NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

RADIOACTIVE EFFLUENT RELEASE REPORT

January 1, 2002 through December 31, 2002

USNRC Docket 50-298

CONTENTS

INTRODUCTION

This report summarizes meteorological data and doses from radioactive effluents for the Cooper Nuclear Station for the period January through December, 2002. The data presented is consistent with guidance provided in Regulatory Guide 1.21 of the U.S. Nuclear Regulatory Commission (Revision 1, 1974) for reporting meteorological data and radioactive effluent data.

The report is organized into three parts. Appendix A presents the effluent and waste disposal source term data. Appendix B presents a summary of onsite meteorological data for the report period, including atmospheric diffusion estimates and a description of the atmospheric diffusion model. Appendix C presents the doses from liquid and gaseous radioactive effluents. Descriptions of the dose calculation models are also included.

APPENDIX A

SOURCE TERMS

EFFLUENT AND WASTE DISPOSAL REPORTS

SUPPLEMENTAL INFORMATION

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

January 1, 2002, to December 31, 2002

Cooper Nuclear Station effluent and waste disposal data are presented in the format prescribed by Regulatory Guide 1.21. Meteorological data required by Table 4A&B of Regulatory Guide 1.21 is included in the Meteorological Section of the Annual Radioactive Material Release Report - Radioactive Effluents.

Facility Cooper Nuclear Station License DPR-46.

A. Regulatory Limits

1. Gaseous Waste Effluents

a. The dose rates due to radioactive materials released in gaseous effluents offsite shall be limited to the following:

1. Noble Gases: Less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin.

2. I-131, I-133, tritium, and all radionuclides in particulate form with half-lives greater than or equal to 8 days: Less than or equal to 1500 mrem/yr to any organ.

b. The air dose due to noble gases released in gaseous effluents offsite shall be limited to the following:

1. During any calendar quarter: Less than or equal to 5 mrad from gamma radiation and less than or equal to 10 mrad from beta radiation.

2. During any calendar year: Less than or equal to 10 mrad from gamma radiation and less than or equal to 20 mrad from beta radiation.

c. The dose to a member of the public due to I-131, I-133, and radioactive materials in particulate form with half-lives greater than 8 days in gaseous effluents offsite shall be limited to the following:

1. During any calendar quarter: Less than or equal to 7.5 mrem to any organ.

2. During any calendar year: Less than or equal to 15 mrem to any organ.

2. Liquid Waste Effluents

a. January 1, 2002, through December 31, 2002

The concentration of radioactive material in water offsite due to radioactive liquid effluents shall not exceed the concentration specified in 10 CFR 20 Part 20.1302 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall not exceed 2 x 10-4 Ci/ml total activity. (CNS Technical Specification Amendment 174 Implementation)

b. The dose to a member of the public due to radioactive material in liquid effluents offsite shall be limited to the following:

1. During any calendar quarter: Less than or equal to 1.5 mrem to the total body and less than or equal to 5 mrem to any organ.

2. During any calendar year: Less than or equal to 3 mrem to the total body and less than or equal to 10 mrem to any organ.

B. Maximum Permissible Concentrations

1. Water: Covered in Section A.2.

2. Air: Covered in Section A.1.

C. Average Energy

The average energy (E) of the radionuclide mixtures of fission and activation gases released is not applicable. This information is not utilized for dose or release calculations.

D. Measurements and Approximations of Total Radioactivity

The methods used to measure or approximate the total radioactivity in effluents and to determine radionuclide composition are as follows:

1. Gaseous Effluents

a. Fission and Activation Gases:

Radioactivity and radionuclide composition is determined by laboratory HPGe detector analysis in correlation with continuous gross radioactivity monitoring by a beta scintillation detector in the release pathway.

b. Iodines:

Charcoal cartridges provide continuous sample collection. These cartridges are analyzed for radioactivity and radionuclide composition in the laboratory by a HPGe detector gamma spectrometer.

c. Particulates:

Particulate filters provide continuous sample collection. These filters are analyzed for radioactivity and radionuclide composition in the laboratory by a HPGe detector gamma spectrometer. An aliquot of a filter composite from each release point was analyzed for Sr-89, Sr-90, and gross alpha by an offsite laboratory.

d. Tritium:

A portable sampling apparatus is utilized to collect a quarterly sample of each radioactive vent effluent. These samples are analyzed using a liquid scintillation counter.

2. Liquid Effluents

a. Principal gamma emitters and dissolved and entrained gases:

Each batch of liquid effluent is analyzed for radioactivity and radionuclide composition in the laboratory by a HPGe detector gamma spectrometer. In addition, each batch is monitored for gross gamma radioactivity by a NaI detector in-line with the release pathway.

b. Tritium:

An aliquot of a monthly composite is analyzed using a liquid scintillation counter.

c. Sr-89 and Sr-90:

An aliquot from a quarterly composite is analyzed by an offsite laboratory.

d. Gross alpha:

An aliquot from a monthly composite is analyzed by gas flow proportional counting.

e. Fe-55:

An aliquot from a quarterly composite is analyzed by an offsite laboratory.

E. Batch Releases

a. Liquid

1.	Number of batch releases	None	
2.	Total time period for batch releases	0	minutes
3.	Maximum time period for batch release	0	minutes
4.	Average time period for batch release	0	minutes
5.	Minimum time period for batch release	0	minutes
6.	Average stream flow during periods of release of effluent into a flowing stream:	0.00E+00	liters/minute

b. Gaseous

1. Number of batch releases	None
2. Total time period for batch releases	N/A
3. Maximum time period for batch release	N/A
4. Average time period for batch release	N/A
5. Minimum time period for batch release	N/A

F. Abnormal Release

a. Liquid

1. Number of releases:	0
2. Total activity released	None

b. Gaseous

1. Number of releases:	0
2. Total activity released	None

TABLE 1A
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR	EST. TOTAL ERROR %
A. Fission and activation gases						
1. Total release	Ci	1.85E+02	3.62E+02	1.13E+02	9.76E+01	2.0E+01
2. Average release rate for period	uCi/sec	2.38E+01	4.61E+01	1.42E+01	1.23E+01	
B. Iodines						
1. Total iodine 131	Ci	1.22E-04	4.27E-04	1.43E-04	1.40E-04	3.0E+01
2. Average release rate for period	uCi/sec	1.57E-05	5.43E-05	1.80E-05	1.76E-05	
C. Particulates						
1. Particulates with half-lives >8days	Ci	2.06E-04	1.69E-03	1.18E-03	1.94E-04	5.0E+01
2. Average release rate for period	uCi/sec	2.65E-05	2.15E-04	1.48E-04	2.44E-05	
3. Gross alpha radioactivity	Ci	5.26E-06	5.24E-06	4.94E-06	1.26E-06	
D. Tritium						
1. Total release	Ci	4.94E-01	2.84E+00	3.25E+00	3.43E+00	3.0E+01
2. Average release rate for period	uCi/sec	6.35E-02	3.61E-01	4.09E-01	4.32E-01	

TABLE 1B
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-ELEVATED RELEASE
CONTINUOUS MODE *BATCH

	NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
1.	Fission gases					
	krypton-83m	Ci	4.60E-01	2.40E+00	2.60E-01	1.80E-01
	krypton-85m	Ci	8.30E-01	4.30E+00	4.60E-01	3.20E-01
	krypton-85	Ci	2.60E+00	1.30E+01	1.40E+00	9.80E-01
	krypton-87	Ci	2.70E+00	1.40E+01	1.50E+00	1.00E+00
	krypton-88	Ci	2.70E+00	1.40E+01	1.50E+00	1.00E+00
	krypton-89	Ci	1.30E+01	6.60E+01	7.10E+00	4.90E+00
	xenon-133m	Ci	3.90E-02	2.00E-01	2.10E-02	1.50E-02
	xenon-133	Ci	1.90E+00	9.90E+00	1.10E+00	7.40E-01
	xenon-135m	Ci	9.30E-01	4.70E+00	5.20E-01	3.60E-01
	xenon-135	Ci	3.40E+00	1.70E+01	1.90E+00	1.30E+00
	xenon-137	Ci	1.50E+01	7.90E+01	8.60E+00	5.90E+00
	xenon-138	Ci	1.10E+01	5.80E+01	6.30E+00	4.30E+00
	Total for period	Ci	5.46E+01	2.83E+02	3.07E+01	2.10E+01
2.	Iodines					
	iodine-131	Ci	1.12E-04	4.03E-04	9.25E-05	8.12E-05
	iodine-132	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	iodine-133	Ci	2.03E-04	5.68E-04	1.78E-04	9.22E-05
	iodine-134	Ci	1.61E-04	3.82E-05	0.00E+00	0.00E+00
	iodine-135	Ci	8.81E-05	2.88E-04	0.00E+00	0.00E+00
	Total for period	Ci	5.64E-04	1.30E-03	2.71E-04	1.73E-04

* No batch discharges were made

TABLE 1B
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-ELEVATED RELEASE (continued)
CONTINUOUS MODE *BATCH

	NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
3.	Particulates					
	manganese-54	Ci	0.00E+00	2.02E-08	0.00E+00	0.00E+00
	cobalt-60	Ci	2.03E-07	0.00E+00	0.00E+00	0.00E+00
	rubidium-88	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	rubidium-89	Ci	4.67E-03	0.00E+00	4.77E-03	2.73E-03
	strontium-89	Ci	7.73E-05	1.06E-03	7.63E-04	7.53E-05
	strontium-90	Ci	3.77E-07	1.83E-06	8.57E-07	1.93E-07
	strontium-91	Ci	3.38E-04	2.12E-03	2.68E-04	2.79E-04
	yttrium-91m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	ruthenium-106	Ci	0.00E+00	5.59E-07	0.00E+00	0.00E+00
	tellurium-132	Ci	1.41E-06	5.68E-06	1.46E-07	7.29E-07
	cesium-137	Ci	3.49E-06	2.59E-05	1.04E-05	3.56E-06
	cesium-138	Ci	2.18E-01	4.83E-01	1.82E-02	2.96E-02
	barium-139	Ci	3.25E-02	9.88E-02	2.41E-02	2.17E-02
	barium-140	Ci	9.71E-05	5.38E-04	3.43E-04	4.14E-05
	lanthanum-140	Ci	7.70E-05	3.34E-04	3.23E-04	2.90E-05
	cerium-144	Ci	7.15E-07	6.10E-06	0.00E+00	0.00E+00
	praseodymium-144	Ci	7.15E-07	6.10E-06	0.00E+00	0.00E+00
	Total for period	Ci	2.56E-01	5.86E-01	4.88E-02	5.45E-02

* No batch discharges were made

TABLE 1C
EFFLUENT AND GASEOUS WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENT-BUILDING VENT RELEASES
CONTINUOUS MODE *BATCH

	NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
1.	Fission gases					
	krypton-83m	Ci	0 00E+00	0 00E+00	0.00E+00	0 00E+00
	krypton-85m	Ci	1.49E+00	9 26E-01	9 41E-01	8.72E-01
	krypton-85	Ci	0 00E+00	0 00E+00	0.00E+00	0 00E+00
	krypton-87	Ci	2.78E+00	1.74E+00	1.80E+00	1 61E+00
	krypton-88	Ci	4 85E+00	3.05E+00	3.10E+00	2 91E+00
	krypton-89	Ci	0 00E+00	0 00E+00	0.00E+00	0 00E+00
	xenon-133m	Ci	0 00E+00	0 00E+00	0 00E+00	0 00E+00
	xenon-133	Ci	5 47E+01	3 36E+01	3 51E+01	3 21E+01
	xenon-135m	Ci	1.46E+01	9 06E+00	9 20E+00	8.52E+00
	xenon-135	Ci	2 23E+01	1 37E+01	1.41E+01	1 29E+01
	xenon-137	Ci	0 00E+00	0.00E+00	0 00E+00	0 00E+00
	xenon-138	Ci	2 99E+01	1.78E+01	1 83E+01	1.77E+01
	Total for period	Ci	1.31E+02	7.99E+01	8 25E+01	7.66E+01
2	Iodines					
	iodine-131	Ci	9 98E-06	2.39E-05	5.09E-05	5 86E-05
	iodine-132	Ci	0 00E+00	0.00E+00	0.00E+00	0.00E+00
	iodine-133	Ci	1 23E-05	2 81E-05	1.14E-04	8 28E-05
	iodine-134	Ci	0.00E+00	0 00E+00	0.00E+00	0 00E+00
	iodine-135	Ci	0.00E+00	0.00E+00	0.00E+00	0 00E+00
	Total for period	Ci	2.23E-05	5 20E-05	1 65E-04	1.41E-04
3.	Particulates					
	manganese-54	Ci	2.34E-06	2.10E-06	4.12E-06	3.04E-07
	cobalt-60	Ci	2.37E-05	3.47E-05	4.47E-05	1.77E-05
	rubidium-89	Ci	0.00E+00	0 00E+00	4.57E-06	6.84E-06
	strontium-89	Ci	9.91E-07	2.17E-05	7.39E-06	5.35E-05
	strontium-90	Ci	1.42E-07	2 34E-07	3.11E-07	2 23E-06
	strontium-91	Ci	3.29E-08	3.27E-08	3.53E-08	7 88E-08
	yttrium-91m	Ci	0 00E+00	0.00E+00	0.00E+00	6 05E-07
	strontium-92	Ci	7.58E-06	0.00E+00	0.00E+00	0.00E+00
	technetium-99m	Ci	3.30E-06	1.78E-06	0.00E+00	7.54E-07
	tellurium-132	Ci	2.43E-07	0.00E+00	1.41E-10	0 00E+00
	cesium-137	Ci	0 00E+00	1 40E-06	1.71E-06	0.00E+00
	cesium-138	Ci	0 00E+00	0 00E+00	2 76E-06	3.49E-06
	barium-139	Ci	7.64E-04	3.00E-03	3.27E-03	3.24E-03
	barium-140	Ci	1.80E-09	1.90E-09	1 66E-09	5.44E-09
	lanthanum-140	Ci	1.32E-09	1.32E-09	1.40E-09	3.87E-09
	cerium-144	Ci	0.00E+00	4.57E-07	0 00E+00	0.00E+00
	praseodymium-144	Ci	0.00E+00	4.57E-07	0.00E+00	0.00E+00
	Total for period	Ci	8 02E-04	3 06E-03	3.34E-03	3.33E-03

* No batch discharges were made

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

	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR	EST. TOTAL ERROR %
A. Fission and activation products						
1. Total release (not including tritium, gases or alpha)	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
2. Average diluted concentration during period	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
B. Tritium						
1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
2. Average diluted concentration during period	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
C. Dissolved and entrained gases						
1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
2. Average diluted concentration during period	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
D. Gross alpha radioactivity						
1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
E. Volume of waste released (prior to dilution)	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
F. Volume of dilution water used during period	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

TABLE 2B
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
LIQUID EFFLUENTS
CONTINUOUS MODE* BATCH MODE

NUCLIDES RELEASED	UNIT	1st QTR	2nd QTR	3rd QTR	4th QTR
NONE	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

* No continuous mode discharges were made

TABLE 3

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
PERIOD January 1, 2002 TO December 31, 2002

A. Solid Waste Shipped Offsite for Burial or Disposal (Not Irradiated Fuel)

1. Type of Waste

		Unit	12 Month Period	Est. Total Error %
a.	Spent resins, filter sludges, evaporator bottoms, etc	m3	6.76E+00	N/A
		Ci	8.08E+01	15%
b.	Dry compressible waste, contaminated equip, etc.	m3	2.70E+01	N/A
		Ci	1.13E+00	25%
c.	Irradiated components, control rods, etc.	m3	0.00E+00	N/A
		Ci	0.00E+00	
d.	Other	m3	0.00E+00	N/A
		Ci	0.00E+00	

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

a.	americium-241	1.23E-03	iron-55	2.64E+01
	antimony-122	9.91E-06	lanthanum-140	7.28E-06
	barium-140	9.02E-03	maganese-54	5 12E+00
	carbon-14	1.27E+00	nickel-59	4.95E-03
	cerium-143	1.12E-09	nickel-63	9.02E-01
	cerium-144	2.93E-50	plutonium-238	7.40E-04
	cesuim-134	1.20E+00	plutonium-239	6.24E-04
	cesium-137	2.09E+00	plutonium-240	5.98E-04
	chromium-51	7.74E-02	plutonium-241	2.56E-02
	cobalt-58	2.29E-01	silver-110m	4.27E+00
	cobalt-60	4.48E+01	strontium-89	3.85E+00
	curium-242	1.03E-04	strontium-90	2.74E-01
	curium-243	1.23E-03	technetium-99	3.54E-01
	curium-244	1.24E-03	tritium	6.83E-02
	iodine-129	4.68E+00	zinc-65	4.39E+00
	iodine-131	1.67E-03	zirconium-97	1.61E-15

TABLE 3

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS (continued)
PERIOD January 1, 2002 TO December 31, 2002

b.

americium-241	5.04E-04	lanthanum-140	3 00E+00
antimony-122	1.35E-06	manganese-54	4.42E+00
barium-140	2.60E+00	nickel-59	4.27E-03
carbon-14	1.31E+01	nickel-63	1.42E+00
cerium-141	2.79E-01	niobium-95	4.79E-01
cerium-143	6.98E-08	plutonium-238	2.92E-04
cerium-144	2.13E-52	plutonium-239	2.48E-04
cesium-134	4.44E-01	plutonium-240	2.48E-04
cesium-137	1.09E+00	plutonium-241	7.15E-02
chromium-51	1.19E+00	ruthenium-106	1.77E-05
cobalt-58	2.61E+00	silver-110m	1.70E+00
cobalt-60	2.34E+01	strontium-89	3.12E+00
curium-242	2.65E-05	strontium-90	3.15E-01
curium-243	1.07E-03	technetium-99	1.58E-02
curium-244	1.07E-03	tritum	2.09E-01
iodine-129	4 59E-01	zinc-65	1.39E+00
iodine-131	3.75E+00	zirconium-97	3.07E-18
iron-55	2.44E+01		
iron-59	1.06E+01		

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
9	Exclusive Use Vehicle	Barnwell, SC
48	Exclusive Use Vehicle	Clive, UT

4. Solidification Agent

No shipments required solidification during this period.

B. Irradiated Fuel Shipments (Disposition)

Number of Shipments	Mode of Transportation	Destination
0	N/A	N/A

GASEOUS RADIOACTIVE WASTES
CUMULATIVE DOSE DATA

			1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
A.	Maximum gamma air dose						
	Site boundary*		N	N	N	N	N
	1. Total	mrad	2.28E-01	1.52E-01	1.71E-01	1.89E-01	7.39E-01
	Percent of Technical						
	2. Specification Limit		4.56%	3.04%	3 42%	3.78%	7.39%
	Most Exposed Resident*		NW	NW	NW	NW	NW
	1. Total	mrad	3.10E-02	3 44E-02	5.10E-02	4.07E-02	1.69E-01
	Percent of Technical						
	2. Specification Limit		0.62%	0.69%	1.02%	0.81%	1.69%
B.	Maximum beta air dose						
	Site boundary*		N	N	N	N	N
	1. Total	mrad	1.48E-01	1.04E-01	1.12E-01	1.22E-01	4.84E-01
	Percent of Technical						
	2. Specification Limit		1.48%	1.04%	1.12%	1.22%	2.42%
	Most Exposed Resident*		NW	NW	NW	NW	NW
	1. Total	mrad	2.03E-02	2.62E-02	3 44E-02	2.64E-02	1.16E-01
	Percent of Technical						
	2. Specification Limit		0.20%	0.26%	0.34%	0.26%	0.58%
C	Maximum organ dose due to I-131, I-133, and particulates (>8 day half lives)						
	Site boundary*		NNE	N	N	N	N
	1. Total	mrem	8.89E-03	9.81E-02	6.23E-02	4.43E-02	1.87E-01
	Percent of Technical						
	2. Specification Limit		0.12%	1.31%	0.83%	0 59%	1.25%
	3. Organ		Thyroid	Thyroid	Thyroid	Thyroid	Thyroid
	4. Exposed Individual		Infant	Infant	Infant	Infant	Infant
	Most Exposed Resident*		NW	NW	NW	NW	NW
	1. Total	mrem	2.09E-03	2.42E-02	2.77E-02	9.06E-03	5.97E-02
	Percent of Technical						
	2. Specification Limit		0.03%	0.32%	0 37%	0.12%	0 40%
	3. Organ		Thyroid	Thyroid	Thyroid	Thyroid	Thyroid
	4. Exposed Individual		Infant	Infant	Infant	Infant	Infant

D. Maximum organ dose rate due to I-131, I-133, tritium, and particulates (>8 day half-lives) was 0.187 mrem/year which was 1.25% of the Technical Specification Limit.

E. All radioactive noble gas effluent monitors were set to automatically alarm when the monitor alarm set point, determined as specified in the Offsite Dose Assessment Manual (ODAM), was exceeded. This is required to ensure that the 500 mrem/yr to the total body and the 3000 mrem/yr to the skin limits are not exceeded

**Resident and Site Boundary Key: N is 0.67 miles North, NNE is 0.6 miles North-northeast NW residence is 0.90 miles Northwest*

LIQUID RADIOACTIVE WASTES
CUMULATIVE DOSE DATA

			1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
A.	Maximum whole body dose						
1.	Total	mrem	0	0	0	0	0
2.	Percent of Technical Specification Limit		0.00%	0.00%	0.00%	0.00%	0.00%
B.	Maximum Organ Dose						
1.	Total	mrem	0	0	0	0	0
2.	Percent of Technical Specification Limit		0.00%	0.00%	0.00%	0.00%	0.00%

SUPPLEMENTAL INFORMATION

A. Unplanned Releases:

None

B. NPPD Initiated Changes to the Process Control Program:

None

C. Changes to the Offsite Dose Assessment Manual:

In accordance with Technical Specification (TS) 5.5.1.c.3, a complete, legible copy of the entire Offsite Dose Assessment Manual (ODAM) is being submitted along with the 2002 Annual Radioactive Effluent Release Report. The specific changes are identified with revision bars in the right-hand margin of the affected pages; pages revised during 2002 are identified as such by date in the lower right-hand corner of the affected pages.

D. Reports Required by the Offsite Dose Assessment Manual:

The following information is being reported per the requirements of ODAM Specification D 3.3.1, Condition B, Required Action B.2.2. This information describes a continuation of a condition that was reported previously in the 2001 Annual Radioactive Effluent Release Report[1/] and is being reported below due to the condition continuing for a period of greater than 31 days during the January 1 - December 31, 2002 reporting period.

> The Service Water (SW) radiation effluent monitor had been declared inoperable for the majority of the reporting period (January 1, 2002 - December 31, 2002). This was due to the low SW flow condition to the SW radiation effluent monitor caused by system design inadequacies. Therefore, ODAM Specification D 3.3.1, Required Action D.1 has been implemented requiring daily grab samples of the SW effluent be taken. These daily grab samples provide continued confirmation that no radioactive releases have occurred. Actions to address the design inadequacies with the SW radiation effluent monitor are being addressed in the Corrective Action Program.

The following information is being reported per the requirements of ODAM Specification D 3.3.2, Condition I, Required Action I.2.2. This information describes conditions in which particulate and iodine sampling via auxiliary sampling equipment as required by ODAM Specification D 3.3.2, Condition I, Required Action I.1. was out of service.

> On August 28, 2002, with the Elevated Release Point auxiliary sampler in service the sampler was removed from service to swap sample pumps due to a pump low oil level condition. The sampler was out of service for 12 minutes.
>
> On October 7, 2002, with the Multi Purpose Facility auxiliary sampler in service power was lost to the sampler for approximately 13 minutes until power could be restored.

1./ Letter (No. NLS2002041) to USNRC Document Control Desk from David L. Wilson (NPPD) dated May 1, 2002, "Annual Radioactive Effluent Release Report".

Based on verbatim compliance with ODAM Specification D 3.3.2, Condition I, Required Action I.2.2 requires the reporting of auxiliary sampling equipment out of service events (including out of services event for change out of particulate filters and iodine cartridges) in the Radioactive Effluent Release Report. During the time period of January 1, 2002 and December 31, 2002, there were multiple events (approximately 70) during which auxiliary samplers were removed from service for approximately 5 to 10 minutes to change out particulate filters and iodine cartridges so that, the required surveillances of analyzing the filters and cartridges could be performed.

On March 18, 2003. a revision was made to the ODAM whereby, a note was added to ODAM Specification D 3.3.2, Condition I Required Action I.1, which states "When the primary monitoring system is inoperable and the backup system is in service, sampling may be discontinued for up to 30 minutes for changing particulate filters and iodine cartridges". Change out of theses filters and cartidges is a normal and required activity and not an event that is appropriate for inclusion in the Radioactive Effluent Release Report. Eliminating the need to report these change outs in the Radioactive Effluent Release Report will reduce administrative burdens on plant staff. Therefore, only a sampling of the events during which auxiliary samplers were removed from service to change out particulate filters and iodine cartridges are listed below.

On January 8, 2002, with the Multi Purpose Facility Building auxiliary sampler in service the sampler was removed from service for the weekly change out of the particulate filter. The sampler was out of service for 4 minutes.

On October 8, 2002, with the Multi Purpose Facility Building auxiliary sampler in service the sampler was removed from service for the weekly change out of the particulate filter. The sampler was out of service for 5 minutes.

On October 8, 2002, with the Radwaste/ Augmented Radwaste Building auxiliary sampler in service the sampler was removed from service for the weekly change out of the particulate filter. The sampler was out of service for 8 minutes.

APPENDIX B

METEOROLOGY

CONTENTS

METEOROLOGICAL DATA SUMMARIES

Meteorological data collected onsite for the period January 1, 2002, through December 31, 2002, were reduced, validated, summarized for analysis, and included in appropriate dose calculations. Hourly data summaries are provided for all pertinent parameters and for the joint frequency distributions (JFD's) of wind speed and wind direction by atmospheric stability class.

DATA RECOVERY

Data recovery statistics are provided in Table 1 for all pertinent meteorological parameters.

		Lowest Data Recovery	Average Data Recovery
January 1 - March 31, 2002	(Q1)	92.1%	97.8%
April 1 - June 30, 2002	(Q2)	96.0%	98.1%
First Semiannual Period - January 1 - June 30, 2002	(SEM1)	95.2%	97.9%
July 1 - September 30, 2002	(Q3)	80.3%	98.8%
October 1 - December 31, 2002	(Q4)	66.9%	86.3%
Second Semiannual Period - July 1 - December 31, 2002	(SEM2)	83.4%	92.5%
Annual Period - January 1 - December 31, 2002	(ANN)	90.3%	95.2%

WIND AT 100-METER LEVEL AND 10-METER LEVEL

	Predominant Wind Direction at 100m Level		Predominant Wind Direction at 10m Level	
Q1	Northwest	14.7%	North-Northwest	15.5%
Q2	South	22.4%	South	23.1%
SEM1	South	14.6%	South	17.0%
Q3	South	19.7%	South	20.0%
Q4	North-Northwest	10.7%	South	12.9%
SEM2	South	15.2%	South	16.6%
ANN	South	14.9%	South	16.8%

	Mean Wind Speed at 100m Level	Mean Wind Speed at 10m Level
Q1	15.8 MPH	9.6 MPH
Q2	16.0 MPH	9.7 MPH
SEM1	15.9 MPH	9.7 MPH
Q3	12.6 MPH	7.0 MPH
Q4	13.3 MPH	7.3 MPH
SEM2	12.9 MPH	7.1 MPH
ANN	14.4 MPH	8.4 MPH

	Maximum Hourly Average Wind Speed/(Date at 100m Level)	Maximum Hourly Average Wind Speed/(Date at 10m Level)
Q1	36.6 MPH/(02/02/10)	28.7 MPH/(02/03/09)
Q2	48.6 MPH/(02/04/27)	35.1 MPH/(02/04/27)
SEM1	48.6 MPH/(02/04/27)	35.1 MPH/(02/04/27)
Q3	31.9 MPH/(02/09/29)	20.8 MPH/(02/07/01)
Q4	37.4 MPH/(02/10/04)	27.1 MPH/(02/10/04)
SEM2	37.4 MPH/(02/10/04)	27.1 MPH/(02/10/04)
ANN	48.6 MPH/(02/04/27)	35.1 MPH/(02/04/27)

TEMPERATURE AT 10-METER LEVEL

	Mean Hourly Average Temperature	Average Daily Maximum	Average Daily Minimum
Q1	34.5 Degrees F	44.6 Degrees F	24.5 Degrees F
Q2	65.2 Degrees F	74.8 Degrees F	54.5 Degrees F
SEM1	49.8 Degrees F	59.8 Degrees F	39.6 Degrees F
Q3	75.6 Degrees F	86.2 Degrees F	65.5 Degrees F
Q4	40.6 Degrees F	50.1 Degrees F	32.1 Degrees F
SEM2	59.0 Degrees F	68.6 Degrees F	49.2 Degrees F
ANN	54.4 Degrees F	64.1 Degrees F	44.4 Degrees F

	Maximum Temperature (Date)	Minimum Temperature (Date)
Q1	67.5 Degrees F (02/03/05)	1.7 Degrees F (02/03/04)
Q2	94.2 Degrees F (02/06/26)	22.8 Degrees F (02/03/07)
SEM1	94.2 Degrees F (02/06/26)	1.7 Degrees F (02/03/04)
Q3	101.3 Degrees F (02/07/21)	46.0 Degrees F (02/09/16)
Q4	89.5 Degrees F (02/10/01)	12.5 Degrees F (02/12/25)
SEM2	101.3 Degrees F (02/07/21)	12.5 Degrees F (02/12/31)
ANN	101.3 Degrees F (02/07/21)	1.7 Degrees F (02/03/04)

PRECIPITATION

	Total Precipitation	Maximum Daily Precipitation Total/(Date)	Maximum Hourly Precipitation Total/(Date)
Q1	1.10 Inches	0.40 Inches (02/02/19)	0.20 Inches (02/03/08)
Q2	5.70 Inches	1.00 Inches (02/05/06)	0.60 Inches (02/05/11)
SEM1	6.80 Inches	1.00 Inches (02/05/06)	0.60 Inches (02/05/11)
Q3	3.10 Inches	0.70 Inches (02/08/13)	0.30 Inches (02/08/13)
Q4	3.40 Inches	1.00 Inches (02/10/05)	1.00 Inches (02/10/05)
SEM2	6.50 Inches	1.00 Inches (02/10/05)	1.00 Inches (02/10/05)
ANN	13.30 Inches	1.00 Inches (02/05/06 and 02/10/05)	1.00 Inches (02/10/05)

ATMOSPHERIC STABILITY

Atmospheric stability is determined through classification of differential temperature data based on JFD of the 100-meter wind and the delta T (100m - 10m) stability data.

	Unstable Conditions Classes A-C	Neutral Conditions Class D	Stable Conditions Classes E-G
Q1	4%	45%	51%
Q2	12%	44%	44%
SEM1	8%	44%	48%
Q3	10%	37%	53%
Q4	3%	37%	60%
SEM2	7%	37%	56%
ANN	7%	41%	52%

TABLE 1. Meteorological Data Recovery

Data Recovery (% of total Observations)

	January-March 2002	April-June 2002	January-June 2002	July-Sept. 2002	October-Dec. 2002	July-Dec. 2002	January-Dec. 2002
100m wind speed	98.7	98.5	98.6	100.0	92.8	96.4	97.5
100m wind direction	99.9	96.2	98.0	100.0	85.2	92.6	95.2
100m ambient temperature	99.9	98.4	99.1	100.0	89.6	94.8	96.9
60m wind speed	99.9	98.5	99.2	100.0	94.5	97.3	98.2
60m wind direction	99.9	98.5	99.2	100.0	94.6	97.3	98.2
60m ambient temperature	92.2	98.3	95.2	100.0	88.7	94.3	94.8
10m wind speed	99.9	98.5	99.2	100.0	94.6	97.3	98.2
10m wind direction	99.9	98.5	99.2	100.0	94.5	97.3	98.2
10m ambient temperature	99.8	98.4	99.1	100.0	90.1	95.1	97.0
10m dew point	99.9	97.6	98.7	100.0	94.6	97.3	98.0
100m-10m delta T	99.6	98.4	99.0	100.0	75.4	87.7	93.3
100m-60m delta T	92.2	98.3	95.3	100.0	74.0	87.0	91.1
60m-10m delta T	92.1	98.3	95.2	100.0	75.9	88.0	91.6
Precipitation	99.9	99.2	99.5	80.3	93.3	86.8	93.1
100m JFD	98.5	96.0	97.2	100.0	66.9	83.4	90.3
10m JFD	92.1	98.3	95.2	100.0	75.9	88.0	91.6

JFD - Joint Frequency Distribution of wind speed, wind direction and atmospheric stability.

MONTHLY SUMMARY TABLES OF HOURLY METEOROLOGICAL DATA

The tables presented in this section provide a summary of hourly averages of measured meteorological parameters. The tables provide summaries by month for the annual period January through December, 2002. Summaries for the first quarter, second quarter, third quarter, fourth quarter, and semiannual periods are also provided. The parameters provided are listed below.

* 10 meter ambient temperature
* Wind direction frequencies at 10 meters and 100 meters.
* Precipitation.

Any missing or non-measured data are indicated by a field of 9's.

10-Meter Ambient Temperature

and

10-Meter Dew Point Temperature

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NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

JANUARY

10.0 METERS LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	29.9	31	15.7	31	57.1	31	2.6	31	25.2
2	31	29.1	31	15.6	31	58.6	31	2.6	31	24.7
3	31	28.3	31	15.5	31	60.0	31	2.5	31	24.2
4	31	27.8	31	15.5	31	61.4	31	2.5	31	23.9
5	30	26.3	30	15.2	30	63.9	30	2.5	30	22.8
6	30	25.6	30	15.1	30	65.5	30	2.5	30	22.3
7	30	25.5	30	14.9	30	65.0	30	2.5	30	22.2
8	31	25.8	31	15.1	31	64.8	31	2.5	31	22.5
9	31	26.3	31	15.7	31	65.1	31	2.6	31	23.0
10	31	29.2	31	16.9	31	61.5	31	2.7	31	25.1
11	31	32.5	31	17.9	31	56.4	31	2.8	31	27.4
12	31	35.5	31	18.3	31	51.5	31	2.8	31	29.4
13	31	37.9	31	18.3	31	47.7	31	2.8	31	30.8
14	31	39.9	31	18.4	31	44.8	31	2.8	31	32.0
15	31	41.3	31	18.3	31	42.7	31	2.8	31	32.8
16	31	42.0	31	18.2	31	41.8	31	2.8	31	33.2
17	31	41.5	31	17.9	31	41.8	31	2.8	31	32.8
18	31	39.3	31	17.5	31	44.2	31	2.7	31	31.4
19	31	36.8	31	17.3	31	47.7	31	2.7	31	30.0
20	31	35.4	31	17.0	31	49.6	31	2.7	31	29.0
21	31	33.5	31	16.7	31	52.3	31	2.6	31	27.8
22	31	32.2	31	16.6	31	54.6	31	2.6	31	27.0
23	31	31.3	31	16.4	31	56.1	31	2.6	31	26.3
24	31	30.4	31	16.2	31	57.7	31	2.6	31	25.7
HOURLY MEAN		32.7		16.7		54.6		2.7		27.2
AVG DAILY MAX		42.4		21.7		70.6		3.2		33.7
AVG DAILY MIN		22.6		11.2		39.8		2.1		19.4
ABSOLUTE MAX		66.4		32.4		86.6		4.6		48.6
ABSOLUTE MIN		3.8		-1.1		14.4		1.2		3.0
TOTAL OBS		741		741		741		741		741

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VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

FEBRUARY

10.0 METERS LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	28	32.0	28	19.7	28	61.6	28	3.1	28	27.8
2	28	31.0	28	19.4	28	63.3	28	3.1	28	27.0
3	28	30.1	28	19.0	28	64.3	28	3.0	28	26.3
4	28	29.3	28	18.6	28	65.2	28	3.0	28	25.7
5	28	28.6	28	18.3	28	66.3	28	3.0	28	25.2
6	28	28.2	28	18.0	28	66.5	28	2.9	28	24.8
7	28	27.6	28	17.6	28	67.0	28	2.9	28	24.3
8	28	27.1	28	17.3	28	67.7	28	2.9	28	23.8
9	28	28.5	28	18.1	28	66.4	28	2.9	28	25.0
10	28	31.4	28	19.1	28	61.7	28	3.1	28	27.2
11	28	34.7	28	19.9	28	56.5	28	3.1	28	29.4
12	28	37.3	28	20.4	28	52.2	28	3.2	28	31.2
13	28	39.2	28	20.5	28	48.9	28	3.1	28	32.3
14	28	40.7	28	20.2	28	45.9	28	3.1	28	33.2
15	28	41.5	28	20.1	28	44.6	28	3.1	28	33.7
16	28	41.9	28	20.4	28	44.5	28	3.1	28	34.0
17	28	41.6	28	20.6	28	45.4	28	3.1	28	33.8
18	28	40.4	28	20.4	28	46.8	28	3.1	28	33.1
19	28	38.5	28	20.2	28	49.5	28	3.1	28	31.9
20	28	36.7	28	20.1	28	52.5	28	3.1	28	30.8
21	28	35.7	28	20.2	28	54.6	28	3.1	28	30.2
22	28	34.8	28	20.3	28	56.9	28	3.1	28	29.6
23	28	33.9	28	20.1	28	58.1	28	3.1	28	29.1
24	28	33.1	28	20.0	28	59.8	28	3.1	28	28.5
HOURLY MEAN		34.3		19.5		56.9		3.1		29.1
AVG DAILY MAX		43.7		24.4		73.0		3.7		35.5
AVG DAILY MIN		24.6		14.4		40.9		2.5		21.8
ABSOLUTE MAX		66.5		45.0		87.5		7.7		49.7
ABSOLUTE MIN		6.5		-3.5		20.5		1.0		5.0
TOTAL OBS		672		672		672		672		672

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

MARCH

10.0 METERS LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	33.0	31	17.9	31	55.2	31	2.8	31	27.8
2	31	32.4	31	17.8	31	56.2	31	2.8	31	27.4
3	31	31.6	31	18.0	31	58.0	31	2.9	31	27.0
4	31	30.6	31	17.9	31	59.8	31	2.9	31	26.4
5	30	29.3	31	17.4	30	60.3	30	2.8	30	25.3
6	30	28.9	31	17.0	30	60.1	30	2.7	30	24.9
7	31	28.9	31	16.8	31	60.7	31	2.8	31	25.1
8	31	29.4	31	16.9	31	59.9	31	2.8	31	25.4
9	31	31.6	31	17.6	31	56.7	31	2.9	31	27.0
10	31	34.6	31	18.3	31	52.1	31	3.0	31	29.0
11	31	37.5	31	18.8	31	47.8	31	3.0	31	30.9
12	31	40.1	31	19.4	31	44.8	31	3.1	31	32.6
13	31	42.0	31	19.6	31	42.2	31	3.1	31	33.7
14	31	43.4	31	19.6	31	40.5	31	3.1	31	34.5
15	31	44.5	31	19.6	31	39.3	31	3.1	31	35.1
16	31	45.3	31	19.7	31	38.6	31	3.1	31	35.6
17	31	45.2	31	19.8	31	39.0	31	3.1	31	35.6
18	31	44.2	31	19.9	31	40.8	31	3.1	31	35.0
19	31	42.0	31	19.9	31	43.8	31	3.1	31	33.8
20	31	40.0	31	19.5	31	46.1	31	3.0	31	32.6
21	31	38.0	31	19.3	31	49.0	31	3.0	31	31.3
22	31	36.2	31	19.0	31	51.5	31	3.0	31	30.1
23	31	35.0	31	19.0	31	53.8	31	3.0	31	29.4
24	31	34.0	31	18.6	31	54.8	31	2.9	31	28.7
HOURLY MEAN		36.6		18.6		50.4		3.0		30.2
AVG DAILY MAX		47.6		24.7		67.6		3.8		37.4
AVG DAILY MIN		26.4		12.7		35.3		2.3		22.9
ABSOLUTE MAX		67.5		40.1		81.3		6.3		53.1
ABSOLUTE MIN		1.7		-7.8		11.7		.8		.5
TOTAL OBS		742		744		742		742		742

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NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

JAN-MAR HOUR AVERAGES

10.0 METERS LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	90	31.6	90	17.7	90	57.9	90	2.8	90	26.9
2	90	30.8	90	17.5	90	59.2	90	2.8	90	26.4
3	90	30.0	90	17.4	90	60.6	90	2.8	90	25.8
4	90	29.2	90	17.3	90	62.0	90	2.8	90	25.3
5	88	28.1	89	16.9	88	63.4	88	2.8	88	24.4
6	88	27.6	89	16.7	88	64.0	88	2.7	88	24.0
7	89	27.4	89	16.4	89	64.2	89	2.7	89	23.8
8	90	27.5	90	16.4	90	64.0	90	2.7	90	23.9
9	90	28.8	90	17.1	90	62.6	90	2.8	90	25.0
10	90	31.7	90	18.1	90	58.4	90	2.9	90	27.1
11	90	34.9	90	18.8	90	53.5	90	3.0	90	29.2
12	90	37.7	90	19.3	90	49.4	90	3.0	90	31.1
13	90	39.7	90	19.4	90	46.2	90	3.0	90	32.3
14	90	41.4	90	19.4	90	43.6	90	3.0	90	33.3
15	90	42.5	90	19.3	90	42.1	90	3.0	90	33.9
16	90	43.1	90	19.4	90	41.5	90	3.0	90	34.3
17	90	42.8	90	19.4	90	42.0	90	3.0	90	34.1
18	90	41.3	90	19.2	90	43.9	90	3.0	90	33.2
19	90	39.1	90	19.1	90	46.9	90	2.9	90	31.9
20	90	37.4	90	18.8	90	49.3	90	2.9	90	30.8
21	90	35.7	90	18.7	90	51.9	90	2.9	90	29.8
22	90	34.4	90	18.6	90	54.3	90	2.9	90	28.9
23	90	33.4	90	18.5	90	55.9	90	2.9	90	28.3
24	90	32.4	90	18.2	90	57.4	90	2.9	90	27.6
HOURLY MEAN		34.5		18.2		53.9		2.9		28.8
AVG DAILY MAX		44.6		23.6		70.3		3.6		35.5
AVG DAILY MIN		24.5		12.7		38.6		2.3		21.4
ABSOLUTE MAX		67.5		45.0		87.5		7.7		53.1
ABSOLUTE MIN		1.7		-7.8		11.7		.8		.5
TOTAL OBS		2155		2157		2155		2155		2155

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

APRIL

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	29	52.2	28	36.3	28	58.2	28	6.2	28	45.2
2	29	51.1	28	36.6	28	61.0	28	6.3	28	44.8
3	29	50.2	27	38.7	27	65.2	27	6.6	27	45.2
4	29	49.2	28	37.1	28	65.8	28	6.6	28	44.2
5	29	48.4	28	37.0	28	67.5	28	6.6	28	43.8
6	29	47.7	28	36.9	28	69.0	28	6.6	28	43.4
7	29	47.6	28	37.0	28	69.6	28	6.6	28	43.3
8	29	49.2	28	37.6	28	67.2	28	6.7	28	44.3
9	29	51.4	28	38.1	28	63.7	28	6.8	28	45.5
10	27	54.4	26	38.5	26	58.7	26	6.8	26	47.1
11	28	56.7	28	39.3	28	54.3	28	6.8	28	48.4
12	28	59.2	28	39.5	28	50.5	28	6.8	28	49.6
13	28	60.9	28	39.7	28	48.1	28	6.7	28	50.4
14	27	63.3	27	40.9	27	47.0	27	6.9	27	52.0
15	28	64.8	27	40.5	27	44.8	27	6.9	27	52.4
16	28	65.5	27	41.2	27	44.7	27	7.1	27	53.1
17	29	64.8	28	39.6	28	43.3	28	6.8	28	52.3
18	29	64.2	28	38.9	28	43.3	28	6.6	28	51.8
19	29	62.3	28	38.4	28	45.1	28	6.5	28	50.8
20	29	59.7	28	38.5	28	48.9	28	6.6	28	49.7
21	29	57.6	28	38.2	28	51.7	28	6.6	28	48.7
22	29	56.0	28	38.2	28	54.3	28	6.6	28	47.9
23	29	54.6	28	38.5	28	57.2	28	6.8	28	47.4
24	29	53.5	28	37.9	28	58.4	28	6.6	28	46.6
HOURLY MEAN		56.0		38.5		55.8		6.7		47.8
AVG DAILY MAX		65.7		44.0		71.7		8.2		53.1
AVG DAILY MIN		45.1		29.3		35.4		4.8		40.3
ABSOLUTE MAX		89.8		63.5		92.4		14.6		68.9
ABSOLUTE MIN		22.8		-17.0		11.4		.5		19.5
TOTAL OBS		687		666		666		666		666

