4	9	12	12	17	16	6	7	4	3	4	16	0	149
(1)	.49	2.43	1.94	1.46	.65	1.46	1.94	1.94	2.76	2.59	.97	1.13	.65	.49	.65	2.59	.00	24.15
(2)	.15	.75	.60	.45	.20	.45	.60	.60	.85	.80	.30	.35	.20	.15	.20	.80	.00	7.41
13-18	0	6	13	7	1	5	6	20	34	29	12	9	8	4	4	11	0	169
(1)	.00	.97	2.11	1.13	.16	.81	.97	3.24	5.51	4.70	1.94	1.46	1.30	.65	.65	1.78	.00	27.39
(2)	.00	.30	.65	.35	.05	.25	.30	1.00	1.69	1.44	.60	.45	.40	.20	.20	.55	.00	8.41
19-24	2	8	15	0	0	3	2	3	24	35	5	6	14	12	9	12	0	150
(1)	.32	1.30	2.43	.00	.00	.49	.32	.49	3.89	5.67	.81	.97	2.27	1.94	1.46	1.94	.00	24.31
(2)	.10	.40	.75	.00	.00	.15	.10	.15	1.19	1.74	.25	.30	.70	.60	.45	.60	.00	7.46
GT 24	11	7	6	0	3	2	3	5	5	5	0	0	5	7	4	10	0	73
(1)	1.78	1.13	.97	.00	.49	.32	.49	.81	.81	.81	.00	.00	.81	1.13	.65	1.62	.00	11.83
(2)	.55	.35	.30	.00	.15	.10	.15	.25	.25	.25	.00	.00	.25	.35	.20	.50	.00	3.63
ALL SPEEDS	18	43	55	19	12	27	28	42	87	88	26	28	35	27	26	56	0	617
(1)	2.82	6.97	8.91	3.08	1.94	4.38	4.54	6.81	14.10	14.26	4.21	4.54	5.67	4.38	4.21	9.08	.00	100.00
(2)	.90	2.14	2.74	.95	.60	1.34	1.39	2.09	4.33	4.38	1.29	1.39	1.74	1.34	1.29	2.79	.00	30.70

(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 0.95 MPH)

PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS E CLASS FREQUENCY (PERCENT) = 32.84

	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	2	0	0	0	0	1	3	2	2	0	1	1	1	0	1	0	0	14
(1)	.30	.00	.00	.00	.00	.15	.45	.30	.30	.00	.15	.15	.15	.00	.15	.00	.00	2.12
(2)	.10	.00	.00	.00	.00	.05	.15	.10	.10	.00	.05	.05	.05	.00	.05	.00	.00	.70
4-7	1	8	3	7	6	2	5	1	3	3	2	7	6	2	2	2	0	60
(1)	.15	1.21	.45	1.06	.91	.30	.76	.15	.45	.45	.30	1.06	.91	.30	.30	.30	.00	9.09
(2)	.05	.40	.15	.35	.30	.10	.25	.05	.15	.15	.10	.35	.30	.10	.10	.10	.00	2.99
8-12	6	1	0	3	5	10	19	6	7	9	11	7	4	9	7	7	0	111
(1)	.91	.15	.00	.45	.76	1.52	2.88	.91	1.06	1.36	1.67	1.06	.61	1.36	1.06	1.06	.00	16.82
(2)	.30	.05	.00	.15	.25	.50	.95	.30	.35	.45	.55	.35	.20	.45	.35	.35	.00	5.52
13-18	3	3	0	5	5	8	7	8	20	23	15	34	31	14	17	18	0	211
(1)	.45	.45	.00	.76	.76	1.21	1.06	1.21	3.03	3.48	2.27	5.15	4.70	2.12	2.58	2.73	.00	31.97
(2)	.15	.15	.00	.25	.25	.40	.35	.40	1.00	1.14	.75	1.69	1.54	.70	.85	.90	.00	10.50
19-24	7	1	0	1	2	0	1	1	11	71	20	17	21	15	13	11	0	192
(1)	1.06	.15	.00	.15	.30	.00	.15	.15	1.67	10.76	3.03	2.58	3.18	2.27	1.97	1.67	.00	29.09
(2)	.35	.05	.00	.05	.10	.00	.05	.05	.55	3.53	1.00	.85	1.04	.75	.65	.55	.00	9.55
GT 24	1	0	0	0	1	0	0	0	2	18	13	0	4	6	8	19	0	72
(1)	.15	.00	.00	.00	.15	.00	.00	.00	.30	2.73	1.97	.00	.61	.91	1.21	2.88	.00	10.91
(2)	.05	.00	.00	.00	.05	.00	.00	.00	.10	.90	.65	.00	.20	.30	.40	.95	.00	3.58
ALL SPEEDS	20	13	3	16	19	21	35	18	45	124	62	66	67	46	48	57	0	660
(1)	3.03	1.97	.45	2.42	2.88	3.18	5.30	2.73	6.82	18.79	9.39	10.00	10.15	6.97	7.27	8.64	.00	100.00
(2)	1.00	.65	.15	.80	.95	1.04	1.74	.90	2.24	6.17	3.08	3.28	3.33	2.29	2.39	2.84	.00	32.84

