



**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

August 29, 1996  
BECO Ltr. 96-078

**L. J. Olivier**

Vice President Nuclear Operations  
and Station Director

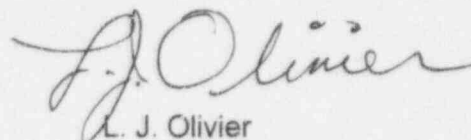
U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

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, 1996  
THROUGH JUNE 30, 1996

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, 1996.

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



L. J. Olivier

RLC/dmc/Waste

cc: Mr. Hubert J. Miller  
Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Sr. NRC Resident Inspector - Pilgrim Station

030109

IE48%

9609050002 960630  
PDR ADOCK 05000293  
R PDR

# **PILGRIM NUCLEAR POWER STATION**

---

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

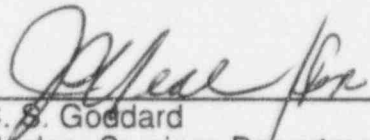
---

**January 1 through June 30, 1996**



BOSTON EDISON COMPANY  
PILGRIM NUCLEAR POWER STATION  
RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT  
INCLUDING METEOROLOGICAL DATA  
JANUARY 1 THROUGH JUNE 30, 1996

Prepared by:  16 Aug 1996  
K. J. Sejkora  
Senior Environmental Radiochemist

Approved by:   
C. S. Goddard  
Nuclear Services Department Manager

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1. Introduction	5
2. Radioactive Effluent Data	5
3. Radioactive Waste Disposal Data	13
4. Meteorological Data	16
5. Off-Site Dose Calculation Manual Revisions	33
6. References	34

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
Supplemental Information	7
1A Gaseous Effluents - Summation of All Releases	8
1B Gaseous Effluents - Elevated Release	9
1C Gaseous Effluents - Ground Level Release	10
2A Liquid Effluents - Summation of All Releases	11
2B Liquid Effluents	12
3 Solid Waste and Irradiated Fuel Shipments	14
4A-1 Distribution of Wind Directions and Speeds for the 33 ft. Level of the 220 ft. Tower	17
4A-2 Distribution of Wind Directions and Speeds for the 220 ft. Level of the 220 ft. Tower	25



## EXECUTIVE SUMMARY

### BOSTON EDISON COMPANY Pilgrim Nuclear Power Station Radioactive Effluent and Waste Disposal Report including Meteorological Data January 1 through June 30, 1996

#### INTRODUCTION

This report quantifies the radioactive gaseous, liquid, and radwaste releases, and summarizes the local meteorological data for the period from January 1 to June 30, 1996. 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."

The quantity of radioactive material released from Pilgrim Station was determined from sample analyses and continuous on-line monitoring of gaseous releases from the main stack and 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 for the reporting period are quantified in Tables 1A, 1B and 1C. Radioactive noble gases released during the period totalled 178 curies. Releases of radioactive particulates and iodines from the main stack and reactor building vent totalled 0.015 curies, and tritium releases totalled 25.6 curies. No gross alpha radioactivity was detected in gaseous effluents.

#### LIQUID EFFLUENTS

The liquid radioactive releases for the reporting period 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 0.00073 curies of fission and activation products and 0.05 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 processing and disposal during the reporting period is described in Table 3. Approximately 23 cubic meters of solid waste, containing 52 curies of radioactivity, were shipped during the reporting period.

## **METEOROLOGICAL DATA**

The meteorological data joint frequency distributions are listed in Tables 4A-1 and 4A-2. The data recovery for the reporting period was 94% on the 33 foot and 92% on the 220 foot elevations of the 220 foot meteorological tower at Pilgrim Station.

The predominant wind direction was from the south-southwest, which occurred approximately 13% of the time during this period. The predominant stability class was stability class D, which occurred about 38% of the time during this period.

## **CONCLUSION**

The PNPS Technical Specifications contain limiting conditions for operation 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. Official dose assessments will be published in a supplement to this report due 90 days following January 1, 1997. Conformance to the 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 January 1 through June 30, 1996 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, 1997.

## 2. RADIOACTIVE EFFLUENT DATA

Radioactive liquid and gaseous releases (Reference 2) for the period January 1 to June 30, 1996 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 178 curies, for an average release rate of 11.3  $\mu\text{Ci/sec}$ . A total of 0.015 curies of radioactive iodines and particulates with half-lives greater than 8 days was released at an average release rate of 0.00095  $\mu\text{Ci/sec}$ . No alpha radioactivity was detected on particulate filters during this reporting period. A total of 25.6 curies of tritium was released at an average release rate of 1.62  $\mu\text{Ci/sec}$ .

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 ground-level releases during the period occurred from the reactor building vent. 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. Ground level releases from the reactor building vent 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 100,000 liters of radioactive liquid waste (prior to dilution) containing 0.00073 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  $3.17\text{E-}10$   $\mu\text{Ci/ml}$ . A total of 0.05 curies of tritium was released, resulting in an average concentration of  $2.18\text{E-}08$   $\mu\text{Ci/ml}$ . 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 Report  
Supplemental Information  
January-June 1996

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 $\mu\text{Ci/mL}$ 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 germanium gamma spectroscopy for all gamma emitters; radiochemistry analysis for H-3, Fe-55 (liquid effluents), Sr-89, and Sr-90 |
| b. Iodines:                      |  |
| c. Particulates:                 |  |
| d. Liquid effluents:             |  |

**5. BATCH RELEASES**

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

- b. Gaseous Effluents

**6. ABNORMAL RELEASES**

- a. Liquid Effluents  
b. Gaseous Effluents

Jan-Mar 1996	Apr-Jun 1996
2.60E+01	1.30E+01
1.43E+03	6.08E+02
5.50E+02	1.50E+02
5.50E+01	4.70E+01
2.50E+01	2.30E+01
1.17E+06	1.03E+06
None	None
None	None
None	None



Table 1A  
Pilgrim Nuclear Power Station  
Effluent and Waste Disposal Report  
Gaseous Effluents - Summation of All Releases  
January-June 1996

Period: Jan-Mar 1996	Period: Apr-Jun 1996	Estimated Total Error
-------------------------	-------------------------	--------------------------

**A. FISSION AND ACTIVATION GASES**

Total Release: Ci	9.34E+01	8.45E+01	22%
Average Release Rate During Period: $\mu\text{Ci/sec}$	1.18E+01	1.07E+01	
Percent of Technical Specification Limit	*	*	

**B. IODINES**

Total Iodine-131 Release: Ci	1.01E-03	1.77E-03	20%
Average Release Rate During Period: $\mu\text{Ci/sec}$	1.28E-04	2.24E-04	
Percent of Technical Specification Limit	*	*	

**C. PARTICULATES**

Total Release: Ci	7.42E-04	6.55E-04	21%
Average Release Rate During Period: $\mu\text{Ci/sec}$	9.41E-05	8.31E-05	
Percent of Technical Specification Limit	*	*	
Gross Alpha Radioactivity: Ci	NDA	NDA	

**D. TRITIUM**

Total Release: Ci	1.53E+01	1.08E+01	20%
Average Release Rate During Period: $\mu\text{Ci/sec}$	1.94E+00	1.37E+00	
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, 1997.

1. NDA stands for No Detectable Activity.
2. LLD for airborne gross alpha activity listed as NDA is  $1\text{E-}11 \mu\text{Ci/cc}$ .

Table 1B  
Pilgrim Nuclear Power Station  
Effluent and Waste Disposal Report  
Gaseous Effluents - Elevated Release  
January-June 1996

Nuclide Released	Continuous Mode		Batch Mode	
	Jan-Mar 1996	Apr-Jun 1996	Jan-Mar 1996	Apr-Jun 1996

**1. FISSION AND ACTIVATION GASES - Ci**

N-13	NDA	NDA	N/A	N/A
Kr-85m	7.73E+00	9.79E+00	N/A	N/A
Kr-87	NDA	NDA	N/A	N/A
Kr-88	5.72E+00	1.86E+00	N/A	N/A
Xe-133	1.93E+01	2.39E+01	N/A	N/A
Xe-135	1.20E+00	2.34E+00	N/A	N/A
Xe-135m	NDA	NDA	N/A	N/A
Xe-138	3.15E+00	6.77E+00	N/A	N/A
Total for period	3.71E+01	4.47E+01	N/A	N/A

**2. IODINES - Ci**

I-131	6.03E-04	8.89E-04	N/A	N/A
I-133	1.39E-03	2.28E-03	N/A	N/A
Total for period	1.99E-03	3.17E-03	N/A	N/A

**3. PARTICULATES - Ci**

Mn-54	NDA	2.25E-06	N/A	N/A
Co-60	NDA	3.17E-06	N/A	N/A
Sr-89	1.86E-05	4.01E-05	N/A	N/A
Sr-90	NDA	NDA	N/A	N/A
Cs-134	NDA	NDA	N/A	N/A
Cs-137	NDA	1.84E-06	N/A	N/A
Ba/La-140	9.87E-06	5.57E-05	N/A	N/A
Total for period	2.85E-05	1.03E-04	N/A	N/A

**4. TRITIUM - Ci**

H-3	6.07E-01	7.93E-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  $\mu$ Ci/cc  
     Iodines: 1E-12  $\mu$ Ci/cc  
     Particulates: 1E-11  $\mu$ Ci/cc

Table 1C  
Pilgrim Nuclear Power Station  
Effluent and Waste Disposal Report  
Gaseous Effluents - Ground Level Release  
January-June 1996

Nuclide Released	Continuous Mode		Batch Mode	
	Jan-Mar 1996	Apr-Jun 1996	Jan-Mar 1996	Apr-Jun 1996

**1. FISSION AND ACTIVATION GASES - Ci**

N-13	NDA	NDA	N/A	N/A
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	5.63E+01	3.87E+01	N/A	N/A
Xe-135m	NDA	NDA	N/A	N/A
Xe-138	NDA	1.10E+00	N/A	N/A
Total for period	5.63E+01	3.98E+01	N/A	N/A

**2. IODINES - Ci**

I-131	4.08E-04	8.76E-04	N/A	N/A
I-133	1.91E-03	5.28E-03	N/A	N/A
Total for period	2.32E-03	6.16E-03	N/A	N/A

**3. PARTICULATES - Ci**

Co-60	NDA	NDA	N/A	N/A
Sr-89	5.49E-04	2.78E-04	N/A	N/A
Sr-90	NDA	NDA	N/A	N/A
Cs-134	NDA	NDA	N/A	N/A
Cs-137	NDA	NDA	N/A	N/A
Ba/La-140	1.64E-04	2.74E-04	N/A	N/A
Total for period	7.13E-04	5.52E-04	N/A	N/A

**4. TRITIUM - Ci**

H-3	1.47E+01	1.00E+01	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  $\mu\text{Ci/cc}$   
     Iodines: 1E-12  $\mu\text{Ci/cc}$   
     Particulates: 1E-11  $\mu\text{Ci/cc}$



Table 2A  
Pilgrim Nuclear Power Station  
Effluent and Waste Disposal Report  
Liquid Effluents - Summation of All Releases  
January-June 1996

Period: Jan-Mar 1996	Period: Apr-Jun 1996	Estimated Total Error
-------------------------	-------------------------	--------------------------

**A. FISSION AND ACTIVATION PRODUCTS**

Total Release (not including H-3, noble gas, or alpha): Ci	2.93E-04	4.34E-04	12%
Average Diluted Concentration During Period: $\mu\text{Ci/mL}$	1.75E-10	6.94E-10	
Percent of Effluent Concentration Limit*	4.15E-03%	2.86E-02%	

**B. TRITIUM**

Total Release: Ci	4.02E-02	9.83E-03	9.4%
Average Diluted Concentration During Period: $\mu\text{Ci/mL}$	2.41E-08	1.57E-08	
Percent of Effluent Concentration Limit*	2.41E-03%	1.57E-03%	

**C. DISSOLVED AND ENTRAINED GASES**

Total Release: Ci	NDA	NDA	16%
Average Diluted Concentration During Period: $\mu\text{Ci/mL}$	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	7.89E+04	2.10E+04	5.7%
----------------------	----------	----------	------

**F. VOLUME OF DILUTION WATER USED DURING PERIOD**

Dilution Volume: Liters	1.67E+09	6.25E+08	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, 1997.

1. NDA stands for No Detectable Activity.
2. LLD for dissolved and entrained gases listed as NDA is  $1\text{E-}05 \mu\text{Ci/mL}$ .
2. LLD for liquid gross alpha activity listed as NDA is  $1\text{E-}07 \mu\text{Ci/mL}$ .