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

MAY

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	56.0	31	43.7	31	64.3	31	7.8	31	50.0
2	31	55.1	31	43.4	31	65.3	31	7.7	31	49.4
3	31	54.4	31	43.3	31	66.7	31	7.7	31	49.0
4	30	54.0	31	43.2	30	67.7	30	7.7	30	48.8
5	30	53.1	31	43.2	30	69.9	30	7.7	30	48.4
6	30	52.8	31	43.5	30	71.4	30	7.8	30	48.4
7	31	54.0	31	43.8	31	69.0	31	7.8	31	49.1
8	31	56.7	31	44.1	31	63.4	31	7.9	31	50.5
9	31	59.6	31	44.2	31	57.8	31	7.9	31	51.9
10	31	62.2	31	43.9	31	52.6	31	7.8	31	53.0
11	31	64.4	31	43.5	31	48.7	31	7.8	31	53.9
12	31	66.3	31	43.5	31	45.8	31	7.8	31	54.7
13	31	67.7	31	43.7	31	44.3	31	7.8	31	55.3
14	31	69.1	31	43.9	31	42.5	31	7.9	31	56.0
15	31	70.6	31	43.8	31	40.1	31	7.8	31	56.6
16	31	71.0	31	43.9	31	39.7	31	7.8	31	56.7
17	31	70.4	31	43.7	31	40.6	31	7.8	31	56.4
18	31	69.3	31	43.7	31	42.3	31	7.8	31	56.0
19	31	67.7	31	43.9	31	45.2	31	7.9	31	55.4
20	31	65.0	31	44.0	31	48.8	31	7.9	31	54.3
21	31	62.8	31	44.2	31	52.1	31	8.0	31	53.4
22	31	61.1	31	44.3	31	55.1	31	8.0	31	52.6
23	31	59.3	31	44.2	31	58.5	31	8.0	31	51.8
24	31	57.7	31	44.5	31	62.3	31	8.1	31	51.2
HOURLY MEAN		61.7		43.8		54.7		7.8		52.6
AVG DAILY MAX		72.0		49.3		75.2		9.5		57.9
AVG DAILY MIN		50.9		38.2		37.5		6.3		46.0
ABSOLUTE MAX		94.1		64.4		83.9		15.1		72.7
ABSOLUTE MIN		40.4		22.5		19.7		3.1		36.1
TOTAL OBS		741		744		741		741		741

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

JUNE

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	30	72.5	30	58.5	30	61.8	30	12.6	30	64.1
2	30	71.4	30	58.4	30	64.2	30	12.6	30	63.6
3	30	70.5	30	58.2	30	65.5	30	12.5	30	63.2
4	30	69.6	30	58.1	30	67.3	30	12.4	30	62.8
5	30	68.6	30	57.9	30	69.1	30	12.4	30	62.3
6	30	68.4	30	57.9	30	69.7	30	12.4	30	62.2
7	30	70.3	30	58.5	30	66.7	30	12.6	30	63.3
8	30	72.8	30	59.0	30	62.4	30	12.8	30	64.5
9	30	75.7	30	59.3	30	57.4	30	12.9	30	65.7
10	30	78.5	30	59.3	30	52.5	30	12.8	30	66.6
11	30	80.6	30	59.0	30	48.9	30	12.7	30	67.3
12	30	82.6	30	58.6	30	45.5	30	12.5	30	67.7
13	30	83.8	30	58.5	30	43.4	30	12.4	30	68.1
14	30	85.1	30	58.2	30	41.4	30	12.3	30	68.4
15	30	85.9	30	58.3	30	40.6	30	12.3	30	68.7
16	30	86.2	30	58.5	30	40.3	30	12.4	30	68.8
17	30	85.6	30	58.7	30	41.3	30	12.5	30	68.8
18	30	84.9	30	58.8	30	42.6	30	12.5	30	68.6
19	30	83.3	30	58.7	30	44.5	30	12.5	30	68.0
20	30	80.4	30	58.7	30	48.5	30	12.5	30	67.0
21	30	77.8	30	58.7	30	52.4	30	12.5	30	66.1
22	30	76.1	30	58.4	30	54.8	30	12.5	30	65.4
23	30	74.6	30	58.6	30	57.8	30	12.6	30	64.9
24	30	73.6	30	58.6	30	60.0	30	12.6	30	64.5
HOURLY MEAN		77.5		58.6		54.1		12.5		65.9
AVG DAILY MAX		86.7		62.2		71.6		14.1		69.6
AVG DAILY MIN		67.8		55.2		38.7		11.2		61.5
ABSOLUTE MAX		94.2		72.3		83.6		19.5		76.0
ABSOLUTE MIN		55.9		39.4		24.1		5.9		50.5
TOTAL OBS		720		720		720		720		720

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

APR-JUN HOUR AVERAGES

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	90	60.3	89	46.4	89	61.5	89	8.9	89	53.3
2	90	59.2	89	46.3	89	63.6	89	8.9	89	52.8
3	90	58.4	88	47.0	88	65.8	88	9.0	88	52.7
4	89	57.7	89	46.3	88	67.0	88	8.9	88	52.1
5	89	56.8	89	46.2	88	68.9	88	8.9	88	51.7
6	89	56.4	89	46.3	88	70.1	88	9.0	88	51.5
7	90	57.3	89	46.6	89	68.4	89	9.0	89	52.0
8	90	59.6	89	47.1	89	64.3	89	9.2	89	53.3
9	90	62.3	89	47.4	89	59.5	89	9.2	89	54.5
10	88	65.4	87	47.6	87	54.4	87	9.2	87	55.9
11	89	67.5	89	47.4	89	50.5	89	9.1	89	56.7
12	89	69.5	89	47.3	89	47.2	89	9.1	89	57.5
13	89	71.0	89	47.4	89	45.2	89	9.0	89	58.1
14	88	72.8	88	47.9	88	43.5	88	9.1	88	59.0
15	89	73.9	88	47.8	88	41.7	88	9.1	88	59.4
16	89	74.4	88	48.0	88	41.4	88	9.2	88	59.8
17	90	73.7	89	47.5	89	41.7	89	9.1	89	59.3
18	90	72.9	89	47.3	89	42.7	89	9.0	89	58.9
19	90	71.2	89	47.2	89	44.9	89	9.0	89	58.2
20	90	68.4	89	47.2	89	48.7	89	9.1	89	57.1
21	90	66.2	89	47.2	89	52.1	89	9.1	89	56.2
22	90	64.5	89	47.1	89	54.8	89	9.1	89	55.4
23	90	62.9	89	47.2	89	57.9	89	9.2	89	54.8
24	90	61.6	89	47.2	89	60.3	89	9.2	89	54.2
HOURLY MEAN		65.2		47.1		54.8		9.1		55.6
AVG DAILY MAX		74.8		51.8		72.9		10.6		60.2
AVG DAILY MIN		54.5		40.9		37.2		7.4		49.3
ABSOLUTE MAX		94.2		72.3		92.4		19.5		76.0
ABSOLUTE MIN		22.8		-17.0		11.4		.5		19.5
TOTAL OBS		2148		2130		2127		2127		2127

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

JAN-JUN HOUR AVERAGES

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	180	45.9	179	31.9	179	59.7	179	5.9	179	40.0
2	180	45.0	179	31.8	179	61.4	179	5.8	179	39.5
3	180	44.2	178	32.0	178	63.2	178	5.9	178	39.1
4	179	43.4	179	31.7	178	64.5	178	5.8	178	38.5
5	177	42.5	178	31.6	176	66.2	176	5.8	176	38.0
6	177	42.1	178	31.5	176	67.0	176	5.8	176	37.8
7	179	42.4	178	31.5	178	66.3	178	5.9	178	37.9
8	180	43.5	179	31.7	179	64.1	179	5.9	179	38.5
9	180	45.6	179	32.2	179	61.1	179	6.0	179	39.7
10	178	48.4	177	32.6	177	56.4	177	6.0	177	41.3
11	179	51.1	179	33.0	179	52.0	179	6.0	179	42.9
12	179	53.5	179	33.3	179	48.3	179	6.0	179	44.2
13	179	55.3	179	33.4	179	45.7	179	6.0	179	45.1
14	178	56.9	178	33.5	178	43.6	178	6.0	178	46.0
15	179	58.1	178	33.4	178	41.9	178	6.0	178	46.5
16	179	58.7	178	33.6	178	41.5	178	6.0	178	46.9
17	180	58.3	179	33.3	179	41.8	179	6.0	179	46.6
18	180	57.1	179	33.2	179	43.3	179	6.0	179	46.0
19	180	55.2	179	33.1	179	45.9	179	6.0	179	45.0
20	180	52.9	179	32.9	179	49.0	179	6.0	179	43.9
21	180	50.9	179	32.8	179	52.0	179	6.0	179	42.9
22	180	49.4	179	32.8	179	54.5	179	6.0	179	42.1
23	180	48.1	179	32.8	179	56.9	179	6.0	179	41.5
24	180	47.0	179	32.6	179	58.8	179	6.0	179	40.8
HOURLY MEAN		49.8		32.6		54.4		6.0		42.1
AVG DAILY MAX		59.8		37.8		71.6		7.1		47.9
AVG DAILY MIN		39.6		26.9		37.9		4.9		35.4
ABSOLUTE MAX		94.2		72.3		92.4		19.5		76.0
ABSOLUTE MIN		1.7		-17.0		11.4		.5		.5
TOTAL OBS		4303		4287		4282		4282		4282

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

JULY

10.0 METER LEVEL

HOUR	TEMPERATURE NUMBER OBS	TEMPERATURE (DEG F)	DEW POINT NUMBER OBS	DEW POINT (DEG F)	RELATIVE HUM NUMBER OBS	RELATIVE HUM (%)	ABSOLUTE HUM NUMBER OBS	ABSOLUTE HUM (GM/M3)	WET BULB NUMBER OBS	WET BULB (DEG F)
1	31	75.4	31	63.3	31	66.7	31	14.6	31	67.7
2	31	74.4	31	63.2	31	68.6	31	14.6	31	67.3
3	31	73.5	31	63.1	31	70.5	31	14.5	31	66.9
4	31	72.4	31	62.8	31	72.2	31	14.4	31	66.4
5	31	71.6	31	62.7	31	74.0	31	14.4	31	66.1
6	31	71.2	31	62.7	31	74.8	31	14.4	31	65.9
7	31	72.5	31	63.3	31	73.2	31	14.7	31	66.7
8	31	75.2	31	64.2	31	68.9	31	15.1	31	68.2
9	31	78.6	31	64.8	31	63.1	31	15.3	31	69.7
10	31	81.3	31	64.8	31	57.9	31	15.3	31	70.5
11	31	83.8	31	64.4	31	52.6	31	15.0	31	71.1
12	31	85.8	31	64.0	31	49.0	31	14.7	31	71.5
13	31	86.7	31	63.3	31	46.7	31	14.4	31	71.4
14	31	87.9	31	63.2	31	44.8	31	14.3	31	71.7
15	31	89.3	31	62.9	31	42.6	31	14.1	31	71.9
16	31	89.8	31	62.7	31	41.8	31	14.0	31	72.0
17	31	89.5	31	62.9	31	42.3	31	14.1	31	72.0
18	31	88.7	31	63.2	31	43.7	31	14.3	31	71.9
19	31	86.8	31	64.0	31	47.5	31	14.7	31	71.8
20	31	83.5	31	64.0	31	52.5	31	14.7	31	70.8
21	31	80.8	31	63.7	31	56.8	31	14.7	31	69.8
22	31	79.1	31	63.7	31	60.0	31	14.7	31	69.2
23	31	77.7	31	63.8	31	62.9	31	14.8	31	68.8
24	31	76.4	31	63.7	31	65.3	31	14.8	31	68.3
HOURLY MEAN		80.5		63.5		58.3		14.6		69.5
AVG DAILY MAX		90.5		66.8		76.6		16.3		73.1
AVG DAILY MIN		70.6		60.0		39.5		12.9		65.3
ABSOLUTE MAX		101.3		73.2		88.6		19.6		79.6
ABSOLUTE MIN		61.7		51.1		28.2		9.2		58.1
TOTAL OBS		744		744		744		744		744

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

AUGUST

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	71.1	31	60.7	31	70.3	31	13.5	31	64.8
2	31	70.5	31	60.6	31	71.5	31	13.5	31	64.5
3	31	69.7	31	60.3	31	72.6	31	13.4	31	64.0
4	31	68.7	31	60.1	31	74.6	31	13.3	31	63.5
5	31	68.2	31	60.1	31	75.8	31	13.3	31	63.3
6	31	67.8	31	60.1	31	76.6	31	13.3	31	63.2
7	31	68.4	31	60.1	31	75.2	31	13.3	31	63.4
8	31	70.3	31	60.9	31	72.6	31	13.6	31	64.6
9	31	72.9	31	61.6	31	68.1	31	13.9	31	65.9
10	31	75.8	31	61.7	31	62.3	31	13.9	31	67.0
11	31	78.5	31	61.8	31	57.4	31	13.9	31	67.9
12	31	80.7	31	61.7	31	53.3	31	13.8	31	68.6
13	31	82.4	31	61.6	31	50.3	31	13.7	31	69.1
14	31	83.9	31	61.6	31	48.0	31	13.6	31	69.6
15	31	85.3	31	61.7	31	46.2	31	13.7	31	70.2
16	31	85.8	31	61.6	31	45.3	31	13.6	31	70.2
17	31	85.3	31	61.7	31	46.2	31	13.7	31	70.2
18	31	84.4	31	61.5	31	47.2	31	13.6	31	69.7
19	31	82.4	31	61.7	31	50.5	31	13.7	31	69.2
20	31	78.9	31	61.8	31	56.7	31	13.8	31	68.1
21	31	76.3	31	61.4	31	61.1	31	13.7	31	67.0
22	31	74.3	31	61.1	31	64.5	31	13.6	31	66.1
23	31	73.2	31	60.9	31	66.2	31	13.6	31	65.6
24	31	71.9	31	60.6	31	68.2	31	13.5	31	65.0
HOURLY MEAN		76.1		61.1		61.7		13.6		66.7
AVG DAILY MAX		86.6		65.2		79.1		15.6		71.3
AVG DAILY MIN		66.6		56.7		43.8		11.7		61.6
ABSOLUTE MAX		99.1		72.3		90.5		19.4		77.6
ABSOLUTE MIN		58.5		48.2		27.5		8.2		55.0
TOTAL OBS		744		744		744		744		744

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

SEPTEMBER

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	30	64.6	30	51.9	30	64.4	30	10.2	30	57.5
2	30	63.7	30	51.7	30	65.8	30	10.1	30	57.1
3	30	62.9	30	51.5	30	67.1	30	10.0	30	56.6
4	30	62.3	30	51.4	30	68.2	30	10.0	30	56.3
5	30	61.4	30	51.3	30	70.1	30	10.0	30	55.9
6	30	60.6	30	51.3	30	72.0	30	10.0	30	55.5
7	30	60.4	30	51.3	30	72.4	30	10.0	30	55.4
8	30	62.6	30	52.0	30	68.9	30	10.2	30	56.7
9	30	66.3	30	52.7	30	62.5	30	10.4	30	58.6
10	30	70.3	30	53.0	30	55.8	30	10.5	30	60.4
11	30	73.3	30	52.5	30	50.0	30	10.3	30	61.3
12	30	75.8	30	51.8	30	45.4	30	10.1	30	61.9
13	30	77.7	30	51.2	30	42.0	30	9.8	30	62.3
14	30	79.2	30	51.0	30	39.7	30	9.7	30	62.8
15	30	80.1	30	50.8	30	38.5	30	9.6	30	63.0
16	30	80.4	30	50.9	30	38.4	30	9.6	30	63.2
17	30	80.1	30	51.0	30	38.8	30	9.6	30	63.1
18	30	78.6	30	51.3	30	41.1	30	9.8	30	62.7
19	30	75.0	30	51.7	30	46.2	30	9.9	30	61.5
20	30	71.6	30	51.9	30	51.5	30	10.0	30	60.3
21	30	69.7	30	52.2	30	55.4	30	10.2	30	59.7
22	30	67.9	30	52.5	30	59.0	30	10.3	30	59.2
23	30	66.4	30	52.4	30	61.7	30	10.3	30	58.5
24	30	65.5	30	52.1	30	62.9	30	10.2	30	58.0
HOURLY MEAN		69.9		51.7		55.7		10.0		59.5
AVG DAILY MAX		81.3		55.7		75.2		11.5		64.0
AVG DAILY MIN		59.2		46.8		36.4		8.3		54.2
ABSOLUTE MAX		96.5		65.3		89.1		15.4		73.9
ABSOLUTE MIN		46.0		30.4		19.8		4.2		41.4
TOTAL OBS		720		720		720		720		720

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

JUL-SEP HOUR AVERAGES

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	92	70.4	92	58.7	92	67.1	92	12.8	92	63.4
2	92	69.6	92	58.6	92	68.7	92	12.8	92	63.0
3	92	68.8	92	58.4	92	70.1	92	12.7	92	62.6
4	92	67.9	92	58.2	92	71.7	92	12.6	92	62.1
5	92	67.1	92	58.1	92	73.3	92	12.6	92	61.8
6	92	66.6	92	58.1	92	74.5	92	12.6	92	61.6
7	92	67.2	92	58.3	92	73.6	92	12.7	92	61.9
8	92	69.4	92	59.1	92	70.2	92	13.0	92	63.2
9	92	72.7	92	59.8	92	64.6	92	13.2	92	64.8
10	92	75.8	92	59.9	92	58.7	92	13.2	92	66.0
11	92	78.6	92	59.6	92	53.4	92	13.1	92	66.8
12	92	80.8	92	59.2	92	49.3	92	12.9	92	67.4
13	92	82.3	92	58.8	92	46.4	92	12.6	92	67.7
14	92	83.7	92	58.7	92	44.2	92	12.6	92	68.1
15	92	85.0	92	58.6	92	42.5	92	12.5	92	68.4
16	92	85.4	92	58.5	92	41.9	92	12.4	92	68.5
17	92	85.0	92	58.6	92	42.5	92	12.5	92	68.5
18	92	83.9	92	58.8	92	44.0	92	12.6	92	68.2
19	92	81.5	92	59.2	92	48.1	92	12.8	92	67.6
20	92	78.1	92	59.3	92	53.6	92	12.9	92	66.5
21	92	75.6	92	59.2	92	57.8	92	12.9	92	65.6
22	92	73.8	92	59.2	92	61.2	92	12.9	92	64.9
23	92	72.5	92	59.1	92	63.6	92	12.9	92	64.4
24	92	71.3	92	58.9	92	65.5	92	12.8	92	63.8
HOURLY MEAN		75.6		58.9		58.6		12.8		65.3
AVG DAILY MAX		86.2		62.7		77.0		14.5		69.5
AVG DAILY MIN		65.5		54.6		40.0		11.0		60.4
ABSOLUTE MAX		101.3		73.2		90.5		19.6		79.6
ABSOLUTE MIN		46.0		30.4		19.8		4.2		41.4
TOTAL OBS		2208		2208		2208		2208		2208

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

OCTOBER

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	25	46.4	27	36.7	25	71.1	25	6.2	25	42.2
2	25	45.6	27	36.8	25	73.2	25	6.2	25	41.8
3	25	45.0	27	36.7	25	74.3	25	6.2	25	41.5
4	25	44.3	27	36.4	25	75.2	25	6.2	25	41.0
5	25	43.6	27	35.7	25	75.0	25	5.9	25	40.3
6	25	43.1	27	35.4	25	75.6	25	5.8	25	39.9
7	25	42.6	27	35.3	25	76.5	25	5.8	25	39.5
8	24	43.8	27	35.4	24	74.6	24	5.9	24	40.4
9	25	46.1	27	35.8	25	69.2	25	5.9	25	41.7
10	25	48.5	27	35.9	25	64.3	25	5.9	25	43.0
11	24	51.1	26	35.9	24	59.0	24	5.8	24	44.3
12	25	51.9	27	35.5	25	57.2	25	5.7	25	44.4
13	24	52.5	26	34.9	24	55.0	24	5.6	24	44.5
14	24	53.6	26	34.7	24	52.9	24	5.5	24	44.9
15	24	56.1	26	36.3	24	51.6	24	5.9	24	46.9
16	25	55.7	27	35.6	25	51.2	25	5.8	25	46.3
17	25	55.2	27	35.7	25	52.1	25	5.8	25	46.1
18	25	53.4	27	35.9	25	55.4	25	5.9	25	45.3
19	25	51.1	27	36.2	25	59.6	25	5.9	25	44.3
20	25	49.2	27	36.1	25	63.0	25	5.9	25	43.4
21	25	48.0	27	36.0	25	65.3	25	5.9	25	42.7
22	25	47.1	27	35.6	25	66.3	25	5.8	25	42.1
23	25	45.9	27	35.5	25	68.7	25	5.9	25	41.4
24	25	45.1	27	35.5	25	70.7	25	5.9	25	41.0
HOURLY MEAN		48.5		35.8		64.9		5.9		42.9
AVG DAILY MAX		56.2		40.2		80.1		7.0		47.9
AVG DAILY MIN		40.1		32.4		50.6		5.1		37.3
ABSOLUTE MAX		89.5		62.1		86.6		14.1		71.0
ABSOLUTE MIN		27.0		18.5		24.2		2.8		24.3
TOTAL OBS		595		644		595		595		595

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

NOVEMBER

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	28	37.9	30	25.0	28	60.3	28	3.7	28	32.9
2	28	37.1	30	24.8	28	61.5	28	3.7	28	32.4
3	27	35.5	30	24.6	27	63.7	27	3.6	27	31.2
4	27	35.0	30	24.5	27	64.5	27	3.6	27	30.9
5	27	34.6	30	24.4	27	65.3	27	3.6	27	30.6
6	27	34.5	30	24.4	27	65.4	27	3.6	27	30.5
7	27	34.3	30	24.3	27	65.7	27	3.6	27	30.4
8	27	34.1	30	24.3	27	66.2	27	3.6	27	30.2
9	26	35.7	28	25.0	26	63.9	26	3.7	26	31.4
10	27	38.4	28	25.9	27	59.8	27	3.8	27	33.3
11	26	41.4	27	26.2	26	54.3	26	3.8	26	35.2
12	27	43.7	28	26.2	27	50.1	27	3.8	27	36.5
13	27	45.6	28	26.1	27	46.7	27	3.8	27	37.5
14	27	47.0	28	26.2	27	44.8	27	3.8	27	38.3
15	27	48.0	29	25.8	27	43.1	27	3.8	27	38.8
16	27	48.5	29	25.4	27	41.6	27	3.7	27	39.0
17	28	47.8	30	25.3	28	42.4	28	3.7	28	38.6
18	28	45.4	30	25.2	28	45.7	28	3.7	28	37.3
19	28	43.4	30	25.2	28	49.2	28	3.7	28	36.2
20	28	41.9	30	25.1	28	51.8	28	3.7	28	35.3
21	28	40.9	30	24.8	28	53.0	28	3.7	28	34.7
22	28	39.7	30	24.7	28	55.3	28	3.7	28	33.9
23	28	38.7	30	24.7	28	57.5	28	3.7	28	33.3
24	28	38.4	30	24.7	28	58.3	28	3.7	28	33.1
HOURLY MEAN		40.3		25.1		55.4		3.7		34.2
AVG DAILY MAX		49.8		29.7		69.6		4.4		40.4
AVG DAILY MIN		32.2		20.7		40.9		3.2		28.5
ABSOLUTE MAX		71.2		44.4		83.8		7.5		53.2
ABSOLUTE MIN		17.8		4.6		22.2		1.5		15.9
TOTAL OBS		656		705		656		656		656

PROGRAM: WETTEMP
VERSION: PC-1.0
NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

MONTHLY HOUR AVERAGES

DECEMBER

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	31	30.8	31	18.6	31	61.3	31	3.0	31	26.8
2	31	29.6	31	18.4	31	63.4	31	2.9	31	26.0
3	31	29.2	31	18.4	31	64.5	31	2.9	31	25.7
4	31	28.8	31	18.4	31	65.5	31	2.9	31	25.5
5	31	28.4	31	18.4	31	66.4	31	2.9	31	25.2
6	31	28.1	31	18.3	31	67.2	31	2.9	31	25.0
7	31	27.8	31	18.3	31	68.0	31	2.9	31	24.8
8	31	27.2	31	18.2	31	69.2	31	2.9	31	24.3
9	30	28.3	30	18.8	30	67.7	30	3.0	30	25.3
10	29	31.4	29	20.1	29	63.4	29	3.1	29	27.6
11	30	35.3	30	20.9	30	56.3	30	3.2	30	30.3
12	30	38.7	30	21.3	30	50.8	30	3.3	30	32.5
13	31	41.0	31	21.2	31	46.6	31	3.2	31	33.7
14	31	42.8	31	21.0	31	43.3	31	3.2	31	34.7
15	31	44.1	31	21.0	31	41.2	31	3.2	31	35.4
16	31	44.5	31	21.0	31	40.6	31	3.2	31	35.7
17	31	43.3	31	20.6	31	41.6	31	3.2	31	34.9
18	31	40.5	31	20.1	31	45.3	31	3.1	31	33.2
19	31	38.3	31	19.9	31	48.6	31	3.1	31	31.8
20	31	36.5	31	19.6	31	51.4	31	3.0	31	30.6
21	31	35.1	31	19.4	31	53.9	31	3.0	31	29.7
22	31	34.2	31	19.4	31	55.5	31	3.0	31	29.2
23	31	33.3	31	19.1	31	57.0	31	3.0	31	28.5
24	31	32.0	31	18.9	31	59.2	31	3.0	31	27.7
HOURLY MEAN		34.6		19.6		56.1		3.1		29.4
AVG DAILY MAX		44.9		24.4		72.7		3.7		36.2
AVG DAILY MIN		24.7		13.5		38.5		2.4		21.8
ABSOLUTE MAX		66.4		43.7		83.6		7.4		49.0
ABSOLUTE MIN		12.5		1.8		18.4		1.3		11.4
TOTAL OBS		739		739		739		739		739

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

OCT-DEC HOUR AVERAGES

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	84	37.8	88	26.3	84	63.8	84	4.2	84	33.4
2	84	36.9	88	26.2	84	65.6	84	4.2	84	32.9
3	83	36.0	88	26.1	83	67.2	83	4.1	83	32.3
4	83	35.5	88	26.0	83	68.1	83	4.1	83	31.9
5	83	35.0	88	25.8	83	68.6	83	4.0	83	31.5
6	83	34.7	88	25.6	83	69.1	83	4.0	83	31.3
7	83	34.4	88	25.5	83	69.8	83	4.0	83	31.1
8	82	34.3	88	25.6	82	69.8	82	4.0	82	31.0
9	81	36.2	85	26.2	81	67.0	81	4.1	81	32.3
10	81	39.0	84	27.1	81	62.5	81	4.2	81	34.3
11	80	42.0	83	27.3	80	56.5	80	4.2	80	36.1
12	82	44.4	85	27.5	82	52.5	82	4.2	82	37.4
13	82	45.9	85	27.0	82	49.1	82	4.1	82	38.1
14	82	47.3	85	26.9	82	46.6	82	4.1	82	38.9
15	82	48.9	86	27.2	82	44.9	82	4.2	82	39.9
16	83	49.1	87	27.0	83	44.1	83	4.1	83	39.9
17	84	48.3	88	26.8	84	45.0	84	4.1	84	39.5
18	84	46.0	88	26.7	84	48.4	84	4.1	84	38.2
19	84	43.8	88	26.7	84	52.1	84	4.1	84	37.0
20	84	42.1	88	26.5	84	55.0	84	4.1	84	36.0
21	84	40.9	88	26.3	84	57.0	84	4.1	84	35.2
22	84	39.9	88	26.2	84	58.6	84	4.1	84	34.6
23	84	38.8	88	26.0	84	60.6	84	4.1	84	34.0
24	84	38.0	88	26.0	84	62.4	84	4.1	84	33.5
HOURLY MEAN		40.6		26.4		58.5		4.1		35.0
AVG DAILY MAX		50.1		31.3		74.0		5.0		41.3
AVG DAILY MIN		32.1		22.0		43.1		3.5		28.9
ABSOLUTE MAX		89.5		62.1		86.6		14.1		71.0
ABSOLUTE MIN		12.5		1.8		18.4		1.3		11.4
TOTAL OBS		1990		2088		1990		1990		1990

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

JUL-DEC HOUR AVERAGES

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	176	54.9	180	42.9	176	65.6	176	8.7	176	49.1
2	176	54.0	180	42.8	176	67.2	176	8.7	176	48.6
3	175	53.2	180	42.6	175	68.7	175	8.6	175	48.2
4	175	52.5	180	42.4	175	70.0	175	8.6	175	47.8
5	175	51.9	180	42.3	175	71.1	175	8.5	175	47.5
6	175	51.5	180	42.2	175	72.0	175	8.5	175	47.2
7	175	51.6	180	42.3	175	71.8	175	8.6	175	47.3
8	174	52.9	180	42.7	174	70.0	174	8.8	174	48.0
9	173	55.6	177	43.7	173	65.7	173	9.0	173	49.6
10	173	58.6	176	44.3	173	60.4	173	9.0	173	51.2
11	172	61.6	175	44.3	172	54.8	172	8.9	172	52.5
12	174	63.6	177	44.0	174	50.8	174	8.8	174	53.3
13	174	65.1	177	43.5	174	47.7	174	8.6	174	53.7
14	174	66.6	177	43.4	174	45.3	174	8.6	174	54.3
15	174	68.0	178	43.4	174	43.6	174	8.6	174	55.0
16	175	68.2	179	43.2	175	42.9	175	8.5	175	55.0
17	176	67.5	180	43.1	176	43.7	176	8.5	176	54.6
18	176	65.8	180	43.1	176	46.1	176	8.5	176	53.9
19	176	63.5	180	43.3	176	50.0	176	8.7	176	53.0
20	176	60.9	180	43.3	176	54.3	176	8.7	176	51.9
21	176	59.0	180	43.1	176	57.4	176	8.7	176	51.1
22	176	57.6	180	43.0	176	60.0	176	8.7	176	50.4
23	176	56.4	180	42.9	176	62.2	176	8.7	176	49.9
24	176	55.4	180	42.8	176	64.0	176	8.7	176	49.3
HOURLY MEAN		59.0		43.1		58.6		8.7		50.9
AVG DAILY MAX		68.6		47.1		75.5		9.9		55.7
AVG DAILY MIN		49.2		38.5		41.5		7.3		45.0
ABSOLUTE MAX		101.3		73.2		90.5		19.6		79.6
ABSOLUTE MIN		12.5		1.8		18.4		1.3		11.4
TOTAL OBS		4198		4296		4198		4198		4198

PROGRAM: WETTEMP
VERSION: PC-1.0

NPPD-COOPER NUCLEAR STATION 10-M TEMPERATURE SUMMARY 2002

JAN-DEC HOUR AVERAGES FOR THE PERIOD 1/ 1/ 2 TO 12/31/ 2

10.0 METER LEVEL

	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
HOUR	NUMBER OBS	(DEG F)	NUMBER OBS	(DEG F)	NUMBER OBS	(%)	NUMBER OBS	(GM/M3)	NUMBER OBS	(DEG F)
1	356	50.3	359	37.4	355	62.6	355	7.3	355	44.5
2	356	49.5	359	37.3	355	64.3	355	7.2	355	44.0
3	355	48.7	358	37.3	353	65.9	353	7.2	353	43.6
4	354	47.9	359	37.1	353	67.2	353	7.2	353	43.1
5	352	47.2	358	37.0	351	68.6	351	7.2	351	42.7
6	352	46.7	358	36.9	351	69.5	351	7.2	351	42.5
7	354	47.0	358	36.9	353	69.0	353	7.2	353	42.6
8	354	48.1	359	37.2	353	67.0	353	7.3	353	43.2
9	353	50.5	356	37.9	352	63.3	352	7.4	352	44.6
10	351	53.4	353	38.4	350	58.4	350	7.5	350	46.2
11	351	56.2	354	38.6	351	53.4	351	7.5	351	47.6
12	353	58.5	356	38.6	353	49.5	353	7.4	353	48.7
13	353	60.1	356	38.4	353	46.7	353	7.3	353	49.4
14	352	61.7	355	38.4	352	44.4	352	7.3	352	50.1
15	353	63.0	356	38.4	352	42.7	352	7.3	352	50.7
16	354	63.4	357	38.4	353	42.2	353	7.3	353	50.9
17	356	62.8	359	38.2	355	42.8	355	7.2	355	50.6
18	356	61.4	359	38.1	355	44.7	355	7.2	355	49.9
19	356	59.3	359	38.2	355	47.9	355	7.3	355	48.9
20	356	56.9	359	38.1	355	51.6	355	7.3	355	47.9
21	356	54.9	359	38.0	355	54.7	355	7.3	355	47.0
22	356	53.5	359	37.9	355	57.2	355	7.3	355	46.2
23	356	52.2	359	37.9	355	59.5	355	7.3	355	45.6
24	356	51.2	359	37.7	355	61.4	355	7.3	355	45.1
HOURLY MEAN		54.4		37.8		56.4		7.3		46.5
AVG DAILY MAX		64.1		42.5		73.6		8.5		51.8
AVG DAILY MIN		44.4		32.7		39.7		6.1		40.2
ABSOLUTE MAX		101.3		73.2		92.4		19.6		79.6
ABSOLUTE MIN		1.7		-17.0		11.4		.5		.5
TOTAL OBS		8501		8583		8480		8480		8480

Wind Direction Frequencies

10-Meter Level

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JANUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	12.9	3.2	00.0	3.2	00.0	00.0	3.2	3.2	12.9	12.9	3.2	6.5	3.2	6.5	9.7	19.4	00.0	100.
2	12.9	00.0	3.2	00.0	00.0	00.0	3.2	3.2	12.9	12.9	12.9	3.2	00.0	6.5	9.7	19.4	00.0	100.
3	9.7	6.5	00.0	00.0	00.0	00.0	00.0	12.9	12.9	9.7	9.7	00.0	3.2	6.5	9.7	19.4	00.0	100.
4	16.1	3.2	00.0	00.0	00.0	00.0	00.0	16.1	16.1	9.7	6.5	3.2	00.0	3.2	9.7	16.1	00.0	100.
5	13.3	6.7	00.0	00.0	00.0	00.0	6.7	3.3	13.3	13.3	3.3	3.3	3.3	3.3	13.3	16.7	00.0	100.
6	6.7	3.3	00.0	00.0	3.3	00.0	6.7	6.7	13.3	6.7	3.3	13.3	00.0	10.0	6.7	20.0	00.0	100.
7	10.0	00.0	00.0	00.0	00.0	00.0	00.0	13.3	13.3	6.7	6.7	6.7	3.3	3.3	13.3	23.3	00.0	100.
8	12.9	00.0	00.0	00.0	00.0	00.0	00.0	12.9	19.4	6.5	6.5	6.5	00.0	9.7	9.7	16.1	00.0	100.
9	16.1	3.2	00.0	00.0	00.0	00.0	00.0	19.4	12.9	9.7	3.2	6.5	00.0	9.7	12.9	6.5	00.0	100.
10	12.9	3.2	00.0	00.0	00.0	00.0	00.0	00.0	22.6	9.7	9.7	3.2	6.5	00.0	16.1	16.1	00.0	100.
11	9.7	3.2	3.2	00.0	00.0	00.0	3.2	00.0	6.5	12.9	16.1	6.5	3.2	00.0	19.4	16.1	00.0	100.
12	12.9	3.2	00.0	3.2	00.0	00.0	00.0	3.2	9.7	12.9	9.7	9.7	3.2	3.2	9.7	19.4	00.0	100.
13	6.5	3.2	00.0	00.0	3.2	00.0	00.0	00.0	9.7	16.1	9.7	9.7	3.2	3.2	16.1	19.4	00.0	100.
14	9.7	3.2	00.0	00.0	00.0	3.2	00.0	00.0	3.2	19.4	6.5	16.1	00.0	6.5	12.9	19.4	00.0	100.
15	12.9	00.0	00.0	00.0	3.2	00.0	00.0	00.0	00.0	22.6	9.7	9.7	3.2	6.5	16.1	16.1	00.0	100.
16	9.7	00.0	00.0	3.2	00.0	3.2	00.0	00.0	3.2	16.1	16.1	6.5	3.2	6.5	12.9	19.4	00.0	100.
17	6.5	00.0	00.0	00.0	3.2	00.0	3.2	00.0	6.5	9.7	19.4	6.5	3.2	6.5	16.1	19.4	00.0	100.
18	6.5	00.0	00.0	3.2	00.0	3.2	00.0	3.2	12.9	9.7	6.5	12.9	3.2	6.5	19.4	12.9	00.0	100.
19	6.5	00.0	00.0	3.2	00.0	00.0	3.2	00.0	16.1	12.9	00.0	9.7	9.7	6.5	9.7	22.6	00.0	100.
20	6.5	3.2	00.0	3.2	00.0	3.2	00.0	3.2	19.4	3.2	6.5	9.7	6.5	12.9	3.2	19.4	00.0	100.
21	12.9	3.2	00.0	6.5	00.0	00.0	00.0	3.2	19.4	6.5	6.5	3.2	12.9	00.0	12.9	12.9	00.0	100.
22	6.5	00.0	00.0	6.5	00.0	00.0	3.2	3.2	12.9	16.1	6.5	3.2	3.2	12.9	9.7	16.1	00.0	100.
23	9.7	3.2	00.0	9.7	00.0	00.0	00.0	6.5	9.7	16.1	3.2	3.2	6.5	3.2	12.9	16.1	00.0	100.
24	9.7	00.0	6.5	00.0	00.0	00.0	6.5	9.7	9.7	16.1	00.0	3.2	3.2	12.9	6.5	16.1	00.0	100.
ALL	10.4	2.2	.5	1.8	.5	.5	1.6	5.1	12.0	12.0	7.6	6.7	3.5	6.1	12.0	17.4	00.0	100.

NUMBER OF OBS = 741

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

FEBRUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.1	00.0	00.0	00.0	00.0	00.0	00.0	10.7	17.9	14.3	3.6	3.6	3.6	7.1	21.4	10.7	00.0	100.
2	3.6	00.0	00.0	00.0	00.0	00.0	00.0	21.4	10.7	10.7	00.0	7.1	00.0	21.4	10.7	14.3	00.0	100.
3	3.6	00.0	00.0	00.0	00.0	00.0	00.0	17.9	17.9	7.1	3.6	00.0	10.7	17.9	10.7	10.7	00.0	100.
4	3.6	00.0	00.0	00.0	7.1	3.6	7.1	10.7	14.3	3.6	3.6	00.0	7.1	17.9	14.3	7.1	00.0	100.
5	3.6	00.0	00.0	00.0	00.0	00.0	7.1	10.7	14.3	17.9	00.0	00.0	00.0	17.9	14.3	14.3	00.0	100.
6	3.6	00.0	00.0	00.0	00.0	3.6	00.0	17.9	17.9	7.1	3.6	3.6	00.0	14.3	21.4	7.1	00.0	100.
7	00.0	7.1	00.0	00.0	00.0	00.0	7.1	17.9	17.9	3.6	10.7	3.6	00.0	14.3	7.1	10.7	00.0	100.
8	00.0	00.0	00.0	00.0	00.0	00.0	7.1	28.6	10.7	10.7	3.6	00.0	7.1	3.6	21.4	7.1	00.0	100.
9	00.0	00.0	00.0	00.0	00.0	10.7	3.6	7.1	25.0	10.7	7.1	3.6	00.0	14.3	10.7	7.1	00.0	100.
10	00.0	00.0	00.0	00.0	3.6	3.6	7.1	7.1	21.4	10.7	10.7	00.0	3.6	00.0	21.4	10.7	00.0	100.
11	00.0	00.0	00.0	00.0	00.0	7.1	3.6	7.1	14.3	25.0	7.1	00.0	3.6	3.6	17.9	10.7	00.0	100.
12	00.0	3.6	00.0	00.0	00.0	3.6	00.0	7.1	3.6	28.6	10.7	3.6	7.1	10.7	7.1	14.3	00.0	100.
13	00.0	00.0	3.6	00.0	00.0	00.0	3.6	3.6	10.7	25.0	3.6	3.6	3.6	14.3	17.9	10.7	00.0	100.
14	00.0	3.6	00.0	00.0	00.0	00.0	3.6	3.6	14.3	17.9	7.1	7.1	3.6	3.6	21.4	14.3	00.0	100.
15	3.6	00.0	00.0	00.0	00.0	00.0	7.1	7.1	10.7	14.3	7.1	7.1	3.6	3.6	17.9	17.9	00.0	100.
16	3.6	00.0	00.0	00.0	00.0	00.0	7.1	10.7	7.1	10.7	14.3	7.1	3.6	00.0	21.4	14.3	00.0	100.
17	3.6	00.0	00.0	00.0	00.0	7.1	3.6	7.1	10.7	10.7	7.1	10.7	00.0	3.6	17.9	17.9	00.0	100.
18	00.0	00.0	00.0	00.0	00.0	00.0	7.1	10.7	14.3	7.1	7.1	7.1	3.6	00.0	17.9	25.0	00.0	100.
19	00.0	3.6	00.0	00.0	00.0	00.0	00.0	17.9	14.3	7.1	3.6	7.1	7.1	00.0	17.9	21.4	00.0	100.
20	00.0	3.6	00.0	00.0	00.0	00.0	00.0	14.3	17.9	00.0	10.7	7.1	7.1	3.6	14.3	21.4	00.0	100.
21	00.0	00.0	00.0	00.0	00.0	00.0	00.0	17.9	14.3	00.0	7.1	3.6	14.3	3.6	17.9	21.4	00.0	100.
22	00.0	3.6	00.0	3.6	00.0	00.0	00.0	7.1	17.9	10.7	7.1	7.1	7.1	3.6	10.7	21.4	00.0	100.
23	00.0	00.0	3.6	00.0	00.0	3.6	3.6	10.7	10.7	14.3	00.0	7.1	7.1	3.6	14.3	21.4	00.0	100.
24	7.1	00.0	00.0	00.0	3.6	00.0	00.0	7.1	17.9	14.3	7.1	3.6	3.6	10.7	14.3	10.7	00.0	100.
ALL	1.8	1.0	.3	.1	.6	1.8	3.3	11.8	14.4	11.8	6.1	4.3	4.5	8.0	15.9	14.3	00.0	100.

