EA Report NPP11-7
Revision 0

COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA
SEMIANNUAL OPERATING REPORT
JANUARY THROUGH JUNE 1982

Prepared for
Nebraska Public Power District
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1. INTRODUCTION

Ecological Analysts, Inc. (EA) has prepared this semiannual operating report for the Nebraska Public Power District to comply with the Cooper Nuclear Station Environmental Technical Specifications to the NRC (Section 5.4.1.b).

This report estimates the radiological doses to the area surrounding the Cooper nuclear facility from routine radiation effluent releases. The dose estimates are based upon the atmosphere dispersion as monitored at the facility.

The report provides a summary of the meteorological data collected during the first six months of 1982. This is followed by estimates of the dispersion characteristics for the period based on the computer model XOQDOQ.

Section 4 reports on the effluent releases and waste disposal at the facility. Dose estimates of gamma radiation due to gaseous releases are presented in Section 5, and individual and population dosages from liquid effluents in Section 6.

Four appendixes are included in the report. The appendixes present in tabular form the data used in the report tables and figures. Additional tables of radiological doses not found in the body of the report also are presented.

2. METEOROLOGICAL DATA SUMMARY

The meteorological data collected at the Cooper Nuclear Station during the first half of 1982 are summarized in Tables 2-1 and 2-2. These tables were compiled from the monthly data tables presented in Appendix A. Table 2-1 summarizes the data recovery for each of the meteorological parameters. Table 2-2 summarizes the meteorological data.

2.1 FIRST QUARTER (January-March 1982)

Data recovery for the first quarter was greater than 93 percent for each parameter except the differential temperatures. Data recovery for the differential temperatures was 88.0 percent due to a missing data chart for the period 12-21 March 1982. Charts running off, frozen sensors and recorder pens not inking accounted for the majority of the data lost.

METEOROLOGICAL SUMMARY--The prevailing wind direction for the first quarter of 1982 was from the north. The next most common direction was from the south. This was true at both the 35-ft and 318-ft heights. The 35-ft wind speed was between 8-19 mph 44.3 percent of the time and less than 8 mph 45.5 percent of the time. The 318-ft wind speed was between 8-19 mph 58.3 percent of the time and less than 8 mph 25.7 percent of the time. The first quarter of 1982 was colder and drier than the climatological normal for Auburn, Nebraska, the closest National Weather Service Climatic Station (10 miles west of the plant site).

ATMOSPHERIC STABILITY--Differential temperature is measured between both the 318-35 ft and 318-155 ft levels. Atmospheric stability is derived from the 318-35 ft differential temperature data and is reduced to the seven Pasquill stability categories for use in the joint frequency of wind speed and wind direction analysis. The grand total joint frequency of occurrence given in the lower right-hand corner of the joint frequency of occurrence by atmospheric stability tables is used to determine the frequency of occurrence of each stability class. The grand total joint frequency of occurrence for the 318-ft wind speed versus 318-ft wind direction by stability class was used to determine the frequency of the atmospheric stability categories. Based on the 318 ft wind speed and direction joint frequency tables, the atmosphere was unstable 27.5 percent of the time, neutral 39.7 percent of the time, and stable 32.8 percent of the time for the first quarter of 1982.

2.2 SECOND QUARTER (April-June 1982)

Data recovery for the second quarter was greater than 94 percent for each parameter. The majority of lost data was caused by charts running off the spool and recorder pens not inking.

METEOROLOGICAL SUMMARY--The prevailing wind direction for the second quarter was from the southsoutheast - southsouthwest at both the 35-ft and 318-ft heights. The next most common wind direction was from the northnorthwest - northnortheast at the 35-ft height and from the northwest - north at the 318-ft height. The 35-ft wind speed was between 8-19 mph 40.8 percent of the time and less than 8 mph 52.8 percent of the time. The 318-ft wind speed was between 8-19 mph 51.9 percent of

the time and less than 8 mph 31.8 percent of the time. The second quarter of 1982 was cooler and drier than the climatological normal for Auburn, Nebraska.

ATMOSPHERIC STABILITY--Based on the joint frequency tables, the atmosphere was unstable 24.1 percent of the time, neutral 44.4 percent of the time, and stable 31.5 percent of the time.

2.3 SEMIANNUAL PERIOD (January - June 1982)

Data recovery for the first half of the year was 92 percent or greater for each parameter. Reasons for data loss were given under the quarterly headings.

METEOROLOGICAL SUMMARY--The prevailing wind direction for the first half of the year was split between the south and north quadrants. Southsoutheast - southsouthwest winds had the highest frequency of occurrence at the 35-ft height and northnorthwest - northnortheast winds had the second highest frequency of occurrence at the 35-ft height. Northwest - north winds had the highest frequency of occurrence at the 318-ft height and southsoutheast - southsouthwest winds had the second highest frequency of occurrence at the 318-ft height. The 35-ft wind speed was between 8-19 mph 41.9 percent of the time and less than 8 mph 50.0 percent of the time. The 318-ft wind speed was between 8-19 mph 54.8 percent of the time and less than 8 mph 29.1 percent of the time. The first half of the year was cooler and drier than the climatological normal for Auburn, Nebraska.

ATMOSPHERIC STABILITY--Based on the joint frequency tables, the atmosphere was unstable 25.5 percent of the time, neutral 42.4 percent of the time, and stable 32.1 percent of the time.

TABLE 2-1 RECOVERY STATISTICS FOR METEOROLOGICAL DATA COLLECTED AT COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY - JUNE 1982, (PERCENT DATA RECOVERY)[a].

Parameter	JAN	FEB	MAR	JAN-MAR	APR	MAY	JUN	APR-JUN	JAN-JUN
Wind speed									
318-ft	94.9%	99.0%	97.8%	97.2%	98.1%	97.3%	92.9%	96.1%	96.6%
35-ft	88.3%	99.0%	93.7%	93.5%	89.2%	97.3%	96.4%	94.3%	93.9%
Wind direction									
318-ft	95.0%	99.0%	97.8%	97.2%	98.1%	98.0%	93.7%	96.6%	96.9%
35-ft	95.6%	100.0%	99.5%	98.3%	95.7%	99.5%	97.8%	97.7%	98.0%
35-ft ambient temperature	99.7%	99.9%	98.8%	99.4%	99.4%	99.7%	98.8%	99.3%	99.4%
Differential temperature									
318-35 ft	99.9%	99.7%	65.5%	88.0%	96.1%	99.1%	99.4%	98.2%	93.1%
318-155 ft	99.9%	99.9%	65.5%	88.0%	96.1%	92.7%	99.4%	96.1%	92.1%
Precipitation	100.0%	99.9%	98.1%	99.3%	99.6%	99.5%	95.1%	98.1%	98.7%

(a) Percent data recovery is defined as the number of valid data hours in the period divided by the maximum possible data hours in the period multiplied by 100.

TABLE 2-2 SUMMARY OF METEOROLOGICAL DATA MEASURED AT THE COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY-JUNE 1982.

	JAN	FEB	MAR	JAN-MAR	APR	MAY	JUN	APR-JUN	JAN-JUN
318-ft Wind									
Mean speed (mph)	14	11	13	13	15	12	9	12	12
Maximum speed (mph)	39	27	38	39	45	35	35	45	45
Direction of maximum speed	WNW	N	SW	WNW	NW	S	S	NW	NW
Date of maximum speed	22 JAN	22 FEB	30 MAR	22 JAN	2 APR	9 MAY	14 JUN	2 APR	2 APR
Prevailing direction(a)				NW-N				SSE-SSW	NW-N
35-ft Wind									
Mean speed (mph)	9	10	11	10	12	9	7	9	10
Maximum speed (mph)	28	32	34	34	36	28	27	36	36
Direction of maximum speed	WNW	SSW,NNE,N-NNW	W	W	NW	SSW	WNW	NW	NW
Date of maximum speed	22 JAN	14,23,24 FEB	30 MAR	30 MAR	2 APR	9,10 MAY	14 JUN	2 APR	2 APR
Prevailing direction (a)				NNW-NNE				SSE-SSW	SSE-SSW
35 ft Ambient Temperature (C)									
Mean	-9.8	-3.7	3.3	-3.4	9.9	17.5	19.8	15.7	6.2
Departure from normal(b)	-6.0	-3.0	-0.8	-3.3	-2.2	-0.1	-2.8	-1.7	-2.5
Maximum	5.9	21.2	18.7	21.2	26.8	28.4	33.0	33.0	33.0
Date of maximum	27 JAN	22 FEB	12,30 MAR	22 FEB	2 APR	4 MAY	29 JUN	29 JUN	29 JUN
Minimum	-28.1	-22.0	-14.5	-28.1	-6.9	6.4	8.1	-6.9	-28.1
Date of minimum	10 JAN	6 FEB	6 MAR	10 JAN	6 APR	7 MAY	1 JUN	6 APR	10 JAN
Precipitation (in.)									
Total	0.69	0.27	1.05	2.01	0.96	6.96	2.41	10.33	12.34
Departure from normal(b)	-0.19	-0.78	-1.19	-2.16	-2.05	2.29	-3.65	-3.41	-5.57
Rain days(c)	7	6	10	23	5	18	6	29	52
Maximum in a single day	0.41	0.11	0.25	0.41	0.65	2.64	1.28	2.64	2.64
Date	22 JAN	17 FEB	19 MAR	22 JAN	28 APR	20 MAY	8 JUN	20 MAY	20 MAY
Maximum in a single hour	0.19	0.03	0.14	0.19	0.11	0.88	0.84	0.88	0.88
Date	22 JAN	17 FEB	19 MAR	22 JAN	5,28 APR	20 MAY	8 JUN	20 MAY	20 MAY

(a) Prevailing direction is derived from the quarterly joint frequency tables and is reported for the quarterly period only.
(b) The climatological normals were derived from NOAA climatological data for Auburn, Nebraska.
(c) Rain days are defined as a day in which 0.01 in. of rain or rain equivalent of frozen precipitation has fallen.

3. DISPERSION CHARACTERISTICS (X/Q) ISOPLETHS

Estimates of the atmospheric dispersion characteristics (X/Q) for the first half of 1982 were made using the NRC supplied model XOQDOQ (U.S. NRC 1977b). Key input to the model is the joint frequency distribution (JFT) of atmospheric stability, wind speed, and wind direction. The JFT was determined from the meteorological data and is presented in Appendix B. This section presents the model-calculated locations of equal dispersion for both the 5- and 50-mile radius circles from the Cooper Nuclear Station. The periods covered are January-March, April-June, and January-June. Separate figures are given for the vent stack and elevated release options.

The data tables from which the isopleth figures were derived are presented in Appendix C and the XOQDOQ computer model is discussed in Appendix D. The XOQDOQ computer model implements the models and assumptions of Regulatory Guide 1.111 (U.S. NRC 1976).

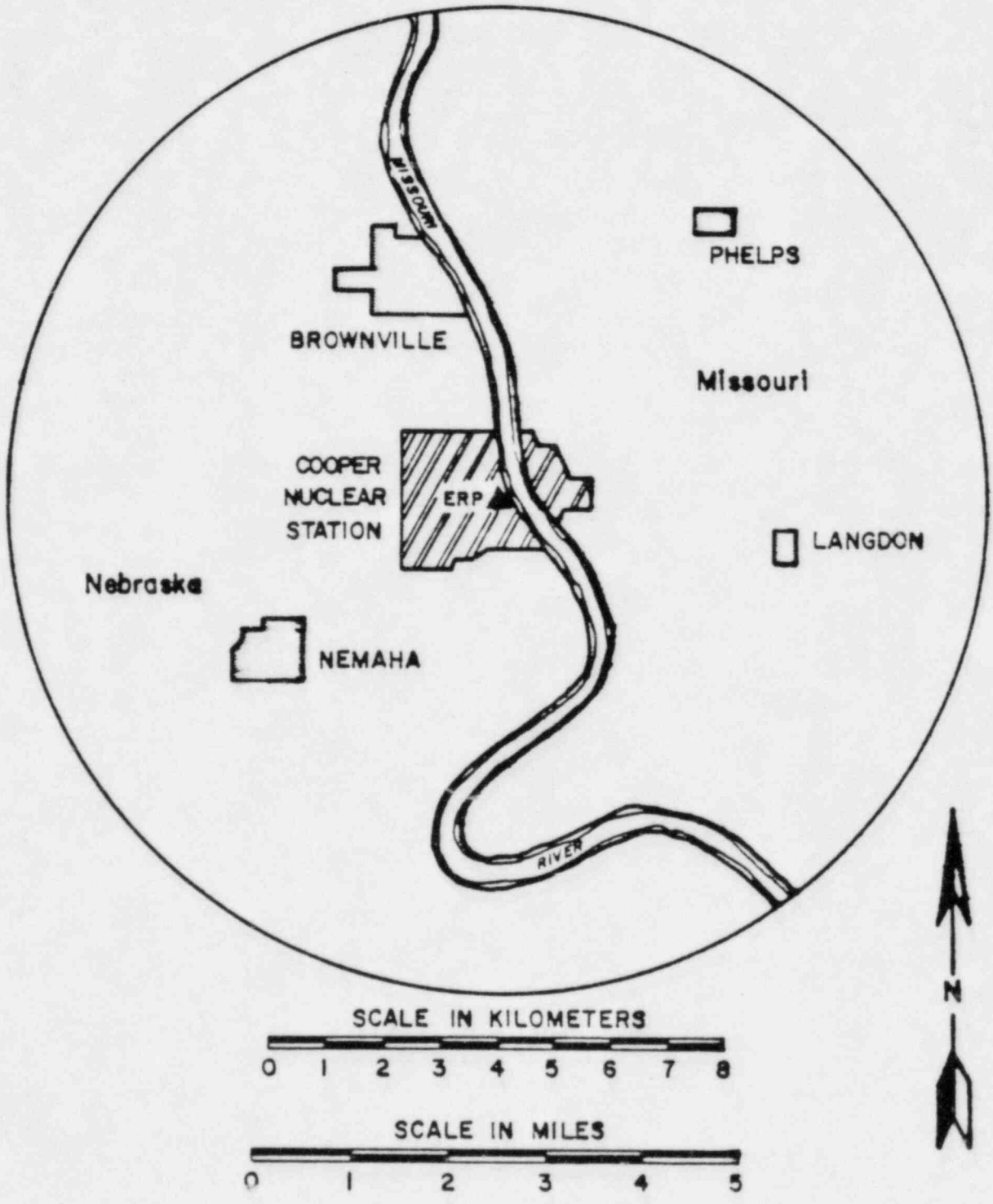

Figure 3-1. Cooper Nuclear Station, Brownville, Nebraska and surrounding area in the range of 0-5 miles.