220.0 FT WIND DATA: STABILITY CLASS F CLASS FREQUENCY (PERCENT) = 11.89

	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	2	1	0	2	0	0	0	1	1	0	0	1	0	0	8
(1)	.00	.00	.00	.84	.42	.00	.84	.00	.00	.00	.42	.42	.00	.00	.42	.00	.00	3.35
(2)	.00	.00	.00	.10	.05	.00	.10	.00	.00	.00	.05	.05	.00	.00	.05	.00	.00	.40
4-7	1	0	1	0	1	2	3	1	2	3	0	3	1	1	0	0	0	19
(1)	.42	.00	.42	.00	.42	.84	1.26	.42	.84	1.26	.00	1.26	.42	.42	.00	.00	.00	7.95
(2)	.05	.00	.05	.00	.05	.10	.15	.05	.10	.15	.00	.15	.05	.05	.00	.00	.00	.95
8-12	1	0	1	2	0	7	1	1	2	4	5	4	10	8	3	4	0	53
(1)	.42	.00	.42	.84	.00	2.93	.42	.42	.84	1.67	2.09	1.67	4.18	3.35	1.26	1.67	.00	22.18
(2)	.05	.00	.05	.10	.00	.35	.05	.05	.10	.20	.25	.20	.50	.40	.15	.20	.00	2.64
13-18	0	0	0	0	2	2	5	2	6	9	7	18	15	8	5	2	0	81
(1)	.00	.00	.00	.00	.84	.84	2.09	.84	2.51	3.77	2.93	7.53	6.28	3.35	2.09	.84	.00	33.89
(2)	.00	.00	.00	.00	.10	.10	.25	.10	.30	.45	.35	.90	.75	.40	.25	.10	.00	4.03
19-24	0	0	0	0	0	0	0	0	0	9	26	7	19	4	2	3	0	70
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.77	10.88	2.93	7.95	1.67	.84	1.26	.00	29.29
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	1.29	.35	.95	.20	.10	.15	.00	3.48
GT 24	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	3	0	8
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.09	.00	.00	.00	.00	1.26	.00	3.35
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	.15	.00	.40
ALL SPEEDS	2	0	2	4	4	11	11	4	10	25	44	33	45	21	11	12	0	239
(1)	.84	.00	.84	1.67	1.67	4.60	4.60	1.67	4.18	10.46	18.41	13.81	18.83	8.79	4.60	5.02	.00	100.00
(2)	.10	.00	.10	.20	.20	.55	.55	.20	.50	1.24	2.19	1.64	2.24	1.04	.55	.60	.00	11.89

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PILGRIM APR97-JUN97 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA: STABILITY CLASS G CLASS FREQUENCY (PERCENT) = 6.42

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	1	1	2	2	2	0	0	1	0	2	1	0	0	3	0	0	15
(1)	.00	.78	.78	1.55	1.55	1.55	.00	.00	.78	.00	1.55	.78	.00	.00	2.33	.00	.00	11.63
(2)	.00	.05	.05	.10	.10	.10	.00	.00	.05	.00	.10	.05	.00	.00	.15	.00	.00	.75
4-7	0	0	0	4	4	4	1	0	0	0	0	1	3	1	0	1	0	19
(1)	.00	.00	.00	3.10	3.10	3.10	.78	.00	.00	.00	.00	.78	2.33	.78	.00	.78	.00	14.73
(2)	.00	.00	.00	.20	.20	.20	.05	.00	.00	.00	.00	.05	.15	.05	.00	.05	.00	.95
8-12	0	0	0	2	15	7	0	0	0	1	6	10	7	6	0	0	0	54
(1)	.00	.00	.00	1.55	11.63	5.43	.00	.00	.00	.78	4.65	7.75	5.43	4.65	.00	.00	.00	41.86
(2)	.00	.00	.00	.10	.75	.35	.00	.00	.00	.05	.30	.50	.35	.30	.00	.00	.00	2.69
13-18	0	0	0	0	0	0	0	0	0	0	6	3	11	2	0	0	0	22
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.65	2.33	8.53	1.55	.00	.00	.00	17.05
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	.15	.55	.10	.00	.00	.00	1.09
19-24	0	0	0	0	0	0	0	0	0	0	9	3	7	0	0	0	0	19
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.98	2.33	5.43	.00	.00	.00	.00	14.73
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	.15	.35	.00	.00	.00	.00	.95
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	1	1	8	21	13	1	0	1	1	23	18	20	9	3	1	0	129
(1)	.00	.78	.78	6.20	16.28	10.08	.78	.00	.78	.78	17.83	13.95	21.71	6.98	2.33	.78	.00	100.00
(2)	.00	.05	.05	.40	1.04	.65	.05	.00	.05	.05	1.14	.90	1.39	.45	.15	.05	.00	6.42