Table 2B  
Pilgrim Nuclear Power Station  
Effluent and Waste Disposal Report  
Liquid Effluents  
January-June 1996

Nuclide Released	Continuous Mode		Batch Mode	
	Jan-Mar 1996	Apr-Jun 1996	Jan-Mar 1996	Apr-Jun 1996

**1. FISSION AND ACTIVATION PRODUCTS - CI**

Na-24	N/A	N/A	NDA	1.21E-06
Cr-51	N/A	N/A	NDA	NDA
Mn-54	N/A	N/A	2.75E-05	6.54E-05
Fe-55	N/A	N/A	1.49E-04	6.55E-05
Fe-59	N/A	N/A	NDA	1.48E-06
Co-58	N/A	N/A	NDA	6.22E-06
Co-60	N/A	N/A	7.45E-05	1.70E-04
Zn-65	N/A	N/A	NDA	2.27E-06
Sr-89	N/A	N/A	NDA	1.81E-06
Sr-90	N/A	N/A	NDA	1.66E-06
Zr/Nb-95	N/A	N/A	NDA	NDA
Mo-99/Tc-99m	N/A	N/A	NDA	NDA
Ag-110m	N/A	N/A	NDA	NDA
Sb-124	N/A	N/A	NDA	NDA
I-131	N/A	N/A	1.98E-07	3.36E-07
I-133	N/A	N/A	NDA	NDA
Cs-134	N/A	N/A	NDA	NDA
Cs-137	N/A	N/A	4.18E-05	1.14E-04
Ba/La-140	N/A	N/A	NDA	4.54E-06
Ce-141	N/A	N/A	NDA	NDA
Total for period	N/A	N/A	2.93E-04	4.34E-04

**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  $\mu$ Ci/mL  
     Iodines: 1E-06  $\mu$ Ci/mL  
     Noble Gases: 1E-05  $\mu$ Ci/mL  
     All Others: 5E-07  $\mu$ Ci/mL

### 3. RADIOACTIVE WASTE DISPOSAL DATA

Radioactive wastes (Reference 2) which were shipped off-site for processing and disposal during the reporting period 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 the reporting period approximately 12 cubic meters of spent resins, filter sludges, etc. with a total activity of about 36 curies were shipped from Pilgrim Station for processing and disposal. Approximately 12 cubic meters of dry compressible waste or contaminated equipment containing about 16 curies of activity were shipped off-site for processing and disposal 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.

Two shipments to Barnwell, SC (Chem Nuclear Systems, Inc.), three shipments to Oak Ridge, TN (Scientific Ecology Group), and two shipments to Memphis, TN (Hake Associates) were made during the reporting period. Estimates of major radionuclides shipped off-site are listed in Table 3.

Table 3  
Pilgrim Nuclear Power Station  
Effluent and Waste Disposal Report  
Solid Waste and Irradiated Fuel Shipments  
January-June 1996

**A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL  
(Not Irradiated Fuel)**

1. Type of Waste	Jan-Jun 1996		
	Volume m <sup>3</sup>	Activity Ci	Est. Total Error
a. Spent resins, filter sludges, evaporator bottoms, etc.	1.16E+01	3.57E+01	±25%
b. Dry compressible waste, contaminated equipment, etc.	1.17E+01	1.61E+01	±25%
c. Irradiated components, control rods, etc.	0.00E+00	0.00E+00	0%
d. Other (describe)	0.00E+00	0.00E+00	0%
Total Combined Waste	2.33E+01	5.18E+01	±25%

**2. Estimate of Major Nuclide Composition by Waste Type.**

**a. Spent resins, filter sludges, evaporator bottoms, etc.**

Nuclide	% Abundance	Curies
H-3	NDA	NDA
C-14	NDA	NDA
Cr-51	9.94E-01%	3.55E-01
Mn-54	4.53E+00%	1.62E+00
Fe-55	5.06E+01%	1.80E+01
Fe-59	4.71E-01%	1.68E-01
Co-58	3.25E-01%	1.16E-01
Co-60	4.18E+01%	1.49E+01
Ni-63	3.61E-01%	1.29E-01
Sr-90	3.30E-01%	1.18E-01
Tc-99	NDA	NDA
I-129	NDA	NDA
I-131	NDA	NDA
Cs-137	6.03E-01%	2.15E-01
Ce-144	NDA	NDA
Pu-241	NDA	NDA
Cm-242	NDA	NDA
Total	1.00E+02%	3.57E+01

Table 3 (continued)

**b. Dry compressible waste, contaminated equipment, etc.**

Nuclide	% Abundance	Curies
H-3	NDA	NDA
C-14	NDA	NDA
Cr-51	1.10E+00%	1.77E-01
Mn-54	5.23E+00%	8.41E-01
Fe-55	6.52E+01%	1.05E+01
Co-60	2.37E+01%	3.82E+00
Ni-59	2.44E-03%	3.92E-04
Ni-63	1.47E+00%	2.37E-01
Sr-90	4.38E-02%	7.04E-03
Tc-99	NDA	NDA
I-129	NDA	NDA
Cs-137	2.61E+00%	4.19E-01
Ce-144	4.59E-01%	7.38E-02
Pu-241	1.29E-01%	2.08E-02
Cm-242	6.36E-05%	1.02E-05
Total	1.00E+02%	1.61E+01

**3. Solid Waste Disposition**

Number of Shipments	Mode of Transportation	Destination
2	Tractor-trailer	Chem Nuclear Systems, Inc., Barnwell, SC
3	Tractor-trailer	Scientific Ecology Group, Oak Ridge, TN*
2	Tractor-trailer	Hake Associates, Memphis, TN*

\* These processors provided Boston Edison Company, Pilgrim Nuclear Power Station, with volume reduction services for dry compressible waste, contaminated equipment, etc. Remaining radioactive waste will be shipped to Chem Nuclear Systems, Inc., in Barnwell, SC, for final disposal.

**B. IRRADIATED FUEL SHIPMENTS (DISPOSITION)**

No shipments of irradiated fuel were made from Pilgrim Nuclear Power Station during this reporting period.

#### 4. METEOROLOGICAL DATA

Meteorological data (Reference 3) for the reporting period are presented 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 13% 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 31% during this period. The predominant wind speed range at the 33-foot sensor was 4 to 7 mph, which occurred approximately 42% of the time. The predominant stability class was stability class D, which occurred about 38% 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. Data recovery for the reporting period was 94% for the 33-foot level and 92% for the 220-foot level of the meteorological tower.



Table 4A-1  
Distributions of Wind Directions and Speeds  
for the 33-ft Level of the 220-ft Tower

PILGRIM JAN96-MAR96 MMT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS A						CLASS FREQUENCY (PERCENT) = 20.22													
		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	2	1	1	0	2	6	0	5	9	7	5	11	3	2	0	55		
(1)		.25	.00	.50	.25	.25	.00	.50	1.49	.00	1.24	2.23	1.74	1.24	2.73	.74	.50	.00	13.65		
(2)		.05	.00	.10	.05	.05	.00	.10	.30	.00	.25	.45	.35	.25	.55	.15	.10	.00	2.76		
4-7		5	8	6	2	0	2	5	8	2	11	3	10	18	13	9	13	0	115		
(1)		1.24	1.99	1.49	.50	.00	.50	1.24	1.99	.50	2.73	.74	2.48	4.47	3.23	2.23	3.23	.00	28.54		
(2)		.25	.40	.30	.10	.00	.10	.25	.40	.10	.55	.15	.50	.90	.65	.45	.65	.00	5.77		
8-12		4	4	2	2	1	2	6	4	10	10	10	17	34	30	10	5	0	153		
(1)		.99	.99	.50	.50	.25	.50	1.49	1.49	2.48	2.48	2.48	4.22	8.44	7.44	2.48	1.24	.00	37.97		
(2)		.20	.20	.10	.10	.05	.10	.30	.30	.50	.50	.50	.85	1.71	1.51	.50	.25	.00	7.68		
13-18		7	7	1	0	2	0	2	4	7	3	3	5	10	4	6	3	0	64		
(1)		1.74	1.74	.25	.00	.50	.00	.50	.99	1.74	.74	.74	1.24	2.48	.99	1.49	.74	.00	15.88		
(2)		.35	.35	.05	.00	.10	.00	.10	.20	.35	.15	.15	.25	.50	.20	.30	.15	.00	3.21		
19-24		1	1	1	0	0	0	1	6	5	0	0	0	0	1	0	0	0	16		
(1)		.25	.25	.25	.00	.00	.00	.25	1.49	1.24	.00	.00	.00	.00	.25	.00	.00	.00	3.97		
(2)		.05	.05	.05	.00	.00	.00	.05	.30	.25	.00	.00	.00	.00	.05	.00	.00	.00	.80		
GT 24		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8		
(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		18	20	12	5	4	4	16	30	24	29	25	39	67	59	28	23	0	403		
(1)		4.47	4.96	2.98	1.24	.99	.99	3.97	7.44	5.96	7.20	6.20	9.69	16.63	14.64	6.95	5.71	.00	100.00		
(2)		.90	1.00	.60	.25	.20	.20	.80	1.51	1.20	1.46	1.25	1.96	3.36	2.86	1.40	1.15	.00	20.22		

33.0 FT WIND DATA		STABILITY CLASS B						CLASS FREQUENCY (PERCENT) = 4.32												VRBL	TOTAL
		WIND DIRECTION FROM																			
SPEED (MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW				
CALM	0	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	.00		
(2)	.00	.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	2	2	0	7		
(1)	.00	.00	.00	.00	.00	.00	.00	1.16	.00	.00	.00	.00	1.16	1.16	.00	2.33	2.33	.00	8.14		
(2)	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05	.05	.00	.10	.10	.00	.35		
4-7	1	2	2	1	2	0	1	1	4	2	1	4	5	3	1	3	0	33			
(1)	1.16	2.33	2.33	1.16	2.33	.00	1.16	1.16	4.65	2.33	1.16	4.65	5.81	3.49	1.16	3.49	.00	38.37			
(2)	.05	.10	.10	.05	.10	.00	.05	.05	.20	.10	.05	.20	.25	.15	.05	.15	.00	1.66			
8-12	0	1	1	0	1	0	4	0	5	6	2	3	8	7	3	0	0	41			
(1)	.00	1.16	1.16	.00	1.16	.00	4.65	.00	5.81	6.98	2.33	3.49	9.30	8.14	3.49	.00	.00	47.67			
(2)	.00	.05	.05	.00	.05	.00	.20	.00	.25	.30	.10	.15	.40	.35	.15	.00	.00	2.06			
13-18	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4			
(1)	1.16	1.16	.00	.00	.00	.00	.00	.00	1.16	1.16	.00	.00	.00	.00	.00	.00	.00	4.65			
(2)	.05	.05	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.20			
19-24	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
(1)	.00	1.16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.16			
(2)	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.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	8			
(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	5	3	1	3	0	6	2	10	8	3	8	14	10	6	5	0	86			
(1)	2.33	5.81	3.49	1.16	3.49	.00	6.98	2.33	11.63	9.30	3.49	9.30	16.28	11.63	6.98	5.81	.00	100.00			
(2)	.10	.25	.15	.05	.15	.00	.30	.10	.50	.40	.15	.40	.70	.50	.30	.25	.00	4.32			

(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 4A-1 (continued)

PILGRIM JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS C						CLASS FREQUENCY (PERCENT) = 5.32											TOTAL
SPEED (MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	
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	0	0	3	1	0	5
(1)		.00	.00	.00	.00	.00	.00	.00	.94	.00	.00	.00	.00	.00	.00	2.83	.94	.00	4.72
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.15	.05	.00	.25
4-7		2	0	2	0	2	0	1	1	5	3	6	9	4	4	2	2	0	43
(1)		1.89	.00	1.89	.00	1.89	.00	.94	.94	4.72	2.83	5.66	8.49	3.77	3.77	1.89	1.89	.00	40.57
(2)		.10	.00	.10	.00	.10	.00	.05	.05	.25	.15	.30	.45	.20	.20	.10	.10	.00	2.16
8-12		2	0	1	0	0	0	3	2	4	7	2	6	5	6	2	5	0	45
(1)		1.89	.00	.94	.00	.00	.00	2.83	1.89	3.77	6.60	1.89	5.66	4.72	5.66	1.89	4.72	.00	42.45
(2)		.10	.00	.05	.00	.00	.00	.15	.10	.20	.35	.10	.30	.25	.30	.10	.25	.00	2.26
13-18		4	0	2	0	0	0	0	0	0	1	0	0	1	1	2	0	0	11
(1)		3.77	.00	1.89	.00	.00	.00	.00	.00	.00	.94	.00	.00	.94	.94	1.89	.00	.00	10.38
(2)		.20	.00	.10	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.05	.10	.00	.00	.55
19-24		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
(1)		.94	.00	.94	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.89
(2)		.05	.00	.05	.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		9	0	6	0	2	0	4	4	9	11	8	15	10	11	9	8	0	106
(1)		8.49	.00	5.66	.00	1.89	.00	3.77	3.77	8.49	10.38	7.55	14.15	9.43	10.38	8.49	7.55	.00	100.00
(2)		.45	.00	.30	.00	.10	.00	.20	.20	.45	.55	.40	.75	.50	.55	.45	.40	.00	5.32