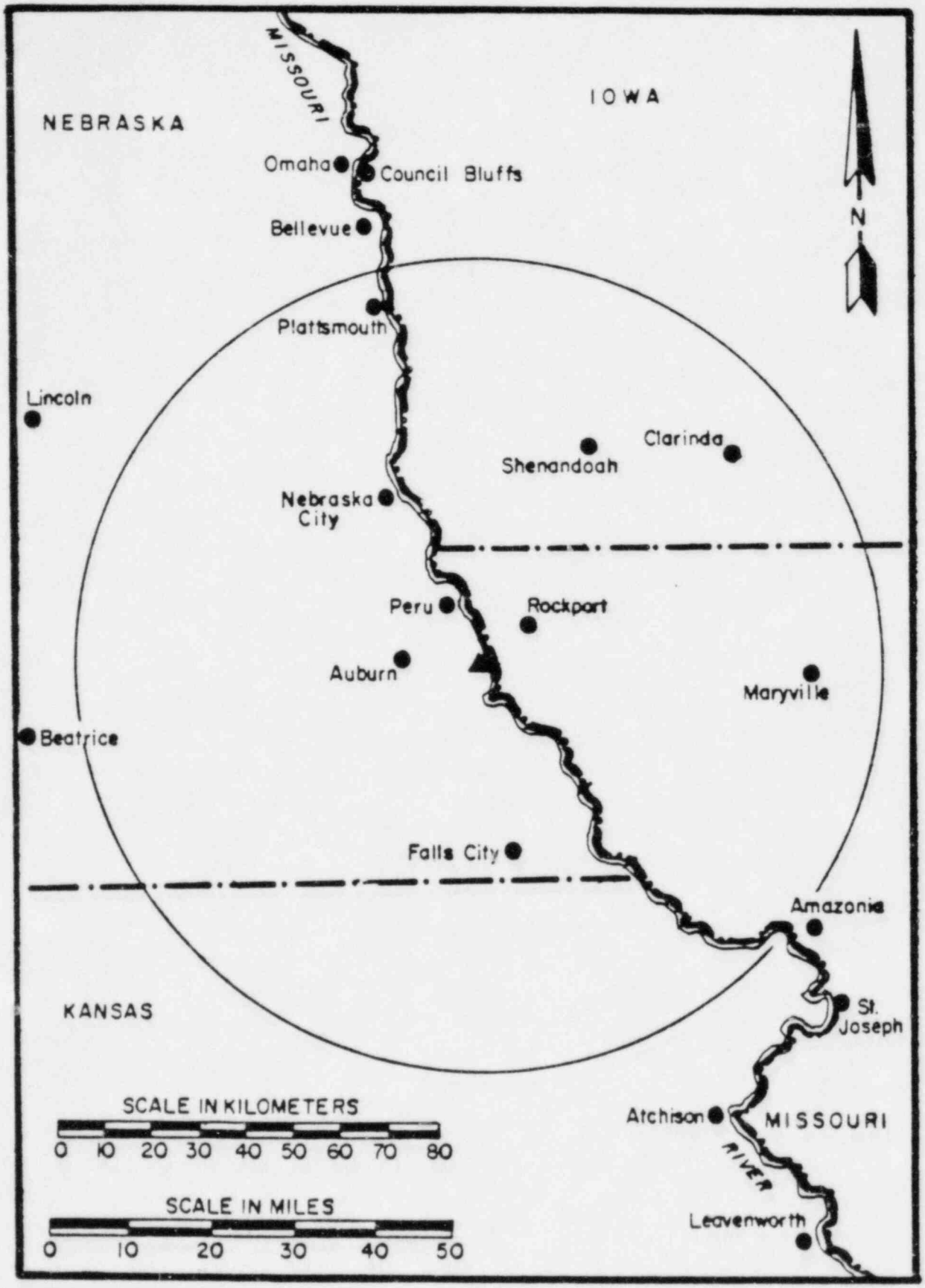

Figure 3-2. Cooper Nuclear Station, Brownville, Nebraska and surrounding area in the range of 0-50 miles.

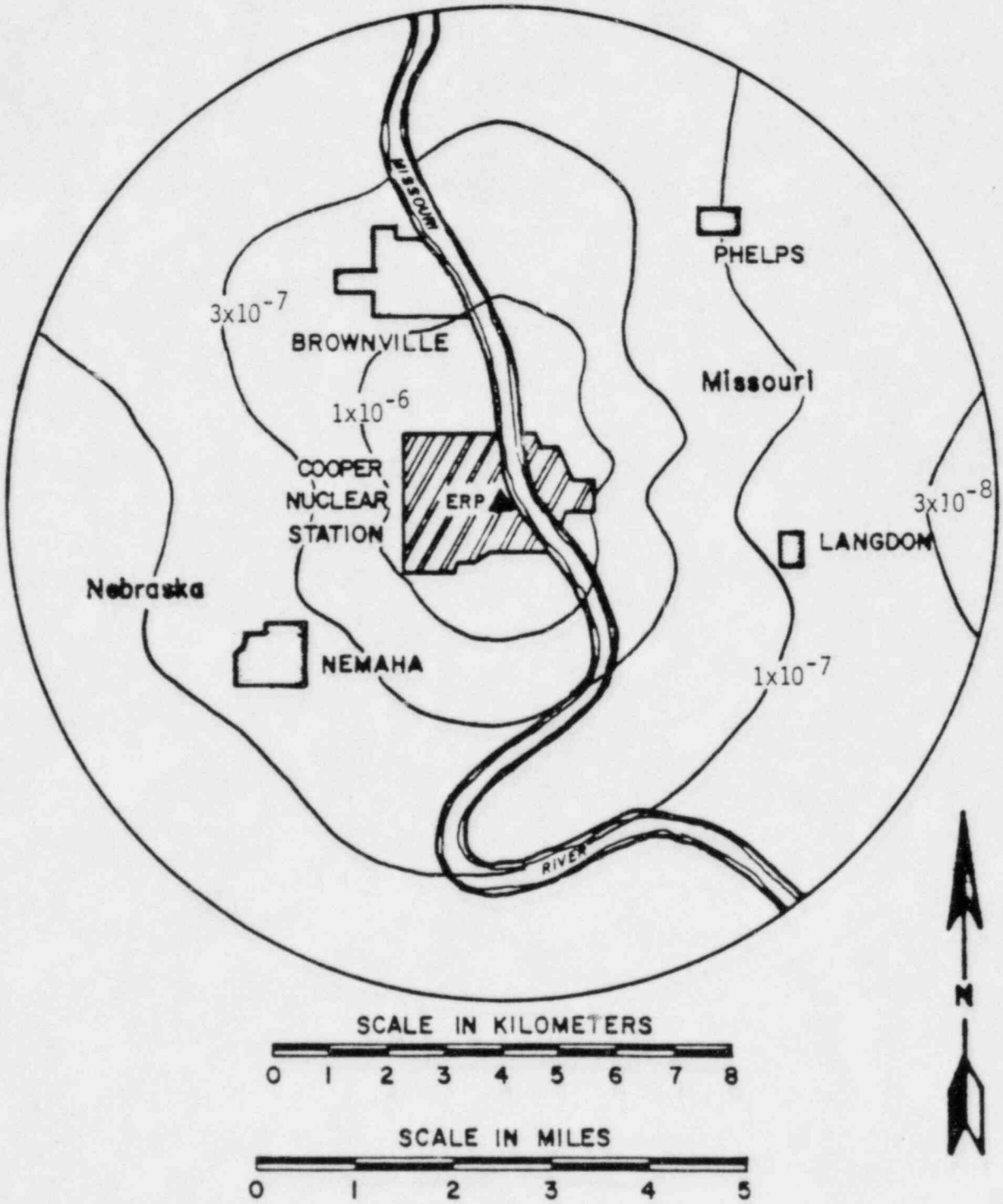

Figure 3-3. Estimated concentration to emission ratio (sec/meter cubed), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5, January-March 1982.

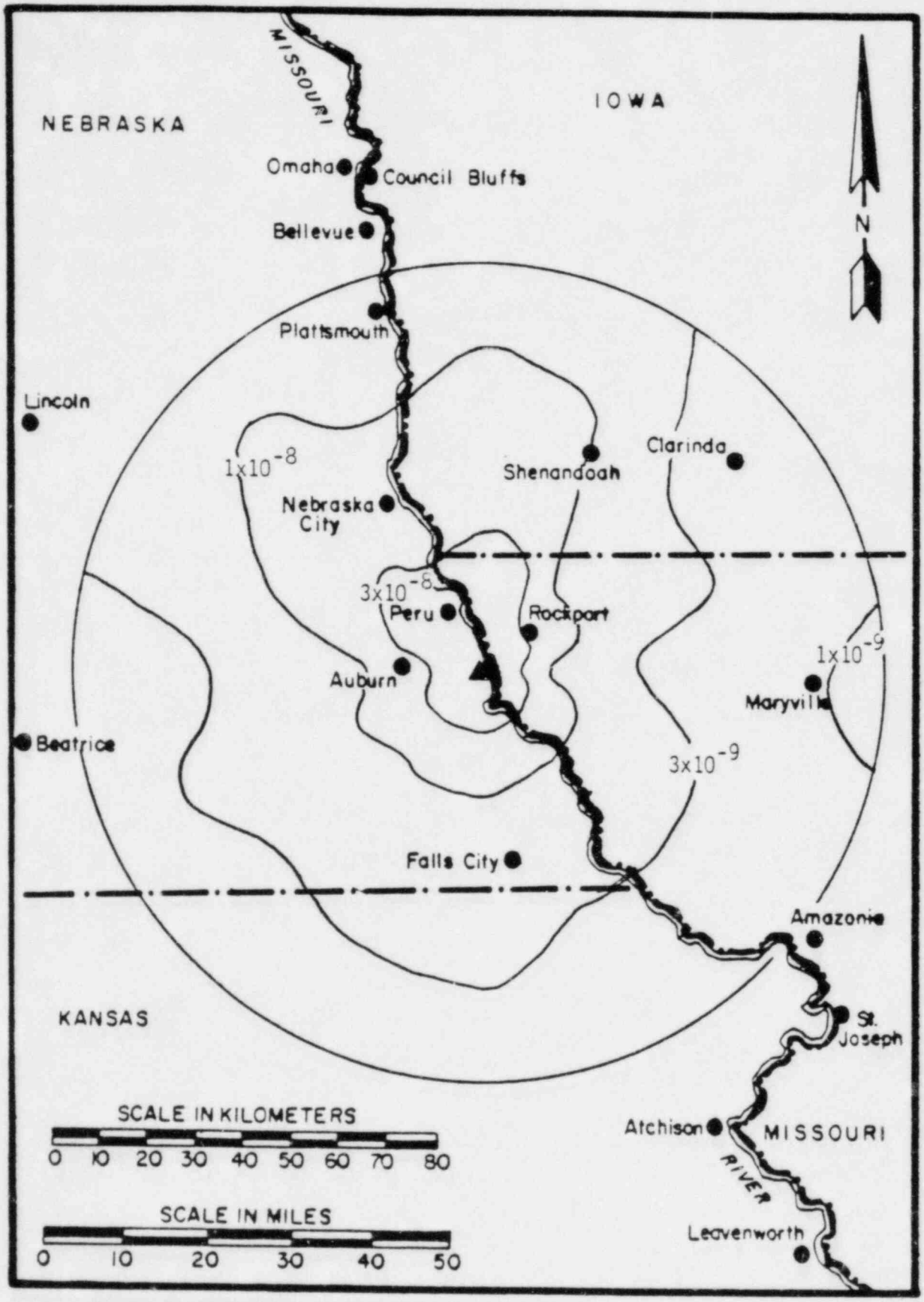

Figure 3-4. Estimated concentration to emission ratio (sec/meter cubed), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-March 1982.