NUMBER OF OBS = 672

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MARCH

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.7	9.7	6.5	3.2	6.5	6.5	3.2	3.2	16.1	6.5	00.0	00.0	3.2	9.7	6.5	9.7	00.0	100.
2	6.5	9.7	12.9	6.5	00.0	6.5	3.2	3.2	12.9	9.7	00.0	00.0	3.2	3.2	6.5	16.1	00.0	100.
3	16.1	00.0	12.9	3.2	3.2	3.2	3.2	3.2	6.5	12.9	6.5	00.0	00.0	6.5	6.5	16.1	00.0	100.
4	16.1	9.7	3.2	9.7	00.0	3.2	00.0	9.7	3.2	9.7	6.5	00.0	9.7	3.2	6.5	9.7	00.0	100.
5	9.7	12.9	00.0	6.5	00.0	00.0	00.0	12.9	6.5	3.2	3.2	9.7	00.0	9.7	00.0	25.8	00.0	100.
6	16.1	6.5	9.7	3.2	3.2	00.0	6.5	3.2	9.7	00.0	00.0	6.5	00.0	9.7	9.7	16.1	00.0	100.
7	19.4	6.5	9.7	3.2	3.2	00.0	3.2	6.5	9.7	3.2	3.2	3.2	3.2	3.2	9.7	12.9	00.0	100.
8	12.9	16.1	3.2	6.5	3.2	00.0	3.2	9.7	9.7	3.2	00.0	00.0	3.2	6.5	9.7	12.9	00.0	100.
9	19.4	9.7	3.2	3.2	9.7	3.2	00.0	9.7	9.7	3.2	6.5	00.0	3.2	3.2	9.7	6.5	00.0	100.
10	12.9	6.5	9.7	00.0	6.5	9.7	00.0	00.0	6.5	3.2	16.1	3.2	3.2	6.5	3.2	12.9	00.0	100.
11	6.5	6.5	6.5	3.2	00.0	12.9	3.2	3.2	6.5	6.5	9.7	3.2	3.2	00.0	12.9	16.1	00.0	100.
12	9.7	3.2	6.5	3.2	00.0	9.7	3.2	00.0	6.5	9.7	9.7	3.2	6.5	00.0	12.9	16.1	00.0	100.
13	3.2	6.5	6.5	3.2	00.0	6.5	6.5	00.0	00.0	12.9	3.2	6.5	3.2	3.2	9.7	29.0	00.0	100.
14	9.7	9.7	6.5	3.2	3.2	3.2	6.5	3.2	3.2	3.2	6.5	6.5	3.2	3.2	12.9	16.1	00.0	100.
15	12.9	9.7	9.7	00.0	3.2	00.0	9.7	6.5	00.0	3.2	6.5	6.5	3.2	3.2	12.9	12.9	00.0	100.
16	19.4	6.5	6.5	00.0	00.0	3.2	12.9	3.2	3.2	6.5	3.2	3.2	6.5	3.2	12.9	9.7	00.0	100.
17	22.6	6.5	3.2	00.0	00.0	3.2	9.7	9.7	00.0	9.7	3.2	00.0	6.5	3.2	12.9	9.7	00.0	100.
18	16.1	6.5	3.2	00.0	3.2	3.2	6.5	6.5	3.2	6.5	6.5	00.0	6.5	6.5	9.7	16.1	00.0	100.
19	9.7	12.9	3.2	00.0	00.0	6.5	6.5	6.5	6.5	9.7	00.0	00.0	3.2	6.5	9.7	19.4	00.0	100.
20	16.1	12.9	3.2	00.0	3.2	6.5	6.5	6.5	00.0	3.2	3.2	3.2	9.7	3.2	9.7	12.9	00.0	100.
21	12.9	9.7	3.2	00.0	00.0	9.7	6.5	3.2	3.2	3.2	6.5	6.5	3.2	6.5	6.5	19.4	00.0	100.
22	16.1	6.5	6.5	3.2	00.0	6.5	9.7	3.2	9.7	3.2	3.2	3.2	3.2	6.5	3.2	16.1	00.0	100.
23	9.7	9.7	6.5	00.0	00.0	6.5	3.2	16.1	6.5	9.7	3.2	3.2	00.0	3.2	6.5	16.1	00.0	100.
24	6.5	9.7	9.7	00.0	3.2	3.2	9.7	00.0	9.7	12.9	3.2	00.0	3.2	3.2	16.1	9.7	00.0	100.
ALL	12.9	8.5	6.3	2.6	2.2	4.7	5.1	5.4	6.2	6.5	4.6	2.8	3.8	4.7	9.0	14.9	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-MAR

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	10.0	4.4	2.2	2.2	2.2	2.2	2.2	5.6	15.6	11.1	2.2	3.3	3.3	7.8	12.2	13.3	00.0	100.
2	7.8	3.3	5.6	2.2	00.0	2.2	2.2	8.9	12.2	11.1	4.4	3.3	1.1	10.0	8.9	16.7	00.0	100.
3	10.0	2.2	4.4	1.1	1.1	1.1	1.1	11.1	12.2	10.0	6.7	00.0	4.4	10.0	8.9	15.6	00.0	100.
4	12.2	4.4	1.1	3.3	2.2	2.2	2.2	12.2	11.1	7.8	5.6	1.1	5.6	7.8	10.0	11.1	00.0	100.
5	9.0	6.7	00.0	2.2	00.0	00.0	4.5	9.0	11.2	11.2	2.2	4.5	1.1	10.1	9.0	19.1	00.0	100.
6	9.0	3.4	3.4	1.1	2.2	1.1	4.5	9.0	13.5	4.5	2.2	7.9	00.0	11.2	12.4	14.6	00.0	100.
7	10.1	4.5	3.4	1.1	1.1	00.0	3.4	12.4	13.5	4.5	6.7	4.5	2.2	6.7	10.1	15.7	00.0	100.
8	8.9	5.6	1.1	2.2	1.1	00.0	3.3	16.7	13.3	6.7	3.3	2.2	3.3	6.7	13.3	12.2	00.0	100.
9	12.2	4.4	1.1	1.1	3.3	4.4	1.1	12.2	15.6	7.8	5.6	3.3	1.1	8.9	11.1	6.7	00.0	100.
10	8.9	3.3	3.3	00.0	3.3	4.4	2.2	2.2	16.7	7.8	12.2	2.2	4.4	2.2	13.3	13.3	00.0	100.
11	5.6	3.3	3.3	1.1	00.0	6.7	3.3	3.3	8.9	14.4	11.1	3.3	3.3	1.1	16.7	14.4	00.0	100.
12	7.8	3.3	2.2	2.2	00.0	4.4	1.1	3.3	6.7	16.7	10.0	5.6	5.6	4.4	10.0	16.7	00.0	100.
13	3.3	3.3	3.3	1.1	1.1	2.2	3.3	1.1	6.7	17.8	5.6	6.7	3.3	6.7	14.4	20.0	00.0	100.
14	6.7	5.6	2.2	1.1	1.1	2.2	3.3	2.2	6.7	13.3	6.7	10.0	2.2	4.4	15.6	16.7	00.0	100.
15	10.0	3.3	3.3	00.0	2.2	00.0	5.6	4.4	3.3	13.3	7.8	7.8	3.3	4.4	15.6	15.6	00.0	100.
16	11.1	2.2	2.2	1.1	00.0	2.2	6.7	4.4	4.4	11.1	11.1	5.6	4.4	3.3	15.6	14.4	00.0	100.
17	11.1	2.2	1.1	00.0	1.1	3.3	5.6	5.6	5.6	10.0	10.0	5.6	3.3	4.4	15.6	15.6	00.0	100.
18	7.8	2.2	1.1	1.1	1.1	2.2	4.4	6.7	10.0	7.8	6.7	6.7	4.4	4.4	15.6	17.8	00.0	100.
19	5.6	5.6	1.1	1.1	00.0	2.2	3.3	7.8	12.2	10.0	1.1	5.6	6.7	4.4	12.2	21.1	00.0	100.
20	7.8	6.7	1.1	1.1	1.1	3.3	2.2	7.8	12.2	2.2	6.7	6.7	7.8	6.7	8.9	17.8	00.0	100.
21	8.9	4.4	1.1	2.2	00.0	3.3	2.2	7.8	12.2	3.3	6.7	4.4	10.0	3.3	12.2	17.8	00.0	100.
22	7.8	3.3	2.2	4.4	00.0	2.2	4.4	4.4	13.3	10.0	5.6	4.4	4.4	7.8	7.8	17.8	00.0	100.
23	6.7	4.4	3.3	3.3	00.0	3.3	2.2	11.1	8.9	13.3	2.2	4.4	4.4	3.3	11.1	17.8	00.0	100.
24	7.8	3.3	5.6	00.0	2.2	1.1	5.6	5.6	12.2	14.4	3.3	2.2	3.3	8.9	12.2	12.2	00.0	100.
ALL	8.6	4.0	2.5	1.5	1.1	2.4	3.3	7.3	10.8	10.0	6.1	4.6	3.9	6.2	12.2	15.6	00.0	100.

NUMBER OF OBS = 2157

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APRIL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	17.2	00.0	6.9	00.0	3.4	3.4	6.9	17.2	20.7	6.9	00.0	3.4	00.0	6.9	3.4	3.4	00.0	100.
2	20.7	00.0	10.3	00.0	3.4	00.0	6.9	3.4	31.0	10.3	3.4	3.4	00.0	00.0	3.4	3.4	00.0	100.
3	17.2	6.9	00.0	3.4	00.0	6.9	10.3	13.8	20.7	3.4	00.0	3.4	3.4	00.0	3.4	6.9	00.0	100.
4	10.3	6.9	00.0	3.4	00.0	17.2	00.0	13.8	17.2	10.3	00.0	3.4	00.0	00.0	3.4	13.8	00.0	100.
5	17.2	3.4	3.4	00.0	3.4	10.3	3.4	6.9	27.6	3.4	00.0	3.4	3.4	00.0	3.4	10.3	00.0	100.
6	20.7	3.4	3.4	00.0	00.0	6.9	10.3	17.2	13.8	3.4	00.0	00.0	3.4	00.0	10.3	6.9	00.0	100.
7	17.2	6.9	00.0	00.0	00.0	00.0	17.2	10.3	17.2	3.4	00.0	00.0	00.0	3.4	10.3	13.8	00.0	100.
8	10.3	10.3	00.0	00.0	00.0	3.4	17.2	6.9	20.7	00.0	3.4	00.0	00.0	00.0	6.9	20.7	00.0	100.
9	17.2	3.4	3.4	00.0	3.4	3.4	10.3	6.9	20.7	3.4	3.4	00.0	00.0	00.0	00.0	24.1	00.0	100.
10	11.1	3.7	3.7	3.7	3.7	7.4	7.4	3.7	22.2	7.4	3.7	00.0	00.0	3.7	11.1	7.4	00.0	100.
11	10.7	3.6	3.6	3.6	3.6	00.0	7.1	10.7	14.3	14.3	3.6	00.0	3.6	3.6	7.1	10.7	00.0	100.
12	10.7	00.0	7.1	3.6	3.6	00.0	3.6	17.9	10.7	3.6	14.3	00.0	3.6	3.6	7.1	10.7	00.0	100.
13	3.6	3.6	3.6	00.0	3.6	3.6	3.6	17.9	14.3	3.6	14.3	00.0	3.6	7.1	3.6	14.3	00.0	100.
14	7.4	00.0	7.4	00.0	3.7	00.0	7.4	18.5	18.5	00.0	7.4	7.4	3.7	11.1	00.0	7.4	00.0	100.
15	7.1	3.6	00.0	7.1	00.0	00.0	3.6	17.9	21.4	3.6	7.1	7.1	00.0	10.7	00.0	10.7	00.0	100.
16	7.1	00.0	3.6	3.6	00.0	3.6	3.6	10.7	25.0	3.6	3.6	7.1	3.6	10.7	7.1	7.1	00.0	100.
17	00.0	6.9	00.0	3.4	3.4	3.4	00.0	13.8	24.1	3.4	3.4	6.9	6.9	6.9	00.0	17.2	00.0	100.
18	3.4	3.4	00.0	00.0	6.9	00.0	3.4	17.2	20.7	3.4	00.0	3.4	10.3	6.9	00.0	20.7	00.0	100.
19	3.4	00.0	3.4	3.4	3.4	00.0	6.9	20.7	17.2	00.0	00.0	00.0	3.4	6.9	6.9	24.1	00.0	100.
20	10.3	00.0	6.9	3.4	3.4	00.0	10.3	20.7	13.8	3.4	00.0	00.0	3.4	00.0	10.3	13.8	00.0	100.
21	6.9	6.9	3.4	00.0	3.4	00.0	17.2	13.8	20.7	00.0	00.0	00.0	3.4	3.4	3.4	17.2	00.0	100.
22	6.9	00.0	10.3	3.4	00.0	00.0	3.4	20.7	24.1	3.4	00.0	00.0	3.4	6.9	00.0	17.2	00.0	100.
23	6.9	6.9	3.4	6.9	3.4	00.0	3.4	13.8	27.6	6.9	3.4	00.0	00.0	6.9	3.4	6.9	00.0	100.
24	17.2	6.9	3.4	00.0	3.4	00.0	6.9	6.9	24.1	3.4	00.0	6.9	3.4	6.9	3.4	6.9	00.0	100.
ALL	10.9	3.6	3.6	2.0	2.5	2.9	7.1	13.4	20.4	4.4	2.9	2.3	2.6	4.4	4.5	12.4	00.0	100.

NUMBER OF OBS = 687

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MAY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.2	00.0	9.7	3.2	00.0	9.7	6.5	3.2	12.9	9.7	3.2	00.0	9.7	00.0	00.0	29.0	00.0	100.
2	12.9	00.0	3.2	00.0	6.5	3.2	9.7	6.5	16.1	6.5	6.5	00.0	00.0	3.2	00.0	25.8	00.0	100.
3	9.7	3.2	3.2	00.0	3.2	12.9	3.2	6.5	19.4	6.5	00.0	00.0	3.2	3.2	12.9	12.9	00.0	100.
4	16.1	12.9	6.5	00.0	00.0	00.0	6.5	12.9	12.9	00.0	9.7	00.0	00.0	3.2	16.1	3.2	00.0	100.
5	12.9	12.9	9.7	00.0	00.0	3.2	6.5	6.5	12.9	3.2	3.2	3.2	00.0	6.5	9.7	9.7	00.0	100.
6	9.7	9.7	00.0	00.0	3.2	6.5	6.5	6.5	16.1	3.2	6.5	3.2	00.0	9.7	9.7	9.7	00.0	100.
7	3.2	9.7	3.2	3.2	3.2	3.2	6.5	19.4	16.1	00.0	3.2	3.2	3.2	3.2	6.5	12.9	00.0	100.
8	6.5	16.1	3.2	00.0	00.0	12.9	9.7	6.5	9.7	12.9	00.0	00.0	6.5	3.2	6.5	6.5	00.0	100.
9	6.5	9.7	9.7	3.2	00.0	6.5	9.7	12.9	12.9	3.2	3.2	3.2	3.2	3.2	6.5	6.5	00.0	100.
10	6.5	9.7	6.5	6.5	00.0	6.5	3.2	16.1	19.4	00.0	6.5	00.0	00.0	9.7	6.5	3.2	00.0	100.
11	16.1	3.2	6.5	00.0	3.2	3.2	12.9	6.5	19.4	6.5	00.0	3.2	3.2	3.2	9.7	3.2	00.0	100.
12	9.7	00.0	6.5	00.0	3.2	3.2	9.7	9.7	16.1	3.2	3.2	6.5	3.2	6.5	9.7	9.7	00.0	100.
13	16.1	00.0	6.5	00.0	00.0	6.5	9.7	3.2	22.6	3.2	9.7	00.0	3.2	6.5	6.5	6.5	00.0	100.
14	16.1	00.0	6.5	00.0	00.0	00.0	9.7	6.5	19.4	12.9	6.5	6.5	00.0	6.5	3.2	6.5	00.0	100.
15	9.7	6.5	3.2	00.0	00.0	3.2	3.2	9.7	19.4	16.1	3.2	6.5	00.0	6.5	3.2	9.7	00.0	100.
16	9.7	3.2	3.2	00.0	00.0	3.2	3.2	6.5	22.6	9.7	3.2	6.5	6.5	3.2	9.7	9.7	00.0	100.
17	12.9	3.2	3.2	00.0	00.0	3.2	12.9	6.5	16.1	6.5	6.5	6.5	00.0	3.2	9.7	9.7	00.0	100.
18	12.9	6.5	00.0	3.2	00.0	3.2	6.5	12.9	12.9	6.5	3.2	6.5	00.0	6.5	6.5	12.9	00.0	100.
19	9.7	9.7	00.0	3.2	00.0	3.2	12.9	9.7	16.1	3.2	00.0	6.5	00.0	6.5	6.5	12.9	00.0	100.
20	9.7	3.2	00.0	3.2	3.2	3.2	12.9	6.5	16.1	9.7	3.2	00.0	00.0	6.5	00.0	22.6	00.0	100.
21	16.1	3.2	00.0	00.0	3.2	3.2	9.7	12.9	19.4	00.0	3.2	00.0	00.0	3.2	00.0	25.8	00.0	100.
22	12.9	00.0	3.2	00.0	3.2	6.5	6.5	9.7	16.1	3.2	9.7	6.5	00.0	00.0	3.2	19.4	00.0	100.
23	9.7	3.2	00.0	00.0	00.0	3.2	9.7	9.7	16.1	12.9	3.2	00.0	00.0	9.7	3.2	19.4	00.0	100.
24	12.9	3.2	00.0	00.0	00.0	9.7	6.5	6.5	22.6	9.7	00.0	00.0	3.2	00.0	00.0	25.8	00.0	100.
ALL	10.9	5.4	3.9	1.1	1.3	5.0	8.1	8.9	16.8	6.2	4.0	2.8	1.9	4.7	6.0	13.0	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUNE

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.7	00.0	00.0	00.0	00.0	00.0	3.3	20.0	36.7	6.7	00.0	00.0	6.7	00.0	13.3	6.7	00.0	100.
2	6.7	3.3	00.0	00.0	00.0	00.0	10.0	13.3	33.3	13.3	6.7	00.0	3.3	3.3	00.0	6.7	00.0	100.
3	00.0	00.0	00.0	6.7	00.0	3.3	6.7	20.0	26.7	6.7	6.7	00.0	00.0	6.7	6.7	10.0	00.0	100.
4	6.7	00.0	00.0	00.0	00.0	3.3	10.0	16.7	33.3	3.3	3.3	3.3	00.0	6.7	10.0	3.3	00.0	100.
5	3.3	00.0	00.0	00.0	00.0	3.3	6.7	26.7	26.7	6.7	3.3	3.3	3.3	3.3	10.0	3.3	00.0	100.
6	6.7	00.0	00.0	00.0	3.3	3.3	3.3	30.0	26.7	10.0	3.3	00.0	00.0	3.3	00.0	10.0	00.0	100.
7	3.3	00.0	00.0	3.3	00.0	3.3	13.3	26.7	26.7	6.7	3.3	3.3	00.0	3.3	00.0	6.7	00.0	100.
8	3.3	00.0	00.0	00.0	3.3	3.3	6.7	23.3	26.7	16.7	3.3	3.3	00.0	00.0	6.7	3.3	00.0	100.
9	00.0	00.0	00.0	00.0	00.0	00.0	13.3	10.0	33.3	20.0	6.7	3.3	00.0	00.0	6.7	6.7	00.0	100.
10	00.0	00.0	00.0	00.0	00.0	3.3	6.7	13.3	23.3	26.7	6.7	3.3	00.0	00.0	13.3	3.3	00.0	100.
11	3.3	00.0	3.3	00.0	3.3	00.0	3.3	6.7	33.3	23.3	6.7	3.3	00.0	3.3	00.0	10.0	00.0	100.
12	00.0	00.0	00.0	00.0	3.3	3.3	3.3	10.0	33.3	16.7	10.0	3.3	00.0	00.0	10.0	6.7	00.0	100.
13	00.0	3.3	00.0	00.0	00.0	00.0	3.3	13.3	46.7	3.3	6.7	6.7	00.0	00.0	6.7	10.0	00.0	100.
14	3.3	00.0	00.0	3.3	00.0	00.0	3.3	23.3	33.3	3.3	6.7	6.7	00.0	00.0	00.0	16.7	00.0	100.
15	6.7	6.7	00.0	00.0	00.0	00.0	6.7	16.7	36.7	6.7	3.3	3.3	00.0	00.0	10.0	3.3	00.0	100.
16	10.0	00.0	6.7	00.0	00.0	00.0	6.7	20.0	36.7	3.3	3.3	00.0	00.0	3.3	3.3	6.7	00.0	100.
17	6.7	3.3	3.3	00.0	00.0	3.3	3.3	23.3	33.3	00.0	3.3	3.3	00.0	00.0	6.7	10.0	00.0	100.
18	3.3	3.3	6.7	00.0	3.3	00.0	6.7	26.7	30.0	3.3	00.0	3.3	00.0	00.0	3.3	10.0	00.0	100.
19	00.0	13.3	00.0	3.3	00.0	00.0	3.3	33.3	30.0	00.0	00.0	00.0	3.3	00.0	6.7	6.7	00.0	100.
20	00.0	00.0	10.0	00.0	00.0	3.3	3.3	36.7	20.0	3.3	3.3	3.3	00.0	00.0	6.7	10.0	00.0	100.
21	3.3	00.0	3.3	00.0	00.0	3.3	10.0	36.7	20.0	00.0	6.7	00.0	00.0	3.3	6.7	6.7	00.0	100.
22	6.7	00.0	00.0	00.0	00.0	00.0	10.0	16.7	33.3	6.7	3.3	00.0	00.0	3.3	6.7	13.3	00.0	100.
23	00.0	00.0	00.0	00.0	00.0	3.3	6.7	16.7	36.7	10.0	00.0	3.3	00.0	6.7	3.3	13.3	00.0	100.
24	00.0	00.0	00.0	00.0	00.0	3.3	3.3	16.7	40.0	6.7	3.3	00.0	00.0	6.7	00.0	20.0	00.0	100.
ALL	3.3	1.4	1.4	.7	.7	1.8	6.4	20.7	31.5	8.5	4.2	2.4	.7	2.2	5.7	8.5	00.0	100.

NUMBER OF OBS = 720

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APR-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.9	00.0	5.6	1.1	1.1	4.4	5.6	13.3	23.3	7.8	1.1	1.1	5.6	2.2	5.6	13.3	00.0	100.
2	13.3	1.1	4.4	00.0	3.3	1.1	8.9	7.8	26.7	10.0	5.6	1.1	1.1	2.2	1.1	12.2	00.0	100.
3	8.9	3.3	1.1	3.3	1.1	7.8	6.7	13.3	22.2	5.6	2.2	1.1	2.2	3.3	7.8	10.0	00.0	100.
4	11.1	6.7	2.2	1.1	00.0	6.7	5.6	14.4	21.1	4.4	4.4	2.2	00.0	3.3	10.0	6.7	00.0	100.
5	11.1	5.6	4.4	00.0	1.1	5.6	5.6	13.3	22.2	4.4	2.2	3.3	2.2	3.3	7.8	7.8	00.0	100.
6	12.2	4.4	1.1	00.0	2.2	5.6	6.7	17.8	18.9	5.6	3.3	1.1	1.1	4.4	6.7	8.9	00.0	100.
7	7.8	5.6	1.1	2.2	1.1	2.2	12.2	18.9	20.0	3.3	2.2	2.2	1.1	3.3	5.6	11.1	00.0	100.
8	6.7	8.9	1.1	00.0	1.1	6.7	11.1	12.2	18.9	10.0	2.2	1.1	2.2	1.1	6.7	10.0	00.0	100.
9	7.8	4.4	4.4	1.1	1.1	3.3	11.1	10.0	22.2	8.9	4.4	2.2	1.1	1.1	4.4	12.2	00.0	100.
10	5.7	4.5	3.4	3.4	1.1	5.7	5.7	11.4	21.6	11.4	5.7	1.1	00.0	4.5	10.2	4.5	00.0	100.
11	10.1	2.2	4.5	1.1	3.4	1.1	7.9	7.9	22.5	14.6	3.4	2.2	2.2	3.4	5.6	7.9	00.0	100.
12	6.7	00.0	4.5	1.1	3.4	2.2	5.6	12.4	20.2	7.9	9.0	3.4	2.2	3.4	9.0	9.0	00.0	100.
13	6.7	2.2	3.4	00.0	1.1	3.4	5.6	11.2	28.1	3.4	10.1	2.2	2.2	4.5	5.6	10.1	00.0	100.
14	9.1	00.0	4.5	1.1	1.1	00.0	6.8	15.9	23.9	5.7	6.8	6.8	1.1	5.7	1.1	10.2	00.0	100.
15	7.9	5.6	1.1	2.2	00.0	1.1	4.5	14.6	25.8	9.0	4.5	5.6	00.0	5.6	4.5	7.9	00.0	100.
16	9.0	1.1	4.5	1.1	00.0	2.2	4.5	12.4	28.1	5.6	3.4	4.5	3.4	5.6	6.7	7.9	00.0	100.
17	6.7	4.4	2.2	1.1	1.1	3.3	5.6	14.4	24.4	3.3	4.4	5.6	2.2	3.3	5.6	12.2	00.0	100.
18	6.7	4.4	2.2	1.1	3.3	1.1	5.6	18.9	21.1	4.4	1.1	4.4	3.3	4.4	3.3	14.4	00.0	100.
19	4.4	7.8	1.1	3.3	1.1	1.1	7.8	21.1	21.1	1.1	00.0	2.2	2.2	4.4	6.7	14.4	00.0	100.
20	6.7	1.1	5.6	2.2	2.2	2.2	8.9	21.1	16.7	5.6	2.2	1.1	1.1	2.2	5.6	15.6	00.0	100.
21	8.9	3.3	2.2	00.0	2.2	2.2	12.2	21.1	20.0	00.0	3.3	00.0	1.1	3.3	3.3	16.7	00.0	100.
22	8.9	00.0	4.4	1.1	1.1	2.2	6.7	15.6	24.4	4.4	4.4	2.2	1.1	3.3	3.3	16.7	00.0	100.
23	5.6	3.3	1.1	2.2	1.1	2.2	6.7	13.3	26.7	10.0	2.2	1.1	00.0	7.8	3.3	13.3	00.0	100.
24	10.0	3.3	1.1	00.0	1.1	4.4	5.6	10.0	28.9	6.7	1.1	2.2	2.2	4.4	1.1	17.8	00.0	100.
ALL	8.4	3.5	3.0	1.3	1.5	3.3	7.2	14.3	22.9	6.4	3.7	2.5	1.7	3.8	5.4	11.3	00.0	100.

NUMBER OF OBS = 2151

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.4	2.2	3.9	1.7	1.7	3.3	3.9	9.4	19.4	9.4	1.7	2.2	4.4	5.0	8.9	13.3	00.0	100.
2	10.6	2.2	5.0	1.1	1.7	1.7	5.6	8.3	19.4	10.6	5.0	2.2	1.1	6.1	5.0	14.4	00.0	100.
3	9.4	2.8	2.8	2.2	1.1	4.4	3.9	12.2	17.2	7.8	4.4	.6	3.3	6.7	8.3	12.8	00.0	100.
4	11.7	5.6	1.7	2.2	1.1	4.4	3.9	13.3	16.1	6.1	5.0	1.7	2.8	5.6	10.0	8.9	00.0	100.
5	10.1	6.1	2.2	1.1	.6	2.8	5.0	11.2	16.8	7.8	2.2	3.9	1.7	6.7	8.4	13.4	00.0	100.
6	10.6	3.9	2.2	.6	2.2	3.4	5.6	13.4	16.2	5.0	2.8	4.5	.6	7.8	9.5	11.7	00.0	100.
7	8.9	5.0	2.2	1.7	1.1	1.1	7.8	15.6	16.8	3.9	4.5	3.4	1.7	5.0	7.8	13.4	00.0	100.
8	7.8	7.2	1.1	1.1	1.1	3.3	7.2	14.4	16.1	8.3	2.8	1.7	2.8	3.9	10.0	11.1	00.0	100.
9	10.0	4.4	2.8	1.1	2.2	3.9	6.1	11.1	18.9	8.3	5.0	2.8	1.1	5.0	7.8	9.4	00.0	100.
10	7.3	3.9	3.4	1.7	2.2	5.1	3.9	6.7	19.1	9.6	9.0	1.7	2.2	3.4	11.8	9.0	00.0	100.
11	7.8	2.8	3.9	1.1	1.7	3.9	5.6	5.6	15.6	14.5	7.3	2.8	2.8	2.2	11.2	11.2	00.0	100.
12	7.3	1.7	3.4	1.7	1.7	3.4	3.4	7.8	13.4	12.3	9.5	4.5	3.9	3.9	9.5	12.8	00.0	100.
13	5.0	2.8	3.4	.6	1.1	2.8	4.5	6.1	17.3	10.6	7.8	4.5	2.8	5.6	10.1	15.1	00.0	100.
14	7.9	2.8	3.4	1.1	1.1	1.1	5.1	9.0	15.2	9.6	6.7	8.4	1.7	5.1	8.4	13.5	00.0	100.
15	8.9	4.5	2.2	1.1	1.1	.6	5.0	9.5	14.5	11.2	6.1	6.7	1.7	5.0	10.1	11.7	00.0	100.
16	10.1	1.7	3.4	1.1	00.0	2.2	5.6	8.4	16.2	8.4	7.3	5.0	3.9	4.5	11.2	11.2	00.0	100.
17	8.9	3.3	1.7	.6	1.1	3.3	5.6	10.0	15.0	6.7	7.2	5.6	2.8	3.9	10.6	13.9	00.0	100.
18	7.2	3.3	1.7	1.1	2.2	1.7	5.0	12.8	15.6	6.1	3.9	5.6	3.9	4.4	9.4	16.1	00.0	100.
19	5.0	6.7	1.1	2.2	.6	1.7	5.6	14.4	16.7	5.6	.6	3.9	4.4	4.4	9.4	17.8	00.0	100.
20	7.2	3.9	3.3	1.7	1.7	2.8	5.6	14.4	14.4	3.9	4.4	3.9	4.4	4.4	7.2	16.7	00.0	100.
21	8.9	3.9	1.7	1.1	1.1	2.8	7.2	14.4	16.1	1.7	5.0	2.2	5.6	3.3	7.8	17.2	00.0	100.
22	8.3	1.7	3.3	2.8	.6	2.2	5.6	10.0	18.9	7.2	5.0	3.3	2.8	5.6	5.6	17.2	00.0	100.
23	6.1	3.9	2.2	2.8	.6	2.8	4.4	12.2	17.8	11.7	2.2	2.8	2.2	5.6	7.2	15.6	00.0	100.
24	8.9	3.3	3.3	00.0	1.7	2.8	5.6	7.8	20.6	10.6	2.2	2.2	2.8	6.7	6.7	15.0	00.0	100.
ALL	8.5	3.7	2.7	1.4	1.3	2.8	5.3	10.8	16.8	8.2	4.9	3.6	2.8	5.0	8.8	13.4	00.0	100.

NUMBER OF OBS = 4308

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JULY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.5	6.5	3.2	00.0	00.0	00.0	6.5	9.7	35.5	12.9	6.5	00.0	00.0	3.2	3.2	6.5	00.0	100.
2	12.9	3.2	00.0	00.0	00.0	00.0	6.5	12.9	38.7	3.2	6.5	00.0	00.0	3.2	6.5	6.5	00.0	100.
3	9.7	6.5	00.0	00.0	00.0	6.5	00.0	9.7	35.5	12.9	9.7	00.0	00.0	00.0	00.0	9.7	00.0	100.
4	9.7	3.2	00.0	00.0	6.5	3.2	3.2	12.9	29.0	12.9	6.5	00.0	00.0	3.2	6.5	3.2	00.0	100.
5	9.7	00.0	3.2	00.0	6.5	00.0	00.0	16.1	29.0	16.1	00.0	3.2	00.0	3.2	6.5	6.5	00.0	100.
6	6.5	00.0	00.0	00.0	00.0	00.0	3.2	29.0	9.7	16.1	6.5	6.5	3.2	3.2	9.7	6.5	00.0	100.
7	9.7	3.2	00.0	3.2	00.0	00.0	6.5	22.6	16.1	16.1	00.0	9.7	3.2	00.0	6.5	3.2	00.0	100.
8	9.7	3.2	3.2	00.0	00.0	3.2	12.9	16.1	25.8	16.1	3.2	00.0	3.2	00.0	00.0	3.2	00.0	100.
9	3.2	6.5	6.5	00.0	00.0	00.0	3.2	12.9	35.5	19.4	6.5	00.0	00.0	3.2	00.0	3.2	00.0	100.
10	3.2	3.2	3.2	6.5	00.0	3.2	3.2	9.7	22.6	25.8	3.2	9.7	3.2	00.0	00.0	3.2	00.0	100.
11	00.0	6.5	00.0	3.2	3.2	3.2	6.5	9.7	29.0	25.8	3.2	3.2	00.0	00.0	00.0	6.5	00.0	100.
12	9.7	00.0	3.2	3.2	6.5	3.2	00.0	12.9	35.5	16.1	00.0	00.0	3.2	3.2	00.0	3.2	00.0	100.
13	6.5	3.2	3.2	3.2	00.0	6.5	9.7	16.1	29.0	9.7	00.0	6.5	00.0	00.0	00.0	6.5	00.0	100.
14	9.7	3.2	00.0	3.2	3.2	9.7	6.5	19.4	29.0	6.5	3.2	3.2	00.0	00.0	00.0	3.2	00.0	100.
15	3.2	6.5	3.2	3.2	3.2	00.0	19.4	19.4	29.0	3.2	6.5	00.0	00.0	00.0	3.2	00.0	00.0	100.
16	00.0	6.5	6.5	00.0	3.2	6.5	16.1	25.8	12.9	9.7	9.7	00.0	00.0	00.0	3.2	00.0	00.0	100.
17	00.0	3.2	6.5	00.0	6.5	6.5	29.0	25.8	6.5	9.7	00.0	3.2	00.0	00.0	3.2	00.0	00.0	100.
18	3.2	00.0	3.2	12.9	00.0	9.7	19.4	29.0	12.9	3.2	3.2	00.0	00.0	00.0	00.0	3.2	00.0	100.
19	3.2	3.2	6.5	00.0	6.5	12.9	22.6	22.6	12.9	3.2	3.2	00.0	00.0	00.0	00.0	3.2	00.0	100.
20	00.0	9.7	6.5	00.0	6.5	9.7	16.1	29.0	6.5	12.9	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
21	6.5	3.2	3.2	00.0	6.5	6.5	9.7	25.8	25.8	6.5	00.0	00.0	00.0	00.0	00.0	6.5	00.0	100.
22	3.2	6.5	3.2	00.0	3.2	6.5	6.5	12.9	32.3	12.9	3.2	3.2	00.0	3.2	00.0	3.2	00.0	100.
23	3.2	3.2	00.0	00.0	6.5	00.0	9.7	12.9	38.7	9.7	6.5	3.2	00.0	00.0	3.2	3.2	00.0	100.
24	9.7	3.2	00.0	00.0	00.0	3.2	3.2	9.7	32.3	16.1	3.2	00.0	6.5	3.2	3.2	6.5	00.0	100.
ALL	5.8	3.9	2.7	1.6	2.8	4.2	9.1	17.6	25.4	12.4	3.8	2.2	.9	1.2	2.3	4.2	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

AUGUST

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.7	12.9	3.2	00.0	3.2	12.9	12.9	6.5	16.1	3.2	6.5	00.0	00.0	00.0	6.5	6.5	00.0	100.
2	9.7	9.7	3.2	00.0	6.5	6.5	12.9	9.7	25.8	00.0	00.0	3.2	00.0	00.0	6.5	6.5	00.0	100.
3	12.9	00.0	9.7	00.0	00.0	16.1	9.7	9.7	19.4	3.2	6.5	00.0	3.2	3.2	00.0	6.5	00.0	100.
4	12.9	3.2	6.5	6.5	3.2	3.2	19.4	6.5	12.9	9.7	00.0	00.0	00.0	3.2	6.5	6.5	00.0	100.
5	12.9	6.5	9.7	3.2	6.5	6.5	12.9	12.9	12.9	3.2	3.2	3.2	3.2	00.0	00.0	3.2	00.0	100.
6	3.2	3.2	00.0	6.5	00.0	00.0	29.0	12.9	19.4	6.5	00.0	00.0	9.7	00.0	00.0	9.7	00.0	100.
7	00.0	6.5	3.2	3.2	00.0	9.7	25.8	9.7	22.6	3.2	6.5	00.0	00.0	00.0	6.5	3.2	00.0	100.
8	6.5	3.2	00.0	00.0	9.7	6.5	29.0	6.5	16.1	3.2	6.5	00.0	3.2	00.0	6.5	3.2	00.0	100.
9	3.2	9.7	6.5	00.0	9.7	3.2	29.0	12.9	9.7	3.2	6.5	00.0	00.0	00.0	3.2	3.2	00.0	100.
10	00.0	00.0	6.5	6.5	9.7	3.2	22.6	16.1	12.9	00.0	3.2	3.2	6.5	00.0	3.2	6.5	00.0	100.
11	6.5	6.5	00.0	6.5	6.5	9.7	16.1	16.1	12.9	00.0	6.5	00.0	3.2	3.2	00.0	6.5	00.0	100.
12	9.7	3.2	00.0	3.2	00.0	16.1	16.1	6.5	22.6	00.0	6.5	00.0	00.0	3.2	3.2	9.7	00.0	100.
13	3.2	3.2	3.2	00.0	6.5	9.7	16.1	16.1	19.4	6.5	00.0	00.0	3.2	00.0	3.2	9.7	00.0	100.
14	6.5	6.5	00.0	6.5	3.2	16.1	12.9	19.4	6.5	6.5	00.0	00.0	00.0	3.2	6.5	6.5	00.0	100.
15	6.5	3.2	3.2	00.0	9.7	6.5	22.6	9.7	16.1	3.2	00.0	00.0	00.0	9.7	00.0	9.7	00.0	100.
16	12.9	3.2	3.2	00.0	3.2	9.7	19.4	19.4	16.1	00.0	00.0	00.0	00.0	00.0	6.5	6.5	00.0	100.
17	16.1	00.0	3.2	3.2	3.2	9.7	25.8	19.4	12.9	00.0	00.0	00.0	00.0	00.0	00.0	6.5	00.0	100.
18	3.2	6.5	9.7	3.2	6.5	3.2	22.6	16.1	12.9	3.2	3.2	00.0	3.2	00.0	00.0	6.5	00.0	100.
19	9.7	9.7	00.0	6.5	3.2	12.9	29.0	6.5	6.5	3.2	3.2	3.2	3.2	00.0	00.0	3.2	00.0	100.
20	19.4	3.2	00.0	3.2	3.2	16.1	16.1	12.9	12.9	00.0	00.0	00.0	3.2	00.0	3.2	6.5	00.0	100.
21	12.9	6.5	00.0	3.2	00.0	9.7	19.4	3.2	25.8	3.2	00.0	00.0	00.0	00.0	3.2	12.9	00.0	100.
22	16.1	3.2	3.2	3.2	00.0	9.7	12.9	9.7	22.6	00.0	3.2	00.0	00.0	3.2	00.0	12.9	00.0	100.
23	19.4	3.2	3.2	3.2	9.7	3.2	16.1	12.9	22.6	3.2	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
24	16.1	3.2	00.0	00.0	3.2	12.9	12.9	9.7	16.1	00.0	3.2	00.0	6.5	6.5	00.0	9.7	00.0	100.
ALL	9.5	4.8	3.2	2.8	4.4	8.9	19.2	11.7	16.4	2.7	2.7	.5	2.0	1.5	2.7	6.9	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

SEPTEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.7	00.0	3.3	3.3	00.0	3.3	20.0	13.3	6.7	6.7	3.3	00.0	3.3	6.7	13.3	10.0	00.0	100.
2	6.7	00.0	00.0	3.3	3.3	6.7	13.3	20.0	3.3	6.7	3.3	13.3	00.0	3.3	6.7	10.0	00.0	100.
3	00.0	00.0	00.0	3.3	6.7	6.7	20.0	10.0	6.7	3.3	00.0	6.7	10.0	3.3	3.3	20.0	00.0	100.
4	6.7	00.0	00.0	00.0	10.0	3.3	16.7	10.0	10.0	3.3	3.3	6.7	3.3	3.3	10.0	13.3	00.0	100.
5	3.3	00.0	00.0	00.0	3.3	00.0	20.0	13.3	13.3	00.0	6.7	00.0	6.7	10.0	3.3	20.0	00.0	100.
6	3.3	00.0	3.3	00.0	00.0	00.0	6.7	23.3	13.3	6.7	6.7	00.0	3.3	3.3	10.0	20.0	00.0	100.
7	3.3	00.0	00.0	00.0	00.0	3.3	10.0	23.3	16.7	6.7	3.3	6.7	00.0	10.0	6.7	10.0	00.0	100.
8	3.3	00.0	00.0	00.0	00.0	3.3	20.0	16.7	13.3	6.7	6.7	6.7	3.3	00.0	3.3	16.7	00.0	100.
9	00.0	00.0	3.3	3.3	3.3	3.3	16.7	16.7	10.0	10.0	00.0	3.3	3.3	3.3	10.0	13.3	00.0	100.
10	3.3	00.0	3.3	00.0	3.3	3.3	16.7	13.3	16.7	6.7	3.3	3.3	00.0	00.0	13.3	13.3	00.0	100.
11	6.7	6.7	00.0	3.3	00.0	3.3	10.0	10.0	26.7	6.7	3.3	00.0	3.3	00.0	6.7	13.3	00.0	100.
12	3.3	6.7	00.0	3.3	00.0	6.7	16.7	00.0	26.7	13.3	00.0	00.0	00.0	3.3	00.0	20.0	00.0	100.
13	10.0	3.3	00.0	3.3	3.3	3.3	10.0	3.3	33.3	3.3	6.7	00.0	3.3	00.0	00.0	16.7	00.0	100.
14	6.7	3.3	3.3	00.0	00.0	3.3	10.0	16.7	23.3	3.3	3.3	00.0	6.7	00.0	00.0	20.0	00.0	100.
15	3.3	3.3	00.0	3.3	3.3	3.3	6.7	10.0	26.7	6.7	3.3	3.3	00.0	3.3	3.3	20.0	00.0	100.
16	10.0	3.3	00.0	6.7	3.3	00.0	10.0	6.7	26.7	3.3	3.3	3.3	00.0	00.0	6.7	16.7	00.0	100.
17	3.3	3.3	6.7	3.3	00.0	3.3	10.0	6.7	26.7	3.3	3.3	3.3	00.0	00.0	10.0	16.7	00.0	100.
18	10.0	00.0	3.3	6.7	3.3	3.3	10.0	6.7	20.0	3.3	10.0	00.0	3.3	00.0	6.7	13.3	00.0	100.
19	13.3	00.0	00.0	3.3	6.7	6.7	13.3	00.0	20.0	00.0	3.3	00.0	00.0	6.7	10.0	16.7	00.0	100.
20	13.3	00.0	3.3	00.0	3.3	6.7	10.0	10.0	20.0	6.7	00.0	3.3	00.0	6.7	3.3	13.3	00.0	100.
21	6.7	3.3	3.3	3.3	00.0	3.3	16.7	6.7	16.7	3.3	3.3	00.0	00.0	10.0	3.3	20.0	00.0	100.
22	10.0	00.0	00.0	3.3	00.0	3.3	13.3	6.7	13.3	13.3	00.0	00.0	00.0	6.7	00.0	30.0	00.0	100.
23	20.0	3.3	00.0	3.3	00.0	3.3	16.7	10.0	13.3	3.3	3.3	00.0	00.0	6.7	3.3	13.3	00.0	100.
24	6.7	3.3	00.0	3.3	00.0	00.0	20.0	6.7	20.0	00.0	6.7	00.0	00.0	3.3	16.7	10.0	3.3	100.
ALL	6.7	1.7	1.4	2.5	2.2	3.5	13.9	10.8	17.6	5.3	3.6	2.5	2.1	3.8	6.3	16.1	.1	100.