33.0 FT WIND DATA		STABILITY CLASS D						CLASS FREQUENCY (PERCENT) = 40.89											TOTAL
SPEED (MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	
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		6	2	2	0	0	1	1	2	2	2	3	5	0	9	5	7	0	47
(1)		.74	.25	.25	.00	.00	.12	.12	.25	.25	.25	.37	.61	.00	1.10	.61	.86	.00	5.77
(2)		.30	.10	.10	.00	.00	.05	.05	.10	.10	.10	.15	.25	.00	.45	.25	.35	.00	2.36
4-7		11	9	7	11	7	2	6	12	28	18	24	25	44	33	26	23	0	286
(1)		1.35	1.10	.86	1.35	.86	.25	.74	1.47	3.44	2.21	2.94	3.07	5.40	4.05	3.19	2.82	.00	35.09
(2)		.55	.45	.35	.55	.35	.10	.30	.60	1.40	.90	1.20	1.25	2.21	1.66	1.30	1.15	.00	14.35
8-12		16	10	14	15	6	7	30	14	27	45	17	25	60	47	33	9	0	375
(1)		1.96	1.23	1.72	1.84	.74	.86	3.68	1.72	3.31	5.52	2.09	3.07	7.36	5.77	4.05	1.10	.00	46.01
(2)		.80	.50	.70	.75	.30	.35	1.51	.70	1.35	2.26	.85	1.25	3.01	2.36	1.66	.45	.00	18.82
13-18		4	12	7	8	1	2	2	10	7	3	1	6	16	5	4	5	0	93
(1)		.49	1.47	.86	.98	.12	.25	.25	1.23	.86	.37	.12	.74	1.96	.61	.49	.61	.00	11.41
(2)		.20	.60	.35	.40	.05	.10	.10	.50	.35	.15	.05	.30	.80	.25	.20	.25	.00	4.67
19-24		0	0	3	2	0	0	0	3	5	0	0	0	0	1	0	0	0	14
(1)		.00	.00	.37	.25	.00	.00	.00	.37	.61	.00	.00	.00	.00	.12	.00	.00	.00	1.72
(2)		.00	.00	.15	.10	.00	.00	.00	.15	.25	.00	.00	.00	.00	.05	.00	.00	.00	.70
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		37	33	33	36	14	12	39	41	69	68	45	61	120	95	68	44	0	615
(1)		4.54	4.05	4.05	4.42	1.72	1.47	4.79	5.03	8.47	8.34	5.52	7.48	14.72	11.66	8.34	5.40	.00	100.00
(2)		1.86	1.66	1.66	1.81	.70	.60	1.96	2.06	3.46	3.41	2.26	3.06	6.02	4.77	3.41	2.21	.00	40.89

(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 4A-1 (continued)

PILGRIM JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS E						CLASS FREQUENCY (PERCENT) = 23.08											
		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	1	0	0	0	0	0	1
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00	.22
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05
C-3		2	4	3	0	0	1	5	11	10	9	9	5	11	11	5	5	0	91
(1)		.43	.87	.65	.00	.00	.22	1.09	2.39	2.17	1.96	1.96	1.09	2.39	2.39	1.09	1.09	.00	19.78
(2)		.10	.20	.15	.00	.00	.05	.25	.55	.50	.45	.45	.25	.55	.55	.25	.25	.00	4.57
4-7		6	2	1	2	0	2	15	16	22	27	33	28	30	18	11	6	0	219
(1)		1.30	.43	.22	.43	.00	.43	3.26	3.48	4.78	5.87	7.17	6.09	6.52	3.91	2.39	1.30	.00	47.61
(2)		.30	.10	.05	.10	.00	.10	.75	.80	1.10	1.35	1.66	1.40	1.51	.90	.55	.30	.00	10.99
8-12		4	0	0	0	0	0	6	3	6	18	11	12	32	18	8	3	0	121
(1)		.87	.00	.00	.00	.00	.00	1.30	.65	1.30	3.91	2.39	2.61	6.96	3.91	1.74	.65	.00	26.30
(2)		.20	.00	.00	.00	.00	.00	.30	.15	.30	.90	.55	.60	1.61	.90	.40	.15	.00	6.07
13-18		0	6	1	0	0	0	2	0	3	1	1	0	3	4	0	2	0	23
(1)		.00	1.30	.22	.00	.00	.00	.43	.00	.65	.22	.22	.00	.65	.87	.00	.43	.00	5.00
(2)		.00	.30	.05	.00	.00	.00	.10	.00	.15	.05	.05	.00	.15	.20	.00	.10	.00	1.15
19-24		0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
(1)		.00	1.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.09
(2)		.00	.25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25
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	17	5	2	0	3	28	30	41	55	54	46	76	51	24	16	0	460
(1)		2.61	3.70	1.09	.43	.00	.65	6.09	6.52	8.91	11.96	11.74	10.00	16.52	11.09	5.22	3.48	.00	100.00
(2)		.60	.85	.25	.10	.00	.15	1.40	1.51	2.06	2.76	2.71	2.31	3.81	2.56	1.20	.80	.00	23.08

33.0 FT WIND DATA		STABILITY CLASS F						CLASS FREQUENCY (PERCENT) = 5.37												
		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	2	3	2	3	3	6	5	0	1	0	0	25	
(1)		.00	.00	.00	.00	.00	.00	1.87	2.80	1.87	2.80	2.80	5.61	4.67	.00	.93	.00	.00	23.36	
(2)		.00	.00	.00	.00	.00	.00	.10	.15	.10	.15	.15	.30	.25	.00	.05	.00	.00	1.25	
4-7		0	0	0	0	0	0	0	1	0	8	27	10	3	1	0	0	0	50	
(1)		.00	.00	.00	.00	.00	.00	.00	.93	.00	7.48	25.23	9.35	2.80	.93	.00	.00	.00	46.73	
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.40	1.35	.50	.15	.05	.00	.00	.00	2.51	
8-12		0	0	0	0	0	0	0	0	0	10	8	0	0	0	2	0	0	20	
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	9.35	7.48	.00	.00	.00	1.87	.00	.00	18.69	
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.50	.40	.00	.00	.00	.10	.00	.00	1.00	
13-18		0	1	2	0	0	0	0	0	0	4	0	0	0	1	3	0	0	11	
(1)		.00	.93	1.87	.00	.00	.00	.00	.00	.00	3.74	.00	.00	.00	.93	2.80	.00	.00	10.28	
(2)		.00	.05	.10	.00	.00	.00	.00	.00	.00	.20	.00	.00	.00	.05	.15	.00	.00	.55	
19-24		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
(1)		.00	.00	.93	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.93	
(2)		.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.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		0	1	3	0	0	0	2	4	2	25	38	16	8	2	6	0	0	107	
(1)		.00	.93	2.80	.00	.00	.00	1.87	3.74	1.87	23.36	35.51	14.95	7.48	1.87	5.61	.00	.00	100.00	
(2)		.00	.05	.15	.00	.00	.00	.10	.20	.10	1.25	1.91	.80	.40	.10	.30	.00	.00	5.37	

(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 4A-1 (continued)

PILGRIM JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS G						CLASS FREQUENCY (PERCENT) = .80										VRBL	TOTAL
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
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	6.25	.00	.00	.00	.00	.00	.00	6.25
(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	0	0	0	1	0	2	1	0	0	0	0	0	0	4
(1)		.00	.00	.00	.00	.00	.00	.00	6.25	.00	12.50	6.25	.00	.00	.00	.00	.00	.00	25.00
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.10	.05	.00	.00	.00	.00	.00	.00	.20
8-12		0	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0	0	10
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	18.75	43.75	.00	.00	.00	.00	.00	.00	62.50
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.35	.00	.00	.00	.00	.00	.00	.50
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	6.25	.00	.00	.00	.00	.00	.00	.00	6.25
(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		0	0	0	0	0	0	0	1	0	6	9	0	0	0	0	0	0	16
(1)		.00	.00	.00	.00	.00	.00	.00	6.25	.00	37.50	56.25	.00	.00	.00	.00	.00	.00	100.00
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.30	.45	.00	.00	.00	.00	.00	.00	.80

33.0 FT WIND DATA		STABILITY CLASS ALL						CLASS FREQUENCY (PERCENT) = 100.00										VRBL	TOTAL
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
CALM		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05
C-3		9	6	7	1	1	2	11	23	14	19	25	24	22	31	19	17	0	231
(1)		.45	.30	.35	.05	.05	.10	.55	1.15	.70	.95	1.25	1.20	1.10	1.56	.95	.85	.00	11.59
(2)		.45	.30	.35	.05	.05	.10	.55	1.15	.70	.95	1.25	1.20	1.10	1.56	.95	.85	.00	11.59
4-7		25	21	18	16	11	6	28	40	61	71	95	86	104	72	49	47	0	750
(1)		1.25	1.05	.90	.80	.55	.30	1.40	2.01	3.06	3.56	4.77	4.32	5.22	3.61	2.46	2.36	.00	37.63
(2)		1.25	1.05	.90	.80	.55	.30	1.40	2.01	3.06	3.56	4.77	4.32	5.22	3.61	2.46	2.36	.00	37.63
8-12		26	15	18	17	8	9	49	25	52	99	57	63	139	106	58	22	0	765
(1)		1.30	.75	.90	.85	.40	.45	2.46	1.25	2.61	4.97	2.86	3.16	6.97	5.42	2.91	1.10	.00	38.38
(2)		1.30	.75	.90	.85	.40	.45	2.46	1.25	2.61	4.97	2.86	3.16	6.97	5.42	2.91	1.10	.00	38.38
13-18		16	27	13	8	3	2	6	15	18	13	5	11	30	15	15	10	0	207
(1)		.60	1.35	.65	.40	.15	.10	.30	.75	.90	.65	.25	.55	1.51	.75	.75	.50	.00	10.39
(2)		.60	1.35	.65	.40	.15	.10	.30	.75	.90	.65	.25	.55	1.51	.75	.75	.50	.00	10.39
19-24		2	7	6	2	0	0	1	9	10	0	0	0	0	2	0	0	0	39
(1)		.10	.35	.30	.10	.00	.00	.05	.45	.50	.00	.00	.00	.00	.10	.00	.00	.00	1.96
(2)		.10	.35	.30	.10	.00	.00	.05	.45	.50	.00	.00	.00	.00	.10	.00	.00	.00	1.96
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		78	76	62	44	23	19	95	112	155	202	182	185	295	228	141	96	0	1993
(1)		3.91	3.81	3.11	2.21	1.15	.95	4.77	5.62	7.78	10.14	9.13	9.28	14.80	11.44	7.07	4.82	.00	100.00
(2)		3.91	3.81	3.11	2.21	1.15	.95	4.77	5.62	7.78	10.14	9.13	9.28	14.80	11.44	7.07	4.82	.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 4A-1 (continued)

PILGRIM APR96-JUN96 MMT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS A						CLASS FREQUENCY (PERCENT) = 22.10											VRBL	TOTAL
		WIND DIRECTION FROM																		
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW			
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	1	1	0	1	0	0	1	0	6	
(1)		.00	.00	.00	.00	.43	.00	.00	.00	.00	.22	.22	.00	.22	.00	.00	.22	.00	1.29	
(2)		.00	.00	.00	.00	.10	.00	.00	.00	.00	.05	.05	.00	.05	.00	.00	.05	.00	.29	
4-7		13	23	14	11	9	9	8	4	5	5	9	13	18	14	15	15	0	185	
(1)		2.80	4.96	3.02	2.37	1.94	1.94	1.72	.86	1.08	1.08	1.94	2.80	3.88	3.02	3.23	3.23	.00	39.87	
(2)		.62	1.10	.67	.52	.43	.43	.38	.19	.24	.24	.43	.62	.86	.67	.71	.71	.00	8.81	
8-12		15	9	7	1	5	8	10	4	38	46	28	5	22	11	0	5	0	214	
(1)		3.23	1.94	1.51	.22	1.08	1.72	2.16	.86	8.19	9.91	6.03	1.08	4.74	2.37	.00	1.08	.00	46.12	
(2)		.71	.43	.33	.05	.24	.38	.48	.19	1.81	2.19	1.33	.24	1.05	.52	.00	.24	.00	10.19	
13-18		5	13	7	1	1	3	4	0	8	4	2	0	4	2	1	2	0	57	
(1)		1.08	2.80	1.51	.22	.22	.65	.86	.00	1.72	.86	.43	.00	.86	.43	.22	.43	.00	12.28	
(2)		.24	.62	.33	.05	.05	.14	.19	.00	.38	.19	.10	.00	.19	.10	.05	.10	.00	2.71	
19-24		0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
(1)		.00	.22	.00	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.43	
(2)		.00	.05	.00	.05	.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		33	46	28	14	17	20	22	8	51	56	40	18	45	27	16	23	0	464	
(1)		7.11	9.91	6.03	3.02	3.66	4.31	4.74	1.72	10.99	12.07	8.62	3.88	9.70	5.82	3.45	4.96	.00	100.00	
(2)		1.57	2.19	1.33	.67	.81	.95	1.05	.38	2.43	2.67	1.90	.86	2.14	1.29	.76	1.10	.00	22.10	