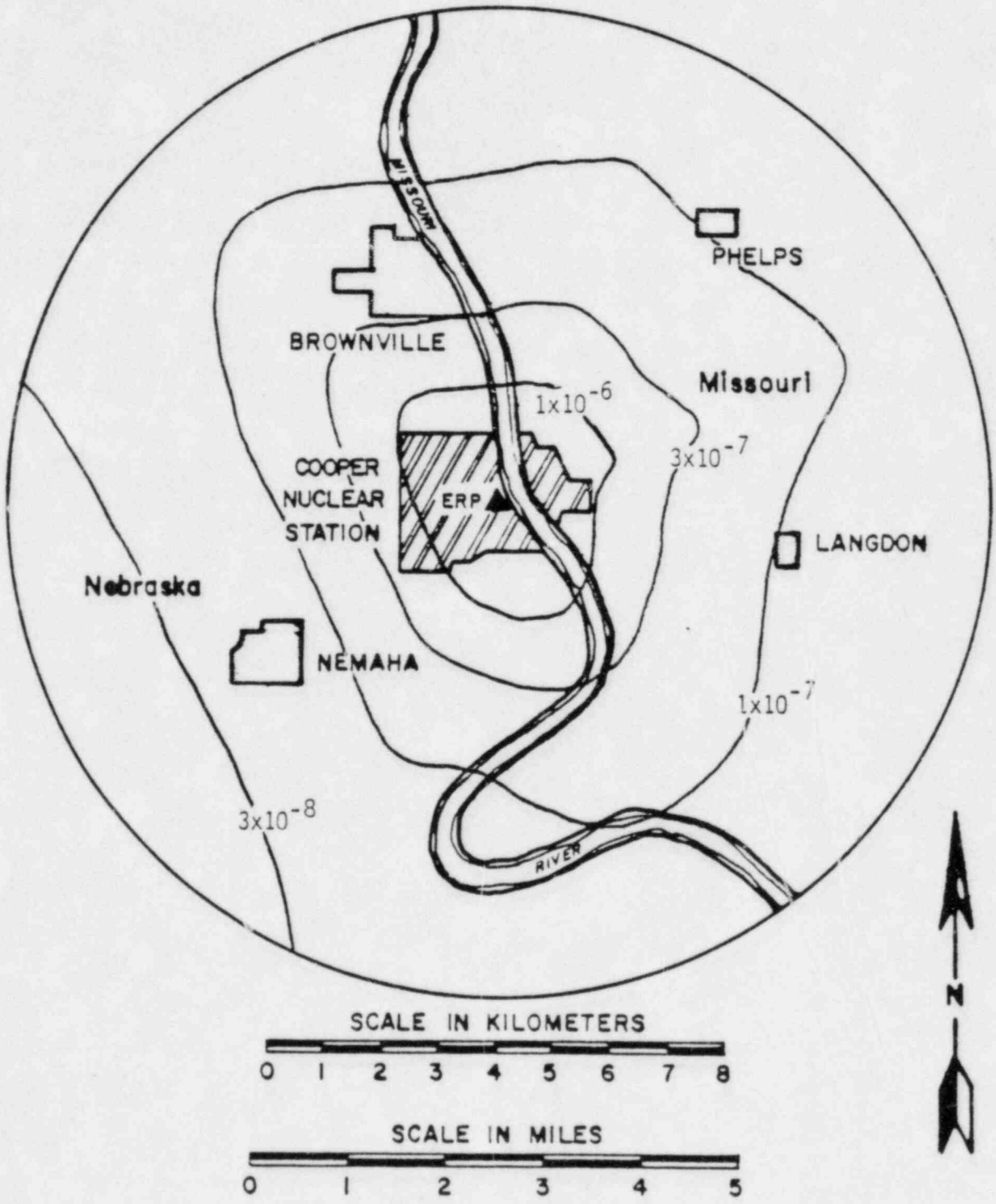

Figure 3-5. Estimated concentration to emission ratio (sec/meter cubed), elevated release point, Cooper Nuclear Station, Brownville, Nebraska. 0-5 miles. January-March 1982.

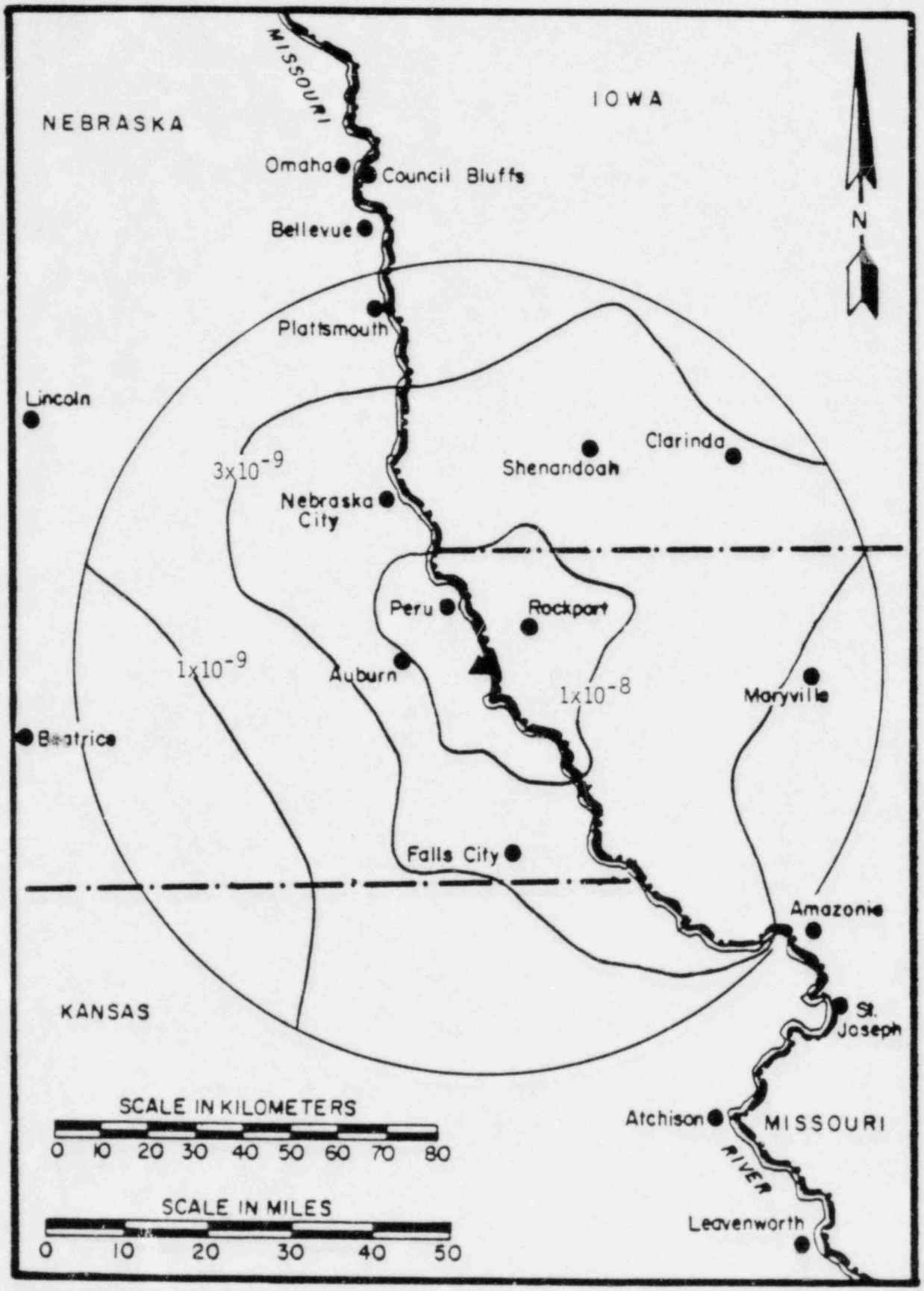

Figure 3-6. Estimated concentration to emission ratio (sec/meter cubed), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-March 1982.

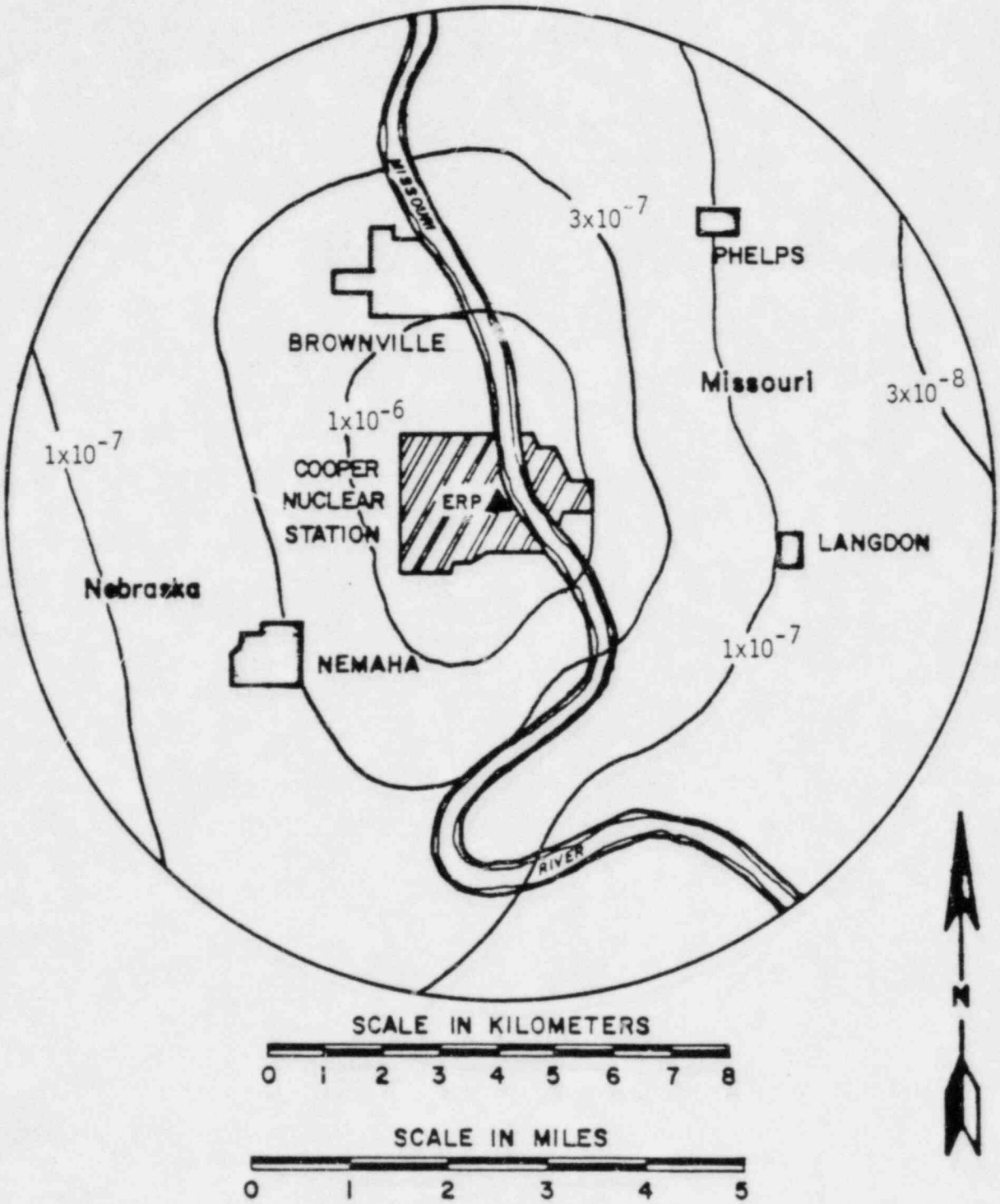

Figure 3-7. Estimated concentration to emission ratio (sec/meter cubed), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, April-June 1982.

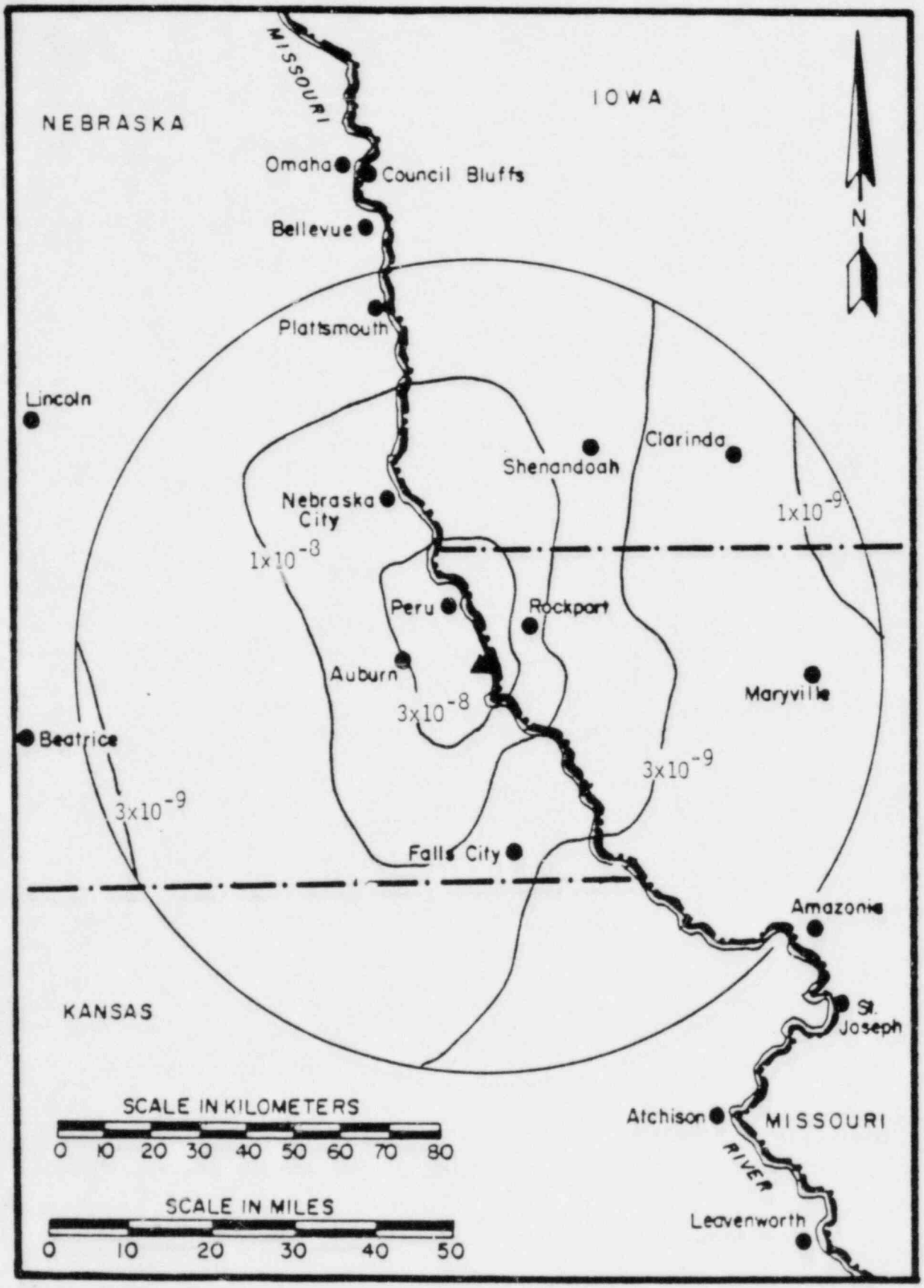

Figure 3-8. Estimated concentration to emission ratio (sec/meter cubed), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, April-June 1982.