NUMBER OF OBS = 720

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-SEP

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.6	6.5	3.3	1.1	1.1	5.4	13.0	9.8	19.6	7.6	5.4	00.0	1.1	3.3	7.6	7.6	00.0	100.
2	9.8	4.3	1.1	1.1	3.3	4.3	10.9	14.1	22.8	3.3	3.3	5.4	00.0	2.2	6.5	7.6	00.0	100.
3	7.6	2.2	3.3	1.1	2.2	9.8	9.8	9.8	20.7	6.5	5.4	2.2	4.3	2.2	1.1	12.0	00.0	100.
4	9.8	2.2	2.2	2.2	6.5	3.3	13.0	9.8	17.4	8.7	3.3	2.2	1.1	3.3	7.6	7.6	00.0	100.
5	8.7	2.2	4.3	1.1	5.4	2.2	10.9	14.1	18.5	6.5	3.3	2.2	3.3	4.3	3.3	9.8	00.0	100.
6	4.3	1.1	1.1	2.2	00.0	00.0	13.0	21.7	14.1	9.8	4.3	2.2	5.4	2.2	6.5	12.0	00.0	100.
7	4.3	3.3	1.1	2.2	00.0	4.3	14.1	18.5	18.5	8.7	3.3	5.4	1.1	3.3	6.5	5.4	00.0	100.
8	6.5	2.2	1.1	00.0	3.3	4.3	20.7	13.0	18.5	8.7	5.4	2.2	3.3	00.0	3.3	7.6	00.0	100.
9	2.2	5.4	5.4	1.1	4.3	2.2	16.3	14.1	18.5	10.9	4.3	1.1	1.1	2.2	4.3	6.5	00.0	100.
10	2.2	1.1	4.3	4.3	4.3	3.3	14.1	13.0	17.4	10.9	3.3	5.4	3.3	00.0	5.4	7.6	00.0	100.
11	4.3	6.5	00.0	4.3	3.3	5.4	10.9	12.0	22.8	10.9	4.3	1.1	2.2	1.1	2.2	8.7	00.0	100.
12	7.6	3.3	1.1	3.3	2.2	8.7	10.9	6.5	28.3	9.8	2.2	00.0	1.1	3.3	1.1	10.9	00.0	100.
13	6.5	3.3	2.2	2.2	3.3	6.5	12.0	12.0	27.2	6.5	2.2	2.2	2.2	00.0	1.1	10.9	00.0	100.
14	7.6	4.3	1.1	3.3	2.2	9.8	9.8	18.5	19.6	5.4	2.2	1.1	2.2	1.1	2.2	9.8	00.0	100.
15	4.3	4.3	2.2	2.2	5.4	3.3	16.3	13.0	23.9	4.3	3.3	1.1	00.0	4.3	2.2	9.8	00.0	100.
16	7.6	4.3	3.3	2.2	3.3	5.4	15.2	17.4	18.5	4.3	4.3	1.1	00.0	00.0	5.4	7.6	00.0	100.
17	6.5	2.2	5.4	2.2	3.3	6.5	21.7	17.4	15.2	4.3	1.1	2.2	00.0	00.0	4.3	7.6	00.0	100.
18	5.4	2.2	5.4	7.6	3.3	5.4	17.4	17.4	15.2	3.3	5.4	00.0	2.2	00.0	2.2	7.6	00.0	100.
19	8.7	4.3	2.2	3.3	5.4	10.9	21.7	9.8	13.0	2.2	3.3	1.1	1.1	2.2	3.3	7.6	00.0	100.
20	10.9	4.3	3.3	1.1	4.3	10.9	14.1	17.4	13.0	6.5	00.0	1.1	1.1	2.2	2.2	7.6	00.0	100.
21	8.7	4.3	2.2	2.2	2.2	6.5	15.2	12.0	22.8	4.3	1.1	00.0	00.0	3.3	2.2	13.0	00.0	100.
22	9.8	3.3	2.2	2.2	1.1	6.5	10.9	9.8	22.8	8.7	2.2	1.1	00.0	4.3	00.0	15.2	00.0	100.
23	14.1	3.3	1.1	2.2	5.4	2.2	14.1	12.0	25.0	5.4	3.3	1.1	00.0	2.2	2.2	6.5	00.0	100.
24	10.9	3.3	00.0	1.1	1.1	5.4	12.0	8.7	22.8	5.4	4.3	00.0	4.3	4.3	6.5	8.7	1.1	100.
ALL	7.3	3.5	2.4	2.3	3.2	5.5	14.1	13.4	19.8	6.8	3.4	1.7	1.7	2.1	3.7	9.0	.0	100.

NUMBER OF OBS = 2208

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCTOBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	14.8	7.4	3.7	7.4	00.0	00.0	00.0	14.8	14.8	7.4	3.7	14.8	00.0	00.0	3.7	7.4	00.0	100.
2	14.8	7.4	7.4	00.0	00.0	3.7	00.0	14.8	14.8	3.7	7.4	7.4	3.7	3.7	7.4	3.7	00.0	100.
3	14.8	7.4	3.7	00.0	00.0	00.0	00.0	7.4	18.5	11.1	00.0	7.4	3.7	7.4	3.7	14.8	00.0	100.
4	22.2	3.7	3.7	00.0	3.7	00.0	00.0	18.5	7.4	7.4	3.7	00.0	7.4	3.7	3.7	14.8	00.0	100.
5	25.9	7.4	7.4	00.0	00.0	00.0	3.7	7.4	14.8	11.1	3.7	3.7	3.7	00.0	3.7	7.4	00.0	100.
6	25.9	00.0	3.7	3.7	00.0	00.0	7.4	11.1	7.4	3.7	3.7	7.4	7.4	00.0	00.0	18.5	00.0	100.
7	25.9	7.4	3.7	00.0	7.4	00.0	3.7	3.7	11.1	7.4	3.7	00.0	7.4	7.4	3.7	7.4	00.0	100.
8	14.8	14.8	00.0	00.0	00.0	00.0	3.7	11.1	18.5	3.7	3.7	00.0	00.0	11.1	7.4	11.1	00.0	100.
9	3.7	22.2	3.7	00.0	00.0	00.0	11.1	00.0	11.1	7.4	00.0	11.1	00.0	3.7	11.1	14.8	00.0	100.
10	11.1	3.7	11.1	3.7	00.0	00.0	7.4	3.7	11.1	00.0	7.4	3.7	7.4	3.7	11.1	14.8	00.0	100.
11	11.5	7.7	00.0	3.8	3.8	00.0	3.8	00.0	11.5	7.7	3.8	11.5	00.0	3.8	11.5	19.2	00.0	100.
12	7.4	7.4	7.4	00.0	3.7	00.0	3.7	3.7	7.4	7.4	3.7	11.1	00.0	3.7	11.1	22.2	00.0	100.
13	15.4	11.5	3.8	7.7	3.8	00.0	00.0	3.8	11.5	7.7	3.8	7.7	00.0	3.8	7.7	11.5	00.0	100.
14	19.2	3.8	3.8	00.0	7.7	00.0	00.0	00.0	19.2	11.5	00.0	3.8	3.8	3.8	7.7	15.4	00.0	100.
15	15.4	7.7	00.0	7.7	00.0	3.8	00.0	00.0	19.2	7.7	00.0	00.0	11.5	7.7	7.7	11.5	00.0	100.
16	14.8	00.0	3.7	3.7	3.7	00.0	3.7	3.7	11.1	11.1	3.7	3.7	3.7	00.0	14.8	18.5	00.0	100.
17	11.1	3.7	3.7	3.7	7.4	00.0	3.7	00.0	22.2	00.0	00.0	11.1	00.0	3.7	11.1	18.5	00.0	100.
18	25.9	00.0	3.7	3.7	7.4	00.0	3.7	7.4	14.8	3.7	3.7	00.0	3.7	00.0	11.1	11.1	00.0	100.
19	18.5	7.4	3.7	3.7	3.7	3.7	00.0	11.1	14.8	7.4	00.0	00.0	3.7	3.7	11.1	7.4	00.0	100.
20	18.5	7.4	3.7	00.0	7.4	3.7	00.0	11.1	14.8	3.7	00.0	7.4	3.7	00.0	3.7	11.1	3.7	100.
21	19.2	7.7	3.8	3.8	00.0	7.7	00.0	3.8	11.5	15.4	3.8	00.0	00.0	3.8	3.8	15.4	00.0	100.
22	18.5	7.4	3.7	3.7	3.7	00.0	3.7	00.0	22.2	7.4	3.7	3.7	00.0	3.7	7.4	11.1	00.0	100.
23	7.4	14.8	00.0	3.7	3.7	00.0	3.7	7.4	25.9	7.4	00.0	00.0	00.0	00.0	7.4	18.5	00.0	100.
24	11.1	7.4	7.4	3.7	00.0	3.7	3.7	00.0	25.9	7.4	00.0	00.0	3.7	00.0	14.8	11.1	00.0	100.
ALL	16.2	7.3	4.0	2.6	2.8	1.1	2.8	6.1	15.1	7.0	2.6	4.8	3.1	3.3	7.8	13.2	.2	100.

NUMBER OF OBS = 643

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

NOVEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.7	00.0	00.0	00.0	00.0	3.3	10.0	10.0	6.7	3.3	16.7	13.3	00.0	6.7	20.0	3.3	00.0	100.
2	3.3	3.3	00.0	00.0	00.0	3.3	13.3	6.7	10.0	6.7	3.3	16.7	3.3	6.7	6.7	16.7	00.0	100.
3	10.0	00.0	00.0	3.3	00.0	00.0	13.3	10.0	10.0	6.7	00.0	13.3	3.3	13.3	10.0	6.7	00.0	100.
4	10.0	3.3	00.0	3.3	3.3	3.3	10.0	10.0	3.3	6.7	3.3	13.3	3.3	13.3	6.7	6.7	00.0	100.
5	13.3	3.3	00.0	00.0	3.3	00.0	6.7	13.3	6.7	6.7	00.0	10.0	3.3	10.0	13.3	10.0	00.0	100.
6	6.7	00.0	3.3	6.7	00.0	3.3	3.3	10.0	6.7	6.7	10.0	6.7	3.3	6.7	13.3	13.3	00.0	100.
7	6.7	3.3	00.0	00.0	3.3	00.0	6.7	10.0	6.7	13.3	6.7	3.3	3.3	10.0	16.7	10.0	00.0	100.
8	3.3	3.3	00.0	3.3	00.0	00.0	16.7	6.7	13.3	16.7	00.0	00.0	00.0	3.3	10.0	23.3	00.0	100.
9	00.0	3.6	00.0	00.0	00.0	3.6	10.7	3.6	14.3	7.1	14.3	00.0	3.6	7.1	7.1	25.0	00.0	100.
10	14.3	3.6	00.0	00.0	00.0	00.0	3.6	7.1	10.7	14.3	10.7	00.0	10.7	00.0	10.7	14.3	00.0	100.
11	11.1	3.7	00.0	00.0	00.0	00.0	7.4	3.7	11.1	7.4	14.8	3.7	3.7	3.7	14.8	14.8	00.0	100.
12	14.3	00.0	00.0	00.0	00.0	3.6	3.6	7.1	14.3	14.3	3.6	7.1	3.6	3.6	14.3	10.7	00.0	100.
13	10.7	00.0	00.0	00.0	00.0	00.0	3.6	3.6	17.9	14.3	3.6	7.1	7.1	7.1	10.7	14.3	00.0	100.
14	17.9	00.0	00.0	00.0	00.0	3.6	3.6	3.6	3.6	17.9	7.1	3.6	7.1	10.7	14.3	7.1	00.0	100.
15	6.9	00.0	00.0	00.0	00.0	00.0	3.4	6.9	3.4	17.2	3.4	6.9	3.4	10.3	17.2	20.7	00.0	100.
16	10.3	00.0	00.0	00.0	00.0	00.0	6.9	00.0	10.3	13.8	10.3	00.0	3.4	13.8	6.9	24.1	00.0	100.
17	3.3	00.0	00.0	00.0	00.0	3.3	6.7	00.0	10.0	10.0	10.0	6.7	00.0	6.7	13.3	30.0	00.0	100.
18	6.7	00.0	00.0	00.0	3.3	00.0	6.7	6.7	10.0	3.3	13.3	3.3	3.3	6.7	20.0	16.7	00.0	100.
19	6.7	3.3	00.0	00.0	00.0	3.3	6.7	10.0	6.7	6.7	6.7	3.3	10.0	6.7	6.7	23.3	00.0	100.
20	3.3	3.3	00.0	00.0	3.3	3.3	6.7	6.7	6.7	16.7	3.3	6.7	3.3	10.0	10.0	16.7	00.0	100.
21	10.0	00.0	00.0	00.0	00.0	3.3	6.7	16.7	3.3	13.3	6.7	6.7	3.3	6.7	13.3	10.0	00.0	100.
22	3.3	00.0	00.0	00.0	00.0	00.0	20.0	00.0	13.3	10.0	3.3	10.0	3.3	6.7	10.0	20.0	00.0	100.
23	3.3	00.0	3.3	00.0	00.0	3.3	10.0	10.0	6.7	13.3	10.0	3.3	3.3	3.3	20.0	10.0	00.0	100.
24	6.7	00.0	3.3	00.0	00.0	00.0	20.0	6.7	6.7	6.7	10.0	6.7	3.3	6.7	13.3	10.0	00.0	100.
ALL	7.8	1.4	.4	.7	.7	1.7	8.7	7.1	8.8	10.5	7.1	6.4	3.8	7.5	12.5	14.9	00.0	100.

NUMBER OF OBS = 705

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

DECEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.2	3.2	3.2	00.0	3.2	3.2	6.5	9.7	12.9	16.1	9.7	3.2	3.2	9.7	3.2	9.7	00.0	100.
2	6.5	9.7	00.0	00.0	00.0	3.2	00.0	19.4	22.6	9.7	9.7	3.2	3.2	6.5	3.2	3.2	00.0	100.
3	3.2	6.5	00.0	00.0	00.0	6.5	00.0	6.5	22.6	22.6	3.2	00.0	9.7	3.2	3.2	12.9	00.0	100.
4	12.9	00.0	3.2	00.0	3.2	6.5	00.0	6.5	19.4	9.7	12.9	00.0	6.5	6.5	00.0	12.9	00.0	100.
5	3.2	00.0	00.0	00.0	3.2	3.2	00.0	12.9	19.4	12.9	9.7	3.2	3.2	3.2	6.5	19.4	00.0	100.
6	3.2	00.0	00.0	00.0	00.0	3.2	00.0	19.4	12.9	6.5	9.7	6.5	6.5	3.2	12.9	16.1	00.0	100.
7	3.2	3.2	00.0	00.0	3.2	00.0	3.2	6.5	12.9	9.7	16.1	12.9	3.2	3.2	9.7	12.9	00.0	100.
8	3.2	3.2	3.2	3.2	00.0	3.2	00.0	3.2	19.4	19.4	3.2	3.2	6.5	6.5	12.9	9.7	00.0	100.
9	3.3	3.3	00.0	00.0	00.0	3.3	6.7	16.7	3.3	13.3	3.3	00.0	16.7	6.7	6.7	16.7	00.0	100.
10	6.9	00.0	6.9	00.0	00.0	10.3	6.9	3.4	20.7	10.3	3.4	00.0	3.4	6.9	6.9	13.8	00.0	100.
11	10.0	3.3	6.7	00.0	00.0	10.0	3.3	6.7	6.7	16.7	6.7	3.3	00.0	13.3	6.7	6.7	00.0	100.
12	10.0	3.3	6.7	00.0	3.3	3.3	3.3	3.3	6.7	16.7	6.7	10.0	00.0	20.0	00.0	6.7	00.0	100.
13	9.7	3.2	3.2	3.2	3.2	3.2	00.0	6.5	6.5	16.1	6.5	9.7	3.2	12.9	6.5	6.5	00.0	100.
14	6.5	3.2	3.2	6.5	00.0	6.5	00.0	3.2	9.7	12.9	9.7	00.0	12.9	9.7	3.2	12.9	00.0	100.
15	9.7	00.0	3.2	3.2	3.2	3.2	00.0	6.5	6.5	12.9	12.9	00.0	6.5	19.4	3.2	9.7	00.0	100.
16	6.5	3.2	00.0	3.2	3.2	3.2	3.2	3.2	6.5	12.9	12.9	3.2	6.5	12.9	6.5	12.9	00.0	100.
17	6.5	3.2	00.0	3.2	00.0	9.7	00.0	6.5	9.7	9.7	9.7	3.2	9.7	9.7	6.5	12.9	00.0	100.
18	6.5	3.2	3.2	3.2	00.0	3.2	3.2	3.2	25.8	6.5	6.5	3.2	6.5	3.2	9.7	12.9	00.0	100.
19	3.2	3.2	00.0	3.2	3.2	3.2	6.5	3.2	22.6	12.9	00.0	3.2	9.7	3.2	3.2	19.4	00.0	100.
20	3.2	3.2	00.0	00.0	3.2	3.2	00.0	6.5	25.8	12.9	3.2	00.0	9.7	3.2	6.5	19.4	00.0	100.
21	6.5	00.0	00.0	6.5	3.2	00.0	3.2	16.1	12.9	12.9	6.5	3.2	9.7	00.0	12.9	6.5	00.0	100.
22	9.7	3.2	3.2	3.2	00.0	6.5	3.2	12.9	16.1	3.2	9.7	3.2	12.9	00.0	6.5	6.5	00.0	100.
23	9.7	3.2	6.5	00.0	00.0	6.5	3.2	9.7	16.1	6.5	6.5	3.2	6.5	12.9	6.5	3.2	00.0	100.
24	6.5	6.5	00.0	00.0	00.0	3.2	12.9	9.7	12.9	9.7	6.5	3.2	3.2	9.7	12.9	3.2	00.0	100.
ALL	6.4	3.0	2.2	1.6	1.5	4.5	2.7	8.4	14.6	12.2	7.7	3.4	6.6	7.7	6.5	11.1	00.0	100.

NUMBER OF OBS = 739

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCT-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.0	3.4	2.3	2.3	1.1	2.3	5.7	11.4	11.4	9.1	10.2	10.2	1.1	5.7	9.1	6.8	00.0	100.
2	8.0	6.8	2.3	00.0	00.0	3.4	4.5	13.6	15.9	6.8	6.8	9.1	3.4	5.7	5.7	8.0	00.0	100.
3	9.1	4.5	1.1	1.1	00.0	2.3	4.5	8.0	17.0	13.6	1.1	6.8	5.7	8.0	5.7	11.4	00.0	100.
4	14.8	2.3	2.3	1.1	3.4	3.4	3.4	11.4	10.2	8.0	6.8	4.5	5.7	8.0	3.4	11.4	00.0	100.
5	13.6	3.4	2.3	00.0	2.3	1.1	3.4	11.4	13.6	10.2	4.5	5.7	3.4	4.5	8.0	12.5	00.0	100.
6	11.4	00.0	2.3	3.4	00.0	2.3	3.4	13.6	9.1	5.7	8.0	6.8	5.7	3.4	9.1	15.9	00.0	100.
7	11.4	4.5	1.1	00.0	4.5	00.0	4.5	6.8	10.2	10.2	9.1	5.7	4.5	6.8	10.2	10.2	00.0	100.
8	6.8	6.8	1.1	2.3	00.0	1.1	6.8	6.8	17.0	13.6	2.3	1.1	2.3	6.8	10.2	14.8	00.0	100.
9	2.4	9.4	1.2	00.0	00.0	2.4	9.4	7.1	9.4	9.4	5.9	3.5	7.1	5.9	8.2	18.8	00.0	100.
10	10.7	2.4	6.0	1.2	00.0	3.6	6.0	4.8	14.3	8.3	7.1	1.2	7.1	3.6	9.5	14.3	00.0	100.
11	10.8	4.8	2.4	1.2	1.2	3.6	4.8	3.6	9.6	10.8	8.4	6.0	1.2	7.2	10.8	13.3	00.0	100.
12	10.6	3.5	4.7	00.0	2.4	2.4	3.5	4.7	9.4	12.9	4.7	9.4	1.2	9.4	8.2	12.9	00.0	100.
13	11.8	4.7	2.4	3.5	2.4	1.2	1.2	4.7	11.8	12.9	4.7	8.2	3.5	8.2	8.2	10.6	00.0	100.
14	14.1	2.4	2.4	2.4	2.4	3.5	1.2	2.4	10.6	14.1	5.9	2.4	8.2	8.2	8.2	11.8	00.0	100.
15	10.5	2.3	1.2	3.5	1.2	2.3	1.2	4.7	9.3	12.8	5.8	2.3	7.0	12.8	9.3	14.0	00.0	100.
16	10.3	1.1	1.1	2.3	2.3	1.1	4.6	2.3	9.2	12.6	9.2	2.3	4.6	9.2	9.2	18.4	00.0	100.
17	6.8	2.3	1.1	2.3	2.3	4.5	3.4	2.3	13.6	6.8	6.8	6.8	3.4	6.8	10.2	20.5	00.0	100.
18	12.5	1.1	2.3	2.3	3.4	1.1	4.5	5.7	17.0	4.5	8.0	2.3	4.5	3.4	13.6	13.6	00.0	100.
19	9.1	4.5	1.1	2.3	2.3	3.4	4.5	8.0	14.8	9.1	2.3	2.3	8.0	4.5	6.8	17.0	00.0	100.
20	8.0	4.5	1.1	00.0	4.5	3.4	2.3	8.0	15.9	11.4	2.3	4.5	5.7	4.5	6.8	15.9	1.1	100.
21	11.5	2.3	1.1	3.4	1.1	3.4	3.4	12.6	9.2	13.8	5.7	3.4	4.6	3.4	10.3	10.3	00.0	100.
22	10.2	3.4	2.3	2.3	1.1	2.3	9.1	4.5	17.0	6.8	5.7	5.7	5.7	3.4	8.0	12.5	00.0	100.
23	6.8	5.7	3.4	1.1	1.1	3.4	5.7	9.1	15.9	9.1	5.7	2.3	3.4	5.7	11.4	10.2	00.0	100.
24	8.0	4.5	3.4	1.1	00.0	2.3	12.5	5.7	14.8	8.0	5.7	3.4	3.4	5.7	13.6	8.0	00.0	100.
ALL	9.9	3.8	2.2	1.6	1.6	2.5	4.7	7.2	12.8	10.0	5.9	4.8	4.6	6.3	8.9	13.0	.0	100.

NUMBER OF OBS = 2087

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.8	5.0	2.8	1.7	1.1	3.9	9.4	10.6	15.6	8.3	7.8	5.0	1.1	4.4	8.3	7.2	00.0	100.
2	8.9	5.6	1.7	.6	1.7	3.9	7.8	13.9	19.4	5.0	5.0	7.2	1.7	3.9	6.1	7.8	00.0	100.
3	8.3	3.3	2.2	1.1	1.1	6.1	7.2	8.9	18.9	10.0	3.3	4.4	5.0	5.0	3.3	11.7	00.0	100.
4	12.2	2.2	2.2	1.7	5.0	3.3	8.3	10.6	13.9	8.3	5.0	3.3	3.3	5.6	5.6	9.4	00.0	100.
5	11.1	2.8	3.3	.6	3.9	1.7	7.2	12.8	16.1	8.3	3.9	3.9	3.3	4.4	5.6	11.1	00.0	100.
6	7.8	.6	1.7	2.8	00.0	1.1	8.3	17.8	11.7	7.8	6.1	4.4	5.6	2.8	7.8	13.9	00.0	100.
7	7.8	3.9	1.1	1.1	2.2	2.2	9.4	12.8	14.4	9.4	6.1	5.6	2.8	5.0	8.3	7.8	00.0	100.
8	6.7	4.4	1.1	1.1	1.7	2.8	13.9	10.0	17.8	11.1	3.9	1.7	2.8	3.3	6.7	11.1	00.0	100.
9	2.3	7.3	3.4	.6	2.3	2.3	13.0	10.7	14.1	10.2	5.1	2.3	4.0	4.0	6.2	12.4	00.0	100.
10	6.3	1.7	5.1	2.8	2.3	3.4	10.2	9.1	15.9	9.7	5.1	3.4	5.1	1.7	7.4	10.8	00.0	100.
11	7.4	5.7	1.1	2.9	2.3	4.6	8.0	8.0	16.6	10.9	6.3	3.4	1.7	4.0	6.3	10.9	00.0	100.
12	9.0	3.4	2.8	1.7	2.3	5.6	7.3	5.6	19.2	11.3	3.4	4.5	1.1	6.2	4.5	11.9	00.0	100.
13	9.0	4.0	2.3	2.8	2.8	4.0	6.8	8.5	19.8	9.6	3.4	5.1	2.8	4.0	4.5	10.7	00.0	100.
14	10.7	3.4	1.7	2.8	2.3	6.8	5.6	10.7	15.3	9.6	4.0	1.7	5.1	4.5	5.1	10.7	00.0	100.
15	7.3	3.4	1.7	2.8	3.4	2.8	9.0	9.0	16.9	8.4	4.5	1.7	3.4	8.4	5.6	11.8	00.0	100.
16	8.9	2.8	2.2	2.2	2.8	3.4	10.1	10.1	14.0	8.4	6.7	1.7	2.2	4.5	7.3	12.8	00.0	100.
17	6.7	2.2	3.3	2.2	2.8	5.6	12.8	10.0	14.4	5.6	3.9	4.4	1.7	3.3	7.2	13.9	00.0	100.
18	8.9	1.7	3.9	5.0	3.3	3.3	11.1	11.7	16.1	3.9	6.7	1.1	3.3	1.7	7.8	10.6	00.0	100.
19	8.9	4.4	1.7	2.8	3.9	7.2	13.3	8.9	13.9	5.6	2.8	1.7	4.4	3.3	5.0	12.2	00.0	100.
20	9.4	4.4	2.2	.6	4.4	7.2	8.3	12.8	14.4	8.9	1.1	2.8	3.3	3.3	4.4	11.7	.6	100.
21	10.1	3.4	1.7	2.8	1.7	5.0	9.5	12.3	16.2	8.9	3.4	1.7	2.2	3.4	6.1	11.7	00.0	100.
22	10.0	3.3	2.2	2.2	1.1	4.4	10.0	7.2	20.0	7.8	3.9	3.3	2.8	3.9	3.9	13.9	00.0	100.
23	10.6	4.4	2.2	1.7	3.3	2.8	10.0	10.6	20.6	7.2	4.4	1.7	1.7	3.9	6.7	8.3	00.0	100.
24	9.4	3.9	1.7	1.1	.6	3.9	12.2	7.2	18.9	6.7	5.0	1.7	3.9	5.0	10.0	8.3	.6	100.
ALL	8.6	3.6	2.3	2.0	2.4	4.1	9.5	10.4	16.4	8.4	4.6	3.2	3.1	4.1	6.2	10.9	.0	100.

NUMBER OF OBS = 4295

NPPD-COOPER NUCLEAR STATION 10-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.6	3.6	3.3	1.7	1.4	3.6	6.7	10.0	17.5	8.9	4.7	3.6	2.8	4.7	8.6	10.3	00.0	100.
2	9.7	3.9	3.3	.8	1.7	2.8	6.7	11.1	19.4	7.8	5.0	4.7	1.4	5.0	5.6	11.1	00.0	100.
3	8.9	3.1	2.5	1.7	1.1	5.3	5.6	10.6	18.1	8.9	3.9	2.5	4.2	5.8	5.8	12.2	00.0	100.
4	11.9	3.9	1.9	1.9	3.1	3.9	6.1	11.9	15.0	7.2	5.0	2.5	3.1	5.6	7.8	9.2	00.0	100.
5	10.6	4.5	2.8	.8	2.2	2.2	6.1	12.0	16.4	8.1	3.1	3.9	2.5	5.6	7.0	12.3	00.0	100.
6	9.2	2.2	1.9	1.7	1.1	2.2	7.0	15.6	13.9	6.4	4.5	4.5	3.1	5.3	8.6	12.8	00.0	100.
7	8.4	4.5	1.7	1.4	1.7	1.7	8.6	14.2	15.6	6.7	5.3	4.5	2.2	5.0	8.1	10.6	00.0	100.
8	7.2	5.8	1.1	1.1	1.4	3.1	10.6	12.2	16.9	9.7	3.3	1.7	2.8	3.6	8.3	11.1	00.0	100.
9	6.2	5.9	3.1	.8	2.2	3.1	9.5	10.9	16.5	9.2	5.0	2.5	2.5	4.5	7.0	10.9	00.0	100.
10	6.8	2.8	4.2	2.3	2.3	4.2	7.1	7.9	17.5	9.6	7.1	2.5	3.7	2.5	9.6	9.9	00.0	100.
11	7.6	4.2	2.5	2.0	2.0	4.2	6.8	6.8	16.1	12.7	6.8	3.1	2.3	3.1	8.8	11.0	00.0	100.
12	8.1	2.5	3.1	1.7	2.0	4.5	5.3	6.7	16.3	11.8	6.5	4.5	2.5	5.1	7.0	12.4	00.0	100.
13	7.0	3.4	2.8	1.7	2.0	3.4	5.6	7.3	18.5	10.1	5.6	4.8	2.8	4.8	7.3	12.9	00.0	100.
14	9.3	3.1	2.5	2.0	1.7	3.9	5.4	9.9	15.2	9.6	5.4	5.1	3.4	4.8	6.8	12.1	00.0	100.
15	8.1	3.9	2.0	2.0	2.2	1.7	7.0	9.2	15.7	9.8	5.3	4.2	2.5	6.7	7.8	11.8	00.0	100.
16	9.5	2.2	2.8	1.7	1.4	2.8	7.8	9.2	15.1	8.4	7.0	3.4	3.1	4.5	9.2	12.0	00.0	100.
17	7.8	2.8	2.5	1.4	1.9	4.4	9.2	10.0	14.7	6.1	5.6	5.0	2.2	3.6	8.9	13.9	00.0	100.
18	8.1	2.5	2.8	3.1	2.8	2.5	8.1	12.2	15.8	5.0	5.3	3.3	3.6	3.1	8.6	13.3	00.0	100.
19	6.9	5.6	1.4	2.5	2.2	4.4	9.4	11.7	15.3	5.6	1.7	2.8	4.4	3.9	7.2	15.0	00.0	100.
20	8.3	4.2	2.8	1.1	3.1	5.0	6.9	13.6	14.4	6.4	2.8	3.3	3.9	3.9	5.8	14.2	.3	100.
21	9.5	3.6	1.7	1.9	1.4	3.9	8.4	13.4	16.2	5.3	4.2	1.9	3.9	3.3	7.0	14.5	00.0	100.
22	9.2	2.5	2.8	2.5	.8	3.3	7.8	8.6	19.4	7.5	4.4	3.3	2.8	4.7	4.7	15.6	00.0	100.
23	8.3	4.2	2.2	2.2	1.9	2.8	7.2	11.4	19.2	9.4	3.3	2.2	1.9	4.7	6.9	11.9	00.0	100.
24	9.2	3.6	2.5	.6	1.1	3.3	8.9	7.5	19.7	8.6	3.6	1.9	3.3	5.8	8.3	11.7	.3	100.
ALL	8.5	3.7	2.5	1.7	1.9	3.4	7.4	10.6	16.6	8.3	4.8	3.4	3.0	4.6	7.5	12.2	.0.	100.

NUMBER OF OBS = 8603

Wind Direction Frequencies

100-Meter Level

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JANUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.7	00.0	00.0	00.0	3.2	3.2	3.2	00.0	00.0	19.4	3.2	3.2	6.5	16.1	6.5	25.8	00.0	100.
2	9.7	00.0	00.0	3.2	00.0	00.0	3.2	3.2	3.2	12.9	6.5	3.2	6.5	12.9	9.7	25.8	00.0	100.
3	9.7	6.5	00.0	00.0	00.0	00.0	00.0	3.2	3.2	12.9	12.9	6.5	00.0	12.9	9.7	22.6	00.0	100.
4	9.7	3.2	00.0	00.0	00.0	00.0	00.0	00.0	9.7	12.9	9.7	6.5	3.2	6.5	16.1	22.6	00.0	100.
5	10.0	3.3	00.0	00.0	00.0	00.0	00.0	3.3	3.3	10.0	10.0	10.0	10.0	6.7	16.7	16.7	00.0	100.
6	10.0	3.3	00.0	00.0	00.0	00.0	00.0	3.3	10.0	3.3	10.0	13.3	3.3	6.7	16.7	20.0	00.0	100.
7	13.3	00.0	00.0	00.0	00.0	00.0	00.0	00.0	6.7	10.0	10.0	10.0	6.7	6.7	16.7	20.0	00.0	100.
8	12.9	00.0	00.0	00.0	00.0	00.0	00.0	00.0	9.7	12.9	6.5	12.9	6.5	9.7	12.9	16.1	00.0	100.
9	12.9	3.2	00.0	00.0	00.0	00.0	00.0	00.0	9.7	16.1	6.5	9.7	6.5	6.5	16.1	12.9	00.0	100.
10	9.7	3.2	3.2	00.0	00.0	00.0	00.0	00.0	9.7	16.1	9.7	6.5	6.5	3.2	22.6	9.7	00.0	100.
11	6.5	00.0	6.5	00.0	00.0	00.0	00.0	3.2	9.7	12.9	9.7	9.7	3.2	6.5	16.1	16.1	00.0	100.
12	6.5	3.2	00.0	3.2	00.0	00.0	00.0	3.2	9.7	12.9	9.7	9.7	3.2	3.2	16.1	19.4	00.0	100.
13	6.5	3.2	00.0	00.0	00.0	3.2	00.0	00.0	12.9	12.9	9.7	9.7	3.2	3.2	16.1	19.4	00.0	100.
14	6.5	3.2	00.0	00.0	00.0	3.2	00.0	00.0	3.2	19.4	9.7	12.9	00.0	6.5	19.4	16.1	00.0	100.
15	6.5	3.2	00.0	00.0	3.2	00.0	00.0	00.0	00.0	22.6	9.7	9.7	6.5	3.2	16.1	19.4	00.0	100.
16	9.7	00.0	00.0	00.0	3.2	3.2	00.0	00.0	3.2	19.4	12.9	6.5	6.5	3.2	16.1	16.1	00.0	100.
17	6.5	00.0	00.0	00.0	3.2	3.2	00.0	00.0	6.5	12.9	16.1	9.7	00.0	6.5	22.6	12.9	00.0	100.
18	3.2	00.0	00.0	00.0	3.2	3.2	00.0	00.0	6.5	16.1	6.5	19.4	00.0	3.2	22.6	16.1	00.0	100.
19	3.2	00.0	00.0	00.0	3.2	3.2	00.0	00.0	9.7	12.9	3.2	16.1	6.5	00.0	22.6	19.4	00.0	100.
20	6.5	00.0	00.0	00.0	00.0	6.5	00.0	00.0	9.7	9.7	6.5	6.5	16.1	6.5	12.9	19.4	00.0	100.
21	9.7	3.2	00.0	00.0	00.0	6.5	00.0	00.0	3.2	16.1	3.2	9.7	9.7	6.5	19.4	12.9	00.0	100.
22	12.9	00.0	00.0	00.0	3.2	3.2	00.0	3.2	3.2	16.1	3.2	6.5	12.9	9.7	6.5	19.4	00.0	100.
23	12.9	00.0	00.0	00.0	3.2	3.2	00.0	00.0	3.2	12.9	6.5	6.5	9.7	6.5	16.1	19.4	00.0	100.
24	16.1	3.2	00.0	00.0	3.2	3.2	00.0	00.0	3.2	16.1	3.2	9.7	3.2	12.9	12.9	12.9	00.0	100.
ALL	9.2	1.8	.4	.3	1.2	1.9	.3	.9	6.2	14.2	8.1	9.3	5.7	6.9	15.8	17.9	00.0	100.

NUMBER OF OBS = 741

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

FEBRUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.6	00.0	00.0	00.0	00.0	00.0	00.0	7.1	17.9	7.1	10.7	3.6	7.1	10.7	21.4	10.7	00.0	100.
2	7.1	00.0	00.0	00.0	00.0	00.0	00.0	7.1	14.3	10.7	10.7	3.6	3.6	17.9	14.3	10.7	00.0	100.
3	7.1	00.0	00.0	00.0	00.0	00.0	00.0	7.1	10.7	14.3	10.7	3.6	3.6	17.9	14.3	10.7	00.0	100.
4	7.1	00.0	00.0	00.0	00.0	00.0	00.0	10.7	7.1	14.3	7.1	3.6	7.1	17.9	17.9	7.1	00.0	100.
5	7.1	00.0	00.0	00.0	00.0	00.0	00.0	10.7	10.7	14.3	3.6	3.6	3.6	21.4	17.9	7.1	00.0	100.
6	00.0	7.1	00.0	00.0	00.0	00.0	00.0	10.7	10.7	14.3	3.6	7.1	00.0	17.9	21.4	7.1	00.0	100.
7	3.6	00.0	3.6	00.0	00.0	00.0	00.0	14.3	10.7	14.3	3.6	00.0	3.6	25.0	14.3	7.1	00.0	100.
8	00.0	00.0	00.0	00.0	3.6	00.0	00.0	14.3	14.3	14.3	3.6	3.6	3.6	21.4	14.3	7.1	00.0	100.
9	00.0	00.0	00.0	00.0	3.6	00.0	3.6	14.3	17.9	7.1	7.1	3.6	3.6	21.4	10.7	7.1	00.0	100.
10	00.0	00.0	00.0	00.0	00.0	00.0	3.6	00.0	21.4	21.4	10.7	00.0	7.1	14.3	14.3	7.1	00.0	100.
11	00.0	00.0	00.0	00.0	00.0	7.1	00.0	3.6	10.7	25.0	10.7	00.0	7.1	10.7	17.9	7.1	00.0	100.
12	00.0	00.0	00.0	00.0	00.0	3.6	3.6	7.1	3.6	21.4	10.7	3.6	7.1	17.9	7.1	14.3	00.0	100.
13	00.0	00.0	00.0	00.0	3.6	00.0	3.6	7.1	7.1	17.9	7.1	3.6	10.7	10.7	17.9	10.7	00.0	100.
14	00.0	00.0	3.6	00.0	00.0	00.0	00.0	7.1	10.7	25.0	3.6	7.1	3.6	3.6	25.0	10.7	00.0	100.
15	00.0	00.0	3.6	00.0	00.0	00.0	3.6	7.1	10.7	14.3	10.7	7.1	3.6	3.6	25.0	10.7	00.0	100.
16	00.0	3.6	00.0	00.0	00.0	00.0	3.6	7.1	14.3	10.7	14.3	7.1	3.6	00.0	25.0	10.7	00.0	100.
17	3.6	00.0	00.0	00.0	00.0	00.0	7.1	7.1	10.7	10.7	14.3	7.1	3.6	00.0	17.9	17.9	00.0	100.
18	00.0	00.0	00.0	00.0	3.6	00.0	00.0	17.9	10.7	7.1	10.7	7.1	3.6	00.0	21.4	17.9	00.0	100.
19	00.0	00.0	00.0	00.0	3.6	00.0	00.0	25.0	7.1	3.6	7.1	7.1	7.1	00.0	25.0	14.3	00.0	100.
20	00.0	00.0	00.0	3.6	00.0	00.0	00.0	25.0	7.1	3.6	3.6	10.7	3.6	3.6	17.9	21.4	00.0	100.
21	00.0	00.0	00.0	3.6	00.0	00.0	00.0	17.9	7.1	10.7	3.6	3.6	10.7	3.6	17.9	21.4	00.0	100.
22	00.0	00.0	00.0	3.6	00.0	00.0	00.0	14.3	7.1	14.3	3.6	7.1	00.0	17.9	17.9	14.3	00.0	100.
23	00.0	00.0	00.0	3.6	00.0	00.0	00.0	10.7	10.7	10.7	7.1	7.1	7.1	7.1	17.9	17.9	00.0	100.
24	00.0	00.0	00.0	00.0	3.6	00.0	00.0	10.7	10.7	14.3	7.1	00.0	10.7	14.3	14.3	14.3	00.0	100.
ALL	1.6	.4	.4	.6	.9	.4	1.2	11.0	11.0	13.4	7.7	4.6	5.2	11.6	17.9	11.9	00.0	100.

NUMBER OF OBS = 672

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MARCH

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	10.0	6.7	3.3	10.0	3.3	6.7	3.3	6.7	3.3	10.0	6.7	00.0	3.3	3.3	10.0	13.3	00.0	100.
2	6.7	6.7	10.0	6.7	3.3	6.7	00.0	10.0	00.0	13.3	6.7	00.0	3.3	6.7	10.0	10.0	00.0	100.
3	10.0	3.3	10.0	6.7	3.3	6.7	00.0	6.7	3.3	13.3	6.7	00.0	00.0	3.3	10.0	16.7	00.0	100.
4	13.3	6.7	6.7	6.7	3.3	3.3	3.3	6.7	00.0	13.3	3.3	3.3	3.3	6.7	3.3	16.7	00.0	100.
5	16.7	3.3	6.7	6.7	3.3	00.0	6.7	6.7	3.3	6.7	3.3	00.0	10.0	00.0	6.7	20.0	00.0	100.
6	13.3	6.7	10.0	3.3	3.3	3.3	3.3	3.3	13.3	6.7	00.0	00.0	3.3	3.3	6.7	20.0	00.0	100.
7	13.3	10.0	10.0	00.0	6.7	3.3	00.0	13.3	3.3	6.7	3.3	00.0	00.0	10.0	6.7	13.3	00.0	100.
8	13.3	13.3	6.7	3.3	10.0	00.0	00.0	10.0	3.3	13.3	00.0	00.0	00.0	6.7	6.7	13.3	00.0	100.
9	20.0	6.7	10.0	3.3	10.0	3.3	00.0	6.7	3.3	10.0	6.7	00.0	3.3	00.0	10.0	6.7	00.0	100.
10	10.0	6.7	10.0	00.0	3.3	16.7	00.0	00.0	10.0	00.0	13.3	6.7	3.3	00.0	6.7	13.3	00.0	100.
11	6.7	10.0	6.7	00.0	3.3	10.0	00.0	6.7	10.0	3.3	10.0	3.3	3.3	00.0	10.0	16.7	00.0	100.
12	3.3	3.3	6.7	3.3	00.0	13.3	00.0	6.7	3.3	6.7	13.3	00.0	6.7	00.0	10.0	23.3	00.0	100.
13	6.7	6.7	6.7	00.0	00.0	10.0	3.3	3.3	3.3	10.0	3.3	6.7	3.3	6.7	6.7	23.3	00.0	100.
14	10.0	6.7	10.0	3.3	3.3	3.3	6.7	3.3	3.3	3.3	6.7	10.0	00.0	3.3	13.3	13.3	00.0	100.
15	13.3	10.0	6.7	3.3	3.3	00.0	10.0	6.7	00.0	3.3	6.7	6.7	3.3	3.3	10.0	13.3	00.0	100.
16	16.7	10.0	6.7	00.0	00.0	3.3	10.0	10.0	00.0	6.7	6.7	00.0	3.3	10.0	6.7	10.0	00.0	100.
17	20.0	10.0	3.3	00.0	00.0	3.3	6.7	13.3	00.0	10.0	3.3	00.0	3.3	6.7	10.0	10.0	00.0	100.
18	16.7	6.7	3.3	00.0	00.0	6.7	6.7	10.0	00.0	6.7	6.7	3.3	3.3	3.3	13.3	13.3	00.0	100.
19	16.7	10.0	3.3	00.0	00.0	6.7	6.7	10.0	3.3	10.0	00.0	00.0	00.0	6.7	10.0	16.7	00.0	100.
20	13.3	13.3	6.7	00.0	00.0	13.3	00.0	6.7	3.3	3.3	3.3	3.3	00.0	10.0	16.7	6.7	00.0	100.
21	10.0	13.3	6.7	3.3	00.0	10.0	3.3	6.7	3.3	3.3	3.3	00.0	3.3	10.0	10.0	13.3	00.0	100.
22	6.7	13.3	3.3	6.7	3.3	13.3	00.0	6.7	3.3	3.3	3.3	00.0	10.0	3.3	10.0	13.3	00.0	100.
23	6.9	10.3	3.4	6.9	00.0	17.2	00.0	6.9	00.0	6.9	3.4	00.0	10.3	6.9	3.4	17.2	00.0	100.
24	3.3	13.3	3.3	6.7	3.3	3.3	13.3	3.3	3.3	10.0	00.0	10.0	00.0	6.7	6.7	13.3	00.0	100.
ALL	11.5	8.6	6.7	3.3	2.8	6.8	3.5	7.1	3.3	7.5	5.0	2.2	3.3	4.9	8.9	14.5	00.0	100.