33.0 FT WIND DATA		STABILITY CLASS B						CLASS FREQUENCY (PERCENT) = 7.90												
		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	0	1	1	1	0	0	1	0	1	1	2	3	0	13	
(1)		.00	.00	.00	1.20	.00	.60	.60	.60	.00	.00	.60	.00	.60	.60	1.20	1.81	.00	7.83	
(2)		.00	.00	.00	.10	.00	.05	.05	.05	.00	.00	.05	.00	.05	.05	.10	.14	.00	.62	
4-7		2	4	3	8	10	4	5	3	8	8	6	3	7	4	4	2	0	81	
(1)		1.20	2.41	1.81	4.82	6.02	2.41	3.01	1.81	4.82	4.82	3.61	1.81	4.22	2.41	2.41	1.20	.00	48.80	
(2)		.10	.19	.14	.38	.48	.19	.24	.14	.38	.38	.29	.14	.33	.19	.19	.10	.00	3.86	
8-12		1	2	2	5	2	1	1	1	8	15	10	2	3	5	0	0	0	58	
(1)		.60	1.20	1.20	3.01	1.20	.60	.60	.60	4.82	9.04	6.02	1.20	1.81	3.01	.00	.00	.00	34.94	
(2)		.05	.10	.10	.24	.10	.05	.05	.05	.38	.71	.48	.10	.14	.24	.00	.00	.00	2.76	
13-18		0	0	0	5	0	0	0	0	4	4	0	0	0	0	0	0	0	13	
(1)		.00	.00	.00	3.01	.00	.00	.00	.00	2.41	2.41	.00	.00	.00	.00	.00	.00	.00	7.83	
(2)		.00	.00	.00	.24	.00	.00	.00	.00	.19	.19	.00	.00	.00	.00	.00	.00	.00	.62	
19-24		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
(1)		.00	.00	.00	.60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60	
(2)		.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.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	6	5	21	12	6	7	5	20	27	17	5	11	10	6	5	0	166	
(1)		1.81	3.61	3.01	12.65	7.23	3.61	4.22	3.01	12.05	16.27	10.24	3.01	6.63	6.02	3.61	3.01	.00	100.00	
(2)		.14	.29	.24	1.00	.57	.29	.33	.24	.95	1.29	.81	.24	.52	.48	.29	.24	.00	7.90	

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

Table 4A-1 (continued)

PILGRIM APR96-JUN96 MMT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS C																CLASS FREQUENCY (PERCENT) = 6.67	
		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	0	1	2	0	1	0	1	0	0	1	4	2	3	0	17
(1)		.00	1.43	.00	.00	.71	1.43	.00	.71	.00	.71	.00	.00	.71	2.86	1.43	2.14	.00	12.14
(2)		.00	.10	.00	.00	.05	.10	.00	.05	.00	.05	.00	.00	.05	.19	.10	.14	.00	.81
4-7		0	4	3	6	7	3	7	1	11	3	3	7	8	3	2	3	0	71
(1)		.00	2.86	2.14	4.29	5.00	2.14	5.00	.71	7.86	2.14	2.14	5.00	5.71	2.14	1.43	2.14	.00	50.71
(2)		.00	.19	.14	.29	.33	.14	.33	.05	.52	.14	.14	.33	.38	.14	.10	.14	.00	3.38
8-12		1	2	1	0	5	1	0	0	8	12	5	1	2	0	0	1	0	39
(1)		.71	1.43	.71	.00	3.57	.71	.00	.00	5.71	8.57	3.57	.71	1.43	.00	.00	.71	.00	27.86
(2)		.05	.10	.05	.00	.24	.05	.00	.00	.38	.57	.24	.05	.10	.00	.00	.05	.00	1.86
13-18		0	0	0	4	0	0	0	0	5	3	0	0	0	0	0	0	0	12
(1)		.00	.00	.00	2.86	.00	.00	.00	.00	3.57	2.14	.00	.00	.00	.00	.00	.00	.00	8.57
(2)		.00	.00	.00	.19	.00	.00	.00	.00	.24	.14	.00	.00	.00	.00	.00	.00	.00	.57
19-24		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)		.00	.00	.00	.71	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.71
(2)		.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.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		1	8	4	11	13	6	7	2	24	19	8	8	11	7	4	7	0	140
(1)		.71	5.71	3.86	7.86	9.29	4.29	5.00	1.43	17.14	13.57	5.71	5.71	7.86	5.00	2.86	5.00	.00	100.00
(2)		.05	.38	.19	.52	.62	.29	.33	.10	1.14	.90	.38	.38	.52	.33	.19	.33	.00	6.67

33.0 FT WIND DATA		STABILITY CLASS D																CLASS FREQUENCY (PERCENT) = 34.00	
		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	8	14	9	14	11	15	10	12	5	4	8	6	7	10	9	0	143
(1)		.14	1.12	1.96	1.26	1.96	1.54	2.10	1.40	1.68	.70	.56	1.12	.84	.98	1.40	1.26	.00	20.03
(2)		.05	.38	.67	.43	.67	.52	.71	.48	.57	.24	.19	.38	.29	.33	.48	.43	.00	6.81
4-7		2	26	15	32	31	21	14	21	39	46	35	17	9	2	7	8	0	325
(1)		.28	3.64	2.10	4.48	4.34	2.94	1.96	2.94	5.40	6.64	4.90	2.38	1.26	.28	.98	1.12	.00	45.52
(2)		.10	1.24	.71	1.52	1.48	1.00	.67	1.00	1.86	2.19	1.67	.81	.43	.10	.33	.38	.00	15.48
8-12		1	2	0	4	5	4	2	9	33	69	16	20	22	7	4	5	0	203
(1)		.14	.28	.00	.56	.70	.56	.28	1.26	4.62	9.66	2.24	2.80	3.08	.98	.56	.70	.00	28.43
(2)		.05	.10	.00	.19	.24	.19	.10	.43	1.57	3.29	.76	.95	1.05	.33	.19	.24	.00	9.67
13-18		0	0	0	2	0	0	0	1	18	21	0	0	0	0	0	0	0	42
(1)		.00	.00	.00	.28	.00	.00	.00	.14	2.52	2.94	.00	.00	.00	.00	.00	.00	.00	5.88
(2)		.00	.00	.00	.10	.00	.00	.00	.05	.86	1.00	.00	.00	.00	.00	.00	.00	.00	2.00
19-24		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)		.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
(2)		.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.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		4	36	29	48	50	36	31	41	102	141	55	45	37	16	21	22	0	714
(1)		.56	5.04	4.06	6.72	7.00	5.04	4.34	5.74	14.29	19.75	7.70	6.30	5.18	2.24	2.94	3.08	.00	100.00
(2)		.19	1.71	1.38	2.29	2.38	1.71	1.48	1.95	4.86	6.71	2.62	2.14	1.76	.76	1.00	1.05	.00	34.00

(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 4A-1 (continued)

PILGRIM APR96-JUN96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA

STABILITY CLASS E

CLASS FREQUENCY (PERCENT) = 19.00

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	1	0	0	0	0	0	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25
(2)	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
C-3	0	1	1	7	9	7	9	9	9	7	10	9	10	4	7	1	0	99
(1)	.00	.25	.25	1.75	2.26	1.75	2.26	2.01	2.26	1.75	2.51	2.26	2.51	1.00	1.75	.25	.00	24.81
(2)	.00	.05	.05	.33	.43	.33	.43	.38	.43	.33	.48	.43	.48	.19	.33	.05	.00	4.71
4-7	2	3	2	18	9	3	4	4	22	38	32	43	18	14	7	3	0	212
(1)	.50	.75	.50	4.51	2.26	.75	1.00	1.00	5.51	9.52	5.51	10.78	4.51	3.51	1.75	.75	.00	53.13
(2)	.10	.14	.10	.86	.43	.14	.19	.19	1.05	1.81	1.05	2.05	.86	.67	.33	.14	.00	10.10
8-12	0	0	0	0	1	0	0	0	2	35	15	13	9	3	6	0	0	84
(1)	.00	.00	.00	.00	.25	.00	.00	.00	.50	8.77	3.76	3.26	2.26	.75	1.50	.00	.00	21.05
(2)	.00	.00	.00	.00	.05	.00	.00	.00	.10	1.67	.71	.62	.43	.14	.29	.00	.00	4.00
13-18	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.75	.00	.00	.00	.00	.00	.00	.00	.75
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.14
19-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
GT 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS	2	4	3	25	19	10	13	13	33	83	47	65	37	21	20	4	0	399
(1)	.50	1.00	.75	6.27	4.76	2.51	3.26	3.26	8.27	20.80	11.78	16.29	9.27	5.26	5.01	1.00	.00	100.00
(2)	.10	.19	.14	1.19	.90	.48	.62	.62	1.57	3.95	2.24	3.10	1.76	1.00	.95	.19	.00	19.00

33.0 FT WIND DATA

STABILITY CLASS F

CLASS FREQUENCY (PERCENT) = 7.95

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	1	1	2	4	7	4	5	9	6	3	1	1	0	0	44
(1)	.00	.00	.00	.60	.60	1.20	2.40	4.19	2.40	2.99	5.39	3.59	1.80	.60	.60	.00	.00	26.35
(2)	.00	.00	.00	.05	.05	.10	.19	.33	.19	.24	.43	.29	.14	.05	.05	.00	.00	2.10
4-7	0	0	0	2	2	0	0	2	4	16	22	24	8	6	7	3	0	96
(1)	.00	.00	.00	1.20	1.20	.00	.00	1.20	2.40	9.58	13.17	14.37	4.79	3.59	4.19	1.80	.00	57.49
(2)	.00	.00	.00	.10	.10	.00	.00	.10	.19	.76	1.05	1.14	.38	.29	.33	.14	.00	4.57
8-12	0	0	0	0	0	0	0	0	0	6	20	0	0	0	1	0	0	27
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.59	11.98	.00	.00	.00	.60	.00	.00	16.17
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.95	.00	.00	.00	.05	.00	.00	1.29
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	3	3	2	4	9	8	27	51	30	11	7	9	3	0	167
(1)	.00	.00	.00	1.80	1.80	1.20	2.40	5.39	4.79	16.17	30.54	17.96	6.59	4.19	5.39	1.80	.00	100.00
(2)	.00	.00	.00	.14	.14	.10	.19	.43	.38	1.29	2.43	1.43	.52	.33	.43	.14	.00	7.95

(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 4A-1 (continued)

PILGRIM APR96-JUN96 MMT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

33.0 FT WIND DATA		STABILITY CLASS G						CLASS FREQUENCY (PERCENT) = 2.38											
		WIND DIRECTION FROM																	
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	.00	.00	.00	.00	.00	.00	.00	2.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05
C-3		0	0	0	0	1	0	0	2	0	3	2	2	0	0	0	0	0	10
(1)		.00	.00	.00	.00	2.00	.00	.00	4.00	.00	6.00	4.00	4.00	.00	.00	.00	.00	.00	20.00
(2)		.00	.00	.00	.00	.05	.00	.00	.10	.00	.14	.10	.10	.00	.00	.00	.00	.00	.46
4-7		0	0	0	0	0	0	0	0	3	1	14	2	0	0	0	0	0	20
(1)		.00	.00	.00	.00	.00	.00	.00	.00	6.00	2.00	28.00	4.00	.00	.00	.00	.00	.00	40.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.14	.05	.67	.10	.00	.00	.00	.00	.00	.95
8-12		0	0	0	0	0	0	0	0	0	9	7	0	0	0	0	0	0	16
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	18.00	14.00	.00	.00	.00	.00	.00	.00	32.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.43	.33	.00	.00	.00	.00	.00	.00	.76
13-16		0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	6.00	.00	.00	.00	.00	.00	.00	.00	6.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.14
19-24		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
GT 24		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ALL SPEEDS		0	0	0	0	1	0	0	2	3	17	23	4	0	0	0	0	0	50
(1)		.00	.00	.00	.00	2.00	.00	.00	4.00	6.00	34.00	46.00	8.00	.00	.00	.00	.00	.00	100.00
(2)		.00	.00	.00	.00	.05	.00	.00	.10	.14	.61	1.10	.19	.00	.00	.00	.00	.00	2.38