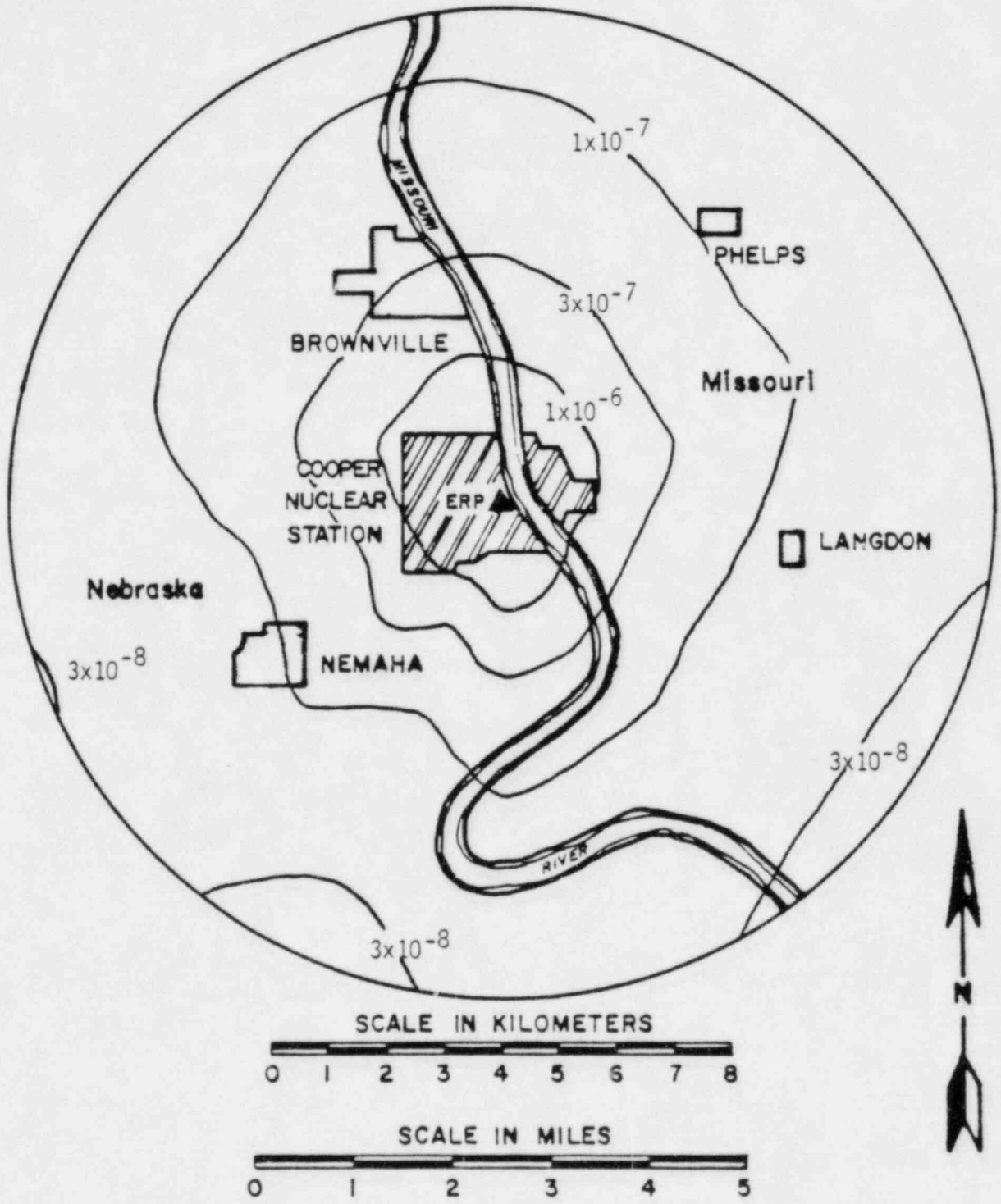

Figure 3-9. Estimated concentration to emission ratio (sec/meter cubed), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, April-June 1982.

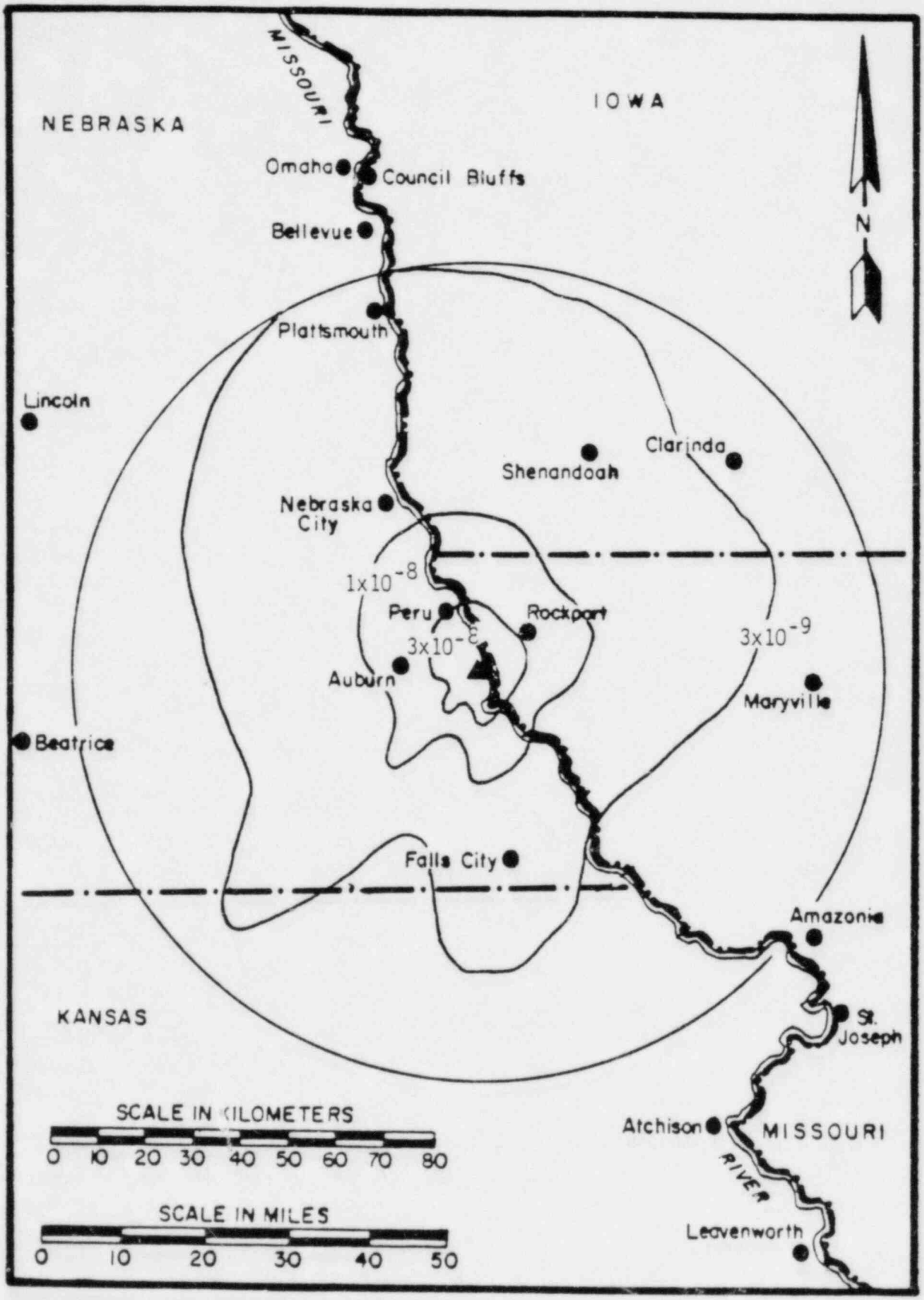

Figure 3-10. Estimated concentration to emission ratio (sec/meter cubed), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, April-June 1982.

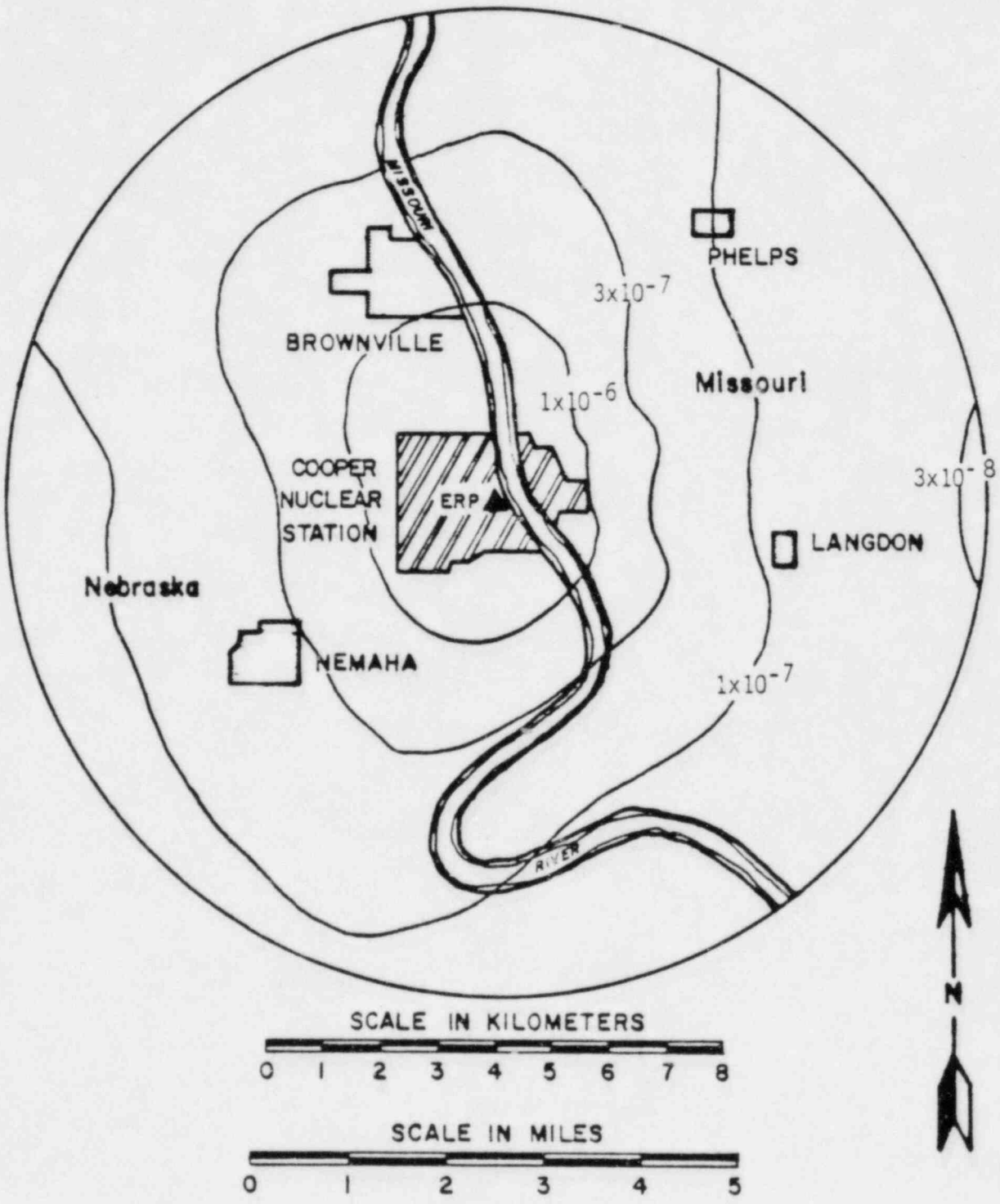

Figure 3-11. Estimated concentration to emission ratio (sec/meter cubed), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, January-June 1982.