NUMBER OF OBS = 719

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-MAR

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.9	2.2	1.1	3.4	2.2	3.4	2.2	4.5	6.7	12.4	6.7	2.2	5.6	10.1	12.4	16.9	00.0	100.
2	7.9	2.2	3.4	3.4	1.1	2.2	1.1	6.7	5.6	12.4	7.9	2.2	4.5	12.4	11.2	15.7	00.0	100.
3	9.0	3.4	3.4	2.2	1.1	2.2	00.0	5.6	5.6	13.5	10.1	3.4	1.1	11.2	11.2	16.9	00.0	100.
4	10.1	3.4	2.2	2.2	1.1	1.1	1.1	5.6	5.6	13.5	6.7	4.5	4.5	10.1	12.4	15.7	00.0	100.
5	11.4	2.3	2.3	2.3	1.1	00.0	2.3	6.8	5.7	10.2	5.7	4.5	8.0	9.1	13.6	14.8	00.0	100.
6	8.0	5.7	3.4	1.1	1.1	1.1	1.1	5.7	11.4	8.0	4.5	6.8	2.3	9.1	14.8	15.9	00.0	100.
7	10.2	3.4	4.5	00.0	2.3	1.1	00.0	9.1	6.8	10.2	5.7	3.4	3.4	13.6	12.5	13.6	00.0	100.
8	9.0	4.5	2.2	1.1	4.5	00.0	00.0	7.9	9.0	13.5	3.4	5.6	3.4	12.4	11.2	12.4	00.0	100.
9	11.2	3.4	3.4	1.1	4.5	1.1	1.1	6.7	10.1	11.2	6.7	4.5	4.5	9.0	12.4	9.0	00.0	100.
10	6.7	3.4	4.5	00.0	1.1	5.6	1.1	00.0	13.5	12.4	11.2	4.5	5.6	5.6	14.6	10.1	00.0	100.
11	4.5	3.4	4.5	00.0	1.1	5.6	00.0	4.5	10.1	13.5	10.1	4.5	4.5	5.6	14.6	13.5	00.0	100.
12	3.4	2.2	2.2	2.2	00.0	5.6	1.1	5.6	5.6	13.5	11.2	4.5	5.6	6.7	11.2	19.1	00.0	100.
13	4.5	3.4	2.2	00.0	1.1	4.5	2.2	3.4	7.9	13.5	6.7	6.7	5.6	6.7	13.5	18.0	00.0	100.
14	5.6	3.4	4.5	1.1	1.1	2.2	2.2	3.4	5.6	15.7	6.7	10.1	1.1	4.5	19.1	13.5	00.0	100.
15	6.7	4.5	3.4	1.1	2.2	00.0	4.5	4.5	3.4	13.5	9.0	7.9	4.5	3.4	16.9	14.6	00.0	100.
16	9.0	4.5	2.2	00.0	1.1	2.2	4.5	5.6	5.6	12.4	11.2	4.5	4.5	4.5	15.7	12.4	00.0	100.
17	10.1	3.4	1.1	00.0	1.1	2.2	4.5	6.7	5.6	11.2	11.2	5.6	2.2	4.5	16.9	13.5	00.0	100.
18	6.7	2.2	1.1	00.0	2.2	3.4	2.2	9.0	5.6	10.1	7.9	10.1	2.2	2.2	19.1	15.7	00.0	100.
19	6.7	3.4	1.1	00.0	2.2	3.4	2.2	11.2	6.7	9.0	3.4	7.9	4.5	2.2	19.1	16.9	00.0	100.
20	6.7	4.5	2.2	1.1	00.0	6.7	00.0	10.1	6.7	5.6	4.5	6.7	6.7	6.7	15.7	15.7	00.0	100.
21	6.7	5.6	2.2	2.2	00.0	5.6	1.1	7.9	4.5	10.1	3.4	4.5	7.9	6.7	15.7	15.7	00.0	100.
22	6.7	4.5	1.1	3.4	2.2	5.6	00.0	7.9	4.5	11.2	3.4	4.5	7.9	10.1	11.2	15.7	00.0	100.
23	6.8	3.4	1.1	3.4	1.1	6.8	00.0	5.7	4.5	10.2	5.7	4.5	9.1	6.8	12.5	18.2	00.0	100.
24	6.7	5.6	1.1	2.2	3.4	2.2	4.5	4.5	5.6	13.5	3.4	6.7	4.5	11.2	11.2	13.5	00.0	100.
ALL	7.6	3.7	2.5	1.4	1.6	3.1	1.6	6.2	6.8	11.7	6.9	5.4	4.7	7.7	14.1	14.9	00.0	100.

NUMBER OF OBS = 2132

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APRIL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	18.5	00.0	3.7	00.0	3.7	7.4	14.8	3.7	22.2	7.4	00.0	00.0	00.0	7.4	3.7	7.4	00.0	100.
2	18.5	00.0	00.0	3.7	3.7	7.4	7.4	11.1	18.5	11.1	00.0	00.0	00.0	3.7	7.4	7.4	00.0	100.
3	18.5	00.0	3.7	3.7	3.7	7.4	3.7	11.1	22.2	7.4	00.0	00.0	3.7	00.0	7.4	7.4	00.0	100.
4	14.8	7.4	00.0	3.7	00.0	14.8	00.0	14.8	11.1	14.8	00.0	3.7	00.0	00.0	3.7	11.1	00.0	100.
5	14.8	7.4	3.7	00.0	00.0	11.1	3.7	11.1	11.1	14.8	00.0	3.7	3.7	00.0	3.7	11.1	00.0	100.
6	18.5	3.7	3.7	00.0	00.0	11.1	3.7	7.4	22.2	7.4	00.0	00.0	3.7	00.0	7.4	11.1	00.0	100.
7	11.5	11.5	3.8	3.8	00.0	3.8	11.5	7.7	15.4	3.8	00.0	00.0	3.8	3.8	11.5	7.7	00.0	100.
8	11.5	11.5	00.0	00.0	3.8	00.0	15.4	7.7	19.2	00.0	3.8	00.0	00.0	3.8	7.7	15.4	00.0	100.
9	7.7	7.7	3.8	00.0	00.0	3.8	15.4	7.7	15.4	3.8	3.8	00.0	00.0	00.0	7.7	23.1	00.0	100.
10	12.0	4.0	4.0	4.0	00.0	4.0	12.0	4.0	20.0	8.0	4.0	00.0	00.0	4.0	12.0	8.0	00.0	100.
11	11.5	3.8	3.8	00.0	3.8	00.0	11.5	7.7	11.5	15.4	3.8	00.0	3.8	3.8	7.7	11.5	00.0	100.
12	11.5	00.0	3.8	3.8	00.0	3.8	3.8	19.2	7.7	7.7	11.5	00.0	3.8	3.8	7.7	11.5	00.0	100.
13	3.8	00.0	7.7	00.0	3.8	3.8	3.8	15.4	15.4	00.0	15.4	00.0	3.8	7.7	3.8	15.4	00.0	100.
14	8.0	00.0	8.0	00.0	4.0	00.0	4.0	20.0	16.0	00.0	8.0	8.0	00.0	16.0	00.0	8.0	00.0	100.
15	7.7	3.8	00.0	7.7	00.0	00.0	3.8	23.1	11.5	3.8	7.7	7.7	00.0	11.5	7.7	3.8	00.0	100.
16	7.7	00.0	3.8	3.8	3.8	00.0	3.8	11.5	19.2	3.8	3.8	7.7	3.8	11.5	7.7	7.7	00.0	100.
17	3.7	3.7	00.0	3.7	7.4	00.0	00.0	14.8	18.5	3.7	3.7	7.4	7.4	7.4	00.0	18.5	00.0	100.
18	3.7	3.7	00.0	00.0	7.4	00.0	3.7	18.5	14.8	3.7	00.0	3.7	11.1	7.4	3.7	18.5	00.0	100.
19	3.7	00.0	3.7	3.7	3.7	00.0	00.0	25.9	14.8	00.0	00.0	00.0	3.7	11.1	7.4	22.2	00.0	100.
20	7.4	7.4	7.4	00.0	3.7	00.0	18.5	11.1	14.8	00.0	00.0	00.0	3.7	00.0	11.1	14.8	00.0	100.
21	3.7	3.7	7.4	3.7	7.4	3.7	11.1	14.8	18.5	00.0	00.0	00.0	3.7	00.0	7.4	14.8	00.0	100.
22	11.1	00.0	7.4	7.4	3.7	3.7	11.1	7.4	25.9	3.7	00.0	00.0	3.7	3.7	3.7	7.4	00.0	100.
23	7.4	00.0	11.1	3.7	7.4	00.0	11.1	11.1	22.2	3.7	3.7	00.0	00.0	3.7	7.4	7.4	00.0	100.
24	11.1	7.4	3.7	3.7	7.4	3.7	11.1	7.4	22.2	3.7	00.0	00.0	00.0	7.4	7.4	3.7	00.0	100.
ALL	10.4	3.6	3.9	2.5	3.3	3.8	7.7	12.3	17.1	5.3	2.8	1.7	2.7	4.9	6.4	11.5	00.0	100.

NUMBER OF OBS = 636

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

MAY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.5	6.5	6.5	3.2	3.2	9.7	6.5	6.5	16.1	9.7	3.2	00.0	00.0	00.0	00.0	22.6	00.0	100.
2	9.7	3.2	6.5	3.2	6.5	3.2	19.4	00.0	12.9	9.7	6.5	00.0	00.0	00.0	3.2	16.1	00.0	100.
3	9.7	6.5	6.5	3.2	00.0	12.9	9.7	9.7	6.5	9.7	6.5	00.0	00.0	3.2	9.7	6.5	00.0	100.
4	6.5	3.2	9.7	6.5	00.0	3.2	12.9	12.9	3.2	9.7	6.5	00.0	00.0	6.5	9.7	9.7	00.0	100.
5	6.5	9.7	12.9	3.2	3.2	3.2	9.7	6.5	16.1	6.5	6.5	00.0	00.0	6.5	3.2	6.5	00.0	100.
6	9.7	9.7	3.2	9.7	6.5	3.2	9.7	6.5	16.1	3.2	3.2	3.2	3.2	6.5	3.2	3.2	00.0	100.
7	3.2	3.2	12.9	00.0	3.2	6.5	12.9	12.9	9.7	6.5	3.2	3.2	3.2	3.2	6.5	9.7	00.0	100.
8	6.5	3.2	9.7	3.2	00.0	3.2	22.6	9.7	9.7	6.5	3.2	3.2	3.2	3.2	6.5	6.5	00.0	100.
9	6.5	3.2	9.7	3.2	3.2	3.2	9.7	16.1	9.7	3.2	6.5	00.0	6.5	6.5	3.2	9.7	00.0	100.
10	9.7	6.5	6.5	6.5	00.0	6.5	6.5	16.1	12.9	3.2	6.5	00.0	00.0	12.9	3.2	3.2	00.0	100.
11	19.4	00.0	6.5	00.0	3.2	00.0	16.1	9.7	16.1	6.5	00.0	3.2	3.2	6.5	6.5	3.2	00.0	100.
12	9.7	00.0	6.5	00.0	00.0	3.2	12.9	9.7	16.1	3.2	6.5	6.5	00.0	6.5	9.7	9.7	00.0	100.
13	12.9	00.0	3.2	3.2	00.0	3.2	9.7	6.5	22.6	3.2	9.7	00.0	3.2	9.7	3.2	9.7	00.0	100.
14	12.9	3.2	6.5	00.0	00.0	00.0	9.7	6.5	22.6	12.9	00.0	6.5	3.2	6.5	3.2	6.5	00.0	100.
15	9.7	6.5	3.2	00.0	00.0	3.2	3.2	6.5	22.6	16.1	6.5	3.2	00.0	3.2	6.5	9.7	00.0	100.
16	6.5	6.5	00.0	00.0	00.0	3.2	6.5	3.2	25.8	9.7	3.2	6.5	3.2	6.5	6.5	12.9	00.0	100.
17	9.7	6.5	00.0	3.2	00.0	3.2	9.7	9.7	16.1	6.5	6.5	6.5	00.0	3.2	9.7	9.7	00.0	100.
18	9.7	6.5	00.0	3.2	00.0	3.2	6.5	12.9	12.9	6.5	9.7	3.2	00.0	6.5	3.2	16.1	00.0	100.
19	12.9	9.7	00.0	3.2	00.0	3.2	9.7	12.9	12.9	3.2	6.5	6.5	00.0	6.5	3.2	9.7	00.0	100.
20	19.4	6.5	00.0	00.0	3.2	6.5	9.7	9.7	12.9	6.5	9.7	00.0	00.0	00.0	6.5	9.7	00.0	100.
21	19.4	6.5	00.0	00.0	3.2	6.5	9.7	12.9	12.9	9.7	3.2	00.0	00.0	00.0	6.5	9.7	00.0	100.
22	12.9	6.5	3.2	00.0	3.2	6.5	9.7	6.5	19.4	9.7	3.2	00.0	00.0	00.0	6.5	12.9	00.0	100.
23	19.4	3.2	6.5	3.2	00.0	6.5	12.9	3.2	22.6	6.5	6.5	00.0	00.0	00.0	00.0	9.7	00.0	100.
24	9.7	6.5	9.7	00.0	3.2	12.9	3.2	12.9	12.9	9.7	3.2	00.0	00.0	00.0	00.0	16.1	00.0	100.
ALL	10.8	5.1	5.4	2.4	1.7	4.8	10.3	9.1	15.1	7.4	5.2	2.2	1.2	4.3	5.0	9.9	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUNE

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.3	3.3	00.0	3.3	00.0	6.7	3.3	20.0	36.7	6.7	00.0	00.0	3.3	3.3	3.3	6.7	00.0	100.
2	13.3	00.0	3.3	00.0	00.0	3.3	3.3	20.0	40.0	6.7	00.0	3.3	00.0	3.3	3.3	00.0	00.0	100.
3	00.0	3.3	00.0	00.0	00.0	6.7	10.0	13.3	40.0	3.3	3.3	3.3	00.0	3.3	6.7	6.7	00.0	100.
4	3.3	3.3	00.0	00.0	00.0	6.7	3.3	20.0	36.7	6.7	3.3	3.3	00.0	6.7	3.3	3.3	00.0	100.
5	00.0	3.3	3.3	00.0	00.0	3.3	6.7	23.3	33.3	3.3	6.7	3.3	00.0	6.7	3.3	3.3	00.0	100.
6	3.3	00.0	00.0	6.7	00.0	6.7	3.3	13.3	43.3	6.7	3.3	3.3	00.0	6.7	00.0	3.3	00.0	100.
7	3.3	00.0	00.0	00.0	6.7	3.3	3.3	20.0	36.7	13.3	00.0	3.3	00.0	6.7	00.0	3.3	00.0	100.
8	3.3	00.0	00.0	00.0	00.0	6.7	3.3	23.3	26.7	16.7	6.7	3.3	00.0	00.0	6.7	3.3	00.0	100.
9	3.3	00.0	00.0	00.0	00.0	6.7	3.3	16.7	30.0	20.0	6.7	3.3	00.0	00.0	6.7	3.3	00.0	100.
10	00.0	00.0	00.0	00.0	3.3	3.3	3.3	10.0	33.3	20.0	6.7	3.3	00.0	00.0	13.3	3.3	00.0	100.
11	00.0	00.0	3.3	00.0	3.3	00.0	3.3	6.7	36.7	23.3	3.3	3.3	00.0	3.3	00.0	13.3	00.0	100.
12	00.0	00.0	00.0	00.0	3.3	3.3	3.3	6.7	43.3	10.0	10.0	3.3	00.0	00.0	6.7	10.0	00.0	100.
13	3.3	00.0	3.3	00.0	00.0	00.0	6.7	13.3	43.3	3.3	10.0	3.3	00.0	00.0	3.3	10.0	00.0	100.
14	6.7	00.0	3.3	00.0	00.0	00.0	3.3	23.3	33.3	3.3	6.7	6.7	00.0	00.0	3.3	10.0	00.0	100.
15	6.7	6.7	00.0	00.0	00.0	00.0	6.7	20.0	33.3	6.7	3.3	3.3	00.0	00.0	6.7	6.7	00.0	100.
16	10.0	00.0	3.3	3.3	00.0	00.0	6.7	23.3	33.3	3.3	3.3	00.0	3.3	00.0	3.3	6.7	00.0	100.
17	6.7	3.3	00.0	3.3	00.0	3.3	3.3	26.7	30.0	3.3	00.0	3.3	00.0	3.3	3.3	10.0	00.0	100.
18	10.0	3.3	3.3	00.0	3.3	00.0	6.7	26.7	33.3	00.0	00.0	3.3	00.0	00.0	3.3	6.7	00.0	100.
19	6.7	6.7	6.7	00.0	00.0	00.0	6.7	36.7	26.7	00.0	00.0	00.0	3.3	00.0	3.3	3.3	00.0	100.
20	10.0	3.3	3.3	6.7	00.0	3.3	00.0	43.3	20.0	3.3	00.0	00.0	3.3	00.0	3.3	00.0	00.0	100.
21	10.0	00.0	3.3	00.0	3.3	6.7	6.7	33.3	26.7	00.0	3.3	00.0	00.0	3.3	3.3	00.0	00.0	100.
22	6.7	00.0	00.0	00.0	3.3	3.3	10.0	26.7	33.3	00.0	00.0	3.3	00.0	3.3	3.3	6.7	00.0	100.
23	3.3	00.0	00.0	00.0	3.3	3.3	6.7	30.0	30.0	3.3	00.0	3.3	00.0	3.3	3.3	10.0	00.0	100.
24	6.7	00.0	00.0	00.0	3.3	6.7	3.3	16.7	40.0	6.7	00.0	00.0	00.0	6.7	3.3	6.7	00.0	100.
ALL	5.0	1.5	1.5	1.0	1.4	3.5	4.9	21.4	34.2	7.1	3.2	2.6	.6	2.5	4.0	5.7	00.0	100.

NUMBER OF OBS = 720

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

APR-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.1	3.4	3.4	2.3	2.3	8.0	8.0	10.2	25.0	8.0	1.1	00.0	1.1	3.4	2.3	12.5	00.0	100.
2	13.6	1.1	3.4	2.3	3.4	4.5	10.2	10.2	23.9	9.1	2.3	1.1	00.0	2.3	4.5	8.0	00.0	100.
3	9.1	3.4	3.4	2.3	1.1	9.1	8.0	11.4	22.7	6.8	3.4	1.1	1.1	2.3	8.0	6.8	00.0	100.
4	8.0	4.5	3.4	3.4	00.0	8.0	5.7	15.9	17.0	10.2	3.4	2.3	00.0	4.5	5.7	8.0	00.0	100.
5	6.8	6.8	6.8	1.1	1.1	5.7	6.8	13.6	20.5	8.0	4.5	2.3	1.1	4.5	3.4	6.8	00.0	100.
6	10.2	4.5	2.3	5.7	2.3	6.8	5.7	9.1	27.3	5.7	2.3	2.3	2.3	4.5	3.4	5.7	00.0	100.
7	5.7	4.6	5.7	1.1	3.4	4.6	9.2	13.8	20.7	8.0	1.1	2.3	2.3	4.6	5.7	6.9	00.0	100.
8	6.9	4.6	3.4	1.1	1.1	3.4	13.8	13.8	18.4	8.0	4.6	2.3	1.1	2.3	6.9	8.0	00.0	100.
9	5.7	3.4	4.6	1.1	1.1	4.6	9.2	13.8	18.4	9.2	5.7	1.1	2.3	2.3	5.7	11.5	00.0	100.
10	7.0	3.5	3.5	3.5	1.2	4.7	7.0	10.5	22.1	10.5	5.8	1.2	00.0	5.8	9.3	4.7	00.0	100.
11	10.3	1.1	4.6	00.0	3.4	00.0	10.3	8.0	21.8	14.9	2.3	2.3	2.3	4.6	4.6	9.2	00.0	100.
12	6.9	00.0	3.4	1.1	1.1	3.4	6.9	11.5	23.0	6.9	9.2	3.4	1.1	3.4	8.0	10.3	00.0	100.
13	6.9	00.0	4.6	1.1	1.1	2.3	6.9	11.5	27.6	2.3	11.5	1.1	2.3	5.7	3.4	11.5	00.0	100.
14	9.3	1.2	5.8	00.0	1.2	00.0	5.8	16.3	24.4	5.8	4.7	7.0	1.2	7.0	2.3	8.1	00.0	100.
15	8.0	5.7	1.1	2.3	00.0	1.1	4.6	16.1	23.0	9.2	5.7	4.6	00.0	4.6	6.9	6.9	00.0	100.
16	8.0	2.3	2.3	2.3	1.1	1.1	5.7	12.6	26.4	5.7	3.4	4.6	3.4	5.7	5.7	9.2	00.0	100.
17	6.8	4.5	00.0	3.4	2.3	2.3	4.5	17.0	21.6	4.5	3.4	5.7	2.3	4.5	4.5	12.5	00.0	100.
18	8.0	4.5	1.1	1.1	3.4	1.1	5.7	19.3	20.5	3.4	3.4	3.4	3.4	4.5	3.4	13.6	00.0	100.
19	8.0	5.7	3.4	2.3	1.1	1.1	5.7	25.0	18.2	1.1	2.3	2.3	2.3	5.7	4.5	11.4	00.0	100.
20	12.5	5.7	3.4	2.3	2.3	3.4	9.1	21.6	15.9	3.4	3.4	00.0	2.3	00.0	6.8	8.0	00.0	100.
21	11.4	3.4	3.4	1.1	4.5	5.7	9.1	20.5	19.3	3.4	2.3	00.0	1.1	1.1	5.7	8.0	00.0	100.
22	10.2	2.3	3.4	2.3	3.4	4.5	10.2	13.6	26.1	4.5	1.1	1.1	1.1	2.3	4.5	9.1	00.0	100.
23	10.2	1.1	5.7	2.3	3.4	3.4	10.2	14.8	25.0	4.5	3.4	1.1	00.0	2.3	3.4	9.1	00.0	100.
24	9.1	4.5	4.5	1.1	4.5	8.0	5.7	12.5	25.0	6.8	1.1	00.0	00.0	4.5	3.4	9.1	00.0	100.
ALL	8.7	3.4	3.6	2.0	2.1	4.0	7.7	14.3	22.2	6.7	3.8	2.2	1.4	3.9	5.1	9.0	00.0	100.

NUMBER OF OBS = 2100

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-JUN

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.5	2.8	2.3	2.8	2.3	5.6	5.1	7.3	15.8	10.2	4.0	1.1	3.4	6.8	7.3	14.7	00.0	100.
2	10.7	1.7	3.4	2.8	2.3	3.4	5.6	8.5	14.7	10.7	5.1	1.7	2.3	7.3	7.9	11.9	00.0	100.
3	9.0	3.4	3.4	2.3	1.1	5.6	4.0	8.5	14.1	10.2	6.8	2.3	1.1	6.8	9.6	11.9	00.0	100.
4	9.0	4.0	2.8	2.8	.6	4.5	3.4	10.7	11.3	11.9	5.1	3.4	2.3	7.3	9.0	11.9	00.0	100.
5	9.1	4.5	4.5	1.7	1.1	2.8	4.5	10.2	13.1	9.1	5.1	3.4	4.5	6.8	8.5	10.8	00.0	100.
6	9.1	5.1	2.8	3.4	1.7	4.0	3.4	7.4	19.3	6.8	3.4	4.5	2.3	6.8	9.1	10.8	00.0	100.
7	8.0	4.0	5.1	.6	2.9	2.9	4.6	11.4	13.7	9.1	3.4	2.9	2.9	9.1	9.1	10.3	00.0	100.
8	8.0	4.5	2.8	1.1	2.8	1.7	6.8	10.8	13.6	10.8	4.0	4.0	2.3	7.4	9.1	10.2	00.0	100.
9	8.5	3.4	4.0	1.1	2.8	2.8	5.1	10.2	14.2	10.2	6.3	2.8	3.4	5.7	9.1	10.2	00.0	100.
10	6.9	3.4	4.0	1.7	1.1	5.1	4.0	5.1	17.7	11.4	8.6	2.9	2.9	5.7	12.0	7.4	00.0	100.
11	7.4	2.3	4.5	00.0	2.3	2.8	5.1	6.3	15.9	14.2	6.3	3.4	3.4	5.1	9.7	11.4	00.0	100.
12	5.1	1.1	2.8	1.7	.6	4.5	4.0	8.5	14.2	10.2	10.2	4.0	3.4	5.1	9.7	14.8	00.0	100.
13	5.7	1.7	3.4	.6	1.1	3.4	4.5	7.4	17.6	8.0	9.1	4.0	4.0	6.3	8.5	14.8	00.0	100.
14	7.4	2.3	5.1	.6	1.1	1.1	4.0	9.7	14.9	10.9	5.7	8.6	1.1	5.7	10.9	10.9	00.0	100.
15	7.4	5.1	2.3	1.7	1.1	.6	4.5	10.2	13.1	11.4	7.4	6.3	2.3	4.0	11.9	10.8	00.0	100.
16	8.5	3.4	2.3	1.1	1.1	1.7	5.1	9.1	15.9	9.1	7.4	4.5	4.0	5.1	10.8	10.8	00.0	100.
17	8.5	4.0	.6	1.7	1.7	2.3	4.5	11.9	13.6	7.9	7.3	5.6	2.3	4.5	10.7	13.0	00.0	100.
18	7.3	3.4	1.1	.6	2.8	2.3	4.0	14.1	13.0	6.8	5.6	6.8	2.8	3.4	11.3	14.7	00.0	100.
19	7.3	4.5	2.3	1.1	1.7	2.3	4.0	18.1	12.4	5.1	2.8	5.1	3.4	4.0	11.9	14.1	00.0	100.
20	9.6	5.1	2.8	1.7	1.1	5.1	4.5	15.8	11.3	4.5	4.0	3.4	4.5	3.4	11.3	11.9	00.0	100.
21	9.0	4.5	2.8	1.7	2.3	5.6	5.1	14.1	11.9	6.8	2.8	2.3	4.5	4.0	10.7	11.9	00.0	100.
22	8.5	3.4	2.3	2.8	2.8	5.1	5.1	10.7	15.3	7.9	2.3	2.8	4.5	6.2	7.9	12.4	00.0	100.
23	8.5	2.3	3.4	2.8	2.3	5.1	5.1	10.2	14.8	7.4	4.5	2.8	4.5	4.5	8.0	13.6	00.0	100.
24	7.9	5.1	2.8	1.7	4.0	5.1	5.1	8.5	15.3	10.2	2.3	3.4	2.3	7.9	7.3	11.3	00.0	100.
ALL	8.1	3.5	3.1	1.7	1.9	3.6	4.6	10.2	14.4	9.2	5.4	3.8	3.1	5.8	9.6	11.9	00.0	100.

NUMBER OF OBS = 4232

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JULY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	6.5	3.2	00.0	3.2	00.0	6.5	6.5	12.9	25.8	22.6	3.2	00.0	00.0	00.0	3.2	6.5	00.0	100.
2	3.2	3.2	3.2	3.2	3.2	6.5	3.2	12.9	32.3	12.9	6.5	00.0	00.0	3.2	3.2	3.2	00.0	100.
3	3.2	9.7	00.0	3.2	3.2	3.2	3.2	9.7	29.0	12.9	16.1	3.2	00.0	00.0	00.0	3.2	00.0	100.
4	00.0	6.5	3.2	00.0	6.5	3.2	6.5	6.5	22.6	25.8	12.9	3.2	00.0	00.0	00.0	3.2	00.0	100.
5	3.2	6.5	00.0	6.5	3.2	3.2	6.5	9.7	22.6	22.6	6.5	3.2	3.2	3.2	00.0	00.0	00.0	100.
6	00.0	6.5	3.2	00.0	3.2	3.2	9.7	9.7	32.3	6.5	16.1	3.2	00.0	00.0	00.0	6.5	00.0	100.
7	3.2	9.7	00.0	00.0	3.2	00.0	9.7	12.9	32.3	6.5	12.9	3.2	3.2	00.0	00.0	3.2	00.0	100.
8	3.2	6.5	3.2	00.0	00.0	3.2	6.5	9.7	35.5	12.9	9.7	00.0	3.2	00.0	3.2	3.2	00.0	100.
9	6.5	3.2	6.5	00.0	00.0	00.0	6.5	6.5	32.3	25.8	6.5	00.0	00.0	3.2	00.0	3.2	00.0	100.
10	3.2	3.2	3.2	6.5	00.0	3.2	3.2	12.9	22.6	22.6	9.7	3.2	3.2	00.0	00.0	3.2	00.0	100.
11	3.2	6.5	00.0	3.2	3.2	3.2	6.5	12.9	29.0	19.4	3.2	6.5	00.0	00.0	00.0	3.2	00.0	100.
12	9.7	00.0	3.2	3.2	3.2	6.5	00.0	19.4	29.0	16.1	00.0	3.2	3.2	00.0	00.0	3.2	00.0	100.
13	9.7	3.2	3.2	3.2	00.0	6.5	9.7	19.4	29.0	6.5	3.2	3.2	00.0	00.0	00.0	3.2	00.0	100.
14	9.7	3.2	00.0	3.2	3.2	3.2	12.9	19.4	32.3	6.5	00.0	3.2	00.0	00.0	00.0	3.2	00.0	100.
15	00.0	9.7	3.2	6.5	00.0	00.0	19.4	19.4	29.0	3.2	6.5	00.0	00.0	00.0	3.2	00.0	00.0	100.
16	00.0	3.2	6.5	3.2	3.2	6.5	16.1	19.4	22.6	6.5	9.7	00.0	00.0	3.2	00.0	00.0	00.0	100.
17	00.0	3.2	6.5	3.2	00.0	16.1	22.6	22.6	12.9	6.5	3.2	00.0	00.0	00.0	3.2	00.0	00.0	100.
18	3.2	00.0	3.2	6.5	6.5	9.7	19.4	25.8	12.9	6.5	3.2	00.0	00.0	00.0	3.2	00.0	00.0	100.
19	3.2	00.0	3.2	6.5	3.2	16.1	22.6	19.4	12.9	9.7	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
20	00.0	3.2	6.5	6.5	6.5	6.5	16.1	29.0	12.9	9.7	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
21	00.0	3.2	6.5	3.2	00.0	12.9	19.4	25.8	19.4	6.5	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
22	00.0	00.0	6.5	6.5	3.2	9.7	12.9	22.6	29.0	6.5	00.0	00.0	00.0	00.0	3.2	00.0	00.0	100.
23	3.2	00.0	6.5	00.0	6.5	6.5	19.4	16.1	29.0	9.7	3.2	00.0	00.0	00.0	00.0	00.0	00.0	100.
24	00.0	3.2	9.7	00.0	00.0	9.7	3.2	19.4	29.0	12.9	3.2	00.0	00.0	3.2	6.5	00.0	00.0	100.
ALL	3.1	4.0	3.6	3.2	2.6	6.0	10.9	16.4	25.7	12.4	5.6	1.5	.7	.7	1.2	2.4	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

AUGUST

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	12.9	9.7	3.2	00.0	00.0	19.4	16.1	9.7	22.6	3.2	00.0	00.0	00.0	00.0	00.0	3.2	00.0	100.
2	3.2	6.5	9.7	00.0	3.2	22.6	12.9	6.5	22.6	6.5	3.2	00.0	00.0	3.2	00.0	00.0	00.0	100.
3	6.5	6.5	00.0	12.9	00.0	16.1	12.9	9.7	16.1	12.9	3.2	00.0	00.0	00.0	00.0	3.2	00.0	100.
4	3.2	12.9	3.2	00.0	9.7	12.9	19.4	3.2	6.5	16.1	3.2	00.0	00.0	3.2	3.2	3.2	00.0	100.
5	3.2	3.2	12.9	3.2	6.5	12.9	22.6	3.2	6.5	3.2	6.5	9.7	00.0	00.0	3.2	3.2	00.0	100.
6	3.2	3.2	6.5	00.0	6.5	16.1	29.0	00.0	9.7	6.5	6.5	6.5	00.0	00.0	3.2	3.2	00.0	100.
7	3.2	3.2	3.2	00.0	3.2	12.9	29.0	9.7	12.9	12.9	3.2	00.0	00.0	00.0	6.5	00.0	00.0	100.
8	6.5	3.2	00.0	00.0	6.5	12.9	29.0	6.5	9.7	6.5	6.5	00.0	3.2	3.2	3.2	3.2	00.0	100.
9	6.5	00.0	6.5	3.2	00.0	16.1	25.8	6.5	9.7	6.5	9.7	00.0	00.0	3.2	3.2	3.2	00.0	100.
10	3.2	3.2	3.2	6.5	3.2	12.9	19.4	16.1	12.9	00.0	3.2	6.5	00.0	00.0	9.7	00.0	00.0	100.
11	3.2	9.7	00.0	6.5	00.0	12.9	19.4	16.1	12.9	3.2	3.2	3.2	00.0	3.2	00.0	6.5	00.0	100.
12	9.7	3.2	3.2	00.0	3.2	16.1	16.1	3.2	25.8	00.0	6.5	00.0	3.2	00.0	3.2	6.5	00.0	100.
13	6.5	3.2	3.2	00.0	3.2	16.1	16.1	19.4	16.1	3.2	00.0	00.0	3.2	00.0	3.2	6.5	00.0	100.
14	9.7	6.5	00.0	3.2	3.2	16.1	16.1	19.4	6.5	6.5	00.0	00.0	00.0	3.2	6.5	3.2	00.0	100.
15	6.5	3.2	3.2	00.0	9.7	9.7	19.4	9.7	12.9	6.5	00.0	00.0	00.0	9.7	00.0	9.7	00.0	100.
16	9.7	6.5	3.2	00.0	6.5	3.2	29.0	16.1	12.9	00.0	00.0	00.0	00.0	3.2	3.2	6.5	00.0	100.
17	6.5	3.2	3.2	3.2	3.2	12.9	22.6	16.1	16.1	00.0	00.0	00.0	00.0	00.0	00.0	12.9	00.0	100.
18	6.5	9.7	00.0	9.7	3.2	9.7	22.6	12.9	12.9	3.2	3.2	00.0	3.2	00.0	00.0	3.2	00.0	100.
19	9.7	9.7	3.2	6.5	00.0	19.4	22.6	9.7	6.5	6.5	00.0	3.2	3.2	00.0	00.0	00.0	00.0	100.
20	9.7	6.5	6.5	6.5	00.0	22.6	12.9	12.9	9.7	6.5	00.0	3.2	00.0	00.0	3.2	00.0	00.0	100.
21	9.7	6.5	3.2	12.9	00.0	16.1	16.1	6.5	22.6	00.0	3.2	00.0	00.0	00.0	00.0	3.2	00.0	100.
22	12.9	3.2	9.7	6.5	3.2	9.7	19.4	12.9	22.6	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	100.
23	16.1	3.2	3.2	3.2	9.7	9.7	22.6	9.7	22.6	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	100.
24	12.9	6.5	6.5	00.0	3.2	12.9	25.8	9.7	16.1	3.2	00.0	00.0	00.0	3.2	00.0	00.0	00.0	100.
ALL	7.5	5.5	4.0	3.5	3.6	14.2	20.7	10.2	14.4	4.7	2.6	1.3	.7	1.5	2.2	3.4	00.0	100.

NUMBER OF OBS = 744

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

SEPTEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.3	6.7	00.0	3.3	00.0	6.7	13.3	23.3	10.0	3.3	6.7	00.0	3.3	00.0	6.7	13.3	00.0	100.
2	3.3	3.3	3.3	3.3	3.3	10.0	6.7	26.7	6.7	6.7	00.0	10.0	00.0	3.3	6.7	6.7	00.0	100.
3	3.3	00.0	6.7	3.3	3.3	10.0	6.7	16.7	20.0	6.7	00.0	3.3	00.0	6.7	6.7	6.7	00.0	100.
4	6.7	00.0	10.0	00.0	3.3	10.0	16.7	10.0	20.0	6.7	00.0	00.0	3.3	00.0	10.0	3.3	00.0	100.
5	6.7	00.0	6.7	3.3	3.3	6.7	10.0	13.3	23.3	3.3	6.7	00.0	3.3	00.0	6.7	6.7	00.0	100.
6	10.0	00.0	3.3	6.7	00.0	6.7	13.3	13.3	23.3	6.7	00.0	00.0	3.3	00.0	10.0	3.3	00.0	100.
7	3.3	3.3	00.0	3.3	00.0	3.3	16.7	13.3	20.0	10.0	00.0	00.0	3.3	6.7	3.3	13.3	00.0	100.
8	3.3	6.7	00.0	00.0	3.3	00.0	16.7	16.7	20.0	6.7	3.3	00.0	3.3	6.7	3.3	10.0	00.0	100.
9	00.0	00.0	3.3	3.3	3.3	3.3	10.0	13.3	16.7	10.0	3.3	3.3	3.3	6.7	6.7	13.3	00.0	100.
10	00.0	00.0	3.3	00.0	3.3	6.7	6.7	13.3	20.0	10.0	3.3	3.3	00.0	3.3	10.0	16.7	00.0	100.
11	6.7	6.7	00.0	3.3	00.0	3.3	10.0	10.0	30.0	3.3	3.3	00.0	3.3	00.0	6.7	13.3	00.0	100.
12	6.7	3.3	00.0	3.3	00.0	6.7	10.0	6.7	30.0	10.0	00.0	00.0	3.3	00.0	00.0	20.0	00.0	100.
13	10.0	3.3	00.0	3.3	00.0	10.0	6.7	10.0	26.7	3.3	6.7	00.0	3.3	00.0	00.0	16.7	00.0	100.
14	6.7	3.3	3.3	00.0	00.0	6.7	6.7	16.7	23.3	3.3	3.3	3.3	3.3	00.0	00.0	20.0	00.0	100.
15	3.3	3.3	00.0	3.3	00.0	10.0	3.3	10.0	26.7	10.0	00.0	3.3	00.0	3.3	3.3	20.0	00.0	100.
16	6.7	3.3	3.3	3.3	3.3	3.3	10.0	10.0	23.3	3.3	3.3	3.3	00.0	00.0	6.7	16.7	00.0	100.
17	3.3	6.7	6.7	3.3	00.0	3.3	10.0	6.7	26.7	3.3	3.3	3.3	00.0	00.0	10.0	13.3	00.0	100.
18	6.7	3.3	00.0	10.0	00.0	6.7	10.0	10.0	13.3	6.7	6.7	3.3	3.3	00.0	3.3	16.7	00.0	100.
19	6.7	00.0	3.3	3.3	6.7	10.0	13.3	3.3	13.3	6.7	6.7	00.0	3.3	3.3	6.7	13.3	00.0	100.
20	10.0	00.0	00.0	3.3	3.3	16.7	10.0	6.7	16.7	16.7	00.0	00.0	00.0	3.3	3.3	10.0	00.0	100.
21	3.3	3.3	00.0	00.0	6.7	6.7	20.0	13.3	10.0	13.3	00.0	3.3	00.0	3.3	3.3	13.3	00.0	100.
22	10.0	3.3	00.0	00.0	6.7	6.7	20.0	16.7	6.7	10.0	00.0	00.0	00.0	00.0	10.0	10.0	00.0	100.
23	10.0	3.3	00.0	00.0	3.3	6.7	16.7	23.3	6.7	10.0	00.0	00.0	00.0	3.3	6.7	10.0	00.0	100.
24	6.7	3.3	3.3	00.0	00.0	6.7	23.3	16.7	10.0	10.0	00.0	00.0	00.0	3.3	6.7	10.0	00.0	100.
ALL	5.7	2.8	2.4	2.6	2.2	6.9	11.9	13.3	18.5	7.5	2.4	1.7	1.8	2.2	5.7	12.4	00.0	100.

NUMBER OF OBS = 720

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-SEP

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.6	6.5	1.1	2.2	00.0	10.9	12.0	15.2	19.6	9.8	3.3	00.0	1.1	00.0	3.3	7.6	00.0	100.
2	3.3	4.3	5.4	2.2	3.3	13.0	7.6	15.2	20.7	8.7	3.3	3.3	00.0	3.3	3.3	3.3	00.0	100.
3	4.3	5.4	2.2	6.5	2.2	9.8	7.6	12.0	21.7	10.9	6.5	2.2	00.0	2.2	2.2	4.3	00.0	100.
4	3.3	6.5	5.4	00.0	6.5	8.7	14.1	6.5	16.3	16.3	5.4	1.1	1.1	1.1	4.3	3.3	00.0	100.
5	4.3	3.3	6.5	4.3	4.3	7.6	13.0	8.7	17.4	9.8	6.5	4.3	2.2	1.1	3.3	3.3	00.0	100.
6	4.3	3.3	4.3	2.2	3.3	8.7	17.4	7.6	21.7	6.5	7.6	3.3	1.1	00.0	4.3	4.3	00.0	100.
7	3.3	5.4	1.1	1.1	2.2	5.4	18.5	12.0	21.7	9.8	5.4	1.1	2.2	2.2	3.3	5.4	00.0	100.
8	4.3	5.4	1.1	00.0	3.3	5.4	17.4	10.9	21.7	8.7	6.5	00.0	3.3	3.3	3.3	5.4	00.0	100.
9	4.3	1.1	5.4	2.2	1.1	6.5	14.1	8.7	19.6	14.1	6.5	1.1	1.1	4.3	3.3	6.5	00.0	100.
10	2.2	2.2	3.3	4.3	2.2	7.6	9.8	14.1	18.5	10.9	5.4	4.3	1.1	1.1	6.5	6.5	00.0	100.
11	4.3	7.6	00.0	4.3	1.1	6.5	12.0	13.0	23.9	8.7	3.3	3.3	1.1	1.1	2.2	7.6	00.0	100.
12	8.7	2.2	2.2	2.2	2.2	9.8	8.7	9.8	28.3	8.7	2.2	1.1	3.3	00.0	1.1	9.8	00.0	100.
13	8.7	3.3	2.2	2.2	1.1	10.9	10.9	16.3	23.9	4.3	3.3	1.1	2.2	00.0	1.1	8.7	00.0	100.
14	8.7	4.3	1.1	2.2	2.2	8.7	12.0	18.5	20.7	5.4	1.1	2.2	1.1	1.1	2.2	8.7	00.0	100.
15	3.3	5.4	2.2	3.3	3.3	6.5	14.1	13.0	22.8	6.5	2.2	1.1	00.0	4.3	2.2	9.8	00.0	100.
16	5.4	4.3	4.3	2.2	4.3	4.3	18.5	15.2	19.6	3.3	4.3	1.1	00.0	2.2	3.3	7.6	00.0	100.
17	3.3	4.3	5.4	3.3	1.1	10.9	18.5	15.2	18.5	3.3	2.2	1.1	00.0	00.0	4.3	8.7	00.0	100.
18	5.4	4.3	1.1	8.7	3.3	8.7	17.4	16.3	13.0	5.4	4.3	1.1	2.2	00.0	2.2	6.5	00.0	100.
19	6.5	3.3	3.3	5.4	3.3	15.2	19.6	10.9	10.9	7.6	2.2	1.1	2.2	1.1	2.2	5.4	00.0	100.
20	6.5	3.3	4.3	5.4	3.3	15.2	13.0	16.3	13.0	10.9	00.0	1.1	00.0	1.1	2.2	4.3	00.0	100.
21	4.3	4.3	3.3	5.4	2.2	12.0	18.5	15.2	17.4	6.5	1.1	1.1	00.0	1.1	1.1	6.5	00.0	100.
22	7.6	2.2	5.4	4.3	4.3	8.7	17.4	17.4	19.6	5.4	00.0	00.0	00.0	00.0	4.3	3.3	00.0	100.
23	9.8	2.2	3.3	1.1	6.5	7.6	19.6	16.3	19.6	6.5	1.1	00.0	00.0	1.1	2.2	3.3	00.0	100.
24	6.5	4.3	6.5	00.0	1.1	9.8	17.4	15.2	18.5	8.7	1.1	00.0	00.0	3.3	4.3	3.3	00.0	100.
ALL	5.4	4.1	3.4	3.1	2.8	9.1	14.5	13.3	19.5	8.2	3.5	1.5	1.0	1.4	3.0	6.0	00.0	100.