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	1	0	7	0	0	0	0	0	0	0	2
(1)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.07	.00	.00	.00	.00	.00	.00	.00	.10
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.00	.00	.00	.10
C-3		1	11	15	19	28	23	29	29	25	22	27	25	22	17	22	17	0	332
(1)		.05	.52	.71	.90	1.33	1.10	1.38	1.38	1.19	1.05	1.29	1.19	1.05	.81	1.05	.81	.00	15.81
(2)		.05	.52	.71	.90	1.33	1.10	1.38	1.38	1.19	1.05	1.29	1.19	1.05	.81	1.05	.81	.00	15.81
4-7		19	60	37	77	68	40	38	35	92	117	111	109	68	43	42	34	0	990
(1)		.90	2.86	1.76	3.67	3.24	1.90	1.81	1.67	4.38	5.57	5.29	5.19	3.24	2.05	2.00	1.62	.00	47.14
(2)		.90	2.86	1.76	3.67	3.24	1.90	1.81	1.67	4.38	5.57	5.29	5.19	3.24	2.05	2.00	1.62	.00	47.14
8-12		18	15	10	10	18	14	13	14	89	192	101	41	58	26	11	11	0	641
(1)		.86	.71	.48	.48	.86	.67	.62	.67	4.24	9.14	4.81	1.95	2.76	1.24	.52	.52	.00	30.52
(2)		.86	.71	.48	.48	.86	.67	.62	.67	4.24	9.14	4.81	1.95	2.76	1.24	.52	.52	.00	30.52
13-18		5	13	7	12	1	3	4	1	35	38	2	0	4	2	1	2	0	130
(1)		.24	.62	.33	.57	.05	.14	.19	.05	1.67	1.81	.10	.00	.19	.10	.05	.10	.00	6.19
(2)		.24	.62	.33	.57	.05	.14	.19	.05	1.67	1.81	.10	.00	.19	.10	.05	.10	.00	6.19
19-24		0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
(1)		.00	.05	.00	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
(2)		.00	.05	.00	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
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		43	100	69	122	115	80	84	80	241	370	241	175	152	88	76	64	0	2100
(1)		2.05	4.76	3.29	5.81	5.48	3.81	4.00	3.81	11.48	17.62	11.48	8.33	7.24	4.19	3.62	3.05	.00	100.00
(2)		2.05	4.76	3.29	5.81	5.48	3.81	4.00	3.81	11.48	17.62	11.48	8.33	7.24	4.19	3.62	3.05	.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 4A-2  
Distributions of Wind Directions and Speeds  
for the 220-ft Level of the 220-ft Tower

Pilgrim JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS A						CLASS FREQUENCY (PERCENT) = 10.54												
		WIND DIRECTION FROM																		
SPEED (MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VREL	TOTAL	
CALM	0	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	.00	.28	.00	.00	.00	.00	.28	
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05	
C-3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
(1)	.28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.28	
(2)	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	
4-7	3	3	2	0	0	0	0	1	0	2	0	7	2	2	1	1	3	0	27	
(1)	.85	.85	.57	.00	.00	.00	.00	.28	.00	.57	.00	1.98	.57	.77	.28	.28	.85	.00	7.65	
(2)	.16	.16	.11	.00	.00	.00	.00	.05	.00	.11	.00	.37	.11	.11	.05	.05	.16	.00	1.42	
8-12	3	1	1	0	1	1	1	2	2	2	0	4	8	4	5	8	8	0	50	
(1)	.85	.28	.28	.00	.28	.28	.28	.57	.57	.57	.00	1.13	2.27	1.13	1.42	2.27	2.27	.00	14.16	
(2)	.16	.05	.05	.00	.05	.05	.11	.11	.11	.00	.21	.42	.21	.26	.42	.42	.00	.00	2.63	
13-18	9	3	2	2	0	1	1	1	5	6	6	12	1	14	20	8	6	0	96	
(1)	2.55	.85	.57	.57	.00	.28	.28	.28	1.42	1.70	1.70	3.40	.28	3.97	5.67	2.27	1.70	.00	27.20	
(2)	.47	.16	.11	.11	.00	.05	.05	.05	.26	.32	.32	.63	.05	.74	1.05	.42	.32	.00	5.04	
19-24	2	2	2	1	0	1	1	2	6	4	4	3	10	8	25	10	4	0	84	
(1)	.57	.57	.57	.28	.00	.28	.28	.57	1.70	1.13	1.13	.85	2.83	2.27	7.08	2.83	1.13	.00	23.80	
(2)	.11	.11	.11	.05	.00	.05	.11	.11	.32	.21	.21	.16	.53	.42	1.31	.53	.21	.00	4.41	
GT 24	10	15	3	1	2	6	3	1	13	7	8	3	3	3	8	7	4	0	94	
(1)	2.83	4.25	.85	.28	.57	1.70	.85	.28	3.68	1.98	2.27	.85	.85	2.27	1.98	1.13	.00	.00	26.63	
(2)	.53	.79	.16	.05	.11	.32	.16	.05	.68	.37	.42	.16	.16	.42	.37	.21	.00	.00	4.94	
ALL SPEEDS	28	24	10	4	3	9	9	14	27	17	34	24	32	59	34	25	0	0	353	
(1)	7.93	6.80	2.83	1.13	.85	2.55	2.55	3.97	7.65	4.82	9.63	6.80	9.07	16.71	9.63	7.08	.00	.00	100.00	
(2)	1.47	1.26	.53	.21	.16	.47	.47	.74	1.42	.89	1.79	1.26	1.68	3.10	1.79	1.31	.00	.00	18.54	

220.0 FT WIND DATA		STABILITY CLASS B						CLASS FREQUENCY (PERCENT) = 4.41												
		WIND DIRECTION FROM																		
SPEED (MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VREL	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	1	0	0	1	0	0	0	0	0	0	0	1	1	2	0	0	7	
(1)		1.19	1.19	.00	.00	1.19	.00	.00	.00	.00	.00	.00	.00	1.19	1.19	2.38	.00	.00	8.33	
(2)		.05	.05	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05	.05	.11	.00	.00	.37	
8-12		2	2	1	0	2	3	1	0	1	1	1	4	0	2	2	1	0	23	
(1)		2.38	2.38	1.19	.00	2.38	3.57	1.19	.00	1.19	1.19	1.19	4.76	.00	2.38	2.38	1.19	.00	27.38	
(2)		.11	.11	.05	.00	.11	.16	.05	.00	.05	.05	.05	.21	.00	.11	.11	.05	.00	1.21	
13-18		1	1	1	0	0	0	0	2	5	4	2	3	3	2	2	1	0	27	
(1)		1.19	1.19	1.19	.00	.00	.00	.00	2.38	5.95	4.76	2.38	3.57	3.57	2.38	2.38	1.19	.00	32.14	
(2)		.05	.05	.05	.00	.00	.00	.00	.11	.26	.21	.11	.16	.16	.11	.11	.05	.00	1.42	
19-24		0	0	0	0	1	0	0	0	3	1	1	2	1	1	2	1	0	13	
(1)		.00	.00	.00	.00	1.19	.00	.00	.00	3.57	1.19	1.19	2.38	1.19	1.19	2.38	1.19	.00	15.48	
(2)		.00	.00	.00	.00	.05	.00	.00	.00	.16	.05	.05	.11	.05	.05	.11	.05	.00	.68	
GT 24		0	2	1	0	0	0	0	1	2	0	0	0	0	1	4	3	0	14	
(1)		.00	2.38	1.19	.00	.00	.00	.00	1.19	2.38	.00	.00	.00	.00	1.19	4.76	3.57	.00	16.67	
(2)		.00	.11	.05	.00	.00	.00	.00	.05	.11	.00	.00	.00	.00	.05	.21	.16	.00	.74	
ALL SPEEDS		4	6	3	0	4	3	1	3	11	6	4	9	5	7	12	6	0	84	
(1)		4.76	7.14	3.57	.00	4.76	3.57	1.19	3.57	13.10	7.14	4.76	10.71	5.95	8.33	14.29	7.14	.00	100.00	
(2)		.21	.32	.16	.00	.21	.16	.05	.16	.58	.32	.21	.47	.26	.37	.63	.32	.00	4.41	

(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 4A-2 (continued)

Pilgrim JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS C						CLASS FREQUENCY (PERCENT), = 5.25												
		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		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	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	5	
(1)		.00	1.00	.00	1.00	.00	.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	.00	5.00	
(2)		.00	.05	.00	.05	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00	.26	
8-12		0	0	0	0	2	0	2	1	4	2	3	3	3	1	1	1	0	23	
(1)		.00	.00	.00	.00	2.00	.00	2.00	1.00	4.00	2.00	3.00	3.00	3.00	1.00	1.00	1.00	.00	23.00	
(2)		.00	.00	.00	.00	.11	.00	.11	.05	.21	.11	.16	.16	.16	.05	.05	.05	.00	1.21	
13-18		0	0	3	0	0	0	1	0	6	2	3	4	4	10	0	1	0	34	
(1)		.00	.00	3.00	.00	.00	.00	1.00	.00	6.00	2.00	3.00	4.00	4.00	10.00	.00	1.00	.00	34.00	
(2)		.00	.00	.16	.00	.00	.00	.05	.00	.32	.11	.16	.21	.21	.53	.00	.05	.00	1.79	
19-24		4	0	0	1	0	0	0	3	1	1	3	0	2	1	1	2	0	19	
(1)		4.00	.00	.00	1.00	.00	.00	.00	3.00	1.00	1.00	3.00	.00	2.00	1.00	1.00	2.00	.00	19.00	
(2)		.21	.00	.00	.05	.00	.00	.00	.16	.05	.05	.16	.00	.11	.05	.05	.11	.00	1.00	
GT 24		6	0	2	0	0	0	0	0	0	0	0	0	1	4	4	2	0	19	
(1)		6.00	.00	2.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.00	4.00	4.00	2.00	.00	19.00	
(2)		.32	.00	.11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.21	.21	.11	.00	1.00	
ALL SPEEDS		10	1	5	2	2	0	4	4	11	5	9	7	10	16	6	8	0	100	
(1)		10.00	1.00	5.00	2.00	2.00	.00	4.00	4.00	11.00	5.00	9.00	7.00	10.00	16.00	6.00	8.00	.00	100.00	
(2)		.53	.05	.26	.11	.11	.00	.21	.21	.58	.26	.47	.37	.53	.84	.32	.42	.00	5.25	

220.0 FT WIND DATA		STABILITY CLASS D						CLASS FREQUENCY (PERCENT) = 41.91												
		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		1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	5	
(1)		.13	.13	.13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.13	.00	.63	
(2)		.05	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.26	
4-7		4	2	1	2	6	0	3	1	1	1	3	4	6	5	4	3	0	46	
(1)		.50	.25	.13	.25	.75	.00	.38	.13	.13	.13	.38	.50	.75	.63	.50	.38	.00	5.76	
(2)		.21	.11	.05	.11	.32	.00	.16	.05	.05	.05	.16	.21	.32	.26	.21	.15	.00	2.42	
8-12		8	2	1	7	4	10	7	5	8	9	10	7	3	5	7	7	0	100	
(1)		1.00	.25	.13	.88	.50	1.25	.88	.63	1.00	1.13	1.25	.88	.38	.63	.88	.88	.00	12.53	
(2)		.42	.11	.05	.37	.21	.53	.37	.26	.42	.47	.53	.37	.16	.26	.37	.37	.00	5.25	
13-18		13	5	9	8	7	6	12	6	8	27	41	21	21	26	27	20	0	257	
(1)		1.63	.63	1.13	1.00	.88	.75	1.50	.75	1.00	3.38	5.14	2.63	2.63	3.26	3.38	2.51	.00	32.21	
(2)		.68	.26	.47	.42	.37	.32	.63	.32	.42	1.42	2.15	1.10	1.10	1.37	1.42	1.05	.00	13.50	
19-24		7	15	8	3	1	6	23	16	11	5	14	8	19	28	34	19	0	217	
(1)		.88	1.88	1.00	.38	.13	.75	2.88	2.01	1.38	.63	1.75	1.00	2.38	3.51	4.26	2.38	.00	27.19	
(2)		.37	.79	.42	.16	.05	.32	1.21	.84	.58	.26	.74	.42	1.00	1.47	1.79	1.00	.00	11.40	
GT 24		14	12	11	11	1	1	3	11	14	3	6	7	20	22	23	14	0	173	
(1)		1.75	1.50	1.38	1.38	.13	.13	.38	1.38	1.75	.38	.75	.88	2.51	2.76	2.88	1.75	.00	21.68	
(2)		.74	.63	.58	.58	.05	.05	.16	.58	.74	.16	.32	.37	1.05	1.16	1.21	.74	.00	9.09	
ALL SPEEDS		47	37	31	31	19	23	48	39	42	45	74	47	69	86	96	64	0	798	
(1)		5.89	4.64	3.88	3.88	2.38	2.88	6.02	4.89	5.26	5.64	9.27	5.89	8.65	10.78	12.03	8.02	.00	100.00	
(2)		2.47	1.94	1.63	1.63	1.00	1.21	2.52	2.05	2.21	2.36	3.89	2.47	3.62	4.52	5.04	3.36	.00	41.91	