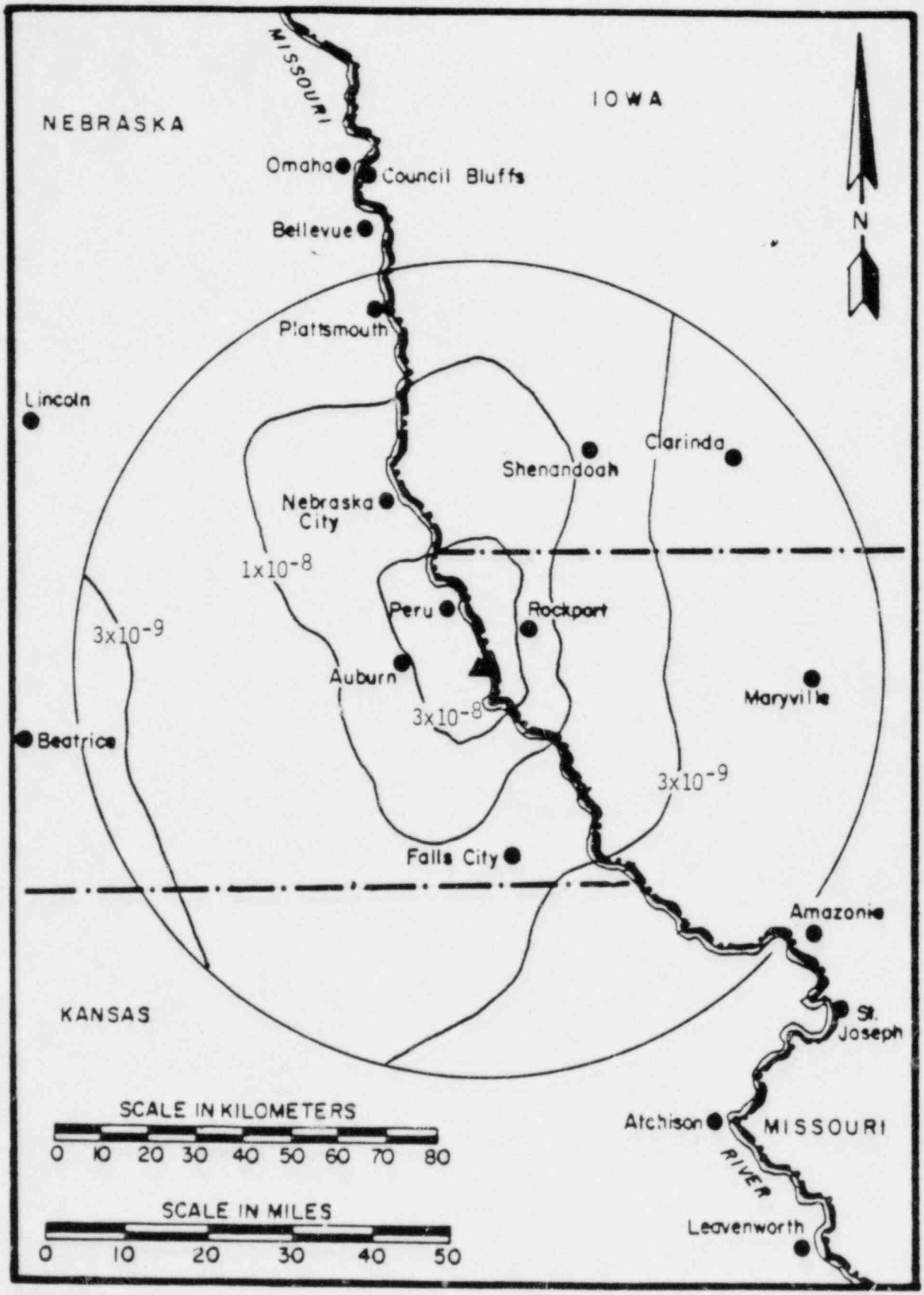

Figure 3-12. Estimated concentration to emission ratio (sec/meter cubed), vent release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-June 1982.

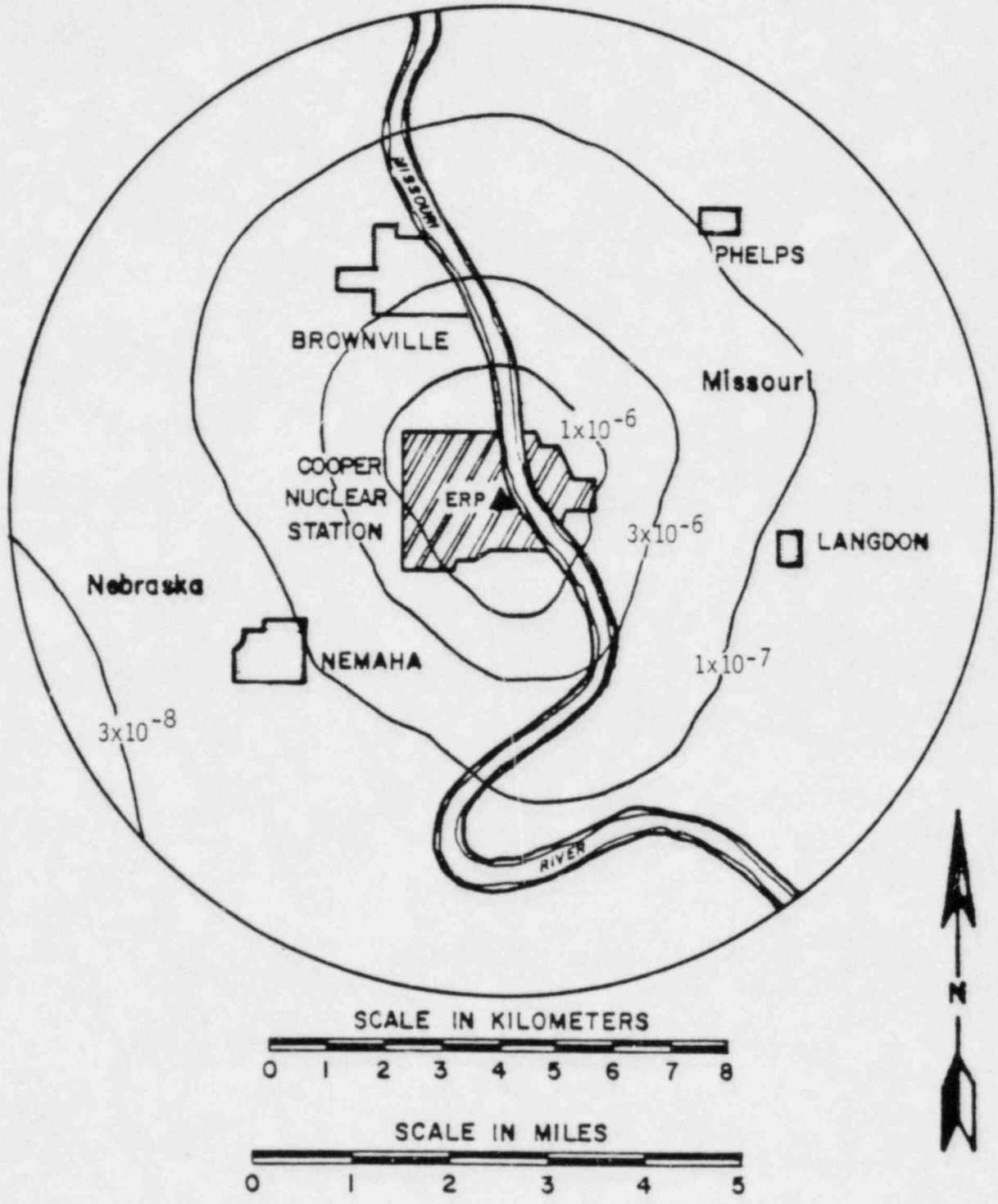

Figure 3-13. Estimated concentration to emission ratio (sec/meter cubed), elevated release point, Cooper Nuclear Station, Brownville, Nebraska. 0-5 miles, January-June 1982.

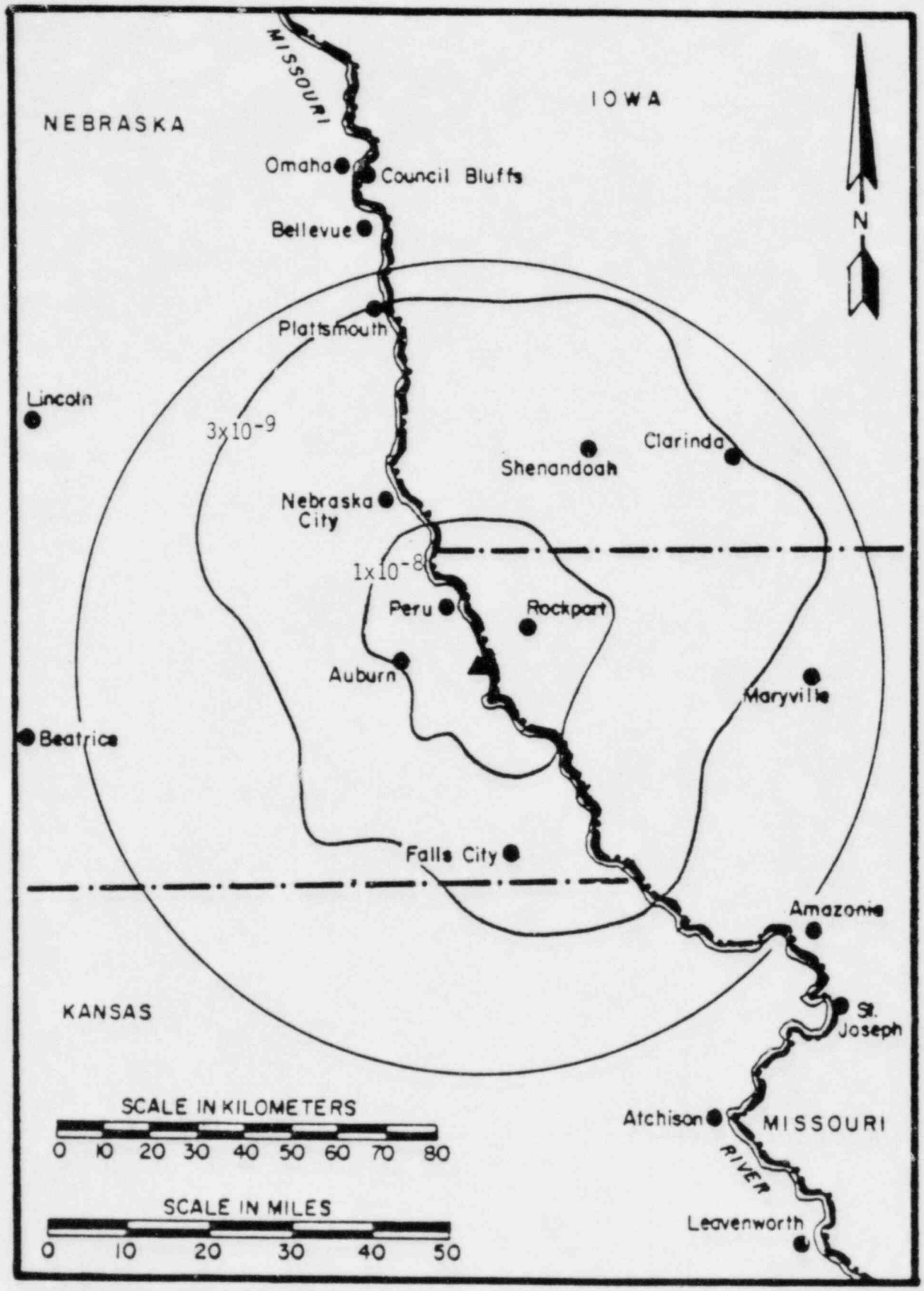

Figure 3-14. Estimated concentration to emission ratio (sec/meter cubed), elevated release point, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-June 1982.

4. EFFLUENT AND WASTE DISPOSAL (January - June 1982)

Cooper Nuclear Station effluent and waste disposal data are presented in the format prescribed by Regulatory Guide 1.21 (U.S. NRC 1974). Meteorological data required by Table 4A and B of Regulatory Guide 1.21 are in Appendix B.

Facility--Cooper Nuclear Station License--DPR-46

4.1 REGULATORY LIMITS

a. Fission and Activation Gases

Restrictions on gaseous activity release:

Maximum release rate of noble gases and tritium (except for halogens and particulates with half-lives >8 days):

$$Qs(2.5\overline{E}_{\gamma s} + 1.25\overline{E}_{\beta s}) + Qv(7.3\overline{E}_{\gamma v} + 77\overline{E}_{\beta v}) \leq 0.16$$

when averaged over a calendar quarter.

γ - gamma
β - beta

where

Qs and Qv = the quarterly release rates in curies/second of radioisotopes from the stack, reactor building, and turbine building vents

$\overline{E}_{\gamma s}$ and $\overline{E}_{\gamma v}$ = the average gamma energies per disintegration of stack and vent effluents

$\overline{E}_{\beta s}$ and $\overline{E}_{\beta v}$ = the average beta energies from stack and vent effluents.

b. and c. Iodines and Particulates with Half-Lives >8 Days

The release rates of I-131 and particulates with half-lives greater than eight days released to the environs as part of airborne effluents shall not exceed:

$$\frac{Qs}{7.7 \times 10^{-6}} + \frac{Qv}{2.1 \times 10^{-6}} \leq 0.08$$

when averaged over a calendar quarter.

Where

Qs and Qv = the quarterly release rates in curies/second of I-131 and particulates with half-lives longer than eight days from the stack, reactor building, and turbine building vents.

d. Liquid Effluents

Maximum calendar quarter release rate of radioactive liquid effluents (excluding tritium and noble gases): 25 curies.

Maximum activity of discharged liquid radwaste tank (sample tank only): 10 curies.

Maximum radioactivity release concentration of discharge channel liquid effluents shall not exceed the values specified in 10 CFR 20, Appendix B, Table II, Column 2, for unrestricted areas.

4.2 MAXIMUM PERMISSIBLE CONCENTRATIONS

No maximum permissible concentrations (MPC) values are required specifically in Cooper Nuclear Station Environmental Technical Specifications for:

a. Fission and activation gases,
b. Iodines, or
c. Particulates with half lives >8 days

The equation in 4.1a under Regulatory Limits provides a method to be used in summing the gaseous airborne effluents from the main stack and vents which will assure that the release rate does not exceed 10 CFR Part 20 for unrestricted areas.

The equation presented in 4.1b and 4.1c under Regulatory Limits provides a method to be used in summing airborne halogens and particulates with half-lives >8 days released from the stack and vents to ensure that the release rate does not exceed 10 CFR Part 20, Appendix B, Table II, Column 1, for unrestricted areas.

d. Liquid effluents

The MPC used to calculate permissible liquid release rates are from 10 CFR 20, Appendix B, Table II, Column 2, and applicable notes to 10 CFR 20, Appendix B.