NUMBER OF OBS = 2208

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCTOBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	11.5	3.8	7.7	7.7	3.8	7.7	00.0	3.8	7.7	19.2	7.7	3.8	3.8	00.0	3.8	7.7	00.0	100.
2	7.7	3.8	7.7	7.7	00.0	7.7	3.8	3.8	11.5	23.1	3.8	00.0	3.8	00.0	11.5	3.8	00.0	100.
3	7.7	11.5	3.8	3.8	00.0	3.8	7.7	7.7	7.7	15.4	11.5	00.0	00.0	3.8	7.7	7.7	00.0	100.
4	11.5	11.5	00.0	3.8	00.0	3.8	11.5	3.8	11.5	15.4	3.8	00.0	3.8	3.8	7.7	7.7	00.0	100.
5	11.5	15.4	00.0	7.7	00.0	7.7	00.0	11.5	15.4	3.8	3.8	3.8	00.0	7.7	3.8	7.7	00.0	100.
6	15.4	7.7	3.8	7.7	00.0	3.8	3.8	11.5	11.5	00.0	11.5	00.0	3.8	7.7	3.8	7.7	00.0	100.
7	15.4	11.5	3.8	00.0	3.8	3.8	7.7	3.8	11.5	3.8	3.8	3.8	11.5	3.8	7.7	3.8	00.0	100.
8	3.8	19.2	3.8	00.0	00.0	00.0	11.5	7.7	7.7	7.7	3.8	7.7	00.0	7.7	11.5	7.7	00.0	100.
9	3.8	7.7	15.4	00.0	00.0	3.8	11.5	00.0	11.5	3.8	3.8	3.8	7.7	3.8	11.5	11.5	00.0	100.
10	3.8	11.5	11.5	00.0	3.8	00.0	3.8	7.7	11.5	00.0	7.7	3.8	7.7	3.8	7.7	15.4	00.0	100.
11	00.0	12.0	4.0	4.0	4.0	00.0	00.0	8.0	8.0	8.0	4.0	12.0	00.0	4.0	16.0	16.0	00.0	100.
12	7.7	3.8	11.5	00.0	3.8	00.0	00.0	7.7	7.7	7.7	3.8	7.7	3.8	3.8	7.7	23.1	00.0	100.
13	16.0	12.0	00.0	4.0	8.0	00.0	00.0	4.0	12.0	8.0	4.0	8.0	00.0	4.0	8.0	12.0	00.0	100.
14	4.0	8.0	4.0	00.0	8.0	00.0	00.0	4.0	20.0	4.0	4.0	4.0	4.0	4.0	8.0	24.0	00.0	100.
15	8.0	4.0	4.0	4.0	4.0	4.0	00.0	4.0	20.0	4.0	00.0	00.0	12.0	8.0	8.0	16.0	00.0	100.
16	11.5	3.8	3.8	3.8	3.8	3.8	00.0	3.8	19.2	3.8	3.8	3.8	3.8	3.8	11.5	15.4	00.0	100.
17	11.1	3.7	3.7	3.7	3.7	3.7	00.0	3.7	22.2	00.0	00.0	11.1	00.0	00.0	14.8	18.5	00.0	100.
18	18.5	7.4	3.7	3.7	7.4	00.0	3.7	14.8	7.4	7.4	3.7	00.0	00.0	00.0	14.8	7.4	00.0	100.
19	14.8	11.1	3.7	00.0	7.4	3.7	3.7	11.1	11.1	7.4	3.7	00.0	00.0	3.7	11.1	7.4	00.0	100.
20	22.2	7.4	00.0	3.7	3.7	7.4	00.0	14.8	11.1	3.7	3.7	3.7	00.0	7.4	3.7	7.4	00.0	100.
21	18.5	11.1	00.0	3.7	3.7	7.4	00.0	11.1	14.8	7.4	00.0	00.0	00.0	7.4	3.7	11.1	00.0	100.
22	11.5	11.5	3.8	3.8	3.8	3.8	3.8	7.7	15.4	11.5	00.0	00.0	00.0	00.0	3.8	19.2	00.0	100.
23	3.8	7.7	15.4	3.8	00.0	3.8	3.8	3.8	19.2	7.7	00.0	00.0	00.0	7.7	00.0	23.1	00.0	100.
24	11.5	11.5	00.0	11.5	3.8	3.8	00.0	3.8	11.5	15.4	00.0	3.8	00.0	3.8	3.8	15.4	00.0	100.
ALL	10.6	9.1	4.8	3.7	3.2	3.5	3.2	6.9	12.8	7.8	3.8	3.4	2.7	4.2	8.0	12.3	00.0	100.

NUMBER OF OBS = 625

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

NOVEMBER

	WIND DIRECTION																
HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	00.0	4.8	00.0	00.0	00.0	00.0	19.0	4.8	00.0	4.8	9.5	9.5	4.8	4.8	28.6	9.5	00.0	100.
2	4.8	00.0	00.0	00.0	00.0	00.0	19.0	00.0	00.0	00.0	9.5	19.0	4.8	14.3	19.0	9.5	00.0	100.
3	4.8	00.0	00.0	00.0	00.0	00.0	19.0	00.0	00.0	00.0	00.0	9.5	19.0	19.0	19.0	9.5	00.0	100.
4	00.0	9.5	00.0	00.0	00.0	00.0	19.0	00.0	00.0	00.0	00.0	14.3	9.5	14.3	28.6	4.8	00.0	100.
5	4.8	4.8	4.8	00.0	00.0	4.8	14.3	00.0	00.0	00.0	00.0	9.5	9.5	23.8	9.5	14.3	00.0	100.
6	9.1	00.0	00.0	4.5	4.5	9.1	4.5	00.0	00.0	00.0	00.0	9.1	18.2	9.1	22.7	9.1	00.0	100.
7	14.3	00.0	00.0	00.0	4.8	00.0	14.3	00.0	00.0	00.0	9.5	4.8	00.0	14.3	28.6	9.5	00.0	100.
8	4.8	00.0	00.0	4.8	00.0	00.0	14.3	00.0	00.0	4.8	9.5	4.8	00.0	19.0	9.5	28.6	00.0	100.
9	10.0	5.0	5.0	00.0	00.0	00.0	5.0	5.0	10.0	00.0	5.0	5.0	5.0	15.0	15.0	15.0	00.0	100.
10	5.0	10.0	5.0	00.0	00.0	00.0	5.0	5.0	10.0	00.0	5.0	10.0	15.0	00.0	15.0	15.0	00.0	100.
11	15.8	00.0	5.3	00.0	00.0	00.0	5.3	10.5	5.3	5.3	10.5	5.3	5.3	5.3	15.8	10.5	00.0	100.
12	14.3	00.0	00.0	00.0	00.0	00.0	9.5	4.8	19.0	00.0	4.8	9.5	4.8	4.8	14.3	14.3	00.0	100.
13	14.3	00.0	00.0	00.0	00.0	00.0	4.8	4.8	14.3	9.5	4.8	4.8	9.5	9.5	9.5	14.3	00.0	100.
14	20.0	00.0	00.0	00.0	5.0	00.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	15.0	10.0	10.0	00.0	100.
15	15.0	00.0	00.0	00.0	00.0	00.0	5.0	5.0	10.0	10.0	5.0	5.0	00.0	20.0	10.0	15.0	00.0	100.
16	15.0	00.0	00.0	00.0	00.0	00.0	5.0	10.0	10.0	5.0	10.0	00.0	00.0	15.0	15.0	15.0	00.0	100.
17	9.5	00.0	00.0	00.0	00.0	00.0	14.3	00.0	9.5	9.5	4.8	00.0	4.8	9.5	14.3	23.8	00.0	100.
18	9.5	00.0	00.0	00.0	00.0	9.5	4.8	4.8	14.3	00.0	4.8	00.0	9.5	9.5	9.5	23.8	00.0	100.
19	4.8	4.8	00.0	00.0	00.0	4.8	9.5	14.3	4.8	00.0	4.8	00.0	9.5	9.5	14.3	19.0	00.0	100.
20	4.8	4.8	00.0	00.0	00.0	9.5	9.5	4.8	9.5	00.0	4.8	00.0	9.5	14.3	4.8	23.8	00.0	100.
21	9.5	4.8	00.0	00.0	00.0	4.8	14.3	4.8	4.8	4.8	4.8	00.0	4.8	14.3	14.3	14.3	00.0	100.
22	4.8	9.5	00.0	00.0	00.0	4.8	14.3	4.8	4.8	4.8	4.8	4.8	4.8	14.3	14.3	9.5	00.0	100.
23	4.8	00.0	4.8	00.0	00.0	00.0	19.0	4.8	4.8	9.5	4.8	00.0	9.5	9.5	14.3	14.3	00.0	100.
24	4.8	00.0	00.0	4.8	00.0	00.0	19.0	00.0	4.8	4.8	14.3	4.8	4.8	4.8	19.0	14.3	00.0	100.
ALL	8.4	2.4	1.0	.6	.6	2.0	11.4	3.8	6.0	3.2	5.6	5.6	7.0	12.0	15.7	14.5	00.0	100.

NUMBER OF OBS = 498

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

DECEMBER

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	9.7	3.2	00.0	00.0	3.2	3.2	3.2	00.0	9.7	16.1	12.9	6.5	3.2	12.9	9.7	6.5	00.0	100.
2	9.7	6.5	00.0	3.2	00.0	3.2	3.2	00.0	6.5	16.1	16.1	6.5	9.7	9.7	6.5	3.2	00.0	100.
3	3.2	3.2	3.2	3.2	00.0	3.2	3.2	3.2	3.2	9.7	25.8	3.2	9.7	9.7	6.5	9.7	00.0	100.
4	3.2	6.5	3.2	00.0	00.0	3.2	00.0	6.5	6.5	12.9	22.6	00.0	9.7	6.5	9.7	9.7	00.0	100.
5	9.7	3.2	3.2	00.0	00.0	3.2	00.0	6.5	00.0	9.7	25.8	9.7	6.5	6.5	12.9	3.2	00.0	100.
6	3.2	9.7	3.2	00.0	00.0	3.2	00.0	6.5	00.0	16.1	16.1	9.7	6.5	9.7	6.5	9.7	00.0	100.
7	3.2	9.7	3.2	00.0	00.0	3.2	00.0	6.5	6.5	3.2	19.4	9.7	9.7	9.7	9.7	6.5	00.0	100.
8	00.0	9.7	3.2	00.0	00.0	3.2	00.0	6.5	3.2	16.1	12.9	3.2	6.5	19.4	6.5	9.7	00.0	100.
9	3.3	6.7	3.3	00.0	00.0	3.3	00.0	6.7	00.0	16.7	13.3	6.7	13.3	10.0	6.7	10.0	00.0	100.
10	6.9	3.4	6.9	00.0	00.0	3.4	00.0	3.4	10.3	20.7	6.9	00.0	3.4	17.2	10.3	6.9	00.0	100.
11	3.3	6.7	6.7	00.0	3.3	3.3	00.0	3.3	13.3	13.3	10.0	3.3	3.3	13.3	6.7	10.0	00.0	100.
12	6.7	6.7	6.7	00.0	3.3	3.3	00.0	00.0	16.7	16.7	3.3	10.0	00.0	20.0	00.0	6.7	00.0	100.
13	6.5	6.5	3.2	3.2	3.2	3.2	00.0	3.2	12.9	12.9	6.5	9.7	3.2	16.1	3.2	6.5	00.0	100.
14	9.7	3.2	6.5	3.2	00.0	3.2	3.2	00.0	12.9	12.9	9.7	00.0	12.9	12.9	3.2	6.5	00.0	100.
15	9.7	00.0	3.2	00.0	6.5	3.2	00.0	6.5	6.5	16.1	9.7	00.0	9.7	16.1	3.2	9.7	00.0	100.
16	9.7	3.2	00.0	3.2	3.2	3.2	3.2	3.2	6.5	9.7	16.1	3.2	6.5	12.9	6.5	9.7	00.0	100.
17	6.5	00.0	3.2	3.2	00.0	6.5	3.2	00.0	9.7	12.9	9.7	6.5	6.5	16.1	3.2	12.9	00.0	100.
18	6.5	00.0	3.2	00.0	3.2	6.5	3.2	00.0	12.9	9.7	12.9	3.2	12.9	6.5	9.7	9.7	00.0	100.
19	9.7	00.0	3.2	00.0	3.2	6.5	00.0	3.2	12.9	16.1	9.7	3.2	9.7	6.5	6.5	9.7	00.0	100.
20	9.7	3.2	00.0	3.2	3.2	6.5	00.0	3.2	9.7	22.6	3.2	3.2	12.9	6.5	6.5	6.5	00.0	100.
21	6.5	3.2	3.2	00.0	6.5	6.5	00.0	3.2	12.9	16.1	6.5	6.5	6.5	9.7	6.5	6.5	00.0	100.
22	9.7	3.2	00.0	3.2	3.2	6.5	00.0	00.0	19.4	6.5	9.7	6.5	12.9	9.7	6.5	3.2	00.0	100.
23	9.7	3.2	3.2	00.0	00.0	9.7	00.0	00.0	9.7	19.4	9.7	3.2	6.5	12.9	9.7	3.2	00.0	100.
24	9.7	3.2	00.0	3.2	00.0	6.5	3.2	00.0	9.7	19.4	6.5	6.5	3.2	16.1	9.7	3.2	00.0	100.
ALL	6.9	4.3	3.0	1.2	1.8	4.5	1.1	3.0	8.8	14.2	12.3	5.0	7.7	11.9	6.9	7.4	00.0	100.

NUMBER OF OBS = 739

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

OCT-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.7	3.8	2.6	2.6	2.6	3.8	6.4	2.6	6.4	14.1	10.3	6.4	3.8	6.4	12.8	7.7	00.0	100.
2	7.7	3.8	2.6	3.8	00.0	3.8	7.7	1.3	6.4	14.1	10.3	7.7	6.4	7.7	11.5	5.1	00.0	100.
3	5.1	5.1	2.6	2.6	00.0	2.6	9.0	3.8	3.8	9.0	14.1	3.8	9.0	10.3	10.3	9.0	00.0	100.
4	5.1	9.0	1.3	1.3	00.0	2.6	9.0	3.8	6.4	10.3	10.3	3.8	7.7	7.7	14.1	7.7	00.0	100.
5	9.0	7.7	2.6	2.6	00.0	5.1	3.8	6.4	5.1	5.1	11.5	7.7	5.1	11.5	9.0	7.7	00.0	100.
6	8.9	6.3	2.5	3.8	1.3	5.1	2.5	6.3	3.8	6.3	10.1	6.3	8.9	8.9	10.1	8.9	00.0	100.
7	10.3	7.7	2.6	00.0	2.6	2.6	6.4	3.8	6.4	2.6	11.5	6.4	7.7	9.0	14.1	6.4	00.0	100.
8	2.6	10.3	2.6	1.3	00.0	1.3	7.7	5.1	3.8	10.3	9.0	5.1	2.6	15.4	9.0	14.1	00.0	100.
9	5.3	6.6	7.9	00.0	00.0	2.6	5.3	3.9	6.6	7.9	7.9	5.3	9.2	9.2	10.5	11.8	00.0	100.
10	5.3	8.0	8.0	00.0	1.3	1.3	2.7	5.3	10.7	8.0	6.7	4.0	8.0	8.0	10.7	12.0	00.0	100.
11	5.4	6.8	5.4	1.4	2.7	1.4	1.4	6.8	9.5	9.5	8.1	6.8	2.7	8.1	12.2	12.2	00.0	100.
12	9.1	3.9	6.5	00.0	2.6	1.3	2.6	3.9	14.3	9.1	3.9	9.1	2.6	10.4	6.5	14.3	00.0	100.
13	11.7	6.5	1.3	2.6	3.9	1.3	1.3	3.9	13.0	10.4	5.2	7.8	3.9	10.4	6.5	10.4	00.0	100.
14	10.5	3.9	3.9	1.3	3.9	1.3	2.6	2.6	14.5	7.9	6.6	2.6	7.9	10.5	6.6	13.2	00.0	100.
15	10.5	1.3	2.6	1.3	3.9	2.6	1.3	5.3	11.8	10.5	5.3	1.3	7.9	14.5	6.6	13.2	00.0	100.
16	11.7	2.6	1.3	2.6	2.6	2.6	2.6	5.2	11.7	6.5	10.4	2.6	3.9	10.4	10.4	13.0	00.0	100.
17	8.9	1.3	2.5	2.5	1.3	3.8	5.1	1.3	13.9	7.6	5.1	6.3	3.8	8.9	10.1	17.7	00.0	100.
18	11.4	2.5	2.5	1.3	3.8	5.1	3.8	6.3	11.4	6.3	7.6	1.3	7.6	5.1	11.4	12.7	00.0	100.
19	10.1	5.1	2.5	00.0	3.8	5.1	3.8	8.9	10.1	8.9	6.3	1.3	6.3	6.3	10.1	11.4	00.0	100.
20	12.7	5.1	00.0	2.5	2.5	7.6	2.5	7.6	10.1	10.1	3.8	2.5	7.6	8.9	5.1	11.4	00.0	100.
21	11.4	6.3	1.3	1.3	3.8	6.3	3.8	6.3	11.4	10.1	3.8	2.5	3.8	10.1	7.6	10.1	00.0	100.
22	9.0	7.7	1.3	2.6	2.6	5.1	5.1	3.8	14.1	7.7	5.1	3.8	6.4	7.7	7.7	10.3	00.0	100.
23	6.4	3.8	7.7	1.3	00.0	5.1	6.4	2.6	11.5	12.8	5.1	1.3	5.1	10.3	7.7	12.8	00.0	100.
24	9.0	5.1	00.0	6.4	1.3	3.8	6.4	1.3	9.0	14.1	6.4	5.1	2.6	9.0	10.3	10.3	00.0	100.
ALL	8.5	5.4	3.1	1.9	1.9	3.5	4.6	4.5	9.4	9.1	7.7	4.6	5.9	9.3	9.6	11.0	00.0	100.

NUMBER OF OBS = 1862

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JUL-DEC

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.6	5.3	1.8	2.4	1.2	7.6	9.4	9.4	13.5	11.8	6.5	2.9	2.4	2.9	7.6	7.6	00.0	100.
2	5.3	4.1	4.1	2.9	1.8	8.8	7.6	8.8	14.1	11.2	6.5	5.3	2.9	5.3	7.1	4.1	00.0	100.
3	4.7	5.3	2.4	4.7	1.2	6.5	8.2	8.2	13.5	10.0	10.0	2.9	4.1	5.9	5.9	6.5	00.0	100.
4	4.1	7.6	3.5	.6	3.5	5.9	11.8	5.3	11.8	13.5	7.6	2.4	4.1	4.1	8.8	5.3	00.0	100.
5	6.5	5.3	4.7	3.5	2.4	6.5	8.8	7.6	11.8	7.6	8.8	5.9	3.5	5.9	5.9	5.3	00.0	100.
6	6.4	4.7	3.5	2.9	2.3	7.0	10.5	7.0	13.5	6.4	8.8	4.7	4.7	4.1	7.0	6.4	00.0	100.
7	6.5	6.5	1.8	.6	2.4	4.1	12.9	8.2	14.7	6.5	8.2	3.5	4.7	5.3	8.2	5.9	00.0	100.
8	3.5	7.6	1.8	.6	1.8	3.5	12.9	8.2	13.5	9.4	7.6	2.4	2.9	8.8	5.9	9.4	00.0	100.
9	4.8	3.6	6.5	1.2	.6	4.8	10.1	6.5	13.7	11.3	7.1	3.0	4.8	6.5	6.5	8.9	00.0	100.
10	3.6	4.8	5.4	2.4	1.8	4.8	6.6	10.2	15.0	9.6	6.0	4.2	4.2	4.2	8.4	9.0	00.0	100.
11	4.8	7.2	2.4	3.0	1.8	4.2	7.2	10.2	17.5	9.0	5.4	4.8	1.8	4.2	6.6	9.6	00.0	100.
12	8.9	3.0	4.1	1.2	2.4	5.9	5.9	7.1	21.9	8.9	3.0	4.7	3.0	4.7	3.6	11.8	00.0	100.
13	10.1	4.7	1.8	2.4	2.4	6.5	6.5	10.7	18.9	7.1	4.1	4.1	3.0	4.7	3.6	9.5	00.0	100.
14	9.5	4.2	2.4	1.8	3.0	5.4	7.7	11.3	17.9	6.5	3.6	2.4	4.2	5.4	4.2	10.7	00.0	100.
15	6.5	3.6	2.4	2.4	3.6	4.8	8.3	9.5	17.9	8.3	3.6	1.2	3.6	8.9	4.2	11.3	00.0	100.
16	8.3	3.6	3.0	2.4	3.6	3.6	11.2	10.7	16.0	4.7	7.1	1.8	1.8	5.9	6.5	10.1	00.0	100.
17	5.8	2.9	4.1	2.9	1.2	7.6	12.3	8.8	16.4	5.3	3.5	3.5	1.8	4.1	7.0	12.9	00.0	100.
18	8.2	3.5	1.8	5.3	3.5	7.0	11.1	11.7	12.3	5.8	5.8	1.2	4.7	2.3	6.4	9.4	00.0	100.
19	8.2	4.1	2.9	2.9	3.5	10.5	12.3	9.9	10.5	8.2	4.1	1.2	4.1	3.5	5.8	8.2	00.0	100.
20	9.4	4.1	2.3	4.1	2.9	11.7	8.2	12.3	11.7	10.5	1.8	1.8	3.5	4.7	3.5	7.6	00.0	100.
21	7.6	5.3	2.3	3.5	2.9	9.4	11.7	11.1	14.6	8.2	2.3	1.8	1.8	5.3	4.1	8.2	00.0	100.
22	8.2	4.7	3.5	3.5	3.5	7.1	11.8	11.2	17.1	6.5	2.4	1.8	2.9	3.5	5.9	6.5	00.0	100.
23	8.2	2.9	5.3	1.2	3.5	6.5	13.5	10.0	15.9	9.4	2.9	.6	2.4	5.3	4.7	7.6	00.0	100.
24	7.6	4.7	3.5	2.9	1.2	7.1	12.4	8.8	14.1	11.2	3.5	2.4	1.2	5.9	7.1	6.5	00.0	100.
ALL	6.9	4.7	3.2	2.6	2.4	6.5	10.0	9.3	14.9	8.6	5.4	2.9	3.2	5.1	6.0	8.3	00.0	100.

NUMBER OF OBS = 4070

NPPD-COOPER NUCLEAR STATION 100-M WIND DIRECTION 2002

PROGRAM: WINPER
VERSION: PC-1.0

HOURLY WIND ROSES (PERCENT)

JAN-DEC

	WIND DIRECTION																
HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.1	4.0	2.0	2.6	1.7	6.6	7.2	8.4	14.7	11.0	5.2	2.0	2.9	4.9	7.5	11.2	00.0	100.
2	8.1	2.9	3.7	2.9	2.0	6.1	6.6	8.6	14.4	11.0	5.8	3.5	2.6	6.3	7.5	8.1	00.0	100.
3	6.9	4.3	2.9	3.5	1.2	6.1	6.1	8.4	13.8	10.1	8.4	2.6	2.6	6.3	7.8	9.2	00.0	100.
4	6.6	5.8	3.2	1.7	2.0	5.2	7.5	8.1	11.5	12.7	6.3	2.9	3.2	5.8	8.9	8.6	00.0	100.
5	7.8	4.9	4.6	2.6	1.7	4.6	6.6	9.0	12.4	8.4	6.9	4.6	4.0	6.4	7.2	8.1	00.0	100.
6	7.8	4.9	3.2	3.2	2.0	5.5	6.9	7.2	16.4	6.6	6.1	4.6	3.5	5.5	8.1	8.6	00.0	100.
7	7.2	5.2	3.5	.6	2.6	3.5	8.7	9.9	14.2	7.8	5.8	3.2	3.8	7.2	8.7	8.1	00.0	100.
8	5.8	6.1	2.3	.9	2.3	2.6	9.8	9.5	13.6	10.1	5.8	3.2	2.6	8.1	7.5	9.8	00.0	100.
9	6.7	3.5	5.2	1.2	1.7	3.8	7.6	8.4	14.0	10.8	6.7	2.9	4.1	6.1	7.8	9.6	00.0	100.
10	5.3	4.1	4.7	2.0	1.5	5.0	5.3	7.6	16.4	10.5	7.3	3.5	3.5	5.0	10.2	8.2	00.0	100.
11	6.1	4.7	3.5	1.5	2.0	3.5	6.1	8.2	16.7	11.7	5.8	4.1	2.6	4.7	8.2	10.5	00.0	100.
12	7.0	2.0	3.5	1.4	1.4	5.2	4.9	7.8	18.0	9.6	6.7	4.3	3.2	4.9	6.7	13.3	00.0	100.
13	7.8	3.2	2.6	1.4	1.7	4.9	5.5	9.0	18.3	7.5	6.7	4.1	3.5	5.5	6.1	12.2	00.0	100.
14	8.5	3.2	3.8	1.2	2.0	3.2	5.8	10.5	16.3	8.7	4.7	5.5	2.6	5.5	7.6	10.8	00.0	100.
15	7.0	4.4	2.3	2.0	2.3	2.6	6.4	9.9	15.4	9.9	5.5	3.8	2.9	6.4	8.1	11.0	00.0	100.
16	8.4	3.5	2.6	1.7	2.3	2.6	8.1	9.9	15.9	7.0	7.2	3.2	2.9	5.5	8.7	10.4	00.0	100.
17	7.2	3.4	2.3	2.3	1.4	4.9	8.3	10.3	14.9	6.6	5.5	4.6	2.0	4.3	8.9	12.9	00.0	100.
18	7.8	3.4	1.4	2.9	3.2	4.6	7.5	12.9	12.6	6.3	5.7	4.0	3.7	2.9	8.9	12.1	00.0	100.
19	7.8	4.3	2.6	2.0	2.6	6.3	8.0	14.1	11.5	6.6	3.4	3.2	3.7	3.7	8.9	11.2	00.0	100.
20	9.5	4.6	2.6	2.9	2.0	8.3	6.3	14.1	11.5	7.5	2.9	2.6	4.0	4.0	7.5	9.8	00.0	100.
21	8.3	4.9	2.6	2.6	2.6	7.5	8.3	12.6	13.2	7.5	2.6	2.0	3.2	4.6	7.5	10.1	00.0	100.
22	8.4	4.0	2.9	3.2	3.2	6.1	8.4	11.0	16.1	7.2	2.3	2.3	3.7	4.9	6.9	9.5	00.0	100.
23	8.4	2.6	4.3	2.0	2.9	5.8	9.2	10.1	15.3	8.4	3.8	1.7	3.5	4.9	6.4	10.7	00.0	100.
24	7.8	4.9	3.2	2.3	2.6	6.1	8.6	8.6	14.7	10.7	2.9	2.9	1.7	6.9	7.2	8.9	00.0	100.
ALL	7.5	4.1	3.1	2.1	2.1	5.0	7.3	9.8	14.7	8.9	5.4	3.4	3.2	5.4	7.9	10.1	00.0	100.

NUMBER OF OBS = 8302

Precipitation

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	TOTAL
2	1	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	1	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	1	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	27	.00 .00	.00 .00	.00 .00	.00 .00	9.99 .00	9.99 .00	9.99 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	1	31	.00 .10	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.10

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF JANUARY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 3
TOTAL HOURS OF PRECIPITATION - 1
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 13 - .10 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 13 - .10 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 13 - .10 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 7 - .10 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 1 - .10 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 378
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 1
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF JANUARY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	1	6	12	12	12
.02	1	6	12	12	12
.03	1	6	12	12	12
.04	1	6	12	12	12
.05	1	6	12	12	12
.07	1	6	12	12	12
.10	1	6	12	12	12
.15	0	0	0	0	0
.20	0	0	0	0	0
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	2	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	2	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	19	.00 .00	.00 .10	.00 .00	.00 .10	.00 .00	.00 .00	.00 .00	.10 .00	.10 .00	.00 .00	.00 .00	.00 .00	.40
2	2	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	2	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF FEBRUARY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 672
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 4
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .40 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .40 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 16 - .10 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 14 - .20 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 8 - .40 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 8 - .40 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 8 - .40 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 277
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF FEBRUARY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	4	14	20	26	32
.02	4	14	20	26	32
.03	4	14	20	26	32
.04	4	14	20	26	32
.05	4	14	20	26	32
.07	4	14	20	26	32
.10	4	14	20	26	32
.15	0	10	17	23	29
.20	0	10	17	23	29
.25	0	0	7	13	19
.30	0	0	7	13	19
.35	0	0	4	10	16
.40	0	0	4	10	16
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	3	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.10	.00	.30
2	3	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	3	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.10
2	3	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	29	.00	.00	.00	.10	.10	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	3	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF MARCH

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 5
TOTAL DAYS WITH PRECIPITATION - 3
TOTAL AMOUNT OF PRECIPITATION - .60 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .20 INCHES
MAXIMUM DAILY PRECIPITATION - .30 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 8 HOUR 22 - .20 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 8 HOUR 22 - .30 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 8 HOUR 22 - .30 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 8 HOUR 22 - .30 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 8 HOUR 22 - .30 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 257
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 1
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF MARCH

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	5	20	38	56	74
.02	5	20	38	56	74
.03	5	20	38	56	74
.04	5	20	38	56	74
.05	5	20	38	56	74
.07	5	20	38	56	74
.10	5	20	38	56	74
.15	1	11	23	35	47
.20	1	11	23	35	47
.25	0	5	11	17	23
.30	0	5	11	17	23
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JAN-MAR INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2160
NUMBER OF MISSING HOURS - 3
TOTAL HOURS OF PRECIPITATION - 10
TOTAL DAYS WITH PRECIPITATION - 5
TOTAL AMOUNT OF PRECIPITATION - 1.10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .20 INCHES
MAXIMUM DAILY PRECIPITATION - .40 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 3 DAY 8 HOUR 22 - .20 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 3 DAY 8 HOUR 22 - .30 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 19 HOUR 8 - .40 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 19 HOUR 8 - .40 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 2 DAY 19 HOUR 8 - .40 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 912
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 2
TOTAL DAYS WITH PRECIPITATION - 2
TOTAL AMOUNT OF PRECIPITATION - .20 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JAN-MAR INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	10	40	70	100	130
.02	10	40	70	100	130
.03	10	40	70	100	130
.04	10	40	70	100	130
.05	10	40	70	100	130
.07	10	40	70	100	130
.10	10	40	70	100	130
.15	1	21	40	58	76
.20	1	21	40	58	76
.25	0	5	18	30	42
.30	0	5	18	30	42
.35	0	0	4	10	16
.40	0	0	4	10	16
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	4	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	
			.00	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.10
2	4	4	9.99	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	
			.10	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30
2	4	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.99	9.99	9.99	
			9.99	9.99	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	4	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.10	.00	.10	.00	.00	.00	.10	.00	.00	.00	.30
2	4	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.10
2	4	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	24	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	4	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	27	.00	.10	.00	.00	.20	.00	.00	.20	.10	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60
2	4	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	4	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF APRIL

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 17
TOTAL HOURS OF PRECIPITATION - 13
TOTAL DAYS WITH PRECIPITATION - 6
TOTAL AMOUNT OF PRECIPITATION - 1.50 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .20 INCHES
MAXIMUM DAILY PRECIPITATION - .60 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 8 - .20 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 5 - .50 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 2 - .60 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 2 - .60 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 27 HOUR 2 - .60 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 17
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 1
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF APRIL

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	13	53	89	125	161
.02	13	53	89	125	161
.03	13	53	89	125	161
.04	13	53	89	125	161
.05	13	53	89	125	161
.07	13	53	89	125	161
.10	13	53	89	125	161
.15	2	21	39	57	75
.20	2	21	39	57	75
.25	0	11	29	47	65
.30	0	11	29	47	65
.35	0	3	9	15	21
.40	0	3	9	15	21
.45	0	2	9	15	21
.50	0	2	9	15	21
.60	0	0	5	11	17
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	TOTAL
2	5	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.10	.20
2	5	6	.00	.00	.00	.40	.50	.10	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.00
2	5	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.10
2	5	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	11	.00	.10	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.60	.10	.00	.00	.00	.00	.00	.90
2	5	12	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	5	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	5	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.50	.60
2	5	23	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	5	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.20	.00	.00	.00	.00	.00	.00	.20	.00	.10	.20	.00	.70
2	5	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.10
2	5	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	5	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF MAY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 20
TOTAL DAYS WITH PRECIPITATION - 9
TOTAL AMOUNT OF PRECIPITATION - 3.90 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .60 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 11 HOUR 18 - .60 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 6 HOUR 4 - 1.00 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 5 HOUR 23 - 1.20 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 5 HOUR 23 - 1.20 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 5 HOUR 23 - 1.20 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF MAY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	20	77	127	163	199
.02	20	77	127	163	199
.03	20	77	127	163	199
.04	20	77	127	163	199
.05	20	77	127	163	199
.07	20	77	127	163	199
.10	20	77	127	163	199
.15	7	40	73	101	125
.20	7	40	73	101	125
.25	4	25	51	75	99
.30	4	25	51	75	99
.35	4	22	49	73	97
.40	4	22	49	73	97
.45	3	22	47	71	95
.50	3	22	47	71	95
.60	1	19	39	63	87
.70	0	14	35	60	84
.80	0	5	13	37	59
.90	0	5	11	18	32
1.00	0	5	11	17	23
1.10	0	0	7	13	19
1.20	0	0	5	11	17
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	6	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	11	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.20
2	6	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	6	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	6	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF JUNE

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 3
TOTAL DAYS WITH PRECIPITATION - 2
TOTAL AMOUNT OF PRECIPITATION - .30 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .20 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 11 - .10 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 11 - .10 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 11 - .10 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 11 HOUR 23 - .20 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 11 HOUR 23 - .20 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF JUNE

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	3	18	36	45	51
.02	3	18	36	45	51
.03	3	18	36	45	51
.04	3	18	36	45	51
.05	3	18	36	45	51
.07	3	18	36	45	51
.10	3	18	36	45	51
.15	0	0	0	9	21
.20	0	0	0	9	21
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

APR-JUN INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2184
NUMBER OF MISSING HOURS - 17
TOTAL HOURS OF PRECIPITATION - 36
TOTAL DAYS WITH PRECIPITATION - 17
TOTAL AMOUNT OF PRECIPITATION - 5.70 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .60 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 11 HOUR 18 - .60 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 6 HOUR 4 - 1.00 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 5 HOUR 23 - 1.20 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 5 HOUR 23 - 1.20 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 5 HOUR 23 - 1.20 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 17
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 1
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

APR-JUN INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT	DURATION (HOURS)				
INCHES	1	6	12	18	24
.01	36	148	252	333	411
.02	36	148	252	333	411
.03	36	148	252	333	411
.04	36	148	252	333	411
.05	36	148	252	333	411
.07	36	148	252	333	411
.10	36	148	252	333	411
.15	9	61	112	167	221
.20	9	61	112	167	221
.25	4	36	80	122	164
.30	4	36	80	122	164
.35	4	25	58	88	118
.40	4	25	58	88	118
.45	3	24	56	86	116
.50	3	24	56	86	116
.60	1	19	44	74	104
.70	0	14	35	60	84
.80	0	5	13	37	59
.90	0	5	11	18	32
1.00	0	5	11	17	23
1.10	0	0	7	13	19
1.20	0	0	5	11	17
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JAN-JUN INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 4344
NUMBER OF MISSING HOURS - 20
TOTAL HOURS OF PRECIPITATION - 46
TOTAL DAYS WITH PRECIPITATION - 22
TOTAL AMOUNT OF PRECIPITATION - 6.80 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .60 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 11 HOUR 18 - .60 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 6 HOUR 4 - 1.00 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 5 HOUR 23 - 1.20 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 5 HOUR 23 - 1.20 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 5 DAY 5 HOUR 23 - 1.20 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 929
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 3
TOTAL DAYS WITH PRECIPITATION - 3
TOTAL AMOUNT OF PRECIPITATION - .30 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JAN-JUN INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT	DURATION (HOURS)				
INCHES	1	6	12	18	24
.01	46	188	322	433	541
.02	46	188	322	433	541
.03	46	188	322	433	541
.04	46	188	322	433	541
.05	46	188	322	433	541
.07	46	188	322	433	541
.10	46	188	322	433	541
.15	10	82	152	225	297
.20	10	82	152	225	297
.25	4	41	98	152	206
.30	4	41	98	152	206
.35	4	25	62	98	134
.40	4	25	62	98	134
.45	3	24	56	86	116
.50	3	24	56	86	116
.60	1	19	44	74	104
.70	0	14	35	60	84
.80	0	5	13	37	59
.90	0	5	11	18	32
1.00	0	5	11	17	23
1.10	0	0	7	13	19
1.20	0	0	5	11	17
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	TOTAL
2	7	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	7	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	12	.00	.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	7	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	7	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	25	.00	.00	.00	.10	.20	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30
2	7	26	.20	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30
2	7	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	7	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF JULY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 6
TOTAL DAYS WITH PRECIPITATION - 4
TOTAL AMOUNT OF PRECIPITATION - 1.00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .20 INCHES
MAXIMUM DAILY PRECIPITATION - .30 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - .20 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - .30 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - .30 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - .30 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 25 HOUR 4 - .60 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF JULY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	6	27	51	75	95
.02	6	27	51	75	95
.03	6	27	51	75	95
.04	6	27	51	75	95
.05	6	27	51	75	95
.07	6	27	51	75	95
.10	6	27	51	75	95
.15	4	24	48	72	92
.20	4	24	48	72	92
.25	0	9	21	33	44
.30	0	9	21	33	44
.35	0	0	0	0	4
.40	0	0	0	0	4
.45	0	0	0	0	4
.50	0	0	0	0	4
.60	0	0	0	0	1
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	TOTAL
2	8	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	13	.10	.30	.10	.20	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.70
2	8	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	17	.00	.00	.00	.00	.10	.10	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	TOTAL
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	
2	8	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.10	.10	.10	.10	.10	.00	.50
2	8	20	.00	.00	.00	.10	.00	.10	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	8	21	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	8	22	.20	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30
2	8	23	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	8	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	8	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF AUGUST

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 17
TOTAL DAYS WITH PRECIPITATION - 7
TOTAL AMOUNT OF PRECIPITATION - 2.10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .30 INCHES
MAXIMUM DAILY PRECIPITATION - .70 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 2 - .30 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 1 - .70 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 19 - .70 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 19 - .70 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 19 HOUR 19 - .70 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF AUGUST

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	17	53	89	123	151
.02	17	53	89	123	151
.03	17	53	89	123	151
.04	17	53	89	123	151
.05	17	53	89	123	151
.07	17	53	89	123	151
.10	17	53	89	123	151
.15	3	32	57	81	107
.20	3	32	57	81	107
.25	1	17	37	57	75
.30	1	17	37	57	75
.35	0	10	24	36	54
.40	0	10	24	36	54
.45	0	7	21	33	45
.50	0	7	21	33	45
.60	0	4	14	26	38
.70	0	3	10	22	34
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	9	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	9	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	9.99	9.99	9.99	9.99	.00
2	9	10	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	11	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	12	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	13	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	14	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	15	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	16	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	9	17	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	9	18	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	19	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	20	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	21	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	22	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	23	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	24	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	25	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	26	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	27	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	9.99 9.99	.00
2	9	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	9	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	9	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF SEPTEMBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 436
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 30 HOUR 24 - .00 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 30 HOUR 19 - .00 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 30 HOUR 13 - .00 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 30 HOUR 7 - .00 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 30 HOUR 1 - .00 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF SEPTEMBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	0	0	0	0	0
.02	0	0	0	0	0
.03	0	0	0	0	0
.04	0	0	0	0	0
.05	0	0	0	0	0
.07	0	0	0	0	0
.10	0	0	0	0	0
.15	0	0	0	0	0
.20	0	0	0	0	0
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JUL-SEP INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2208
NUMBER OF MISSING HOURS - 436
TOTAL HOURS OF PRECIPITATION - 23
TOTAL DAYS WITH PRECIPITATION - 11
TOTAL AMOUNT OF PRECIPITATION - 3.10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .30 INCHES
MAXIMUM DAILY PRECIPITATION - .70 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 8 DAY 13 HOUR 2 - .30 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 8 DAY 13 HOUR 1 - .70 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 8 DAY 19 HOUR 19 - .70 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 8 DAY 19 HOUR 19 - .70 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 8 DAY 19 HOUR 19 - .70 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JUL-SEP INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT	DURATION (HOURS)				
INCHES	1	6	12	18	24
.01	23	80	140	198	246
.02	23	80	140	198	246
.03	23	80	140	198	246
.04	23	80	140	198	246
.05	23	80	140	198	246
.07	23	80	140	198	246
.10	23	80	140	198	246
.15	7	56	105	153	199
.20	7	56	105	153	199
.25	1	26	58	90	119
.30	1	26	58	90	119
.35	0	10	24	36	58
.40	0	10	24	36	58
.45	0	7	21	33	49
.50	0	7	21	33	49
.60	0	4	14	26	39
.70	0	3	10	22	34
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	10	1	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	10	2	.00	.00	.10	.00	.20	.20	.20	.00	.00	.00	.00	.10	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.80
2	10	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.40	.50
2	10	4	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40	.50
2	10	5	.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.00
2	10	6	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	10	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	10	9	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	10	10	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	10	11	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	TOTAL
2	10	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.10
2	10	24	.00	.00	.00	.00	.00	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	10	25	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00
2	10	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	10	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.10
2	10	30	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	10	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	9.99	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF OCTOBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 118
TOTAL HOURS OF PRECIPITATION - 15
TOTAL DAYS WITH PRECIPITATION - 9
TOTAL AMOUNT OF PRECIPITATION - 3.30 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.00 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 5 HOUR 2 - 1.00 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 4 HOUR 24 - 1.40 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 4 HOUR 24 - 1.40 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 4 HOUR 24 - 1.40 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 4 HOUR 24 - 1.40 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 19
NUMBER OF MISSING HOURS - 2
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF OCTOBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	15	61	99	135	168
.02	15	61	99	135	168
.03	15	61	99	135	168
.04	15	61	99	135	168
.05	15	61	99	135	168
.07	15	61	99	135	168
.10	15	61	99	135	168
.15	6	22	44	68	94
.20	6	22	44	68	94
.25	3	22	40	58	76
.30	3	22	40	58	76
.35	3	20	38	56	74
.40	3	20	38	56	74
.45	1	17	36	54	73
.50	1	17	36	54	73
.60	1	13	31	49	67
.70	1	8	22	34	46
.80	1	6	15	27	39
.90	1	6	12	18	24
1.00	1	6	12	18	24
1.10	0	4	10	16	22
1.20	0	4	10	16	22
1.30	0	4	10	16	22
1.40	0	4	10	16	22
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	TOTAL
2	11	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.99	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	6	.00	.00	.00	.00	.00	.00	.00	.00	9.99	9.99	9.99	9.99	
			9.99	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	14	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
2	11	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	TOTAL
			1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12MDNT	
2	11	18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	9.99	9.99	9.99	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	30	.00	.00	.00	.00	.00	.00	.00	9.99	9.99	9.99	9.99	9.99	
			9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF NOVEMBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
NUMBER OF MISSING HOURS - 26
TOTAL HOURS OF PRECIPITATION - 1
TOTAL DAYS WITH PRECIPITATION - 1
TOTAL AMOUNT OF PRECIPITATION - .10 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 7 - .10 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 7 - .10 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 7 - .10 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 7 - .10 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 14 HOUR 7 - .10 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 171
NUMBER OF MISSING HOURS - 13
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF NOVEMBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT	DURATION (HOURS)				
INCHES	1	6	12	18	24
.01	1	6	12	18	24
.02	1	6	12	18	24
.03	1	6	12	18	24
.04	1	6	12	18	24
.05	1	6	12	18	24
.07	1	6	12	18	24
.10	1	6	12	18	24
.15	0	0	0	0	0
.20	0	0	0	0	0
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	12	1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	12	17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
2	12	18	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	19	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	20	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	9.99 .00	.00 .00	.00 .00	.00
2	12	21	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	22	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	23	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	9.99 .00	9.99 .00	9.99 .00	9.99 .00	.00
2	12	24	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	25	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	26	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	27	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	28	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	29	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	30	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00
2	12	31	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00 .00	.00

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF DECEMBER

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 5
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 24 - .00 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 19 - .00 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 13 - .00 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 7 - .00 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 31 HOUR 1 - .00 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 323
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

MONTH OF DECEMBER

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	0	0	0	0	0
.02	0	0	0	0	0
.03	0	0	0	0	0
.04	0	0	0	0	0
.05	0	0	0	0	0
.07	0	0	0	0	0
.10	0	0	0	0	0
.15	0	0	0	0	0
.20	0	0	0	0	0
.25	0	0	0	0	0
.30	0	0	0	0	0
.35	0	0	0	0	0
.40	0	0	0	0	0
.45	0	0	0	0	0
.50	0	0	0	0	0
.60	0	0	0	0	0
.70	0	0	0	0	0
.80	0	0	0	0	0
.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

OCT-DEC INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 2208
NUMBER OF MISSING HOURS - 149
TOTAL HOURS OF PRECIPITATION - 16
TOTAL DAYS WITH PRECIPITATION - 10
TOTAL AMOUNT OF PRECIPITATION - 3.40 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.00 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 5 HOUR 2 - 1.00 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 513
NUMBER OF MISSING HOURS - 15
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

OCT-DEC INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS) 1	6	12	18	24
.01	16	67	111	153	192
.02	16	67	111	153	192
.03	16	67	111	153	192
.04	16	67	111	153	192
.05	16	67	111	153	192
.07	16	67	111	153	192
.10	16	67	111	153	192
.15	6	22	44	68	94
.20	6	22	44	68	94
.25	3	22	40	58	76
.30	3	22	40	58	76
.35	3	20	38	56	74
.40	3	20	38	56	74
.45	1	17	36	54	73
.50	1	17	36	54	73
.60	1	13	31	49	67
.70	1	8	22	34	46
.80	1	6	15	27	39
.90	1	6	12	18	24
1.00	1	6	12	18	24
1.10	0	4	10	16	22
1.20	0	4	10	16	22
1.30	0	4	10	16	22
1.40	0	4	10	16	22
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JUL-DEC INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 4416
NUMBER OF MISSING HOURS - 585
TOTAL HOURS OF PRECIPITATION - 39
TOTAL DAYS WITH PRECIPITATION - 21
TOTAL AMOUNT OF PRECIPITATION - 6.50 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.00 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 5 HOUR 2 - 1.00 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 513
NUMBER OF MISSING HOURS - 15
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - .00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .00 INCHES
MAXIMUM DAILY PRECIPITATION - .00 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

JUL-DEC INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT	DURATION (HOURS)				
INCHES	1	6	12	18	24
.01	39	148	258	364	457
.02	39	148	258	364	457
.03	39	148	258	364	457
.04	39	148	258	364	457
.05	39	148	258	364	457
.07	39	148	258	364	457
.10	39	148	258	364	457
.15	13	78	149	221	293
.20	13	78	149	221	293
.25	4	48	98	148	195
.30	4	48	98	148	195
.35	3	30	62	92	132
.40	3	30	62	92	132
.45	1	24	57	87	122
.50	1	24	57	87	122
.60	1	17	45	75	106
.70	1	11	32	56	80
.80	1	6	15	27	39
.90	1	6	12	18	24
1.00	1	6	12	18	24
1.10	0	4	10	16	22
1.20	0	4	10	16	22
1.30	0	4	10	16	22
1.40	0	4	10	16	22
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

ANNUAL INDEX

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 8760
NUMBER OF MISSING HOURS - 605
TOTAL HOURS OF PRECIPITATION - 85
TOTAL DAYS WITH PRECIPITATION - 43
TOTAL AMOUNT OF PRECIPITATION - 13.30 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 1.00 INCHES
MAXIMUM DAILY PRECIPITATION - 1.00 INCHES

1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 5 HOUR 2 - 1.00 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 10 DAY 4 HOUR 24 - 1.40 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 1442
NUMBER OF MISSING HOURS - 15
TOTAL HOURS OF PRECIPITATION - 3
TOTAL DAYS WITH PRECIPITATION - 3
TOTAL AMOUNT OF PRECIPITATION - .30 INCHES
MAXIMUM 1-HOUR PRECIPITATION - .10 INCHES
MAXIMUM DAILY PRECIPITATION - .10 INCHES

NPPD-COOPER NUCLEAR STATION PRECIPITATION DATA FOR 2002 RAIN VERSION PC-1.0

ANNUAL INDEX

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT	DURATION (HOURS)				
INCHES	1	6	12	18	24
.01	85	336	580	797	998
.02	85	336	580	797	998
.03	85	336	580	797	998
.04	85	336	580	797	998
.05	85	336	580	797	998
.07	85	336	580	797	998
.10	85	336	580	797	998
.15	23	160	301	446	590
.20	23	160	301	446	590
.25	8	89	196	300	401
.30	8	89	196	300	401
.35	7	55	124	190	266
.40	7	55	124	190	266
.45	4	48	113	173	238
.50	4	48	113	173	238
.60	2	36	89	149	210
.70	1	25	67	116	164
.80	1	11	28	64	98
.90	1	11	23	36	56
1.00	1	11	23	35	47
1.10	0	4	17	29	41
1.20	0	4	15	27	39
1.30	0	4	10	16	22
1.40	0	4	10	16	22
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

JOINT FREQUENCY DISTRIBUTION TABLES

The tables presented in this section are results obtained from processing of the hourly meteorological data collected at the Cooper Nuclear Station. The joint frequency distribution (JFD) tables represent the frequency of occurrence, in number of observations, that a particular wind speed, wind direction, and stability category occurred simultaneously. On a quarterly and semiannual basis, the JFDs were produced for wind speed and wind direction by atmospheric stability corresponding to the seven Pasquill stability classes, and for wind speed and wind direction for all stability categories combined. Atmospheric stability was classified per Regulatory Guide 1.23, using the 100-meter to 10-meter temperature difference (delta T) for the 100-meter JFDs and the 60-meter to 10-meter delta T for the 10-meter JFDs.