(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 4A-2 (continued)

Pilgrim JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS E						CLASS FREQUENCY (PERCENT) = 23.42											
		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	2	1	0	0	0	1	0	2	1	0	1	0	1	0	0	0	9
(1)		.00	.45	.22	.00	.00	.00	.22	.00	.45	.22	.00	.22	.00	.22	.00	.00	.00	2.02
(2)		.00	.11	.05	.00	.00	.00	.05	.00	.11	.05	.00	.05	.00	.05	.00	.00	.00	.47
4-7		5	4	3	1	4	0	1	2	2	3	2	1	1	2	9	5	0	45
(1)		1.12	.90	.67	.22	.90	.00	.22	.45	.45	.67	.45	.22	.22	.45	2.02	1.12	.00	10.09
(2)		.26	.21	.16	.05	.21	.00	.05	.11	.11	.16	.11	.05	.05	.11	.47	.26	.00	2.36
8-12		7	3	1	0	1	1	6	14	7	11	12	8	7	8	5	8	0	99
(1)		1.57	.67	.22	.00	.22	.22	1.35	3.14	1.57	2.47	2.69	1.79	1.57	1.79	1.12	1.79	.00	22.20
(2)		.37	.16	.05	.00	.05	.05	.32	.74	.37	.58	.63	.42	.37	.42	.26	.42	.00	5.20
13-18		1	0	1	0	0	0	3	7	10	16	15	21	21	24	20	11	0	150
(1)		.22	.00	.22	.00	.00	.00	.67	1.57	2.24	3.59	3.36	4.71	4.71	5.38	4.48	2.47	.00	33.63
(2)		.05	.00	.05	.00	.00	.00	.16	.37	.53	.84	.79	1.10	1.10	1.26	1.05	.58	.00	7.88
19-24		3	5	0	0	0	0	8	1	5	12	7	7	9	32	11	3	0	103
(1)		.67	1.12	.00	.00	.00	.00	1.79	.22	1.12	2.69	1.57	1.57	2.02	7.17	2.47	.67	.00	23.09
(2)		.16	.26	.00	.00	.00	.00	.42	.05	.26	.63	.37	.37	.47	1.68	.58	.16	.00	5.41
GT 24		2	5	6	0	0	0	3	0	1	10	0	0	0	10	0	3	0	40
(1)		.45	1.12	1.35	.00	.00	.00	.67	.00	.22	2.24	.00	.00	.00	2.24	.00	.67	.00	8.97
(2)		.11	.26	.32	.00	.00	.00	.16	.90	.05	.53	.00	.00	.00	.53	.00	.16	.00	2.10
ALL SPEEDS		18	19	12	1	5	1	22	24	27	53	36	38	38	77	45	30	0	446
(1)		4.04	4.26	2.69	.22	1.12	.22	4.93	5.38	6.05	11.88	8.07	8.52	8.52	17.26	10.09	6.73	.00	100.00
(2)		.95	1.00	.63	.05	.26	.05	1.16	1.26	1.42	2.78	1.89	2.00	2.00	4.04	2.36	1.58	.00	23.42

220.0 FT WIND DATA		STABILITY CLASS F						CLASS FREQUENCY (PERCENT) = 5.62											
		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	2	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	6
(1)		.00	1.87	.00	.00	.93	.00	.00	.00	.00	.93	.00	.00	.93	.93	.00	.00	.00	5.61
(2)		.00	.11	.00	.00	.05	.00	.00	.00	.00	.05	.00	.00	.05	.05	.00	.00	.00	.32
4-7		2	0	1	0	0	2	0	0	0	0	1	2	3	1	1	1	0	14
(1)		1.87	.00	.93	.00	.00	1.87	.00	.00	.00	.00	.93	1.87	2.80	.93	.93	.93	.00	13.08
(2)		.11	.00	.05	.00	.00	.11	.00	.00	.00	.00	.05	.11	.16	.05	.05	.05	.00	.74
8-12		2	0	0	0	0	0	3	0	2	1	3	7	6	9	6	1	0	40
(1)		1.87	.00	.00	.00	.00	.00	2.80	.00	1.87	.93	2.80	6.54	5.61	8.41	5.61	.93	.00	37.38
(2)		.11	.00	.00	.00	.00	.00	.16	.00	.11	.05	.16	.37	.32	.47	.32	.05	.00	2.10
13-18		0	0	0	0	0	0	0	0	1	1	5	3	8	1	2	0	0	21
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.93	.93	4.67	2.80	7.48	.93	1.87	.00	.00	19.63
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.26	.16	.42	.05	.11	.00	.00	1.10
19-24		0	0	0	0	0	0	0	0	0	6	6	2	0	0	0	0	0	14
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	5.61	5.61	1.87	.00	.00	.00	.00	.00	13.08
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.32	.32	.11	.00	.00	.00	.00	.00	.74
GT 24		2	1	3	0	0	0	0	0	0	1	1	0	0	0	0	4	0	12
(1)		1.87	.93	2.80	.00	.00	.00	.00	.00	.00	.93	.93	.00	.00	.00	.00	3.74	.00	11.21
(2)		.11	.05	.16	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.21	.00	.63
ALL SPEEDS		6	3	4	0	1	2	3	0	3	10	16	14	18	12	9	6	0	107
(1)		5.61	2.80	3.74	.00	.93	1.87	2.80	.00	2.80	9.35	14.95	13.08	16.82	11.21	8.41	5.61	.00	100.00
(2)		.32	.16	.21	.00	.05	.11	.16	.00	.16	.53	.84	.74	.95	.63	.47	.32	.00	5.62

(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)

Table 4A-2 (continued)

Pilgrim JAN96-MAR96 MGT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS G						CLASS FREQUENCY (PERCENT) = .64											
		WIND DIRECTION FROM																	
SPEED (MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4-7		0	0	0	0	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	6.25	.00	.00	.00	.00	.00	.00	6.25
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05
8-12		0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	4
(1)		.00	.00	.00	.00	.00	.00	.00	6.25	.00	.00	18.75	.00	.00	.00	.00	.00	.00	25.00
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.16	.00	.00	.00	.00	.00	.00	.21
13-18		0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	6
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	31.25	.00	6.25	.00	.00	.00	.00	37.50
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.05	.00	.00	.00	.00	.32
19-24		0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	4
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	6.25	6.25	.00	12.50	.00	.00	.00	.00	25.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.11	.00	.00	.00	.00	.21
GT 24		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	6.25	.00	.00	.00	.00	.00	.00	.00	6.25
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05
ALL SPEEDS		0	0	0	0	0	0	0	1	0	2	10	0	3	0	0	0	0	16
(1)		.00	.00	.00	.00	.00	.00	.00	6.25	.00	12.50	62.50	.00	18.75	.00	.00	.00	.00	100.00
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.11	.53	.00	.16	.00	.00	.00	.00	.84

320.0 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	1	0	0	0	0	1
(1)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00
(2)	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05
C-3	2	5	2	0	1	0	1	0	2	2	0	1	1	2	1	1	1	0	21
(1)	.11	.26	.11	.00	.05	.00	.05	.00	.11	.11	.00	.05	.05	.11	.05	.05	.00	.00	1.10
(2)	.11	.26	.11	.00	.05	.00	.05	.00	.11	.11	.00	.05	.05	.11	.05	.05	.00	.00	1.10
4-7	15	11	7	4	11	2	6	3	5	4	14	9	13	10	17	14	0	145	
(1)	.79	.58	.37	.21	.58	.11	.32	.16	.26	.21	.74	.47	.68	.53	.89	.74	.00	.00	7.62
(2)	.79	.58	.37	.21	.58	.11	.32	.16	.26	.21	.74	.47	.68	.53	.89	.74	.00	.00	7.62
8-12	22	8	4	7	10	15	21	23	24	24	36	37	23	30	29	26	0	339	
(1)	1.16	.42	.21	.37	.53	.79	1.10	1.21	1.26	1.26	1.89	1.94	1.21	1.58	1.52	1.37	.00	.00	17.80
(2)	1.16	.42	.21	.37	.53	.79	1.10	1.21	1.26	1.26	1.89	1.94	1.21	1.58	1.52	1.37	.00	.00	17.80
13-18	24	9	16	10	7	7	17	20	36	56	83	53	72	83	59	39	0	591	
(1)	1.26	.47	.84	.53	.37	.37	.89	1.05	1.89	2.94	4.36	2.78	3.78	4.36	3.10	2.05	.00	.00	31.04
(2)	1.26	.47	.84	.53	.37	.37	.89	1.05	1.89	2.94	4.36	2.78	3.78	4.36	3.10	2.05	.00	.00	31.04
19-24	16	22	10	5	2	7	33	26	24	30	35	29	41	87	58	29	0	454	
(1)	.84	1.16	.53	.26	.11	.37	1.73	1.37	1.26	1.58	1.84	1.52	2.15	4.57	3.05	1.52	.00	.00	23.84
(2)	.84	1.16	.53	.26	.11	.37	1.73	1.37	1.26	1.58	1.84	1.52	2.15	4.57	3.05	1.52	.00	.00	23.84
GT 24	34	35	26	12	3	7	9	13	30	22	15	10	24	45	38	30	0	353	
(1)	1.79	1.84	1.37	.63	.16	.37	.47	.68	1.58	1.16	.79	.53	1.26	2.36	2.00	1.58	.00	.00	18.54
(2)	1.79	1.84	1.37	.63	.16	.37	.47	.68	1.58	1.16	.79	.53	1.26	2.36	2.00	1.58	.00	.00	18.54
ALL SPEEDS	113	90	65	38	34	38	87	85	121	138	183	139	175	257	202	139	0	1904	
(1)	5.93	4.73	3.41	2.00	1.79	2.00	4.57	4.46	6.36	7.25	9.61	7.30	9.19	13.50	10.61	7.30	.00	.00	100.00
(2)	5.93	4.73	3.41	2.00	1.79	2.00	4.57	4.46	6.36	7.25	9.61	7.30	9.19	13.50	10.61	7.30	.00	.00	100.00

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

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

C = CALM (WIND SPEED LESS THAN OR EQUAL TO 0.95 MPH)

Table 4A-2 (continued)

Pilgrim JAN96-MAR96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS G								CLASS FREQUENCY (PERCENT) = .84									
										WIND DIRECTION FROM									
SPEED(MPH)		N	NNE	NE	NNE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4-7		0	0	0	0	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	6.25	.00	.00	.00	.00	.00	.00	6.25
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05
8-12		0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	4
(1)		.00	.00	.00	.00	.00	.00	.00	6.25	.00	.00	18.75	.00	.00	.00	.00	.00	.00	25.00
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.16	.00	.00	.00	.00	.00	.00	.21
13-16		0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	6
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	31.25	.00	6.25	.00	.00	.00	.00	37.50
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.05	.00	.00	.00	.00	.32
19-24		0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	4
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	6.25	6.25	.00	12.50	.00	.00	.00	.00	25.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.11	.00	.00	.00	.00	.21
GT 24		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	6.25	.00	.00	.00	.00	.00	.00	.00	6.25
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05
ALL SPEEDS		0	0	0	0	0	0	0	1	0	2	10	0	3	0	0	0	0	16
(1)		.00	.00	.00	.00	.00	.00	.00	6.25	.00	12.50	62.50	.00	18.75	.00	.00	.00	.00	100.00
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.11	.53	.00	.16	.00	.00	.00	.00	.84