4.3 AVERAGE ENERGY

The average energy ($\overline{E}$) of the radionuclide mixtures of fission and activation gases released is as follows:

First Quarter:	Second Quarter:
$\overline{E}_{\beta s}$ = 0.21 Mev/disintegration	$\overline{E}_{\beta s}$ = 0.24 Mev/disintegration
$\overline{E}_{\gamma s}$ = 0.18 Mev/disintegration	$\overline{E}_{\gamma s}$ = 0.20 Mev/disintegration
$\overline{E}_{\beta v(Rx)}$ = 0.40 Mev/disintegration	$\overline{E}_{\beta v(Rx)}$ = 0.45 Mev/disintegration
$\overline{E}_{\gamma v(Rx)}$ = 0.74 Mev/disintegration	$\overline{E}_{\gamma v(Rx)}$ = 0.83 Mev/disintegration

First Quarter (cont.):	Second Quarter (cont):
$\bar{E}_{\beta v}$(TG) = 0.37 Mev/disintegration	$\bar{E}_{\beta v}$(TG) = 0.42 Mev/disintegration
$\bar{E}_{\gamma v}$(TG) = 0.71 Mev/disintegration	$\bar{E}_{\gamma v}$(TG) = 0.81 Mev/disintegration
$\bar{E}_{\beta v}$(ARW) = 0.43 Mev/disintegration	$\bar{E}_{\beta v}$(ARW) = 0.51 Mev/disintegration
$\bar{E}_{\gamma v}$(ARW) = 0.77 Mev/disintegration	$\bar{E}_{\gamma v}$(ARW) = 0.84 Mev/disintegration

4.4 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:

a. Fission and activation gases:

Radioactivity and radionuclide composition is determined by laboratory GeLi detector analysis in correlation with continuous gross radioactivity monitoring by a gaseous channel 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 GeLi detector gamma spectrometer. Continuous radioactivity monitoring of the charcoal cartridge is also provided by a NaI detector in-line with the release pathway.

c. Particulates:

Particulate filters provide continuous sample collection. These filters are analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Continuous gross radioactivity monitoring of the particulate filter is provided by a NaI detector in-line with the release pathway.

d. Liquid effluents:

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

4.5 BATCH RELEASES

The following information relates to batch releases of radioactive materials in liquid and gaseous effluents:

a. Liquid

1.	Number of batch releases	87
2.	Total time period for batch releases	2.03 E+04 minutes
3.	Maximum time period for a batch release	7.18 E+02 minutes
4.	Average time period for batch releases	2.33 E+02 minutes
5.	Minimum time period for a batch release	1.68 E+02 minutes
6.	Average stream flow during periods of release of effluent into a flowing stream	8.44 E+07 liters/minute

b. Gaseous

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

4.6 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 4-1A EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY - JUNE 1982

	Unit	1st Quarter	2nd Quarter	Est. Total Error, %
A. Fission & activation gases				
1. Total release	Ci	9.30 E+02	8.67 E+02	2.0 E+01
2. Average release rate for period	µCi/sec	1.20 E+02	1.10 E+02	
3. Percent of Technical Specification limit	%	*	*	
B. Iodines				
1. Total iodine -131	Ci	≤2.21 E-03	≤4.05 E-03	3.0 E+01
2. Average release rate for period	µCi/sec	≤2.84 E-04	≤5.15 E-04	
3. Percent of Technical Specification limit	%	**	**	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	≤1.02 E-03	≤1.89 E-03	5.0 E+01
2. Average release rate for period	µCi/sec	≤1.31 E-04	≤2.40 E-04	
3. Percent of Technical Specification limit	%	**	**	
4. Gross alpha radioactivity	Ci	≤2.03 E-06	≤1.92 E-06	
D. Tritium				
1. Total release	Ci	1.83 E+00	1.68 E+00	3.0 E+01
2. Average release rate for period	µCi/sec	2.35 E-01	2.14 E-01	
3. Percent of Technical Specification limit	%	*	*	

* The noble gases and tritium are combined in the Technical Specification discharge limit. The first quarter releases were 2.36 E+00% of the allowable limit while the second quarter releases were 2.73 E+00% of the allowable limit.

** The iodine -131 and particulates with half-lives longer than 8 days are combined into one Technical Specification. The first quarter releases were 9.58 E-02% of the allowable limit while the second quarter releases were 3.15 E-01% of the allowable limit.

TABLE 4-1B EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, GASEOUS EFFLUENTS-ELEVATED RELEASE, COOPER NUCLEAR STATION, BROWNVILLLE, NEBRASKA, JANUARY - JUNE-1982

Nuclides Released	Unit	Continuous Mode 1st Quarter	Continuous Mode 2nd Quarter	Batch Mode (a)
1. Fission gases				
krypton-85	Ci	5.08 E+00	6.03 E-01	
krypton-85m	Ci	5.09 E+01	4.14 E+01	
krypton-87	Ci	6.79 E+00	1.19 E-02	
krypton-88	Ci	2.72 E+01	1.60 E+01	
xenon-133	Ci	2.77 E+01	8.93 E+00	
xenon-135	Ci	1.57 E+01	-	
xenon-135m	Ci	8.36 E-01	-	
xenon-138	Ci	4.04 E+00	-	
krypton-89	Ci	1.00 E-03	-	
krypton-83m	Ci	1.72 E+00	1.47 E-01	
xenon-137	Ci	7.55 E-03	-	
xenon-133m	Ci	2.74 E-01	3.45 E-04	
xenon-131m	Ci	7.45 E-01	2.77 E-01	
Total for period	Ci	1.41 E+02	6.74 E+01	
2. Iodines				
iodine-131	Ci	2.10 E-03	2.30 E-03	
iodine-133	Ci	4.40 E-03	<2.40 E-03	
iodine-135	Ci	<2.45 E-03	<3.35 E-03	
Total for period	Ci	<8.95 E-03	<8.05 E-03	
3. Particulates				
strontium-89	Ci	3.24 E-04	3.12 E-05	
strontium-90	Ci	3.87 E-05	1.19 E-06	
cesium-134	Ci	<9.56 E-07	<6.96 E-07	
cesium-137	Ci	<2.53 E-06	<1.68 E-06	
barium-lanthanum-140	Ci	2.48 E-04	<9.02 E-05	
iodine-131	Ci	<3.28 E-06	<6.59 E-06	
cobalt-58	Ci	-	1.19 E-06	
cobalt-60	Ci	3.23 E-06	7.49 E-06	
manganese-54	Ci	1.11 E-06	3.07 E-06	
chromium-51	CI	-	7.52 E-04	
Total for period	Ci	<6.22 E-04	<1.44 E-04	

(a) No batch discharges were made.

TABLE 4-1C EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, GASEOUS EFFLUENTS-BUILDING VENT RELEASE, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY - JUNE 1982

Nuclides Released	Unit	Continuous Mode 1st Quarter	2nd Quarter
1. Fission gases			
krypton-85	Ci	1.25 E-01	1.66 E-02
krypton-85m	Ci	4.68 E+01	4.50 E+01
krypton-87	Ci	9.84 E+01	1.17 E+02
krypton-88	Ci	1.40 E+02	1.46 E+02
xenon-133	Ci	9.44 E+01	4.72 E+01
xenon-135	Ci	1.98 E+02	1.67 E+02
xenon-135m	Ci	2.63 E+01	3.54 E+01
xenon-138	Ci	1.43 E+02	1.93 E+02
krypton-89	Ci	4.74 E+00	6.94 E+00
krypton-83m	Ci	2.17 E+01	2.43 E+01
xenon-137	Ci	1.19 E+01	1.70 E+01
xenon-133m	Ci	3.39 E+00	2.01 E+00
xenon-131m	Ci	1.82 E-01	7.72 E-02
Total for period	Ci	7.89 E+02	8.00 E+02
2. Iodines			
iodine-131	Ci	≤1.11 E-04	≤1.75 E-03
iodine-133	Ci	≤6.41 E-04	≤1.12 E-03
iodine-135	Ci	≤2.84 E-02	≤4.28 E-02
Total for period	Ci	≤2.92 E-02	≤4.57 E-02
3. Particulates			
strontium-89	Ci	≤1.07 E-06	≤3.25 E-06
strontium-90	Ci	≤1.30 E-05	≤1.87 E-05
cesium-134	Ci	≤2.67 E-05	≤7.48 E-05
cesium-137	Ci	≤3.01 E-05	≤1.44 E-04
barium-lanthanum-140	Ci	≤2.44 E-04	≤2.29 E-04
iodine-131	Ci	≤3.53 E-05	≤5.54 E-05
cobalt-58	Ci	1.93 E-06	3.84 E-05
cobalt-60	Ci	4.14 E-05	9.83 E-04
manganese-54	Ci	3.51 E-06	1.90 E-04
zinc-65	CI	-	9.21 E-06
Total for period	Ci	≤3.97 E-04	≤1.75 E-03

TABLE 4-2A EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY - JUNE 1982

	Unit	1ST QUARTER	2ND QUARTER	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	≤2.92 E-01	≤1.31 E+00	2.0 E+01
2. Average diluted concentration during period	µCi/ml	≤4.21 E-08	≤9.92 E-08	
3. Percent of applicable limit	%	1.17 E+00	5.24 E+00	
B. Tritium				
1. Total release	Ci	≤1.52 E+00	≤3.20 E+00	2.0 E+01
2. Average diluted concentration during period	µCi/ml	≤2.19 E-07	≤2.42 E-07	
3. Percent of applicable limit	%	7.31 E-03	8.08 E-03	
C. Dissolved and entrained gases				
1. Total release	Ci	≤2.13 E-03	≤2.73 E-02	5.0 E+01
2. Average diluted concentration during period	µCi/ml	≤3.07 E-10	≤2.07 E-09	
3 Percent of applicable limit	%	NA	NA	
D. Gross alpha radioactivity				
1. Total release	Ci	≤5.60 E-04	≤4.14 E-04	5.0 E+01
E. Volume of waste released (prior to dilution)	liters	1.43 E+06	4.18 E+06	1.0 E+01
F. Volume of dilution water used during period.	liters	6.93 E+09	1.32 E+10	1.0 E+01

NA-None applicable.

TABLE 4-2B EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, LIQUID EFFLUENTS, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY - JUNE 1982

Nuclides Released	Unit	Continuous Mode[a]	Batch Mode 1st Quarter	Batch Mode 2nd Quarter
strontium-89	Ci		2.67 E-02	1.76 E-02
strontium-90	Ci		1.59 E-03	5.43 E-04
strontium-92	Ci		-	1.71 E-04
cesium-134	Ci		9.75 E-03	≤1.88 E-01
cesium-136	Ci		-	6.12 E-03
cesium-137	Ci		2.03 E-02	≤1.70 E-01
iodine-131	Ci		≤1.26 E-03	≤7.88 E-02
cobalt-58	Ci		≤2.23 E-03	≤9.64 E-02
cobalt-60	Ci		3.82 E-02	≤4.06 E-01
iron-59	Ci		≤7.82 E-04	≤3.11 E-03
zinc-65	Ci		≤1.39 E-03	≤6.64 E-03
manganese-54	Ci		1.51 E-02	≤1.17 E-01
manganese-56	Ci		-	≤4.10 E-05
chromium-51	Ci		7.03 E-02	≤1.07 E-01
antimony-124	Ci		-	2.91 E-03
zirconium-niobium-95	Ci		≤1.72 E-03	≤6.62 E-03
molybdenum-99	Ci		1.49 E-04	1.93 E-03
technetium-99m	Ci		≤7.66 E-04	≤5.02 E-03
barium-lanthanum-140	Ci		≤5.24 E-03	≤1.06 E-02
cerium-141	Ci		≤1.34 E-03	≤4.39 E-03
silver-110m	Ci		1.18 E-04	2.58 E-03
sodium-24	Ci		6.77 E-03	2.05 E-03
unidentified	Ci		≤8.87 E-02	≤7.51 E-02
Total for period above	Ci		≤2.92 E-01	≤1.31 E+00
xenon-133	Ci		≤1.52 E-03	≤2.42 E-02
xenon-135	Ci		≤6.09 E-04	≤3.06 E-03

(a) No continuous mode discharges made.

TABLE 4-3 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT, SOLID WASTE AND IRRADIATED FUEL SHIPMENTS, COOPER NUCLEAR STATION, BROWNVILLE, NEBRASKA, JANUARY - JUNE 1982

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

	Unit	6-Month Period	Estimated Total Error (%)
1. Type of waste			
a. Spent resins, filter sludges, evaporator bottoms, etc.	m^3	9.63 E+01	15%
	Ci	2.71 E+02	
b. Dry compressible waste, contaminated equip., etc.	m^3	6.56 E+01	25%
	Ci	3.60 E-02	
c. Irradiated components, control rods, etc.	m^3		
	Ci	None	
d. Other	m^3		
	Ci	None	
2. Estimate of major nuclide composition (by type of waste), percent (%)			
a. chromium-51		9.61 E+00	
cobalt-60		4.07 E+01	
cobalt-58		2.71 E+00	
manganese-54		1.34 E+01	
zinc-65		1.66 E+00	
silver-110m		3.56 E+00	
iodine-131		1.93 E-01	
cesium-137		1.69 E+01	
cesium-134		1.12 E+01	
zirconium-niobium-95		2.77 E-01	
barium-lanthanum-140		2.53 E-01	
b. chromium-51		7.19 E+00	
cobalt-60		4.08 E+01	
cobalt-58		2.39 E+00	
manganese-54		1.67 E+01	
zinc-65		1.36 E+00	
silver-110m		2.28 E+00	
iodine-131		1.11 E-01	
cesium-137		1.64 E+01	
cesium-134		1.21 E+01	
zirconium-niobium-95		4.20 E-01	
iron-59		2.06 E-01	

TABLE 4-3 (CONT.)