JFDs of 10-Meter Wind vs. Delta T

January-March 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
7.51-12.50	1	0	0	0	0	0	0	1	2	0	0	1	1	0	0	0	6
12.51-18.50	5	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	9
18.51-24.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12	13
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL	6	1	0	1	0	0	0	2	3	1	0	1	2	0	0	15	32

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	2	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	5
7.51-12.50	0	1	0	1	0	2	0	1	2	1	1	1	3	3	0	3	19
12.51-18.50	1	1	1	0	0	0	3	1	1	2	1	1	0	0	5	6	23
18.51-24.00	0	0	0	0	0	0	0	2	0	0	0	0	0	1	4	3	10
>24.00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	7	0	9
TOTAL	3	2	1	1	0	2	4	4	4	4	2	3	4	4	16	12	66

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH
JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
3.51- 7.50	1	1	0	0	0	0	1	0	1	4	1	2	3	0	1	1	16
7.51-12.50	0	2	0	0	0	1	1	0	2	15	2	1	3	0	4	8	39
12.51-18.50	1	0	1	1	0	0	0	1	3	8	3	0	1	0	5	7	31
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	3	7
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	7
TOTAL	2	3	1	1	0	1	2	1	7	27	6	4	7	3	14	22	101

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	1	2	0	1	4	0	0	2	2	0	0	1	0	1	14
3.51- 7.50	30	9	7	4	3	6	6	6	6	12	14	3	1	2	6	14	129
7.51-12.50	51	18	13	3	7	12	5	6	6	22	23	16	10	11	32	56	291
12.51-18.50	4	13	9	0	0	0	1	4	14	14	14	10	6	21	52	53	215
18.51-24.00	0	0	0	0	0	0	0	1	5	5	0	2	1	1	37	35	87
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	0	10
TOTAL	85	40	30	9	10	19	16	17	31	55	53	31	19	39	133	159	746

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	4	5	1	2	1	2	1	3	5	5	6	8	3	5	4	2	57
3.51- 7.50	29	7	7	7	2	9	2	14	31	18	13	11	8	7	24	21	210
7.51-12.50	13	5	3	5	1	3	8	26	45	19	11	9	15	42	31	26	262
12.51-18.50	0	0	0	0	0	0	2	23	4	10	0	4	2	13	20	16	94
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	5
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10
TOTAL	46	17	11	14	4	14	13	66	85	52	30	32	28	68	79	79	638

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	3	3	0	1	1	0	1	5	18	10	11	4	8	3	4	8	80
3.51- 7.50	2	2	0	0	0	0	2	19	40	28	10	3	6	4	8	8	132
7.51-12.50	0	0	0	0	0	0	2	3	14	18	4	4	4	1	0	1	51
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	5	0	1	1	0	5	27	72	56	25	13	20	8	12	17	267

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	3	4	1	4	2	4	9	29	18	9	4	7	2	6	2	2	106
3.51- 7.50	2	0	0	0	0	0	0	6	8	5	4	0	1	0	0	0	26
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	7	0	0	0	0	8
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	4	1	4	2	4	9	35	26	15	8	14	3	6	2	2	140

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	10	12	3	9	4	7	15	37	41	26	23	20	13	15	10	13	258
3.51- 7.50	66	20	14	11	5	15	12	45	87	69	42	19	19	13	39	45	521
7.51-12.50	65	26	16	9	8	18	16	37	71	76	41	39	36	57	67	94	676
12.51-18.50	11	14	11	2	0	0	6	29	23	34	18	17	11	34	82	84	376
18.51-24.00	0	0	0	0	0	0	0	4	6	5	0	2	1	5	42	57	122
>24.00	0	0	0	0	0	0	0	0	0	0	0	1	3	4	16	13	37
TOTAL	152	72	44	31	17	40	49	152	228	210	124	98	83	128	256	306	1990

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2160

TOTAL NUMBER OF VALID OBSERVATIONS: 1990

TOTAL NUMBER OF MISSING OBSERVATIONS: 170

PERCENT DATA RECOVERY FOR THIS PERIOD: 92.1 %

MEAN WIND SPEED FOR THIS PERIOD: 9.8 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.61	3.32	5.08	37.49	32.06	13.42	7.04

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	6	1	0	1	0	0	0	2	3	1	0	1	2	0	0	15	0
B	3	2	1	1	0	2	4	4	4	4	2	3	4	4	16	12	0
C	2	3	1	1	0	1	2	1	7	27	6	4	7	3	14	22	0
D	85	40	30	9	10	19	16	17	31	55	53	31	19	39	133	159	0
E	46	17	11	14	4	14	13	66	85	52	30	32	28	68	79	79	0
F	5	5	0	1	1	0	5	27	72	56	25	13	20	8	12	17	0
G	5	4	1	4	2	4	9	35	26	15	8	14	3	6	2	2	0
TOTAL	152	72	44	31	17	40	49	152	228	210	124	98	83	128	256	306	0

JFDs of 10-Meter Wind vs. Delta T

April-June 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 4/ 1/ 2 - 6/30/ 2

*** APR-JUN 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	1	1	1	1	1	0	0	0	2	1	0	0	0	0	0	0	8
7.51-12.50	6	0	0	0	0	0	6	10	18	5	2	0	0	1	0	1	49
12.51-18.50	8	0	0	0	0	2	12	25	57	4	7	0	0	0	0	6	121
18.51-24.00	0	0	0	0	0	0	1	7	19	2	0	0	0	0	0	5	34
>24.00	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	2	15
TOTAL	15	1	1	1	1	2	19	42	109	12	9	0	0	1	0	14	227

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	1	3	2	1	1	2	2	0	0	4	2	1	1	0	1	1	22
7.51-12.50	3	0	2	0	3	0	5	9	13	9	2	1	2	1	0	7	57
12.51-18.50	2	0	0	1	1	1	4	8	11	4	2	2	0	5	4	3	48
18.51-24.00	0	0	0	0	0	0	0	2	5	1	0	0	0	1	0	1	10
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	5
TOTAL	6	3	4	2	5	3	11	19	31	18	6	4	3	7	5	15	142

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 4/ 1/ 2 - 6/30/ 2

*** APR-JUN 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	3
3.51- 7.50	3	1	4	0	0	1	3	5	2	3	5	3	2	2	4	2	40
7.51-12.50	3	0	2	4	1	3	2	6	12	13	3	8	2	1	7	1	68
12.51-18.50	0	0	1	0	1	0	3	7	12	5	2	1	1	2	5	4	44
18.51-24.00	0	0	0	0	0	0	0	0	5	0	0	0	0	2	0	1	8
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3
TOTAL	6	1	7	5	3	4	8	18	33	21	11	12	5	7	16	9	166

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	2	1	0	0	2	0	1	1	0	0	1	0	0	1	10
3.51- 7.50	34	15	10	2	3	8	13	9	8	10	14	6	2	3	10	15	162
7.51-12.50	38	22	11	3	2	6	21	39	29	12	8	11	6	13	13	21	255
12.51-18.50	5	0	0	0	0	6	11	32	43	6	0	3	1	9	17	18	151
18.51-24.00	0	0	0	0	0	0	1	5	17	0	0	0	0	5	5	12	45
>24.00	0	0	0	0	0	0	0	0	7	0	1	1	1	0	1	1	12
TOTAL	77	38	23	6	5	20	48	85	105	29	23	21	11	30	46	68	635

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 4/ 1/ 2 - 6/30/ 2

*** APR-JUN 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	14	11	5	4	0	4	3	8	6	6	3	1	0	2	1	7	75
3.51- 7.50	25	18	16	6	10	16	21	40	61	23	8	1	0	3	9	26	283
7.51-12.50	16	1	2	2	6	14	18	55	65	11	4	2	1	9	6	31	243
12.51-18.50	2	0	0	0	0	2	5	13	25	1	0	0	1	1	4	8	62
18.51-24.00	0	0	0	0	0	0	2	2	4	1	0	0	0	0	0	4	13
>24.00	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	2	5
TOTAL	57	30	23	12	16	36	49	118	161	43	15	4	4	15	20	78	681

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	8	4	2	0	0	2	5	8	18	8	7	5	7	12	11	15	112
3.51- 7.50	4	1	3	0	1	0	5	6	18	6	4	0	1	3	4	14	70
7.51-12.50	4	0	0	0	0	0	2	1	3	0	0	0	1	4	2	6	23
12.51-18.50	0	0	0	0	0	0	7	0	0	0	0	1	1	0	0	0	9
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	16	5	5	0	1	2	19	15	39	14	11	6	10	19	17	35	214

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 4/ 1/ 2 - 6/30/ 2

*** APR-JUN 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	6	0	1	1	1	1	1	6	14	2	6	5	3	2	9	17	75
3.51- 7.50	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	2	5
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	0	1	1	1	1	1	7	15	2	6	7	3	3	9	19	82

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	28	16	10	7	2	7	11	22	39	17	17	11	11	16	21	40	275
3.51- 7.50	68	39	36	10	16	27	44	61	92	47	33	11	6	12	28	60	590
7.51-12.50	70	23	17	9	12	23	54	120	140	50	19	24	12	29	28	67	697
12.51-18.50	17	0	1	1	2	11	42	85	148	20	11	7	4	17	30	39	435
18.51-24.00	0	0	0	0	0	0	4	16	50	4	0	0	0	8	5	23	110
>24.00	0	0	0	0	0	0	0	0	24	1	1	1	3	0	1	9	40
TOTAL	183	78	64	27	32	68	155	304	493	139	81	54	36	82	113	238	2147

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - APR-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 4/ 1/ 2 - 6/30/ 2

*** APR-JUN 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2184

TOTAL NUMBER OF VALID OBSERVATIONS: 2147

TOTAL NUMBER OF MISSING OBSERVATIONS: 37

PERCENT DATA RECOVERY FOR THIS PERIOD: 98.3 %

MEAN WIND SPEED FOR THIS PERIOD: 9.7 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
10.57	6.61	7.73	29.58	31.72	9.97	3.82

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	15	1	1	1	1	2	19	42	109	12	9	0	0	1	0	14	0
B	6	3	4	2	5	3	11	19	31	18	6	4	3	7	5	15	0
C	6	1	7	5	3	4	8	18	33	21	11	12	5	7	16	9	0
D	77	38	23	6	5	20	48	85	105	29	23	21	11	30	46	68	0
E	57	30	23	12	16	36	49	118	161	43	15	4	4	15	20	78	0
F	16	5	5	0	1	2	19	15	39	14	11	6	10	19	17	35	0
G	6	0	1	1	1	1	1	7	15	2	6	7	3	3	9	19	0
TOTAL	183	78	64	27	32	68	155	304	493	139	81	54	36	82	113	238	0

JFDs of 10-Meter Wind vs. Delta T

January-June 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

*** JAN-JUN 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	1	2	1	1	1	0	0	0	2	2	0	0	0	0	0	1	11
7.51-12.50	7	0	0	0	0	0	6	11	20	5	2	1	1	1	0	1	55
12.51-18.50	13	0	0	1	0	2	12	25	58	4	7	0	0	0	0	8	130
18.51-24.00	0	0	0	0	0	0	1	8	19	2	0	0	0	0	0	17	47
>24.00	0	0	0	0	0	0	0	0	13	0	0	0	1	0	0	2	16
TOTAL	21	2	1	2	1	2	19	44	112	13	9	1	2	1	0	29	259

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	3	3	2	1	1	2	3	0	1	5	2	1	1	0	1	1	27
7.51-12.50	3	1	2	1	3	2	5	10	15	10	3	2	5	4	0	10	76
12.51-18.50	3	1	1	1	1	1	7	9	12	6	3	3	0	5	9	9	71
18.51-24.00	0	0	0	0	0	0	0	4	5	1	0	0	0	2	4	4	20
>24.00	0	0	0	0	0	0	0	0	2	0	0	1	1	0	7	3	14
TOTAL	9	5	5	3	5	5	15	23	35	22	8	7	7	11	21	27	208

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

*** JAN-JUN 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	4
3.51- 7.50	4	2	4	0	0	1	4	5	3	7	6	5	5	2	5	3	56
7.51-12.50	3	2	2	4	1	4	3	6	14	28	5	9	5	1	11	9	107
12.51-18.50	1	0	2	1	1	0	3	8	15	13	5	1	2	2	10	11	75
18.51-24.00	0	0	0	0	0	0	0	0	6	0	0	0	0	4	1	4	15
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	1	3	4	10
TOTAL	8	4	8	6	3	5	10	19	40	48	17	16	12	10	30	31	267

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	3	3	0	1	6	0	1	3	2	0	1	1	0	2	24
3.51- 7.50	64	24	17	6	6	14	19	15	14	22	28	9	3	5	16	29	291
7.51-12.50	89	40	24	6	9	18	26	45	35	34	31	27	16	24	45	77	546
12.51-18.50	9	13	9	0	0	6	12	36	57	20	14	13	7	30	69	71	366
18.51-24.00	0	0	0	0	0	0	1	6	22	5	0	2	1	6	42	47	132
>24.00	0	0	0	0	0	0	0	0	7	0	1	1	2	3	7	1	22
TOTAL	162	78	53	15	15	39	64	102	136	84	76	52	30	69	179	227	1381

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

*** JAN-JUN 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	18	16	6	6	1	6	4	11	11	11	9	9	3	7	5	9	132
3.51- 7.50	54	25	23	13	12	25	23	54	92	41	21	12	8	10	33	47	493
7.51-12.50	29	6	5	7	7	17	26	81	110	30	15	11	16	51	37	57	505
12.51-18.50	2	0	0	0	0	2	7	36	29	11	0	4	3	14	24	24	156
18.51-24.00	0	0	0	0	0	0	2	2	4	1	0	0	0	1	0	8	18
>24.00	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	12	15
TOTAL	103	47	34	26	20	50	62	184	246	95	45	36	32	83	99	157	1319

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	11	7	2	1	1	2	6	13	36	18	18	9	15	15	15	23	192
3.51- 7.50	6	3	3	0	1	0	7	25	58	34	14	3	7	7	12	22	202
7.51-12.50	4	0	0	0	0	0	4	4	17	18	4	4	5	5	2	7	74
12.51-18.50	0	0	0	0	0	0	7	0	0	0	0	3	3	0	0	0	13
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	21	10	5	1	2	2	24	42	111	70	36	19	30	27	29	52	481

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

*** JAN-JUN 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	9	4	2	5	3	5	10	35	32	11	10	12	5	8	11	19	181
3.51- 7.50	2	0	0	0	0	0	0	7	9	5	4	0	1	1	0	2	31
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	9	0	0	0	0	10
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11	4	2	5	3	5	10	42	41	17	14	21	6	9	11	21	222

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	38	28	13	16	6	14	26	59	80	43	40	31	24	31	31	53	533
3.51- 7.50	134	59	50	21	21	42	56	106	179	116	75	30	25	25	67	105	1111
7.51-12.50	135	49	33	18	20	41	70	157	211	126	60	63	48	86	95	161	1373
12.51-18.50	28	14	12	3	2	11	48	114	171	54	29	24	15	51	112	123	811
18.51-24.00	0	0	0	0	0	0	4	20	56	9	0	2	1	13	47	80	232
>24.00	0	0	0	0	0	0	0	0	24	1	1	2	6	4	17	22	77
TOTAL	335	150	108	58	49	108	204	456	721	349	205	152	119	210	369	544	4137

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

*** JAN-JUN 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4344

TOTAL NUMBER OF VALID OBSERVATIONS: 4137

TOTAL NUMBER OF MISSING OBSERVATIONS: 207

PERCENT DATA RECOVERY FOR THIS PERIOD: 95.2 %

MEAN WIND SPEED FOR THIS PERIOD: 9.8 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
6.26	5.03	6.45	33.38	31.88	11.63	5.37

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	21	2	1	2	1	2	19	44	112	13	9	1	2	1	0	29	0
B	9	5	5	3	5	5	15	23	35	22	8	7	7	11	21	27	0
C	8	4	8	6	3	5	10	19	40	48	17	16	12	10	30	31	0
D	162	78	53	15	15	39	64	102	136	84	76	52	30	69	179	227	0
E	103	47	34	26	20	50	62	184	246	95	45	36	32	83	99	157	0
F	21	10	5	1	2	2	24	42	111	70	36	19	30	27	29	52	0
G	11	4	2	5	3	5	10	42	41	17	14	21	6	9	11	21	0
TOTAL	335	150	108	58	49	108	204	456	721	349	205	152	119	210	369	544	0

Stability Classes by Hour of Day

10-Meter Wind vs. Delta T

January-June 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																							
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	1	1	F	F	E	E	E	E	E	E	D	D	D	C	C	C	C	D	D	E	E	E	E	D	D	D
2	1	2	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	E	F	F	F	G	G	G
2	1	3	G	G	G	G	F	F	F	F	F	D	D	B	B	C	C	D	D	E	E	E	E	E	E	E
2	1	4	E	E	E	E	F	F	F	F	F	D	D	D	C	D	D	D	E	E	E	F	F	F	F	E
2	1	5	F	F	F	F	E	F	F	F	E	D	D	D	C	D	D	D	E	E	F	G	G	G	G	G
2	1	6	F	E	E	D	D	E	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E
2	1	7	E	E	E	F	F	F	F	F	E	D	D	D	C	C	D	D	E	F	F	F	F	F	F	F
2	1	8	F	F	F	F	F	G	G	E	F	D	D	D	D	D	D	D	E	F	G	F	F	G	G	G
2	1	9	G	F	G	G	F	G	F	F	F	E	E	D	D	D	D	D	E	E	E	F	F	E	E	E
2	1	10	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	F	G	F	F	F	G
2	1	11	F	F	G	G	G	G	F	F	E	D	D	D	D	D	D	D	D	E	E	F	E	E	E	E
2	1	12	E	E	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	F	G	G	G	G	F	F
2	1	13	E	E	E	E	F	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
2	1	14	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
2	1	15	E	E	E	E	E	E	E	E	E	D	C	D	D	D	D	D	D	E	E	E	E	E	E	E
2	1	16	D	D	D	D	D	D	D	D	D	D	D	D	B	D	D	D	D	E	F	G	G	G	G	F
2	1	17	E	F	F	F	F	E	F	F	F	E	D	D	D	D	D	D	E	E	E	E	E	F	G	F
2	1	18	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D
2	1	19	D	D	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	E	E	E	E	F	F	F
2	1	20	F	E	E	F	E	E	E	E	E	D	D	D	C	C	D	D	D	E	F	F	F	E	E	E
2	1	21	F	F	F	G	G	F	E	E	E	D	D	D	D	D	D	D	D	F	G	G	F	F	F	F
2	1	22	F	F	F	F	F	G	F	F	E	D	D	D	D	D	D	D	E	E	G	G	G	G	G	G
2	1	23	F	E	E	E	D	E	E	E	D	D	D	D	C	B	C	D	D	E	E	E	E	E	E	E
2	1	24	E	E	E	E	E	E	F	F	F	E	D	D	D	D	D	D	D	E	G	G	G	G	G	G
2	1	25	G	G	G	F	F	F	F	E	E	D	D	D	D	D	D	D	D	F	F	E	F	E	E	E
2	1	26	E	E	E	E	E	F	F	F	F	D	D	C	C	B	D	D	E	E	E	F	F	F	E	E
2	1	27	E	F	F	E	-	-	-	E	E	D	D	C	C	D	D	D	E	F	G	F	E	D	D	D
2	1	28	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
2	1	29	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
2	1	30	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
2	1	31	D	D	E	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E
2	2	1	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	F	F	F	F	F	F
2	2	2	F	G	G	G	G	G	G	G	G	E	E	E	E	D	D	D	E	E	F	F	F	F	F	E
2	2	3	E	E	G	G	G	G	G	G	G	F	F	D	D	D	D	D	D	E	E	E	E	E	E	E
2	2	4	E	E	E	E	E	E	E	E	E	E	D	D	B	C	D	C	C	E	E	F	G	G	G	G
2	2	5	F	F	F	G	G	F	G	G	G	G	F	D	B	D	D	D	D	E	F	F	G	G	G	G
2	2	6	G	G	G	G	G	G	G	F	E	E	D	D	D	D	D	D	D	E	E	E	E	D	D	D
2	2	7	D	D	D	D	E	E	E	E	D	D	D	D	C	A	D	D	E	E	E	F	F	F	F	F
2	2	8	E	G	F	E	F	F	F	G	F	E	D	D	D	D	E	E	E	F	E	E	E	E	E	E
2	2	9	E	E	E	E	E	E	E	E	E	D	E	E	E	D	E	E	E	E	E	E	E	E	E	E
2	2	10	E	E	E	E	E	E	D	D	D	D	D	D	D	C	C	D	D	D	D	E	E	E	E	E
2	2	11	F	E	E	F	E	F	E	E	E	D	D	D	D	D	D	D	E	E	F	F	F	E	E	E
2	2	12	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	G	F
2	2	13	E	E	F	F	F	F	G	G	G	E	D	D	D	D	D	D	D	E	F	F	F	F	F	F
2	2	14	F	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E	E	E	E

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																					
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	2	15	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	E	E	F	F
2	2	16	F	F	F	F	E	E	E	E	E	D	D	A	B	B	C	D	D	E	F	G	G	G	G	G
2	2	17	G	G	G	G	G	G	G	G	F	E	D	B	C	A	C	D	D	E	E	E	E	E	E	E
2	2	18	E	E	E	E	E	E	E	E	D	D	C	D	D	D	D	E	E	E	E	E	E	E	E	D
2	2	19	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D
2	2	20	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
2	2	21	E	E	E	E	E	E	E	E	D	D	D	C	B	B	B	C	D	D	E	F	F	F	E	E
2	2	22	F	F	F	G	G	G	G	G	F	D	C	C	C	C	C	C	D	D	E	E	E	E	E	E
2	2	23	E	E	E	E	E	E	E	E	D	D	C	B	C	C	C	C	D	E	F	F	E	E	E	E
2	2	24	E	E	E	E	E	E	E	E	E	D	C	D	C	B	C	C	D	D	D	D	D	D	D	D
2	2	25	D	D	D	D	D	D	D	D	D	A	A	A	A	A	C	D	D	D	D	D	D	D	D	D
2	2	26	D	D	D	D	D	D	D	D	D	D	B	B	B	C	B	C	D	D	D	D	D	D	D	E
2	2	27	E	E	E	E	E	E	E	E	D	D	C	B	B	C	C	C	D	D	E	E	E	E	E	E
2	2	28	E	E	E	E	E	E	E	F	D	D	C	C	C	C	C	C	D	D	F	G	F	F	E	D
2	3	1	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
2	3	2	D	D	D	D	D	D	D	D	D	D	C	C	B	A	B	B	D	D	D	D	E	E	E	E
2	3	3	E	E	E	E	E	E	E	D	D	D	B	B	B	B	B	C	C	D	D	E	E	E	E	F
2	3	4	F	E	E	E	D	D	E	D	D	D	D	C	D	D	D	D	D	E	E	F	F	F	G	F
2	3	5	F	F	F	E	F	F	F	F	D	D	D	C	D	C	C	D	D	E	F	F	F	F	F	F
2	3	6	E	E	F	G	G	G	G	G	E	D	C	A	A	A	A	A	C	D	D	D	D	D	D	D
2	3	7	D	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
2	3	8	E	D	D	D	D	E	E	E	E	E	E	E	E	E	E	D	D	D	E	E	E	E	E	D
2	3	9	D	D	D	D	D	D	D	D	D	C	B	B	B	B	C	D	D	D	D	E	E	F	F	F
2	3	10	F	F	F	E	E	D	D	D	D	D	C	B	B	B	B	D	D	E	E	E	E	E	E	E
2	3	11	E	E	E	E	E	E	E	E	D	D	C	D	D	D	C	D	D	D	E	E	E	E	E	F
2	3	12	E	F	F	G	G	G	F	F	E	D	D	C	C	C	B	C	D	E	F	F	F	F	F	F
2	3	13	F	E	E	E	E	F	F	E	D	D	B	C	B	C	B	B	D	D	E	E	E	D	D	E
2	3	14	E	E	E	E	E	E	E	D	D	D	B	B	B	B	A	B	D	D	D	D	D	D	D	D
2	3	15	D	D	D	D	D	D	D	D	D	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	D	D	D	E	E	D	D	D
2	3	17	E	E	E	E	E	D	E	D	D	C	C	C	A	A	-	-	-	-	-	-	-	-	-	-
2	3	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	21	-	-	-	-	-	D	D	D	A	A	A	A	A	A	A	A	C	D	D	E	E	E	D	E
2	3	22	E	E	E	E	E	E	E	D	D	B	B	A	B	B	A	B	C	D	E	F	F	F	F	F
2	3	23	F	F	E	E	F	F	F	E	D	B	C	B	A	A	A	B	D	D	E	E	E	E	E	E
2	3	24	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
2	3	25	E	E	E	E	E	D	D	D	D	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	27	-	-	-	-	-	-	-	-	-	-	-	-	A	B	A	B	D	D	E	E	F	E	E	E
2	3	28	E	E	E	E	E	E	E	D	D	D	C	B	B	B	B	C	D	D	E	G	G	F	F	E
2	3	29	E	E	F	F	E	E	E	D	D	D	D	C	C	C	B	C	D	D	E	F	G	G	G	G
2	3	30	G	G	G	G	F	E	E	D	D	D	C	C	D	D	D	D	D	D	D	E	E	E	E	F
2	3	31	F	F	E	E	E	E	E	D	D	D	C	C	B	C	B	C	D	D	E	F	E	F	G	G

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																					
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	4	1	F	F	F	E	E	E	E	D	D	C	A	A	A	B	B	C	D	D	E	E	E	E	E	E
2	4	2	E	D	D	D	D	D	D	D	D	-	A	A	A	A	A	B	C	D	D	D	D	E	E	E
2	4	3	E	E	D	D	D	E	D	D	B	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-
2	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	E	F	F	F	G	G
2	4	5	F	F	F	F	G	G	G	E	A	A	B	B	C	B	B	C	D	D	E	E	E	E	E	E
2	4	6	E	E	E	E	E	E	E	D	D	C	B	A	A	B	C	D	D	D	D	D	D	D	D	D
2	4	7	D	D	D	D	D	E	D	E	E	D	D	D	D	E	E	E	E	E	E	E	E	E	E	E
2	4	8	E	E	E	E	E	E	E	E	E	E	F	F	F	F	F	E	E	E	E	F	F	F	F	E
2	4	9	E	E	E	E	E	E	E	D	D	C	C	D	C	C	C	-	A	A	D	F	F	F	F	F
2	4	10	E	E	E	F	F	E	E	D	C	B	A	A	A	A	A	B	C	D	E	E	E	E	E	E
2	4	11	E	E	E	E	E	E	E	E	E	-	-	-	-	-	D	D	D	D	D	D	D	D	D	D
2	4	12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	B	B	C	D	D	E	F	F	F	F
2	4	13	F	F	F	G	G	F	F	E	D	D	D	B	B	C	A	B	D	D	D	E	E	E	E	E
2	4	14	E	E	E	E	E	E	E	E	D	C	B	A	C	B	B	C	D	D	E	G	G	F	E	E
2	4	15	E	E	E	E	E	E	E	D	C	A	A	A	A	A	A	A	A	D	D	E	E	E	E	E
2	4	16	E	E	E	E	E	E	D	D	D	B	A	A	A	B	C	D	C	D	D	D	D	E	E	D
2	4	17	E	E	E	F	G	F	F	D	D	C	C	B	C	B	A	A	A	D	D	E	E	E	E	E
2	4	18	E	E	E	E	E	E	E	D	D	C	A	A	A	A	A	C	E	E	E	E	F	F	G	F
2	4	19	E	D	D	D	D	D	D	D	B	A	A	A	A	A	B	D	D	D	D	D	D	D	D	D
2	4	20	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E	E
2	4	21	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	F	F	F	F
2	4	22	F	F	F	F	F	F	F	D	D	C	B	B	B	A	A	B	B	D	D	E	E	E	E	F
2	4	23	F	F	E	E	E	E	E	D	D	D	D	C	B	A	A	B	B	D	D	E	E	E	E	E
2	4	24	E	E	E	E	E	E	E	E	E	D	C	B	A	A	B	B	D	D	D	E	E	F	F	F
2	4	25	F	G	G	G	F	F	E	D	C	C	B	B	B	B	C	D	D	D	D	E	E	F	F	F
2	4	26	E	E	E	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
2	4	27	D	D	E	E	E	E	F	F	F	F	F	F	F	F	E	D	D	D	D	E	E	D	D	D
2	4	28	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	E	F	F	F	E
2	4	29	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	G	F	E	F	F
2	4	30	F	F	F	F	F	F	F	D	D	C	B	B	C	B	C	D	D	D	D	E	D	E	D	D
2	5	1	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E
2	5	2	E	E	E	E	E	E	E	D	D	D	C	C	C	B	C	C	C	D	D	F	G	G	G	G
2	5	3	G	F	F	G	G	G	F	D	C	C	B	A	A	A	B	B	B	C	D	E	E	E	F	F
2	5	4	F	F	F	F	E	E	D	D	D	C	B	C	C	D	D	D	D	D	D	F	E	E	E	E
2	5	5	E	E	E	E	F	F	E	D	D	A	A	A	A	A	A	A	C	D	E	E	E	D	E	E
2	5	6	F	E	E	E	F	F	E	E	D	C	D	C	B	C	B	C	D	D	D	E	F	F	F	F
2	5	7	E	E	E	E	E	E	D	D	D	C	B	B	A	A	A	D	D	D	D	D	D	D	D	D
2	5	8	E	E	E	F	F	G	F	D	D	B	D	C	C	D	D	D	D	D	E	E	D	E	E	D
2	5	9	D	D	E	E	E	E	D	D	D	C	C	B	B	B	B	C	D	D	D	F	G	G	G	G
2	5	10	G	G	G	G	F	F	E	E	D	D	B	B	D	C	B	D	D	D	D	D	D	E	D	D
2	5	11	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	E	E	E	E	E	E	E	E	E
2	5	12	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E
2	5	13	E	E	F	E	E	E	E	D	D	D	C	C	D	D	C	D	D	D	E	G	G	G	G	G
2	5	14	G	G	G	G	G	G	G	E	D	C	B	B	C	B	A	B	C	D	D	E	E	E	E	E
2	5	15	E	E	E	E	E	E	D	D	C	A	A	A	A	B	C	D	D	D	D	E	E	E	E	E

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																					
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	5	16	E	E	E	E	E	E	F	E	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D	D
2	5	17	E	E	E	E	E	E	E	D	D	B	A	A	A	A	A	B	C	D	D	E	F	F	F	F
2	5	18	F	E	F	F	F	G	E	D	D	B	A	B	B	B	A	C	C	D	D	E	G	G	G	G
2	5	19	G	G	G	G	G	F	E	D	D	C	C	B	C	D	D	C	D	D	D	F	G	G	G	G
2	5	20	G	G	G	F	E	E	D	D	D	C	C	B	C	C	B	C	C	D	D	E	E	E	E	E
2	5	21	E	E	E	E	E	D	D	C	B	A	A	A	A	A	A	A	A	C	D	D	D	E	E	E
2	5	22	E	E	E	E	E	D	D	C	D	D	B	A	D	D	D	D	D	D	D	D	E	E	E	F
2	5	23	F	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	F	F	E	E	E
2	5	24	E	E	E	D	D	D	D	D	D	D	D	D	E	E	D	D	E	D	E	E	E	E	F	F
2	5	25	F	F	F	-	-	-	E	D	D	D	D	C	C	D	C	D	D	D	D	F	F	F	F	F
2	5	26	F	F	E	E	E	E	E	D	C	A	B	A	B	C	B	A	C	D	D	E	E	E	E	F
2	5	27	E	E	E	E	F	F	F	D	D	D	D	D	C	D	C	D	C	C	D	E	E	F	F	F
2	5	28	F	F	E	E	E	E	D	D	D	C	A	A	A	A	C	D	D	F	F	F	F	G	G	F
2	5	29	E	E	E	F	E	F	E	D	D	C	B	A	A	A	A	B	C	D	D	E	E	E	E	E
2	5	30	E	E	E	F	E	E	D	D	D	D	C	C	C	B	A	B	C	D	D	E	F	F	F	F
2	5	31	F	E	E	E	E	E	D	D	D	C	C	C	C	C	B	B	B	C	D	E	E	E	E	E
2	6	1	E	E	E	E	E	E	D	D	C	B	C	D	B	B	A	A	C	C	D	D	E	E	E	E
2	6	2	E	E	E	E	E	D	D	C	B	B	A	A	A	A	A	A	A	D	D	D	D	D	D	E
2	6	3	D	E	E	E	E	E	D	D	C	B	C	C	B	D	E	D	D	E	E	D	D	E	E	E
2	6	4	E	E	E	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	E	F	F	E	E	E
2	6	5	F	F	G	G	F	F	E	D	D	D	C	B	B	B	C	B	D	D	E	F	G	G	G	G
2	6	6	G	F	E	F	F	F	E	D	D	C	B	C	B	B	A	A	A	B	D	E	E	E	E	E
2	6	7	E	E	E	F	F	E	D	C	B	A	A	A	A	A	A	A	A	B	D	D	E	E	E	E
2	6	8	E	E	E	E	E	E	D	C	A	A	A	A	A	A	A	A	A	A	D	D	E	D	D	D
2	6	9	D	E	E	E	E	D	D	D	B	A	A	A	A	A	A	A	A	A	C	D	D	D	D	D
2	6	10	D	E	E	E	E	E	D	D	D	D	D	B	A	B	B	A	B	C	D	D	D	D	D	D
2	6	11	E	E	E	E	E	E	E	E	E	D	A	C	D	D	D	D	D	D	E	E	D	D	D	E
2	6	12	E	E	E	E	E	E	D	D	D	E	E	E	D	D	D	D	E	D	D	E	E	E	E	E
2	6	13	E	E	E	E	E	E	D	D	D	D	D	D	C	B	B	C	D	D	D	E	F	F	F	F
2	6	14	F	F	F	E	E	E	D	D	C	B	A	A	A	A	B	C	D	D	D	E	F	G	G	G
2	6	15	G	G	E	G	F	E	E	D	D	C	C	C	C	B	D	D	D	D	D	E	E	E	E	E
2	6	16	F	G	G	G	F	E	D	D	D	B	A	B	C	C	A	B	C	D	E	F	F	F	E	E
2	6	17	E	E	E	E	E	E	D	D	D	B	B	C	A	A	A	A	B	C	D	D	E	E	E	E
2	6	18	E	E	D	D	D	D	D	D	D	D	C	A	A	A	A	A	A	C	D	D	D	E	D	D
2	6	19	D	D	E	E	E	E	D	D	C	B	A	A	A	A	A	A	A	B	D	D	E	E	E	E
2	6	20	E	E	E	E	E	E	D	D	D	C	C	B	B	A	A	A	B	C	D	E	E	F	F	E
2	6	21	E	E	E	E	E	E	D	D	D	A	A	A	A	A	A	A	A	C	D	D	E	E	E	E
2	6	22	E	E	E	E	E	E	D	D	D	C	A	A	A	A	A	A	B	C	D	D	E	E	E	E
2	6	23	E	E	E	E	E	E	D	D	C	B	A	A	A	A	A	A	A	B	D	E	E	F	F	E
2	6	24	E	E	E	E	E	E	E	D	C	A	A	B	A	A	A	A	A	A	D	E	E	E	E	E
2	6	25	F	F	F	F	F	F	E	D	D	D	C	C	A	B	A	B	C	C	D	E	E	E	E	F
2	6	26	E	E	E	E	F	F	E	D	D	D	D	C	D	C	D	A	A	A	B	D	E	E	E	E
2	6	27	E	E	F	G	F	F	F	D	C	B	B	A	B	A	B	B	C	D	E	E	F	F	F	G
2	6	28	G	F	F	F	F	E	D	D	C	B	A	A	A	A	A	A	A	B	C	D	E	E	E	D
2	6	29	E	E	E	E	E	E	D	D	D	D	C	A	A	A	A	A	A	C	D	D	E	E	E	E

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-JUN 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 6/30/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																					
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	6	30	E	E	E	E	E	E	D	D	C	B	A	A	A	A	A	A	A	B	D	D	E	E	E	E

JFDs of 10-Meter Wind vs. Delta T

July-September 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 9/30/ 2

*** JUL-SEP 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	1	1	7	3	0	4	1	1	0	0	0	0	0	0	1	19
7.51-12.50	6	4	1	2	3	7	33	35	32	1	0	1	1	0	0	6	132
12.51-18.50	1	0	0	0	0	2	9	20	20	8	3	0	0	0	0	5	68
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	5	2	9	6	9	46	56	53	9	3	1	1	0	0	12	219

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	4	4	2	2	2	4	10	6	8	1	2	0	0	0	0	0	45
7.51-12.50	4	3	1	1	1	10	29	16	27	2	1	0	2	1	0	7	105
12.51-18.50	0	0	0	0	0	0	2	6	11	4	2	0	0	1	2	0	28
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	7	3	3	3	14	41	28	47	7	5	0	2	2	2	7	179

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 9/30/ 2

*** JUL-SEP 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	4
3.51- 7.50	6	3	3	2	5	7	7	5	14	2	0	4	0	1	0	3	62
7.51-12.50	1	3	0	2	5	5	11	2	20	6	3	1	1	0	4	5	69
12.51-18.50	0	0	0	1	0	0	1	3	6	5	1	0	0	0	1	2	20
18.51-24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	6	3	5	10	12	19	10	42	13	5	5	1	2	5	12	157

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	6	1	1	1	1	1	2	4	2	2	0	0	1	0	1	2	25
3.51- 7.50	21	15	18	16	15	31	39	30	24	11	10	2	4	4	7	11	258
7.51-12.50	12	2	4	1	8	14	36	18	27	19	9	5	5	1	10	29	200
12.51-18.50	0	0	0	0	0	0	2	6	10	2	0	0	0	1	1	12	34
18.51-24.00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	39	18	23	18	24	46	79	58	65	35	19	7	10	6	19	54	520

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 9/30/ 2

*** JUL-SEP 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	21	12	8	3	6	6	6	20	20	8	7	2	1	3	4	14	141
3.51- 7.50	46	23	9	9	18	27	79	62	64	26	10	2	2	7	16	33	433
7.51-12.50	7	2	0	2	3	5	31	28	55	17	4	5	5	3	6	27	200
12.51-18.50	1	0	0	0	0	1	2	0	23	1	2	1	0	0	0	0	31
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	75	37	17	14	27	39	118	110	163	52	23	10	8	14	26	74	807