220.0 FT WIND DATA		STABILITY CLASS ALL								CLASS FREQUENCY (PERCENT) = 100.00									
										WIND DIRECTION FROM									
SPEED(MPH)		N	NNE	NE	NNE	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	1	0	0	0	0	1
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05
C-3		2	5	2	0	1	0	1	0	2	2	0	1	1	2	1	1	0	21
(1)		.11	.26	.11	.00	.05	.00	.05	.00	.11	.11	.00	.05	.05	.11	.05	.05	.00	1.10
(2)		.11	.26	.11	.00	.05	.00	.05	.00	.11	.11	.00	.05	.05	.11	.05	.05	.00	1.10
4-7		15	11	7	4	11	2	6	3	5	4	14	9	13	10	17	14	0	145
(1)		.79	.58	.37	.21	.58	.11	.32	.16	.26	.21	.74	.47	.68	.53	.89	.74	.00	7.62
(2)		.79	.58	.37	.21	.58	.11	.32	.16	.26	.21	.74	.47	.68	.53	.89	.74	.00	7.62
8-12		22	8	4	7	10	15	21	23	24	24	36	37	23	30	29	26	0	339
(1)		1.16	.42	.21	.37	.53	.79	1.10	1.21	1.26	1.26	1.89	1.94	1.21	1.58	1.52	1.37	.00	17.80
(2)		1.16	.42	.21	.37	.53	.79	1.10	1.21	1.26	1.26	1.89	1.94	1.21	1.58	1.52	1.37	.00	17.80
13-16		24	9	16	10	7	7	17	20	36	56	83	53	72	83	59	39	0	591
(1)		1.26	.47	.84	.53	.37	.37	.89	1.05	1.89	2.94	4.36	2.78	3.78	4.36	3.10	2.05	.00	31.04
(2)		1.26	.47	.84	.53	.37	.37	.89	1.05	1.89	2.94	4.36	2.78	3.78	4.36	3.10	2.05	.00	31.04
19-24		16	22	10	5	2	7	33	26	24	30	35	29	41	87	58	29	0	454
(1)		.84	1.16	.53	.26	.11	.37	1.73	1.37	1.26	1.58	1.84	1.52	2.15	4.57	3.05	1.52	.00	23.84
(2)		.84	1.16	.53	.26	.11	.37	1.73	1.37	1.26	1.58	1.84	1.52	2.15	4.57	3.05	1.52	.00	23.84
GT 24		34	35	26	12	3	7	9	13	30	22	15	10	24	45	38	30	0	353
(1)		1.79	1.84	1.37	.63	.16	.37	.47	.68	1.58	1.16	.79	.53	1.26	2.36	2.00	1.58	.00	18.54
(2)		1.79	1.84	1.37	.63	.16	.37	.47	.68	1.58	1.16	.79	.53	1.26	2.36	2.00	1.58	.00	18.54
ALL SPEEDS		113	90	65	38	34	38	87	85	121	138	183	139	175	257	202	139	0	1904
(1)		5.93	4.73	3.41	2.00	1.79	2.00	4.57	4.46	6.36	7.25	9.61	7.30	9.19	13.50	10.61	7.30	.00	100.00
(2)		5.93	4.73	3.41	2.00	1.79	2.00	4.57	4.46	6.36	7.25	9.61	7.30	9.19	13.50	10.61	7.30	.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 4A-2 (continued)

Pilgrim APR96-JUN96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS A						CLASS FREQUENCY (PERCENT) = 22.02												
		WIND DIRECTION FROM																		
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL	
CALM	0	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	.00	
(2)	.00	.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	0	
(1)	.00	.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	.00	
4-7	1	1	1	3	5	0	1	0	0	0	0	1	1	0	2	3	0	0	19	
(1)	.21	.21	.21	.64	1.07	.00	.21	.00	.00	.00	.00	.21	.21	.00	.43	.64	.00	.00	4.08	
(2)	.05	.05	.05	.14	.24	.00	.05	.00	.00	.00	.00	.05	.05	.00	.09	.14	.00	.00	.90	
8-12	5	13	7	8	4	6	7	4	4	3	7	3	6	16	6	8	0	0	107	
(1)	1.07	2.79	1.50	1.72	.96	1.29	1.50	.86	.86	.64	1.50	.64	1.29	3.43	1.29	1.72	.00	.00	22.96	
(2)	.24	.61	.33	.38	.19	.28	.33	.19	.19	.14	.33	.14	.28	.76	.28	.38	.00	.00	5.06	
13-18	6	11	2	1	1	5	12	5	22	38	26	8	11	6	0	7	0	0	161	
(1)	1.29	2.36	.43	.21	.21	1.07	2.58	1.07	4.72	8.15	5.58	1.72	2.36	1.29	.00	1.50	.00	.00	34.55	
(2)	.28	.52	.09	.05	.05	.24	.57	.24	1.04	1.80	1.23	.38	.52	.28	.00	.33	.00	.00	7.61	
19-24	3	9	1	3	0	1	2	1	11	20	6	3	8	5	8	6	0	0	86	
(1)	.64	1.93	.21	.64	.00	.21	.43	.21	2.36	4.29	1.29	.43	1.72	1.07	1.72	1.29	.00	.00	18.45	
(2)	.14	.43	.05	.14	.00	.05	.09	.05	.52	.95	.28	.09	.38	.24	.38	.28	.00	.00	4.06	
GT 24	13	8	11	2	4	4	9	0	3	5	0	1	8	9	1	15	0	0	93	
(1)	2.79	1.72	2.36	.43	.86	.86	1.93	.00	.64	1.07	.00	.21	1.72	1.93	.21	3.22	.00	.00	19.96	
(2)	.61	.38	.52	.09	.19	.19	.43	.00	.14	.24	.00	.05	.38	.43	.05	.71	.00	.00	4.40	
ALL SPEEDS	28	42	22	17	14	16	31	10	40	66	40	15	33	38	18	36	0	0	466	
(1)	6.01	9.01	4.72	3.65	3.00	3.43	6.65	2.15	8.58	14.16	8.58	3.22	7.08	8.15	3.86	7.73	.00	.00	100.00	
(2)	1.32	1.98	1.04	.80	.66	.76	1.47	.47	1.89	3.12	1.89	.71	1.56	1.80	.85	1.70	.00	.00	22.02	

220.0 FT WIND DATA		STABILITY CLASS B						CLASS FREQUENCY (PERCENT) = 7.69											
		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	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	2	1	3	1	1	6	2	0	1	1	4	2	0	22
(1)		.00	.60	.60	1.20	1.20	.60	1.80	.60	.60	.00	1.20	.00	.60	.60	2.40	1.20	.00	13.17
(2)		.00	.05	.05	.09	.09	.05	.14	.05	.05	.00	.09	.00	.05	.05	.19	.09	.00	1.06
8-12		2	1	1	1	6	12	3	1	3	6	3	1	4	2	2	1	0	48
(1)		1.20	.60	.60	.60	3.59	7.19	1.80	.60	1.80	3.59	1.80	.60	2.40	1.20	1.20	.60	.00	29.34
(2)		.09	.05	.05	.05	.28	.57	.14	.05	.14	.28	.14	.05	.19	.09	.09	.05	.00	2.32
13-18		1	3	2	3	0	0	3	5	5	14	8	3	3	0	1	2	0	53
(1)		.60	1.80	1.20	1.80	.00	.00	1.80	2.99	2.99	8.38	4.79	1.80	1.80	.00	.60	1.20	.00	31.74
(2)		.05	.14	.09	.14	.00	.00	.14	.24	.24	.66	.38	.14	.14	.00	.05	.09	.00	2.50
19-24		0	1	0	4	3	0	0	0	2	9	3	1	3	2	1	0	0	29
(1)		.00	.60	.00	2.40	1.80	.00	.00	.00	1.20	5.39	1.80	.60	1.80	1.20	.60	.00	.00	17.37
(2)		.00	.05	.00	.19	.14	.00	.00	.00	.09	.43	.14	.05	.14	.09	.05	.00	.00	1.37
GT 24		0	0	0	4	1	1	0	0	1	3	0	0	0	4	0	0	0	14
(1)		.00	.00	.00	2.40	.60	.60	.00	.00	.60	1.80	.00	.00	.00	2.40	.00	.00	.00	8.38
(2)		.00	.00	.00	.19	.05	.05	.00	.00	.05	.14	.00	.00	.00	.19	.00	.00	.00	.66
ALL SPEEDS		3	6	4	14	12	14	9	7	12	32	16	5	11	9	8	5	0	167
(1)		1.80	3.59	2.40	8.38	7.19	8.38	5.39	4.19	7.19	19.16	9.58	2.99	6.59	5.39	4.79	2.99	.00	100.00
(2)		.14	.28	.19	.66	.57	.66	.43	.33	.57	1.51	.76	.24	.52	.43	.38	.24	.00	7.89

(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 4A-2 (continued)

Pilgrim APR96-JUN96 MMT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS C						CLASS FREQUENCY (PERCENT) = 6.76											TOTAL
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	
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	0	0	0	0	0	1
(1)		.00	.00	.00	.00	.00	.00	.00	.70	.00	.00	.00	.00	.00	.00	.00	.00	.00	.70
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
4-7		1	2	0	1	1	2	1	1	1	0	1	1	4	4	2	0	0	22
(1)		.70	1.40	.00	.70	.70	1.40	.70	.70	.70	.00	.70	.70	2.80	2.80	1.40	.00	.00	15.38
(2)		.05	.09	.00	.05	.05	.09	.05	.05	.05	.00	.05	.05	.19	.19	.09	.00	.00	1.04
8-12		3	3	3	0	5	3	3	3	3	5	2	0	4	1	1	5	0	44
(1)		2.10	2.10	2.10	.00	3.50	2.10	2.10	2.10	2.10	3.50	1.40	.00	2.80	.70	.70	3.50	.00	30.77
(2)		.14	.14	.14	.00	.24	.14	.14	.14	.14	.24	.09	.00	.19	.05	.05	.24	.00	2.08
13-18		0	2	2	1	2	3	5	1	11	7	2	2	3	1	1	0	0	43
(1)		.00	1.40	1.40	.70	1.40	2.10	3.50	.70	7.69	4.90	1.40	1.40	2.10	.70	.70	.00	.00	30.07
(2)		.00	.09	.09	.05	.09	.14	.24	.05	.52	.33	.09	.09	.14	.05	.05	.00	.00	2.03
19-24		0	0	0	1	1	0	0	0	1	7	2	0	2	2	1	1	0	18
(1)		.00	.00	.00	.70	.70	.00	.00	.00	.70	4.90	1.40	.00	1.40	1.40	.70	.70	.00	12.59
(2)		.00	.00	.00	.05	.05	.00	.00	.00	.05	.33	.09	.00	.09	.09	.05	.05	.00	.05
GT 24		1	0	0	4	0	0	0	0	2	5	0	0	2	0	0	1	0	15
(1)		.70	.00	.00	2.80	.00	.00	.00	.00	1.40	3.50	.00	.00	1.40	.00	.00	.70	.00	10.49
(2)		.05	.00	.00	.19	.00	.00	.00	.00	.09	.24	.00	.00	.09	.00	.00	.05	.00	.71
ALL SPEEDS		5	7	5	7	9	8	9	6	18	24	7	2	15	8	5	7	0	143
(1)		3.50	4.90	3.50	4.90	6.29	5.59	6.29	4.20	12.59	16.78	4.90	2.10	10.49	5.59	3.50	4.90	.00	100.00
(2)		.24	.33	.24	.33	.43	.36	.43	.28	.85	1.13	.33	.14	.71	.38	.24	.33	.00	6.76

220.0 FT WIND DATA		STABILITY CLASS D						CLASS FREQUENCY (PERCENT) = 34.07											TOTAL
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	
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	3	1	3	2	0	0	2	0	1	1	2	1	0	0	0	17
(1)		.00	.14	.42	.14	.42	.28	.00	.00	.28	.00	.14	.14	.28	.14	.00	.00	.00	2.36
(2)		.00	.05	.14	.05	.14	.09	.00	.00	.09	.00	.05	.05	.09	.05	.00	.00	.00	.60
4-7		5	10	16	7	16	10	9	6	7	4	7	3	6	5	2	7	0	120
(1)		.69	1.39	2.22	.97	2.22	1.39	1.25	.83	.97	.55	.97	.42	.83	.69	.28	.97	.00	16.64
(2)		.24	.47	.76	.33	.76	.47	.43	.28	.33	.19	.33	.14	.28	.24	.09	.33	.00	5.67
8-12		4	17	8	12	15	22	26	10	14	28	10	10	9	7	6	4	0	202
(1)		.55	2.36	1.11	1.66	2.08	3.05	3.61	1.39	1.94	3.88	1.39	1.39	1.25	.97	.83	.55	.00	28.02
(2)		.19	.80	.38	.57	.71	1.04	1.23	.47	.66	1.32	.47	.47	.43	.33	.28	.19	.00	9.55
13-18		2	6	0	3	7	7	14	16	14	66	29	8	8	3	4	3	0	190
(1)		.28	.83	.00	.42	.97	.97	1.94	2.22	1.94	9.15	4.02	1.11	1.11	.42	.55	.42	.00	26.35
(2)		.09	.28	.00	.14	.33	.33	.66	.76	.66	3.12	1.37	.38	.38	.14	.19	.14	.00	8.98
19-24		0	1	0	2	0	0	0	7	17	38	16	14	11	7	6	5	0	124
(1)		.00	.14	.00	.28	.00	.00	.00	.97	2.36	5.27	2.22	1.94	1.53	.97	.83	.69	.00	17.20
(2)		.00	.05	.00	.09	.00	.00	.00	.33	.80	1.80	.76	.66	.52	.33	.28	.24	.00	5.86
GT 24		0	0	0	3	0	2	0	1	12	23	1	2	15	3	2	4	0	68
(1)		.00	.00	.00	.42	.00	.28	.00	.14	1.66	3.19	.14	.28	2.08	.42	.28	.55	.00	9.43
(2)		.00	.00	.00	.14	.00	.09	.00	.05	.57	1.09	.05	.09	.71	.14	.09	.19	.00	3.21
ALL SPEEDS		11	35	27	28	41	43	49	40	66	159	64	38	51	26	20	23	0	721
(1)		1.53	4.85	3.74	3.88	5.69	5.96	6.80	5.55	9.15	22.05	8.88	5.27	7.07	3.61	2.77	3.19	.00	100.00
(2)		.52	1.65	1.28	1.32	1.94	2.03	2.32	1.89	3.12	7.51	3.02	1.80	2.41	1.23	.95	1.09	.00	34.07