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
37	Sole use vehicle	Beatty, Nevada

B. IRRADIATED FUEL SHIPMENTS (Disposition)

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

5. GAMMA DOSE ISOPLETHS

Estimated gamma radiation doses were calculated from the effluent releases presented in Section 4 and the dispersion characteristics presented in Section 3. The NRC supplied computer model GASPAR was used to calculate locations of equal dosage (isopleths). The isopleth figures are presented for both a 5-mile and a 50-mile radius area centered on the Cooper Nuclear Power Station. The periods covered by the figures are January - March, April - June, January - June. Each figure is for a combined release with the vent stack and elevated release point data used together to estimate the gamma dose at each grid point.

The data tables from which the isopleth figures were derived are presented in Appendix C and the GASPAR computer model is discussed in Appendix D. The GASPAR computer model uses the air-released dose models of Regulatory Guide 1.109 (U.S. NRC 1977a).

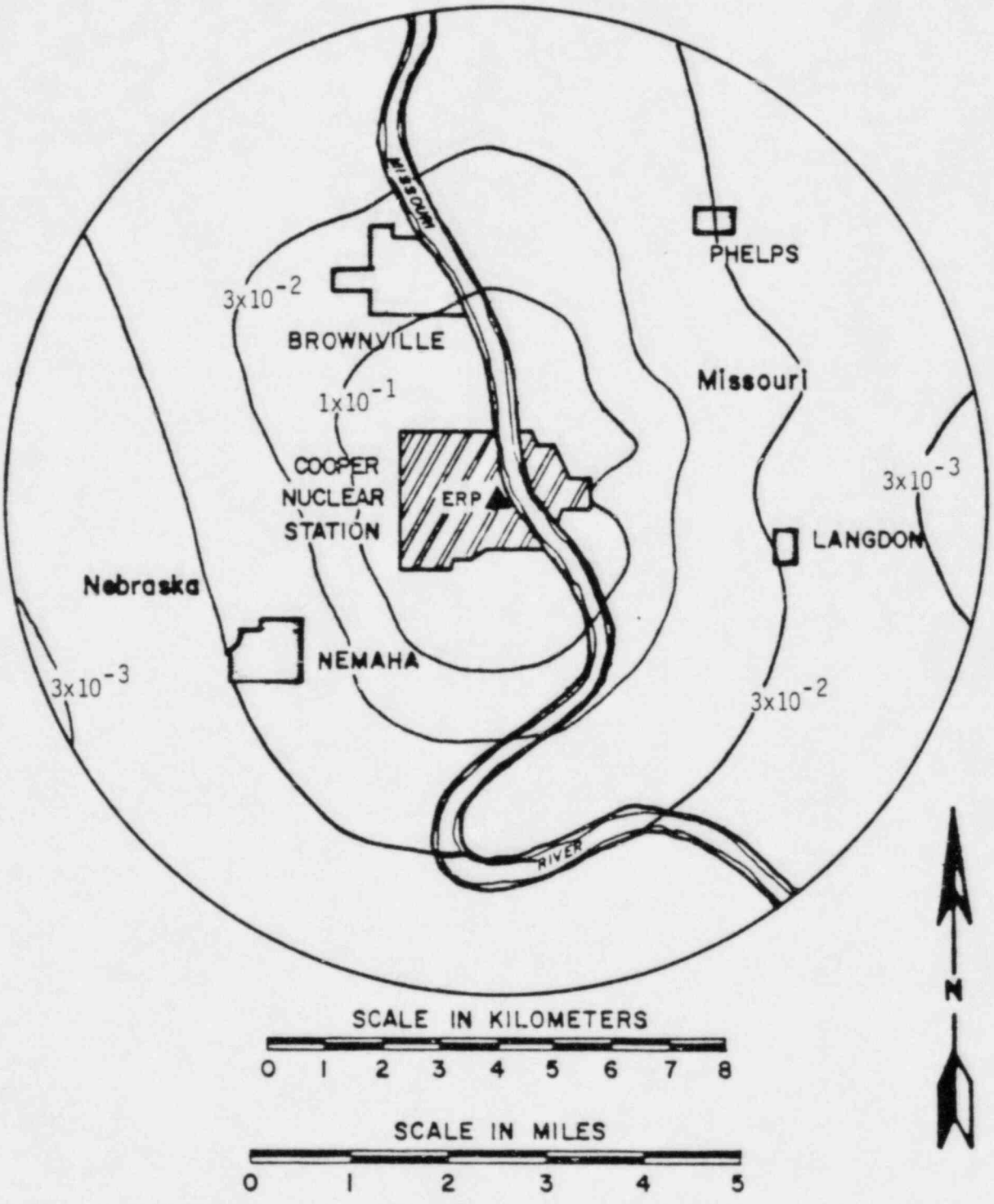

Figure 5-1. Estimated gamma dose (millirads), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, January-March 1982.

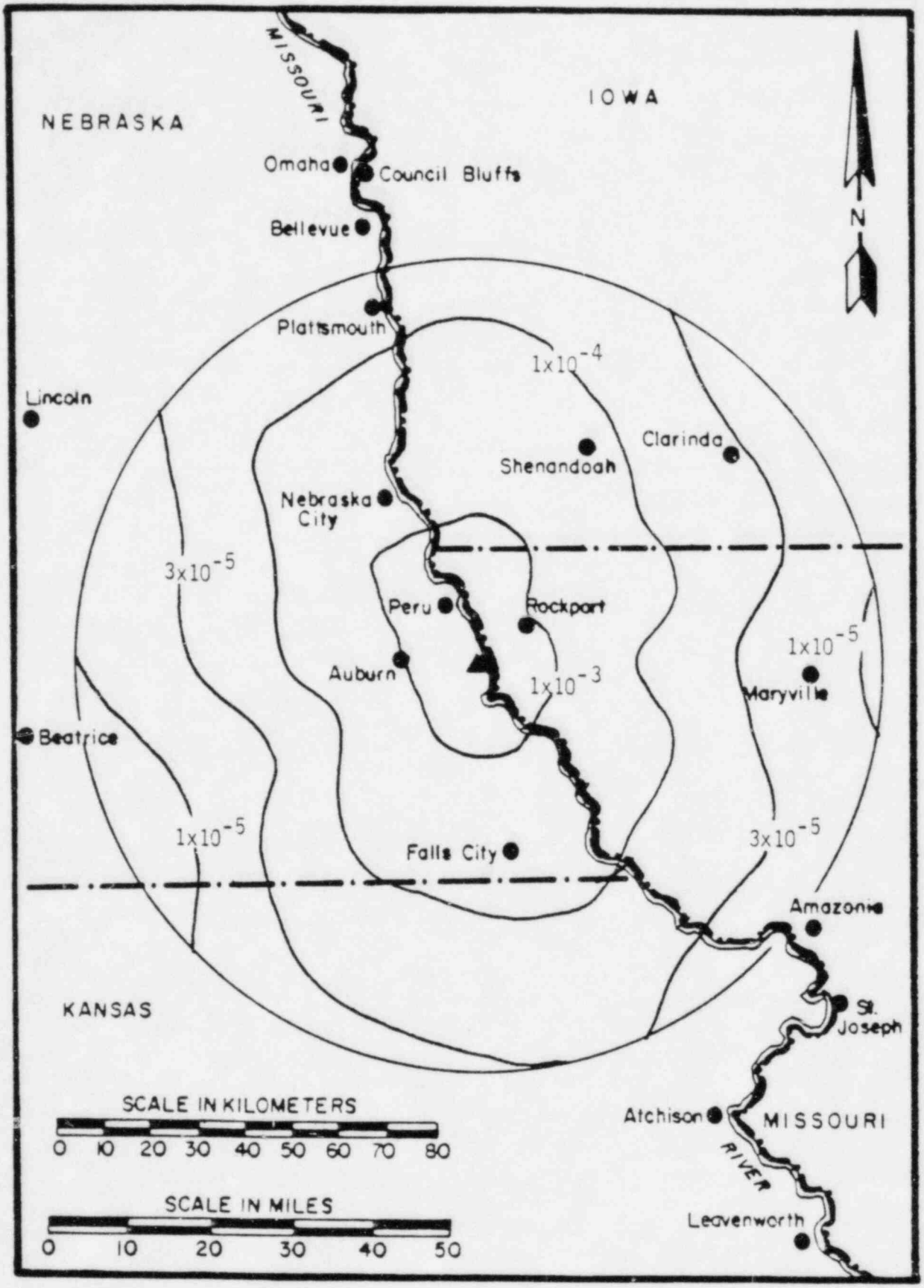

Figure 5-2. Estimated gamma dose (millirads), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-March 1982.

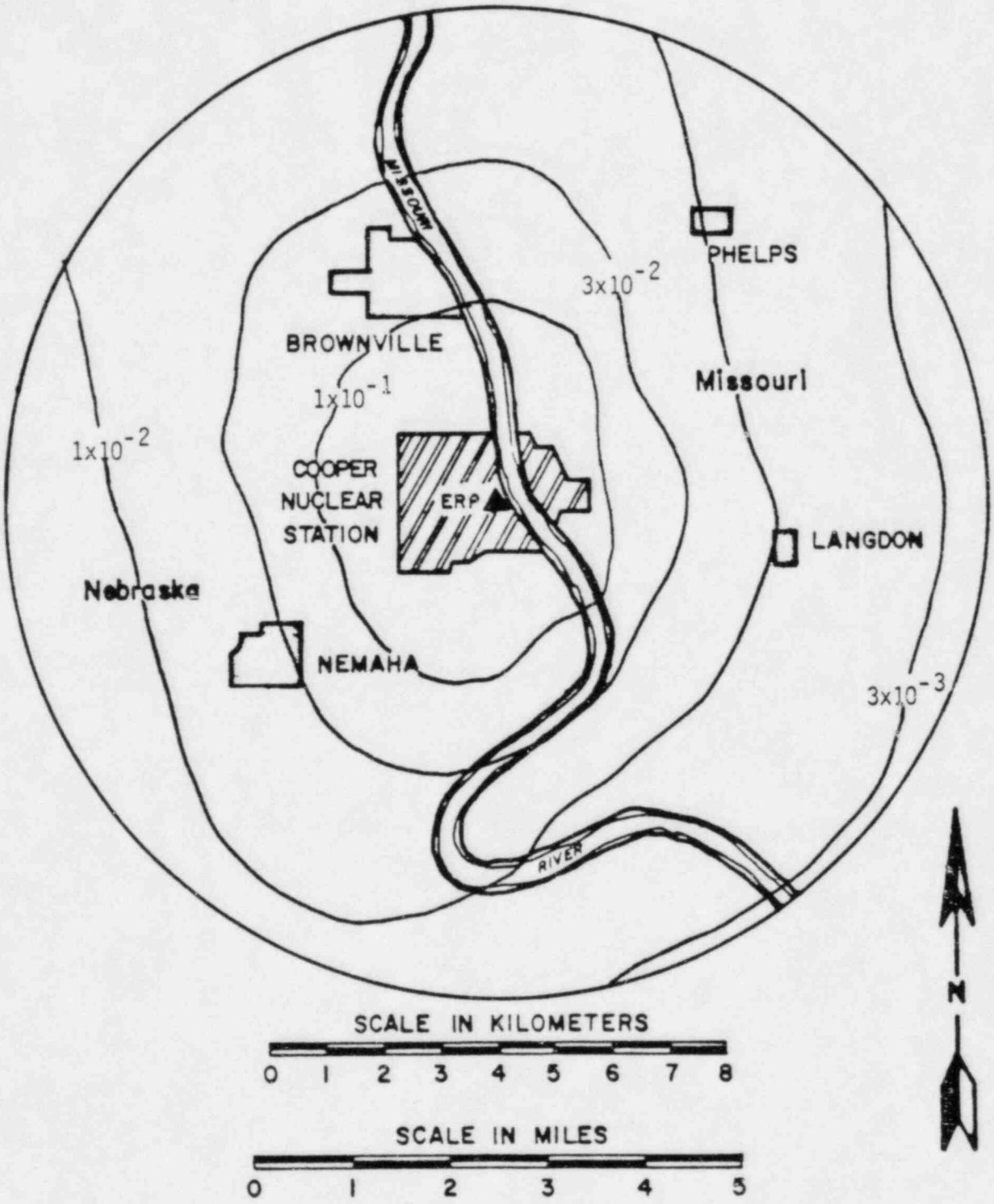

Figure 5-3. Estimated gamma dose (millirads), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, April-June 1982.