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	2	1	2	4	4	4	6	3	3	1	4	3	2	1	5	0	0	45
(1)	.10	.05	.10	.20	.20	.20	.30	.15	.15	.05	.20	.15	.10	.05	.25	.00	.00	2.24
(2)	.10	.05	.10	.20	.20	.20	.30	.15	.15	.05	.20	.15	.10	.05	.25	.00	.00	2.24
4-7	6	24	15	17	17	18	14	3	13	8	5	21	15	5	9	17	0	207
(1)	.30	1.19	.75	.85	.85	.90	.70	.15	.65	.40	.25	1.04	.75	.25	.45	.85	.00	10.30
(2)	.30	1.19	.75	.85	.85	.90	.70	.15	.65	.40	.25	1.04	.75	.25	.45	.85	.00	10.30
8-12	11	36	29	19	36	43	39	22	28	35	28	32	31	32	18	36	0	465
(1)	.55	1.79	1.44	.95	1.79	2.14	1.94	1.09	1.39	1.74	1.39	1.59	1.54	1.59	.90	1.79	.00	23.13
(2)	.55	1.79	1.44	.95	1.79	2.14	1.94	1.09	1.39	1.74	1.39	1.59	1.54	1.59	.90	1.79	.00	23.13
13-18	5	24	20	12	9	23	21	32	75	67	41	65	71	37	29	40	0	571
(1)	.25	1.19	1.00	.60	.45	1.14	1.04	1.59	3.73	3.33	2.04	3.23	3.53	1.84	1.44	1.99	.00	28.41
(2)	.25	1.19	1.00	.60	.45	1.14	1.04	1.59	3.73	3.33	2.04	3.23	3.53	1.84	1.44	1.99	.00	28.41
19-24	10	21	21	1	2	3	4	5	47	126	62	33	73	44	38	33	0	523
(1)	.50	1.04	1.04	.05	.10	.15	.20	.25	2.34	6.27	3.08	1.64	3.63	2.19	1.89	1.64	.00	26.02
(2)	.50	1.04	1.04	.05	.10	.15	.20	.25	2.34	6.27	3.08	1.64	3.63	2.19	1.89	1.64	.00	26.02
GT 24	12	13	8	0	4	2	3	5	10	28	18	1	15	23	22	35	0	199
(1)	.60	.65	.40	.00	.20	.10	.15	.25	.50	1.39	.90	.05	.75	1.14	1.09	1.74	.00	9.90
(2)	.60	.65	.40	.00	.20	.10	.15	.25	.50	1.39	.90	.05	.75	1.14	1.09	1.74	.00	9.90
ALL SPEEDS	46	119	85	53	72	93	87	70	176	265	158	155	207	142	121	161	0	2010
(1)	2.29	5.92	4.23	2.64	3.58	4.63	4.33	3.48	8.76	13.18	7.86	7.71	10.30	7.06	6.02	8.01	.00	100.00
(2)	2.29	5.92	4.23	2.64	3.58	4.63	4.33	3.48	8.76	13.18	7.86	7.71	10.30	7.06	6.02	8.01	.00	100.00

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE
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C = CALM (WIND SPEED LESS THAN OR EQUAL TO 0.95 MPH)

5. OFFSITE DOSE CALCULATION MANUAL REVISIONS

The PNPS Offsite Dose Calculation Manual (ODCM) was not revised during the reporting period.

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. T. Messier memorandum to K.J. Sejkora, "PNPS Meteorological Data Joint Frequency Distribution Tables: January-June 1997", dated August 08, 1997.