(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 4A-2 (continued)

Pilgrim APR96-JUN96 MET DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS E						CLASS FREQUENCY (PERCENT) = 18.90												
		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	2	2	0	1	0	0	2	0	0	0	1	0	0	10	
(1)		.00	.25	.25	.00	.50	.50	.00	.25	.00	.00	.50	.00	.00	.00	.25	.00	.00	2.50	
(2)		.00	.05	.05	.00	.09	.09	.00	.05	.00	.00	.09	.00	.00	.00	.05	.00	.00	.47	
4-7		0	0	9	4	14	16	5	3	9	3	2	1	3	2	3	3	0	77	
(1)		.00	.00	2.25	1.00	3.50	4.00	1.25	.75	2.25	.75	.50	.25	.75	.50	.75	.75	.00	19.25	
(2)		.00	.00	.43	.19	.66	.76	.24	.14	.43	.14	.09	.05	.14	.09	.14	.14	.00	3.64	
8-12		2	2	1	2	4	4	5	3	6	6	4	4	9	5	4	3	0	64	
(1)		.50	.50	.25	.50	1.00	1.00	1.25	.75	1.50	1.50	1.00	1.00	2.25	1.25	1.00	.75	.00	16.00	
(2)		.09	.09	.05	.09	.19	.19	.24	.14	.28	.28	.19	.19	.43	.24	.19	.14	.00	3.02	
13-16		2	0	0	0	0	3	3	2	8	30	21	16	20	15	8	6	0	134	
(1)		.50	.00	.00	.00	.00	.75	.75	.50	2.00	7.50	5.25	4.00	5.00	3.75	2.00	1.50	.00	33.50	
(2)		.09	.00	.00	.00	.00	.14	.14	.09	.38	1.42	.99	.76	.95	.71	.38	.28	.00	6.33	
19-24		2	1	0	0	0	0	0	0	0	31	24	8	15	14	5	2	0	102	
(1)		.50	.25	.00	.00	.00	.00	.00	.00	.00	7.75	6.00	2.00	3.75	3.50	1.25	.50	.00	25.50	
(2)		.09	.05	.00	.00	.00	.00	.00	.00	.00	1.47	1.13	.38	.71	.66	.24	.09	.00	4.92	
GT 24		0	0	0	0	0	0	0	0	0	2	0	0	0	6	5	0	0	13	
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.50	.00	.00	.00	1.50	1.25	.00	.00	3.25	
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.28	.24	.00	.00	.61	
ALL SPEEDS		6	4	11	6	20	25	13	9	23	72	53	29	47	42	26	14	0	400	
(1)		1.50	1.00	2.75	1.50	5.00	6.25	3.25	2.25	5.75	18.00	13.25	7.25	11.75	10.50	6.50	3.50	.00	100.00	
(2)		.28	.19	.52	.28	.95	1.10	.61	.43	1.09	3.40	2.50	1.37	2.22	1.98	1.23	.66	.00	18.90	

220.0 FT WIND DATA		STABILITY CLASS F						CLASS FREQUENCY (PERCENT) = 7.94											
		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	0	1	0	0	0	0	0	0	0	2
(1)		.00	.00	.00	.00	.60	.00	.00	.00	.00	.60	.00	.00	.00	.00	.00	.00	.00	1.19
(2)		.00	.00	.00	.00	.05	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.09
4-7		0	1	2	0	1	1	2	0	1	1	3	2	1	1	0	0	0	16
(1)		.00	.60	1.19	.00	.60	.60	1.19	.00	.60	.60	1.79	1.19	.60	.60	.00	.00	.00	9.52
(2)		.00	.05	.09	.00	.05	.05	.09	.00	.05	.05	.14	.09	.05	.05	.00	.00	.00	.76
8-12		0	0	0	0	3	3	8	4	0	1	3	4	5	2	6	1	0	40
(1)		.00	.00	.00	.00	1.79	1.79	4.76	2.38	.00	.60	1.79	2.38	2.98	1.19	3.57	.60	.00	23.81
(2)		.00	.00	.00	.00	.14	.14	.38	.19	.00	.05	.14	.19	.24	.09	.28	.05	.00	1.89
13-18		0	0	0	0	1	0	0	2	0	1	9	10	17	18	6	3	0	67
(1)		.00	.00	.00	.00	.60	.00	.00	1.19	.00	.60	5.36	5.95	10.12	10.71	3.57	1.79	.00	39.88
(2)		.00	.00	.00	.00	.05	.00	.00	.09	.00	.05	.43	.47	.80	.85	.28	.14	.00	3.17
19-24		1	0	0	0	0	0	0	0	2	4	22	3	0	1	5	3	0	41
(1)		.60	.00	.00	.00	.00	.00	.00	.00	1.19	2.38	13.10	1.79	.00	.60	2.98	1.79	.00	24.40
(2)		.05	.00	.00	.00	.00	.00	.00	.00	.09	.19	1.04	.14	.00	.05	.24	.14	.00	1.94
GT 24		0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60	.00	.00	.00	.60	.00	.00	1.19
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05	.00	.00	.09
ALL SPEEDS		1	1	2	0	6	4	10	6	3	8	38	19	23	22	18	7	0	168
(1)		.60	.60	1.19	.00	3.57	2.38	5.95	3.57	1.79	4.76	22.62	11.31	13.69	13.10	10.71	4.17	.00	100.00
(2)		.05	.05	.09	.00	.28	.19	.47	.28	.14	.38	1.80	.90	1.09	1.04	.85	.33	.00	7.94

(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 4A-2 (continued)

Pilgrim APR96-JUN96 MWT DATA JOINT FREQUENCY DISTRIBUTION (220-FOOT TOWER)

220.0 FT WIND DATA		STABILITY CLASS G					CLASS FREQUENCY (PERCENT) = 2.61												
		WIND DIRECTION FROM																	
SPEED(MPH)		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VRBL	TOTAL
CALM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4-7		0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	3
(1)		.00	.00	.00	.00	1.96	1.96	.00	.00	.00	.00	.00	.00	.00	.00	1.96	.00	.00	5.88
(2)		.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.14
8-12		0	0	0	0	1	0	1	2	0	2	1	0	1	1	1	0	0	10
(1)		.00	.00	.00	.00	1.96	.00	1.96	3.92	.00	3.92	1.96	.00	1.96	1.96	1.96	.00	.00	19.61
(2)		.00	.00	.00	.00	.05	.00	.05	.09	.00	.09	.05	.00	.05	.05	.05	.00	.00	.47
13-18		0	0	0	0	0	0	0	1	1	4	6	4	6	1	0	0	0	23
(1)		.00	.00	.00	.00	.00	.00	.00	1.96	1.96	7.84	11.76	7.84	11.76	1.96	.00	.00	.00	45.10
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.05	.19	.28	.19	.28	.05	.00	.00	.00	1.09
19-24		0	0	0	0	0	0	0	1	0	2	7	1	0	0	0	0	0	11
(1)		.00	.00	.00	.00	.00	.00	.00	1.96	.00	3.92	13.73	1.96	.00	.00	.00	.00	.00	21.57
(2)		.00	.00	.00	.00	.00	.00	.00	.05	.00	.09	.33	.05	.00	.00	.00	.00	.00	.52
GT 24		0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4
(1)		.00	.00	.00	.00	.00	.00	.00	.00	.00	5.88	1.96	.00	.00	.00	.00	.00	.00	7.84
(2)		.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.05	.00	.00	.00	.00	.00	.00	.19
ALL SPEEDS		0	0	0	0	2	1	1	4	1	11	15	5	7	2	2	0	0	51
(1)		.00	.00	.00	.00	3.92	1.96	1.96	7.84	1.96	21.57	29.41	9.80	13.73	3.92	3.92	.00	.00	100.00
(2)		.00	.00	.00	.00	.09	.05	.05	.19	.05	.52	.71	.24	.33	.09	.09	.00	.00	2.61

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		0	2	4	1	6	4	0	2	2	1	3	1	2	1	1	0	0	30
(1)		.00	.09	.19	.05	.28	.19	.00	.09	.09	.05	.14	.05	.09	.05	.05	.00	.00	1.42
(2)		.00	.09	.19	.05	.28	.19	.00	.09	.09	.05	.14	.05	.09	.05	.05	.00	.00	1.42
4-7		7	15	29	17	40	31	21	11	19	8	16	8	15	15	15	12	0	279
(1)		.33	.71	1.37	.80	1.89	1.47	.95	.52	.90	.38	.76	.38	.71	.71	.71	.57	.00	13.19
(2)		.33	.71	1.37	.80	1.89	1.47	.99	.52	.90	.38	.76	.38	.71	.71	.71	.57	.00	13.19
8-12		16	36	20	23	38	50	53	27	30	51	30	22	38	34	26	22	0	516
(1)		.76	1.70	.95	1.09	1.80	2.36	2.50	1.28	1.42	2.41	1.42	1.04	1.80	1.61	1.23	1.04	.00	24.39
(2)		.76	1.70	.95	1.09	1.80	2.36	2.50	1.28	1.42	2.41	1.42	1.04	1.80	1.61	1.23	1.04	.00	24.39
13-18		11	22	6	8	11	18	37	32	61	160	101	51	68	44	20	21	0	671
(1)		.52	1.04	.28	.38	.52	.85	1.75	1.51	2.88	7.56	4.77	2.41	3.21	2.08	.95	.99	.00	31.71
(2)		.52	1.04	.28	.38	.52	.85	1.75	1.51	2.88	7.56	4.77	2.41	3.21	2.08	.95	.99	.00	31.71
19-24		6	12	1	10	4	1	2	9	33	111	80	29	39	31	26	17	0	411
(1)		.28	.57	.05	.47	.19	.05	.09	.43	1.56	5.25	3.78	1.37	1.84	1.47	1.23	.80	.00	19.42
(2)		.28	.57	.05	.47	.19	.05	.09	.43	1.56	5.25	3.78	1.37	1.84	1.47	1.23	.80	.00	19.42
GT 24		14	8	11	13	5	7	9	1	18	41	3	3	25	22	9	20	0	209
(1)		.66	.38	.52	.61	.24	.33	.43	.05	.85	1.94	.14	.14	1.18	1.04	.43	.95	.00	9.88
(2)		.66	.38	.52	.61	.24	.33	.43	.05	.85	1.94	.14	.14	1.18	1.04	.43	.95	.00	9.88
ALL SPEEDS		54	95	71	72	104	131	122	82	163	372	233	114	187	147	97	92	0	2116
(1)		2.55	4.49	3.36	3.40	4.91	5.25	5.77	3.88	7.70	17.58	11.01	5.39	8.84	6.95	4.58	4.35	.00	100.00
(2)		2.55	4.49	3.36	3.40	4.91	5.25	5.77	3.88	7.70	17.58	11.01	5.39	8.84	6.95	4.58	4.35	.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)

5. OFF-SITE DOSE CALCULATION MANUAL REVISIONS

The PNPS Off-site 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. R. J. O'Neill memorandum to D. Fountain, "Effluent & Waste Disposal Report - Solid Waste and Irradiated Fuel Shipments January - June 1996", dated August 2, 1996
3. T. Messier memorandum to K. J. Sejkora, "Documentation for Calculation of 1st and 2nd Quarter 1996 JFD Tables for Pilgrim Station", dated August 7, 1996

KJS/el