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	7	4	5	1	1	1	6	9	27	18	10	10	10	11	10	23	153
3.51- 7.50	5	1	1	0	0	0	0	9	29	14	2	2	1	1	3	4	72
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12	5	6	1	1	1	6	18	56	32	13	12	11	14	13	27	228

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 9/30/ 2

*** JUL-SEP 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	12	2	0	0	0	0	1	13	13	3	7	3	4	7	16	12	93
3.51- 7.50	1	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13	2	0	0	0	0	1	13	15	3	7	3	4	8	16	12	98

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	46	19	14	5	8	8	15	46	62	31	25	15	16	22	31	53	416
3.51- 7.50	83	47	34	36	43	69	139	113	142	54	24	10	7	14	26	52	893
7.51-12.50	30	14	6	8	20	41	140	99	161	45	17	12	14	7	20	74	708
12.51-18.50	2	0	0	1	0	3	16	35	70	20	9	1	0	2	4	19	182
18.51-24.00	0	0	0	0	0	0	0	0	6	1	0	0	0	1	0	0	8
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	161	80	54	50	71	121	310	293	441	151	75	38	37	46	81	198	2208

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-SEP 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 9/30/ 2

*** JUL-SEP 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2208

TOTAL NUMBER OF VALID OBSERVATIONS: 2208

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 7.0 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
9.92	8.11	7.11	23.55	36.55	10.33	4.44

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	7	5	2	9	6	9	46	56	53	9	3	1	1	0	0	12	0
B	8	7	3	3	3	14	41	28	47	7	5	0	2	2	2	7	0
C	7	6	3	5	10	12	19	10	42	13	5	5	1	2	5	12	0
D	39	18	23	18	24	46	79	58	65	35	19	7	10	6	19	54	0
E	75	37	17	14	27	39	118	110	163	52	23	10	8	14	26	74	0
F	12	5	6	1	1	1	6	18	56	32	13	12	11	14	13	27	0
G	13	2	0	0	0	0	1	13	15	3	7	3	4	8	16	12	1
TOTAL	161	80	54	50	71	121	310	293	441	151	75	38	37	46	81	198	1

JFDs of 10-Meter Wind vs. Delta T

October-December 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 10/ 1/ 2 - 12/31/ 2

*** OCT-DEC 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7.51-12.50	0	0	0	0	0	0	0	0	2	0	1	0	0	2	0	0	5
12.51-18.50	1	0	0	0	0	0	0	0	7	4	0	0	0	0	0	0	12
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	9	4	1	0	0	3	0	0	18

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	3	0	0	0	0	0	0	1	5	0	1	0	0	1	0	5	16
12.51-18.50	3	0	0	0	0	0	0	0	3	3	0	0	0	0	0	4	13
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	0	0	0	0	0	0	1	8	3	1	0	0	3	1	9	32

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 10/ 1/ 2 - 12/31/ 2

*** OCT-DEC 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	2	0	3	0	0	1	0	0	0	6
7.51-12.50	6	1	2	0	0	0	1	3	6	3	2	3	2	3	3	8	43
12.51-18.50	0	0	0	0	0	0	1	0	3	2	1	0	0	0	3	2	12
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	2	10
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	1	2	0	0	0	2	5	9	8	3	3	3	4	13	12	71

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	1	0	2	1	2	2	6	7	2	4	0	0	1	1	0	30
3.51- 7.50	19	19	6	5	4	8	8	7	9	17	12	14	8	6	15	12	169
7.51-12.50	25	10	5	0	0	0	8	5	19	31	15	12	9	18	16	29	202
12.51-18.50	1	0	0	0	0	1	3	0	10	8	8	3	4	12	21	23	94
18.51-24.00	0	0	0	0	0	0	0	0	0	0	1	2	0	9	5	13	30
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	5
TOTAL	46	30	11	7	5	11	21	18	45	58	40	31	21	47	59	80	530

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 10/ 1/ 2 - 12/31/ 2

*** OCT-DEC 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	4	1	0	3	2	1	6	7	10	18	5	4	2	2	5	5	75
3.51- 7.50	33	11	1	0	2	9	21	23	38	18	13	4	9	11	19	27	239
7.51-12.50	15	6	0	0	0	4	12	6	7	19	22	8	5	20	25	23	172
12.51-18.50	0	0	0	0	0	5	0	0	4	0	3	1	8	7	7	9	44
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL	52	18	1	3	4	19	39	36	59	55	43	17	25	40	57	65	533

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	9	2	3	1	2	0	4	13	13	16	9	8	4	6	11	12	113
3.51- 7.50	4	0	0	0	0	1	3	22	56	21	7	2	11	5	8	5	145
7.51-12.50	0	0	0	0	0	0	1	0	2	1	2	22	7	7	1	1	44
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13	2	3	1	2	1	8	35	71	38	18	37	24	18	20	18	309

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 10/ 1/ 2 - 12/31/ 2

*** OCT-DEC 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	4	1	4	2	3	5	14	42	27	15	6	3	4	3	6	11	150
3.51- 7.50	1	0	0	0	0	0	1	11	9	1	2	1	5	0	0	1	32
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	1	4	2	3	5	15	53	36	16	8	4	10	3	6	12	183

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	18	5	7	8	8	8	26	68	57	51	24	15	10	12	23	28	368
3.51- 7.50	57	30	7	5	6	18	33	65	112	60	34	21	34	23	42	45	592
7.51-12.50	49	17	7	0	0	4	22	15	41	54	43	45	24	51	45	66	483
12.51-18.50	5	0	0	0	0	6	4	0	27	17	12	9	14	19	31	38	182
18.51-24.00	0	0	0	0	0	0	0	0	0	0	1	2	1	12	13	16	45
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	6
TOTAL	129	52	21	13	14	36	85	148	237	182	114	92	83	118	156	196	1676

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - OCT-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 10/ 1/ 2 - 12/31/ 2

*** OCT-DEC 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2208

TOTAL NUMBER OF VALID OBSERVATIONS: 1676

TOTAL NUMBER OF MISSING OBSERVATIONS: 532

PERCENT DATA RECOVERY FOR THIS PERIOD: 75.9 %

MEAN WIND SPEED FOR THIS PERIOD: 7.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
1.07	1.91	4.24	31.62	31.80	18.44	10.92

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	1	0	0	0	0	0	0	0	9	4	1	0	0	3	0	0	0
B	6	0	0	0	0	0	0	1	8	3	1	0	0	3	1	9	0
C	6	1	2	0	0	0	2	5	9	8	3	3	3	4	13	12	0
D	46	30	11	7	5	11	21	18	45	58	40	31	21	47	59	80	0
E	52	18	1	3	4	19	39	36	59	55	43	17	25	40	57	65	0
F	13	2	3	1	2	1	8	35	71	38	18	37	24	18	20	18	0
G	5	1	4	2	3	5	15	53	36	16	8	4	10	3	6	12	0
TOTAL	129	52	21	13	14	36	85	148	237	182	114	92	83	118	156	196	0

JFDs of 10-Meter Wind vs. Delta T

July-December 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

*** JUL-DEC 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	1	1	7	3	0	4	1	1	0	0	0	0	1	0	1	20
7.51-12.50	6	4	1	2	3	7	33	35	34	1	1	1	1	2	0	6	137
12.51-18.50	2	0	0	0	0	2	9	20	27	12	3	0	0	0	0	5	80
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	5	2	9	6	9	46	56	62	13	4	1	1	3	0	12	237

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	4	4	2	2	2	4	10	6	8	1	2	0	0	0	0	0	45
7.51-12.50	7	3	1	1	1	10	29	17	32	2	2	0	2	2	0	12	121
12.51-18.50	3	0	0	0	0	0	2	6	14	7	2	0	0	1	2	4	41
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	0	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	14	7	3	3	3	14	41	29	55	10	6	0	2	5	3	16	211

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

*** JUL-DEC 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	4
3.51- 7.50	6	3	3	2	5	7	7	7	14	5	0	4	1	1	0	3	68
7.51-12.50	7	4	2	2	5	5	12	5	26	9	5	4	3	3	7	13	112
12.51-18.50	0	0	0	1	0	0	2	3	9	7	2	0	0	0	4	4	32
18.51-24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	1	7	2	12
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13	7	5	5	10	12	21	15	51	21	8	8	4	6	18	24	228

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	7	2	1	3	2	3	4	10	9	4	4	0	1	1	2	2	55
3.51- 7.50	40	34	24	21	19	39	47	37	33	28	22	16	12	10	22	23	427
7.51-12.50	37	12	9	1	8	14	44	23	46	50	24	17	14	19	26	58	402
12.51-18.50	1	0	0	0	0	1	5	6	20	10	8	3	4	13	22	35	128
18.51-24.00	0	0	0	0	0	0	0	0	2	1	1	2	0	9	5	13	33
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	5
TOTAL	85	48	34	25	29	57	100	76	110	93	59	38	31	53	78	134	1050

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

*** JUL-DEC 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	25	13	8	6	8	7	12	27	30	26	12	6	3	5	9	19	216
3.51- 7.50	79	34	10	9	20	36	100	85	102	44	23	6	11	18	35	60	672
7.51-12.50	22	8	0	2	3	9	43	34	62	36	26	13	10	23	31	50	372
12.51-18.50	1	0	0	0	0	6	2	0	27	1	5	2	8	7	7	9	75
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	4
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL	127	55	18	17	31	58	157	146	222	107	66	27	33	54	83	139	1340

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	16	6	8	2	3	1	10	22	40	34	19	18	14	17	21	35	266
3.51- 7.50	9	1	1	0	0	1	3	31	85	35	9	4	12	6	11	9	217
7.51-12.50	0	0	0	0	0	0	1	0	2	1	2	22	7	9	1	1	46
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	5	2	0	0	0	8
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	25	7	9	2	3	2	14	53	127	70	31	49	35	32	33	45	537

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

*** JUL-DEC 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	16	3	4	2	3	5	15	55	40	18	13	6	8	10	22	23	243
3.51- 7.50	2	0	0	0	0	0	1	11	11	1	2	1	5	1	0	1	36
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	18	3	4	2	3	5	16	66	51	19	15	7	14	11	22	24	281

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	64	24	21	13	16	16	41	114	119	82	49	30	26	34	54	81	784
3.51- 7.50	140	77	41	41	49	87	172	178	254	114	58	31	41	37	68	97	1485
7.51-12.50	79	31	13	8	20	45	162	114	202	99	60	57	38	58	65	140	1191
12.51-18.50	7	0	0	1	0	9	20	35	97	37	21	10	14	21	35	57	364
18.51-24.00	0	0	0	0	0	0	0	0	6	1	1	2	1	13	13	16	53
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	6
TOTAL	290	132	75	63	85	157	395	441	678	333	189	130	120	164	237	394	3884

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

*** JUL-DEC 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4416

TOTAL NUMBER OF VALID OBSERVATIONS: 3884

TOTAL NUMBER OF MISSING OBSERVATIONS: 532

PERCENT DATA RECOVERY FOR THIS PERIOD: 88.0 %

MEAN WIND SPEED FOR THIS PERIOD: 7.3 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
6.10	5.43	5.87	27.03	34.50	13.83	7.23

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	8	5	2	9	6	9	46	56	62	13	4	1	1	3	0	12	0
B	14	7	3	3	3	14	41	29	55	10	6	0	2	5	3	16	0
C	13	7	5	5	10	12	21	15	51	21	8	8	4	6	18	24	0
D	85	48	34	25	29	57	100	76	110	93	59	38	31	53	78	134	0
E	127	55	18	17	31	58	157	146	222	107	66	27	33	54	83	139	0
F	25	7	9	2	3	2	14	53	127	70	31	49	35	32	33	45	0
G	18	3	4	2	3	5	16	66	51	19	15	7	14	11	22	24	1
TOTAL	290	132	75	63	85	157	395	441	678	333	189	130	120	164	237	394	1

Stability Classes by Hour of Day

10-Meter Wind vs. Delta T

July-December 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																					
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	7	1	E	E	E	E	E	E	D	D	C	B	A	A	A	A	B	C	C	B	D	D	D	D	E	E
2	7	2	E	E	E	E	E	E	D	D	D	D	C	A	A	A	A	A	A	C	D	D	D	D	E	E
2	7	3	E	E	E	E	E	E	D	D	B	C	D	A	A	A	C	B	A	A	D	E	E	E	E	E
2	7	4	E	E	F	F	F	E	D	D	D	D	C	D	C	B	D	D	D	D	D	E	E	E	E	E
2	7	5	E	E	E	E	F	F	E	D	D	D	C	B	B	B	A	A	A	B	C	D	E	E	F	F
2	7	6	F	F	F	F	F	F	F	D	D	C	C	B	E	D	C	A	A	B	D	D	D	E	E	E
2	7	7	E	E	E	E	E	E	D	D	D	D	D	D	B	B	A	A	A	B	D	E	E	E	E	E
2	7	8	E	E	E	E	E	E	E	D	D	D	D	D	C	C	D	D	D	D	E	E	E	F	F	F
2	7	9	F	E	E	F	G	G	E	D	D	C	B	C	A	A	A	A	B	C	C	D	D	E	E	E
2	7	10	E	E	F	F	F	F	F	D	D	C	C	D	E	E	D	C	C	D	D	E	E	E	E	E
2	7	11	F	E	F	F	E	E	D	D	C	A	D	D	C	C	D	C	D	D	D	E	F	E	E	E
2	7	12	E	E	E	E	E	F	E	E	E	E	D	D	D	D	C	D	D	D	D	E	E	E	E	E
2	7	13	E	E	E	E	E	E	E	D	D	B	A	A	A	A	A	A	C	D	D	E	F	E	F	F
2	7	14	F	F	F	F	F	F	E	D	D	C	B	B	A	B	B	C	C	C	D	E	F	F	G	F
2	7	15	F	F	F	F	F	G	E	D	D	C	B	A	A	A	A	A	B	B	D	E	E	F	F	F
2	7	16	F	E	E	E	F	E	E	D	D	C	C	A	A	A	A	B	B	C	D	D	E	E	E	E
2	7	17	E	E	E	E	E	E	E	D	D	C	C	A	A	A	A	B	A	B	D	E	E	E	E	F
2	7	18	F	F	E	E	E	E	D	D	D	D	B	D	B	B	A	A	A	B	D	E	E	E	E	E
2	7	19	F	E	E	E	E	E	E	D	D	C	C	B	A	A	A	A	A	C	D	D	E	E	E	F
2	7	20	F	F	F	F	F	F	E	D	D	D	C	B	A	A	A	A	B	D	D	E	E	E	E	E
2	7	21	E	E	E	E	E	E	D	D	D	D	C	A	A	B	A	A	D	D	D	E	E	E	E	E
2	7	22	E	E	E	E	E	E	D	D	D	D	C	B	B	A	A	A	C	D	D	E	E	F	G	G
2	7	23	G	E	E	E	E	E	D	D	C	D	B	B	B	A	C	C	C	D	E	E	F	F	E	E
2	7	24	E	E	E	E	E	E	E	D	C	B	B	A	A	A	A	A	A	B	D	E	E	E	E	E
2	7	25	E	D	E	E	E	E	E	D	D	B	A	A	C	B	C	D	D	D	D	E	E	E	E	E
2	7	26	F	F	E	E	E	F	F	E	D	D	D	D	C	D	C	D	D	E	D	E	D	E	E	E
2	7	27	E	E	E	E	E	E	E	E	D	D	D	D	D	B	B	C	E	E	E	F	F	F	F	E
2	7	28	E	E	E	E	E	F	F	E	D	D	B	C	D	D	C	D	D	E	E	E	E	E	E	E
2	7	29	E	E	F	E	E	E	E	D	D	D	C	C	C	C	B	C	C	B	D	E	F	F	F	E
2	7	30	E	E	E	E	F	F	E	D	D	D	D	D	B	B	A	A	A	B	D	E	F	E	E	E
2	7	31	E	E	E	E	E	E	D	D	C	C	C	C	C	A	A	C	D	D	E	E	E	E	E	E
2	8	1	E	E	E	E	E	E	E	D	D	D	D	B	A	A	A	A	C	D	D	E	E	E	E	E
2	8	2	E	E	E	E	E	E	D	D	C	B	B	B	C	A	B	C	D	D	D	E	E	F	E	E
2	8	3	E	E	E	E	E	E	D	D	C	B	A	A	A	A	B	B	B	D	D	E	E	F	E	E
2	8	4	E	E	E	E	F	G	F	D	C	B	C	C	B	B	B	A	A	C	D	E	E	E	F	F
2	8	5	F	E	E	F	F	F	F	E	D	D	C	D	D	B	B	A	B	C	D	E	E	E	E	E
2	8	6	E	D	D	D	E	E	D	D	D	C	A	A	A	A	A	A	A	B	C	D	D	D	D	D
2	8	7	D	D	D	D	D	D	D	C	C	B	B	A	A	A	A	A	B	B	D	D	E	E	E	E
2	8	8	E	F	E	E	E	E	D	D	C	C	B	A	B	A	A	A	A	B	D	E	E	E	E	E
2	8	9	E	E	E	E	E	F	D	D	D	B	B	D	D	D	D	D	D	D	E	F	G	F	G	G
2	8	10	G	F	G	F	F	F	E	E	D	D	D	D	C	A	A	B	B	B	D	E	F	F	E	E
2	8	11	E	E	E	E	F	E	E	D	D	C	C	B	B	A	A	A	D	D	D	E	E	E	E	E
2	8	12	E	E	E	E	E	E	F	E	D	D	C	A	A	A	A	B	D	E	E	D	D	D	D	D
2	8	13	E	E	E	E	E	E	E	E	E	E	D	D	D	C	B	C	C	D	D	E	E	F	F	F

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																							
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	8	14	F	F	E	F	F	F	E	D	D	D	C	C	C	C	B	B	C	D	D	E	F	E	E	F
2	8	15	E	E	E	E	E	E	E	D	D	C	C	D	D	D	D	D	D	D	E	E	E	E	E	E
2	8	16	E	E	E	E	E	E	E	D	D	E	E	D	A	A	A	B	C	D	D	E	E	E	E	E
2	8	17	E	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E
2	8	18	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D
2	8	19	D	E	E	E	E	E	D	D	D	C	A	A	B	A	B	D	D	D	E	F	E	E	E	E
2	8	20	E	D	D	E	E	E	E	E	D	D	B	A	A	A	A	B	D	D	D	E	E	E	E	E
2	8	21	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	E	E	E	E	E	E
2	8	22	E	E	E	E	E	E	E	E	D	D	C	A	A	A	A	B	D	D	E	E	D	E	E	E
2	8	23	E	E	E	E	E	E	E	E	D	D	D	D	D	D	C	D	D	D	E	F	F	G	G	G
2	8	24	F	F	F	F	E	E	E	E	E	D	D	D	D	D	D	E	E	E	E	E	F	G	G	G
2	8	25	G	G	G	G	F	G	F	E	D	D	D	C	C	D	C	D	D	D	F	F	G	G	G	G
2	8	26	G	G	G	G	G	G	F	E	D	D	D	D	D	D	D	D	D	D	E	F	G	F	F	F
2	8	27	F	E	E	E	E	E	E	D	D	D	C	B	C	C	C	C	D	D	E	E	F	G	F	F
2	8	28	F	F	E	E	E	E	E	D	D	D	B	B	B	D	A	B	D	D	D	E	E	E	F	F
2	8	29	F	E	E	E	E	E	E	D	D	B	A	B	B	B	A	A	B	D	D	E	E	E	E	E
2	8	30	E	E	E	E	E	E	D	D	D	B	B	A	B	B	B	A	B	D	D	E	E	E	E	E
2	8	31	E	E	E	E	E	E	E	D	D	C	B	C	B	C	A	A	B	D	D	E	E	F	E	E
2	9	1	E	E	E	E	E	E	E	D	D	D	B	A	A	B	B	B	D	D	E	E	E	E	E	E
2	9	2	E	E	E	E	E	E	E	D	D	C	B	B	B	B	B	B	D	D	E	E	E	E	E	F
2	9	3	F	G	G	G	G	G	G	F	D	C	B	A	C	C	A	B	C	D	E	F	G	G	F	E
2	9	4	E	E	E	E	E	E	E	D	D	B	A	A	B	A	A	A	B	D	D	D	D	D	D	E
2	9	5	E	E	E	E	E	E	E	D	D	C	B	B	A	A	B	B	B	D	D	E	E	E	E	E
2	9	6	E	E	E	F	F	F	F	D	D	C	B	A	A	B	A	B	D	E	F	F	F	F	F	E
2	9	7	E	E	E	E	E	F	G	E	D	C	A	A	A	A	A	A	B	D	E	F	F	E	E	E
2	9	8	E	F	F	E	E	E	E	D	D	B	A	A	A	A	A	B	C	D	E	F	F	G	G	G
2	9	9	F	F	G	F	F	F	F	E	D	B	B	A	A	A	A	A	C	D	E	F	F	G	G	G
2	9	10	G	F	F	E	E	E	D	D	D	D	D	D	C	B	A	B	D	D	E	F	F	F	E	E
2	9	11	E	E	E	F	G	F	F	D	D	C	B	A	A	B	A	A	D	E	E	F	F	F	F	F
2	9	12	F	F	F	F	F	F	E	E	D	D	C	B	C	D	C	D	D	D	D	D	D	D	E	E
2	9	13	D	D	E	E	E	E	D	D	E	D	D	B	A	C	D	D	E	E	E	F	F	E	F	E
2	9	14	E	E	E	E	E	E	F	E	E	D	D	D	D	C	D	D	D	D	E	E	E	E	E	E
2	9	15	E	E	E	E	E	E	E	D	D	D	B	B	B	C	B	C	D	D	G	G	G	G	G	G
2	9	16	G	G	G	G	G	G	G	F	E	D	B	B	A	B	A	A	B	D	F	F	F	G	G	G
2	9	17	G	G	F	F	G	G	F	E	D	D	A	A	A	A	B	C	B	D	D	E	E	E	E	E
2	9	18	E	E	E	E	E	E	E	D	D	D	D	D	B	B	C	C	D	D	E	E	F	F	F	F
2	9	19	E	E	F	F	E	E	E	E	D	D	D	D	D	D	D	E	D	E	E	E	E	E	E	E
2	9	20	E	E	E	E	E	E	E	E	D	C	C	B	A	B	A	C	D	E	G	G	G	F	F	G
2	9	21	G	G	F	E	E	E	E	D	D	D	C	B	A	B	A	B	D	D	D	E	E	E	E	E
2	9	22	E	E	E	E	E	E	E	D	D	C	C	A	A	A	B	C	D	D	G	G	G	G	G	G
2	9	23	F	F	F	F	F	G	F	E	D	C	A	A	A	A	B	B	D	D	F	E	E	E	E	E
2	9	24	E	E	E	E	E	E	E	E	D	D	B	A	A	A	A	A	A	C	D	E	E	E	E	E
2	9	25	E	E	E	E	E	E	E	D	C	A	A	A	A	A	A	A	C	D	E	F	F	G	G	G
2	9	26	G	F	F	G	G	G	F	E	D	C	C	B	B	A	A	C	C	D	E	E	E	E	D	D
2	9	27	E	D	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	E

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																							
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	9	28	D	E	E	E	E	E	E	E	D	D	D	B	B	C	B	C	D	E	G	G	G	G	E	F
2	9	29	F	F	E	E	E	E	E	E	D	D	B	A	A	A	B	C	D	E	E	E	E	E	E	E
2	9	30	E	E	E	E	E	E	E	D	D	B	A	A	A	A	A	B	D	E	F	F	E	E	E	E
2	10	1	E	F	F	G	F	F	E	E	E	D	D	A	A	A	A	B	D	E	E	F	G	F	F	E
2	10	2	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	D	D
2	10	3	D	D	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E	E	E
2	10	4	F	F	E	E	E	E	D	D	D	D	D	D	D	C	D	D	D	E	G	G	G	G	G	G
2	10	5	G	G	G	G	G	G	G	F	D	C	B	A	B	A	A	B	D	E	E	F	F	E	E	E
2	10	6	E	E	E	E	E	F	F	E	D	D	C	B	C	B	C	D	D	E	E	E	E	E	E	F
2	10	7	G	G	G	G	G	G	F	E	D	C	B	B	C	A	A	B	D	D	E	E	F	E	E	F
2	10	8	F	F	F	F	F	F	F	F	D	C	A	B	-	-	-	-	-	-	-	-	-	-	-	-
2	10	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	C	D	E	E	E	E	E	E	E
2	10	12	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	D	D	E	E	E	E	E	E	E
2	10	13	F	G	F	F	G	G	G	F	D	D	C	C	C	C	D	D	D	E	F	F	F	F	F	F
2	10	14	F	F	F	F	F	F	E	E	D	C	A	A	B	A	A	D	D	E	F	F	F	F	E	E
2	10	15	E	E	E	E	E	E	E	E	D	D	B	B	B	B	B	C	D	E	E	F	F	G	G	G
2	10	16	G	G	G	F	E	E	E	D	D	D	D	D	D	E	E	E	E	E	E	E	E	E	E	E
2	10	17	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	F	F	F	F	F	F
2	10	18	F	F	F	E	E	E	F	E	E	D	D	D	D	C	D	D	E	E	E	E	E	E	E	E
2	10	19	E	E	E	E	E	E	E	E	D	C	B	C	D	C	C	D	D	E	F	F	F	F	F	F
2	10	20	F	F	F	F	F	F	G	F	E	D	D	C	C	B	B	C	D	E	F	E	E	E	E	E
2	10	21	E	E	E	E	E	F	F	F	D	D	D	D	B	B	C	C	D	D	D	D	D	D	D	E
2	10	22	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
2	10	23	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	F
2	10	24	F	F	E	E	E	E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	31	-	-	-	-	-	-	-	-	-	-	-	D	D	D	-	D	D	D	D	E	E	E	E	E
2	11	1	E	E	D	D	D	D	D	D	D	D	C	D	C	D	D	D	D	F	G	G	F	F	F	E
2	11	2	F	F	F	E	F	F	F	F	E	D	D	D	D	D	D	D	D	D	E	E	D	D	E	E
2	11	3	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	E	F	F	F	F	F	F
2	11	4	E	E	E	F	F	F	F	F	E	D	-	D	D	C	D	D	D	E	E	E	D	D	E	E
2	11	5	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	E	E	D	D	D	D	D
2	11	6	E	E	E	E	E	E	E	E	-	-	-	-	-	A	D	A	D	F	G	G	G	G	G	G
2	11	7	F	F	G	G	G	G	F	F	E	D	D	D	D	D	D	D	E	E	E	E	E	-	-	-
2	11	8	-	-	-	-	-	-	-	-	D	D	D	C	C	D	D	D	E	F	-	-	-	-	-	-
2	11	9	-	-	-	-	-	-	-	E	E	D	D	D	D	D	D	D	E	E	F	F	-	-	E	E
2	11	10	E	E	E	E	E	E	E	E	D	D	C	C	C	C	D	D	D	D	D	D	D	D	E	E
2	11	11	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	F	F	F	G	G	G	G

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																							
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	11	12	G	G	G	F	F	F	E	E	D	D	D	D	-	-	-	-	-	E	F	F	F	F	F	F
2	11	13	F	F	F	G	G	F	F	E	E	D	D	B	D	D	D	D	D	F	F	F	E	E	F	E
2	11	14	E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	11	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	11	16	-	-	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	E	F	E	E	E	E	E
2	11	17	E	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	D	E	E	E	E	E	E	E
2	11	18	E	E	E	E	E	E	E	E	D	D	D	D	D	C	C	D	E	F	G	G	G	F	G	G
2	11	19	G	F	F	F	F	F	F	F	E	D	D	D	D	-	-	-	E	F	F	F	F	G	G	G
2	11	20	G	G	G	G	F	F	F	E	E	D	D	D	D	D	D	D	E	E	E	E	E	F	F	F
2	11	21	E	E	F	F	F	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E
2	11	22	E	G	F	E	F	F	E	E	D	D	D	D	C	C	D	D	D	E	E	E	E	E	E	E
2	11	23	E	E	E	E	E	E	E	E	E	D	C	C	C	D	D	D	E	F	G	G	F	F	F	-
2	11	24	-	-	-	-	-	-	-	-	-	D	D	D	C	C	C	D	D	-	-	-	-	-	-	-
2	11	25	-	-	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	-	-	-	-	-	-
2	11	26	-	-	-	-	-	-	-	-	-	D	D	B	B	D	D	D	D	-	-	-	-	-	-	-
2	11	27	-	-	-	-	-	-	-	-	-	D	D	C	C	D	C	D	E	F	E	E	E	F	F	F
2	11	28	F	F	G	G	E	E	E	E	E	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
2	11	29	E	E	F	F	E	E	E	F	E	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
2	11	30	E	D	D	D	D	D	D	D	D	D	C	B	C	C	D	D	E	E	F	G	G	G	G	G
2	12	1	G	F	F	F	F	F	F	E	E	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
2	12	2	E	E	E	E	E	F	E	F	E	D	D	B	A	B	B	D	D	-	-	-	-	-	-	-
2	12	3	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	D	-	-	-	-	-	-	-
2	12	4	-	-	-	-	-	-	-	-	-	D	D	D	C	D	D	D	D	-	-	-	-	-	-	-
2	12	5	-	-	-	-	-	-	-	-	-	D	C	C	B	C	D	D	E	E	F	F	F	F	F	G
2	12	6	G	E	F	F	F	E	E	F	E	D	D	C	C	D	D	D	E	E	E	E	E	E	E	F
2	12	7	F	F	F	E	E	F	F	G	F	E	D	D	D	D	D	D	E	G	G	G	G	G	G	G
2	12	8	G	G	F	F	E	E	E	E	E	D	D	C	C	D	D	D	D	E	E	E	E	E	E	E
2	12	9	E	E	E	F	F	F	F	F	E	D	D	D	C	D	D	D	E	F	F	F	F	F	F	F
2	12	10	F	E	E	F	F	E	E	E	E	D	D	D	C	D	D	D	D	D	-	-	-	-	-	-
2	12	11	-	-	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	-	-	-	-	-	-	-
2	12	12	-	-	-	-	-	-	-	-	-	-	D	D	D	D	D	D	D	E	E	E	F	G	G	G
2	12	13	G	G	F	G	G	G	G	F	E	D	D	D	D	D	D	D	E	G	G	G	G	G	G	G
2	12	14	G	G	G	G	G	G	G	G	G	E	D	D	D	D	D	D	E	F	F	G	G	G	F	E
2	12	15	E	F	G	G	G	G	G	G	G	E	D	D	D	D	D	E	F	F	G	F	F	E	E	F
2	12	16	F	G	G	G	F	F	F	G	G	E	D	D	D	D	D	D	D	-	-	-	-	-	-	-
2	12	17	-	-	-	-	-	-	-	-	-	D	E	E	E	E	E	E	E	E	F	F	F	F	E	F
2	12	18	F	F	F	G	G	F	E	E	E	D	D	D	D	D	D	D	D	E	G	G	G	G	F	E
2	12	19	E	F	F	G	F	F	F	F	F	D	D	D	D	D	D	D	D	E	E	E	F	F	E	E
2	12	20	E	E	E	E	E	E	E	E	E	-	D	D	D	D	D	D	E	E	F	F	F	F	F	F
2	12	21	F	F	F	G	G	G	G	G	G	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E
2	12	22	F	F	E	E	E	E	E	E	E	D	D	C	C	D	D	D	E	E	F	G	G	G	F	F
2	12	23	F	F	F	F	F	E	E	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	12	24	-	-	-	-	-	-	-	-	-	-	D	C	B	C	D	D	D	-	-	-	-	-	-	-
2	12	25	-	-	-	-	-	E	E	D	D	D	D	A	C	D	D	D	E	F	G	G	G	G	G	G
2	12	26	G	G	G	G	G	G	G	G	G	E	D	D	D	D	D	D	E	F	F	F	E	E	F	F

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JUL-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 7/ 1/ 2 - 12/31/ 2

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS

HOURLY STABILITIES

			HOURS																					
YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	12	27	E	E	E	D	D	D	D	D	D	D	D	C	C	D	D	D	E	F	F	F	F	F	F	G
2	12	28	G	G	G	E	E	E	E	E	F	E	D	D	D	D	D	D	E	F	F	F	G	G	F	F
2	12	29	F	F	F	F	G	F	F	F	F	E	D	D	C	D	D	D	E	F	F	F	G	F	F	F
2	12	30	F	G	G	G	F	E	F	E	E	D	D	D	B	D	D	D	D	E	E	E	E	E	F	G
2	12	31	G	G	G	G	G	G	G	G	G	F	D	D	C	D	D	D	D	F	G	F	F	F	F	E

JFDs of 10-Meter Wind vs. Delta T

January-December 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 12/31/ 2

*** JAN-DEC 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	1	3	2	8	4	0	4	1	3	2	0	0	0	1	0	2	31
7.51-12.50	13	4	1	2	3	7	39	46	54	6	3	2	2	3	0	7	192
12.51-18.50	15	0	0	1	0	4	21	45	85	16	10	0	0	0	0	13	210
18.51-24.00	0	0	0	0	0	0	1	8	19	2	0	0	0	0	0	17	47
>24.00	0	0	0	0	0	0	0	0	13	0	0	0	1	0	0	2	16
TOTAL	29	7	3	11	7	11	65	100	174	26	13	2	3	4	0	41	496

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	7	7	4	3	3	6	13	6	9	6	4	1	1	0	1	1	72
7.51-12.50	10	4	3	2	4	12	34	27	47	12	5	2	7	6	0	22	197
12.51-18.50	6	1	1	1	1	1	9	15	26	13	5	3	0	6	11	13	112
18.51-24.00	0	0	0	0	0	0	0	4	6	1	0	0	0	4	5	4	24
>24.00	0	0	0	0	0	0	0	0	2	0	0	1	1	0	7	3	14
TOTAL	23	12	8	6	8	19	56	52	90	32	14	7	9	16	24	43	419

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 12/31/ 2

*** JAN-DEC 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	1	1	0	0	0	0	0	2	1	0	1	0	2	8
3.51- 7.50	10	5	7	2	5	8	11	12	17	12	6	9	6	3	5	6	124
7.51-12.50	10	6	4	6	6	9	15	11	40	37	10	13	8	4	18	22	219
12.51-18.50	1	0	2	2	1	0	5	11	24	20	7	1	2	2	14	15	107
18.51-24.00	0	0	0	0	0	0	0	0	8	0	0	0	0	5	8	6	27
>24.00	0	0	0	0	0	0	0	0	2	0	0	0	0	1	3	4	10
TOTAL	21	11	13	11	13	17	31	34	91	69	25	24	16	16	48	55	495

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	7	3	4	6	2	4	10	10	10	7	6	0	2	2	2	4	79
3.51- 7.50	104	58	41	27	25	53	66	52	47	50	50	25	15	15	38	52	718
7.51-12.50	126	52	33	7	17	32	70	68	81	84	55	44	30	43	71	135	948
12.51-18.50	10	13	9	0	0	7	17	42	77	30	22	16	11	43	91	106	494
18.51-24.00	0	0	0	0	0	0	1	6	24	6	1	4	1	15	47	60	165
>24.00	0	0	0	0	0	0	0	0	7	0	1	1	2	4	8	4	27
TOTAL	247	126	87	40	44	96	164	178	246	177	135	90	61	122	257	361	2431

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 12/31/ 2

*** JAN-DEC 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	43	29	14	12	9	13	16	38	41	37	21	15	6	12	14	28	348
3.51- 7.50	133	59	33	22	32	61	123	139	194	85	44	18	19	28	68	107	1165
7.51-12.50	51	14	5	9	10	26	69	115	172	66	41	24	26	74	68	107	877
12.51-18.50	3	0	0	0	0	8	9	36	56	12	5	6	11	21	31	33	231
18.51-24.00	0	0	0	0	0	0	2	2	5	1	0	0	1	2	0	9	22
>24.00	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	12	16
TOTAL	230	102	52	43	51	108	219	330	468	202	111	63	65	137	182	296	2659

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	27	13	10	3	4	3	16	35	76	52	37	27	29	32	36	58	458
3.51- 7.50	15	4	4	0	1	1	10	56	143	69	23	7	19	13	23	31	419
7.51-12.50	4	0	0	0	0	0	5	4	19	19	6	26	12	14	3	8	120
12.51-18.50	0	0	0	0	0	0	7	0	0	0	1	8	5	0	0	0	21
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	46	17	14	3	5	4	38	95	238	140	67	68	65	59	62	97	1018

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 12/31/ 2

*** JAN-DEC 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	25	7	6	7	6	10	25	90	72	29	23	18	13	18	33	42	424
3.51- 7.50	4	0	0	0	0	0	1	18	20	6	6	1	6	2	0	3	67
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	9	1	0	0	0	11
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	29	7	6	7	6	10	26	108	92	36	29	28	20	20	33	45	503

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 10.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01- 3.50	102	52	34	29	22	30	67	173	199	125	89	61	50	65	85	134	1317
3.51- 7.50	274	136	91	62	70	129	228	284	433	230	133	61	66	62	135	202	2596
7.51-12.50	214	80	46	26	40	86	232	271	413	225	120	120	86	144	160	301	2564
12.51-18.50	35	14	12	4	2	20	68	149	268	91	50	34	29	72	147	180	1175
18.51-24.00	0	0	0	0	0	0	4	20	62	10	1	4	2	26	60	96	285
>24.00	0	0	0	0	0	0	0	0	24	1	1	2	6	5	19	25	83
TOTAL	625	282	183	121	134	265	599	897	1399	682	394	282	239	374	606	938	8021

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:10M WIND VS 10M DELTA T - JAN-DEC 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 12/31/ 2

*** JAN-DEC 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 60.0 AND 10.0 METERS
WIND MEASURED AT: 10.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 8760

TOTAL NUMBER OF VALID OBSERVATIONS: 8021

TOTAL NUMBER OF MISSING OBSERVATIONS: 739

PERCENT DATA RECOVERY FOR THIS PERIOD: 91.6 %

MEAN WIND SPEED FOR THIS PERIOD: 8.5 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
6.18	5.22	6.17	30.31	33.15	12.69	6.27

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	29	7	3	11	7	11	65	100	174	26	13	2	3	4	0	41	0
B	23	12	8	6	8	19	56	52	90	32	14	7	9	16	24	43	0
C	21	11	13	11	13	17	31	34	91	69	25	24	16	16	48	55	0
D	247	126	87	40	44	96	164	178	246	177	135	90	61	122	257	361	0
E	230	102	52	43	51	108	219	330	468	202	111	63	65	137	182	296	0
F	46	17	14	3	5	4	38	95	238	140	67	68	65	59	62	97	0
G	29	7	6	7	6	10	26	108	92	36	29	28	20	20	33	45	1
TOTAL	625	282	183	121	134	265	599	897	1399	682	394	282	239	374	606	938	1

JFDs of 100-Meter Wind vs. Delta T

January-March 2002

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 100M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12.51-18.50	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	5
18.51-24.00	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
TOTAL	2	0	0	0	0	0	1	1	0	1	0	0	0	0	0	9	14

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 100M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH
JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	4
7.51-12.50	0	0	0	0	0	0	0	0	2	1	2	2	2	1	0	0	10
12.51-18.50	2	1	0	0	1	1	1	0	1	0	1	0	0	0	0	3	11
18.51-24.00	1	1	1	0	0	2	2	1	1	0	0	1	0	1	0	6	17
>24.00	1	0	0	0	0	0	1	4	0	0	0	1	2	0	4	8	21
TOTAL	4	2	1	0	1	3	5	5	5	2	3	4	4	2	4	18	63

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	1	0	1	0	1	0	4	0	3	2	2	0	0	0	0	14
3.51- 7.50	8	3	3	1	3	8	3	4	6	9	11	7	2	2	4	6	80
7.51-12.50	22	9	7	4	5	11	4	3	6	37	21	9	9	5	28	37	217
12.51-18.50	44	18	9	4	7	15	3	7	15	26	20	16	7	16	49	48	304
18.51-24.00	16	17	20	0	2	1	1	8	10	8	7	3	4	13	53	44	207
>24.00	3	7	0	0	0	0	4	3	8	0	1	1	3	14	41	51	136
TOTAL	93	55	39	10	17	36	15	29	45	83	62	38	25	50	175	186	958

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 100M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	0	1	0	1	0	0	0	2	1	2	1	0	0	0	0	9
3.51- 7.50	1	3	1	0	2	3	0	2	0	4	6	1	0	4	3	2	32
7.51-12.50	13	9	4	3	4	5	1	4	5	46	15	5	10	12	23	17	176
12.51-18.50	18	4	4	7	8	15	7	15	23	41	17	8	14	17	29	41	268
18.51-24.00	8	3	0	6	1	3	2	33	31	9	2	9	8	35	32	11	193
>24.00	3	1	0	0	0	0	0	22	3	0	0	4	1	8	4	3	49
TOTAL	44	20	10	16	16	26	10	76	64	101	42	28	33	76	91	74	727

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	3	0	2	0	0	0	3	2	5	5	5	1	2	0	0	1	29
7.51-12.50	5	1	1	0	0	0	0	2	5	18	12	6	4	11	10	5	80
12.51-18.50	1	0	0	4	0	0	0	11	9	20	5	10	14	5	11	4	94
18.51-24.00	2	0	0	0	0	0	0	0	3	3	4	7	2	1	1	2	25
>24.00	0	0	0	0	0	0	1	1	0	0	1	1	5	4	1	10	24
TOTAL	11	1	3	4	0	0	4	16	22	46	27	25	27	21	23	22	252

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 100M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	5
3.51- 7.50	1	1	0	0	0	0	0	3	3	9	4	3	2	1	2	1	30
7.51-12.50	2	0	0	0	0	0	0	1	4	7	3	1	2	3	4	4	31
12.51-18.50	0	0	0	0	0	0	0	1	0	1	3	9	7	6	1	1	29
18.51-24.00	0	0	0	0	0	0	0	0	0	0	4	7	0	1	0	0	12
>24.00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3
TOTAL	4	2	0	0	1	1	0	5	7	17	14	21	12	11	8	7	110

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT100.00 METERS

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01- 3.50	2	2	1	1	2	2	0	4	2	4	4	3	0	0	1	0	28
3.51- 7.50	13	7	6	1	5	11	7	11	15	28	26	12	6	7	9	11	175
7.51-12.50	42	19	12	7	9	16	5	10	22	110	53	23	27	32	65	63	515
12.51-18.50	66	23	13	15	16	31	11	35	48	88	46	43	42	44	90	100	711
18.51-24.00	29	21	21	6	3	6	6	42	45	20	17	27	14	51	86	63	457
>24.00	7	8	0	0	0	0	6	30	11	0	2	8	12	26	50	81	241
TOTAL	159	80	53	30	35	66	35	132	143	250	148	116	101	160	301	318	2127

PROGRAM: JFD VERSION: PC-1.2
NPPD-COOPER NUCLEAR STATION JFD:100M WIND VS 100M DELTA T - JAN-MAR 2002
SITE IDENTIFIER: PPD
DATA PERIOD EXAMINED: 1/ 1/ 2 - 3/31/ 2

*** JAN-MAR 2002 ***

STABILITY BASED ON: DELTA T BETWEEN 100.0 AND 10.0 METERS
WIND MEASURED AT: 100.0 METERS
WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2160

TOTAL NUMBER OF VALID OBSERVATIONS: 2127

TOTAL NUMBER OF MISSING OBSERVATIONS: 33

PERCENT DATA RECOVERY FOR THIS PERIOD: 98.5 %

MEAN WIND SPEED FOR THIS PERIOD: 15.8 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
.14	.66	2.96	45.04	34.18	11.85	5.17

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
B	2	0	0	0	0	0	1	1	0	1	0	0	0	0	0	9	0
C	4	2	1	0	1	3	5	5	5	2	3	4	4	2	4	18	0
D	93	55	39	10	17	36	15	29	45	83	62	38	25	50	175	186	0
E	44	20	10	16	16	26	10	76	64	101	42	28	33	76	91	74	0
F	11	1	3	4	0	0	4	16	22	46	27	25	27	21	23	22	0
G	4	2	0	0	1	1	0	5	7	17	14	21	12	11	8	7	0
TOTAL	159	80	53	30	35	66	35	132	143	250	148	116	101	160	301	318	0