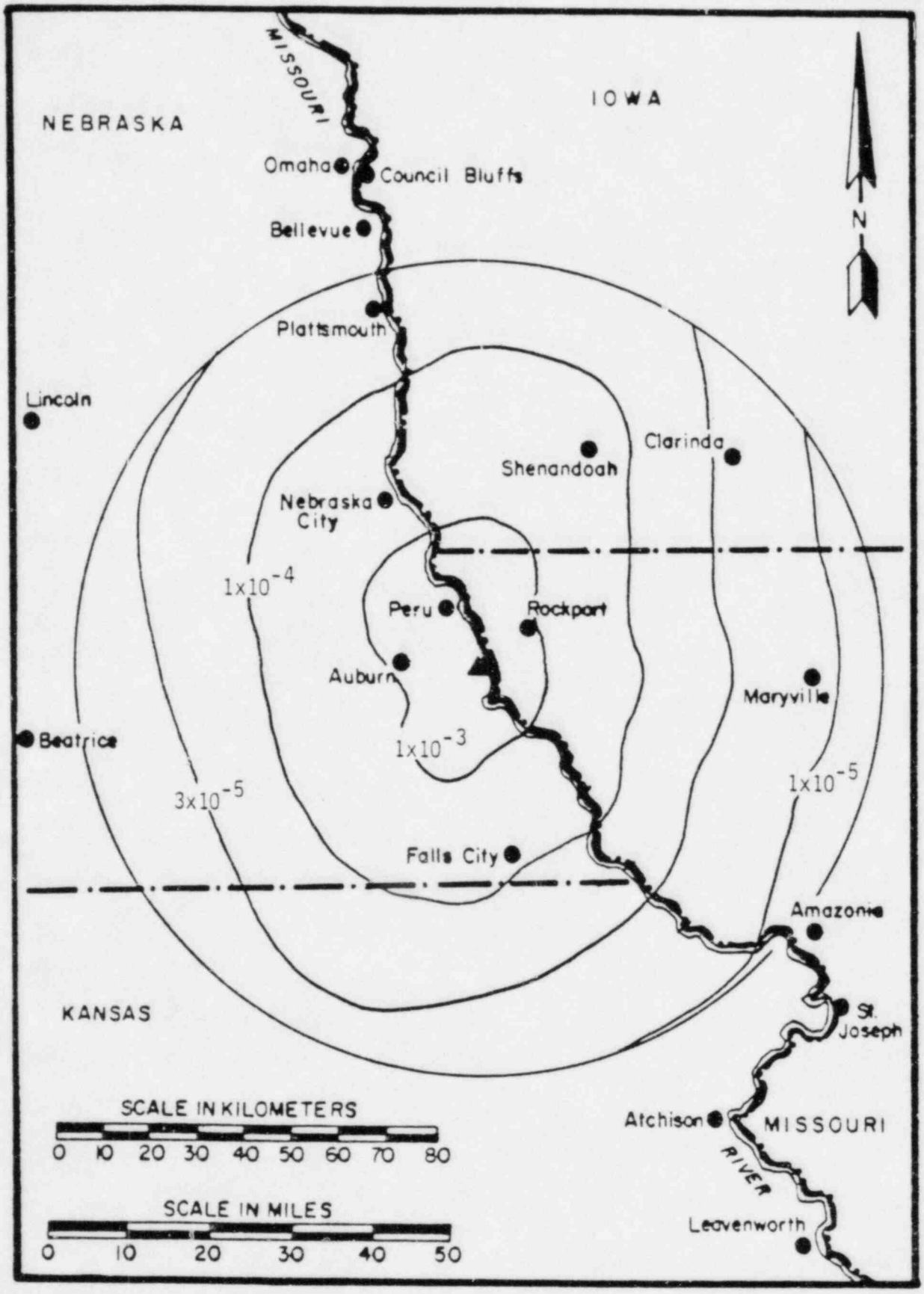

Figure 5-4. Estimated gamma dose (millirads), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, April-June 1982.

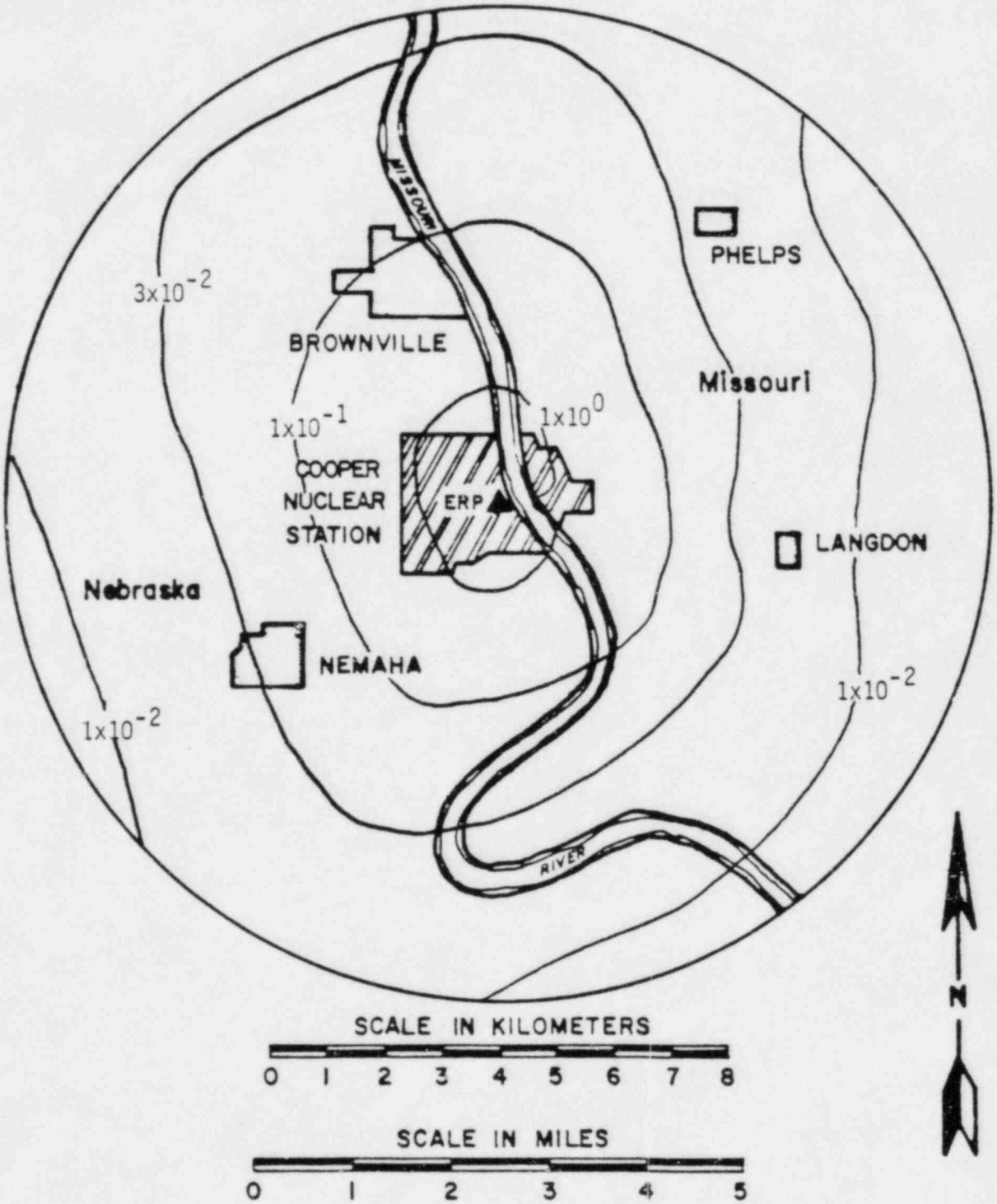

Figure 5-5. Estimated gamma dose (millirads), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-5 miles, January-June 1982.

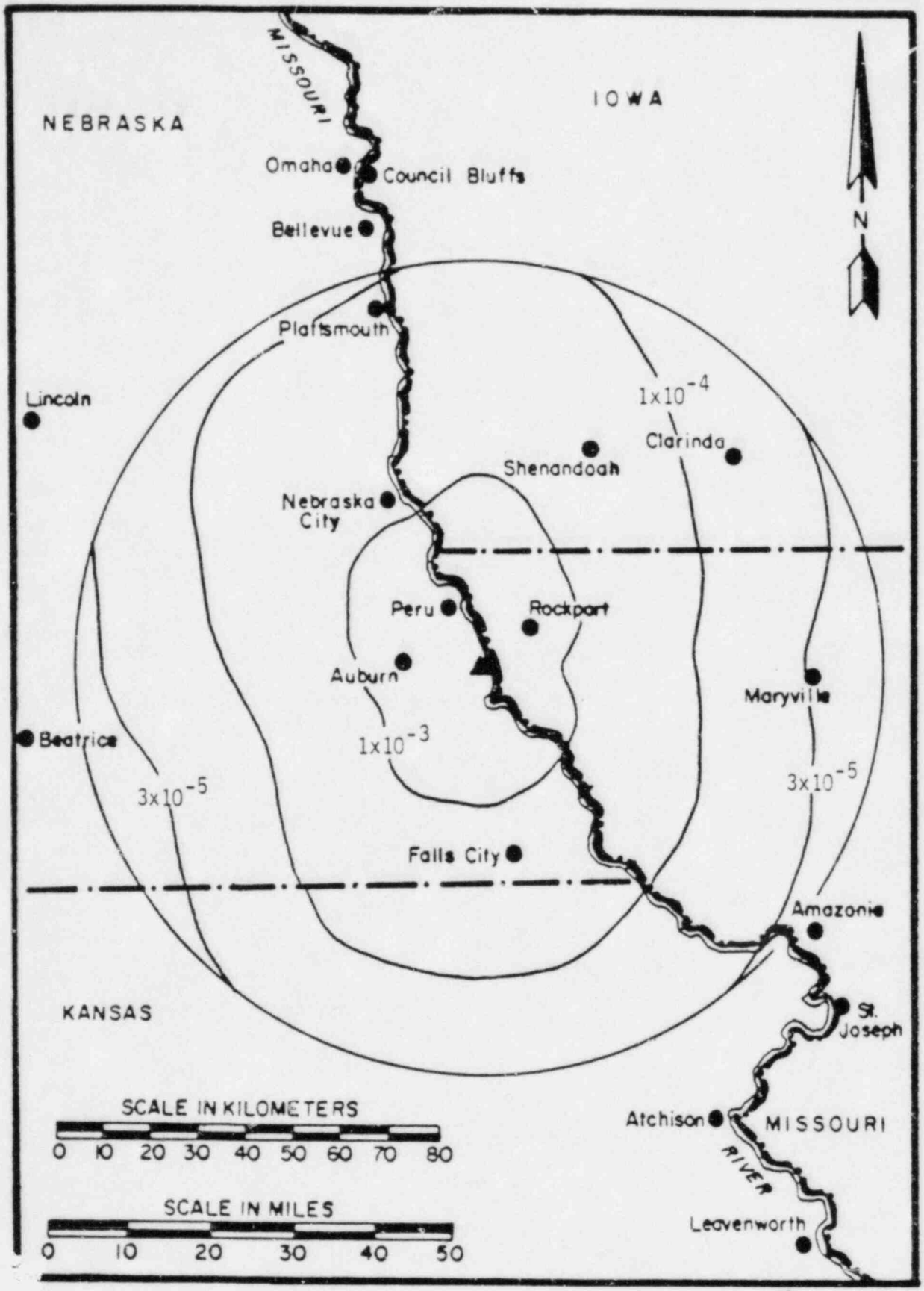

Figure 5-6. Estimated gamma dose (millirads), combined vent and elevated release, Cooper Nuclear Station, Brownville, Nebraska, 0-50 miles, January-June 1982.

6. RADIOLOGICAL DOSE CALCULATIONS FROM WATERBORNE SOURCES

In calculating doses to an individual and population caused by the release of radioactive material via liquid effluent from Cooper Nuclear Power Station, the LADTAP II (ORNL 1980) computer program was used. The LADTAP II program uses the radiological impact models of Regulatory Guide 1.109 (U.S. NRC 1977a) for determining the radiation exposure to man from four principal exposure pathways in the aquatic environment--potable water, aquatic foods, shoreline deposits, and irrigated foods. Doses for both the "maximum individual" and the general population are calculated as a function of age group and pathway for appropriate body organs. The input data are obtained from the effluent release report presented in Section 4.

TABLE 6-1. DOSES TO INDIVIDUALS AT THE SITE BOUNDARY, RESULTING FROM EXPOSURE TO RADIOACTIVITY DISCHARGED IN LIQUID EFFLUENTS, JANUARY - JUNE, 1982, COOPER NUCLEAR POWER STATION.

Period and Pathway	Dose to individual, mrem[a]							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
1st Quarter								
Drinking Water		4.36E-03	1.06E-03	1.29E-03	6.37E-04	3.76E-04	1.50E-04	1.08E-03
Shoreline	1.47E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04
Total	1.47E-04	4.49E-03	1.18E-03	1.41E-03	7.62E-04	5.02E-04	2.75E-04	1.20E-03
2nd Quarter								
Eating Fish		4.27E-01	7.85E-01	5.90E-01	1.78E-02	2.60E-01	8.55E-02	6.35E-02
Drinking Water		9.68E-03	1.42E-02	1.12E-02	4.11E-02	4.86E-03	1.58E-03	6.94E-03
Shoreline	1.74E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03	1.48E-03
Swimming	0.00E+00	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06
Boating	0.00E+00	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05	4.70E-05
Total	1.74E-03	4.38E-01	8.00E-01	6.02E-01	6.04E-02	2.66E-01	8.86E-02	7.19E-02
Total for 1st and 2nd Quarters	1.89E-03	4.42E-01	8.01E-01	6.03E-01	6.10E-02	2.66E-01	8.89E-02	7.31E-02

[a] Calculated doses are based on the following periods of exposures:
Fishing and boating: from April through November
Drinking water and shoreline: from January through December
Swimming: from June through September.

Other assumptions are listed in Table 6-3.

Table 6-2. DOSES TO POPULATION WITHIN A 50 MILE RADIUS, RESULTING FROM EXPOSURE TO RADIOACTIVITY DISCHARGED IN LIQUID EFFLUENTS, JANUARY - JUNE 1982, COOPER NUCLEAR POWER STATION.

Period and Pathway	Dose to population, man-rem[a]							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
1st Quarter								
Drinking Water[b]		3.53E-03	8.59E-04	1.05E-03	4.81E-04	3.06E-04	1.22E-04	9.16E-04
Shoreline	2.30E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04	1.96E-04
Total	2.30E-04	3.73E-03	1.06E-03	1.91E-03	6.77E-04	5.02E-04	3.18E-04	1.11E-03
2nd Quarter								
Drinking Water[b]		4.03E-03	5.94E-03	4.68E-03	1.59E-02	2.02E-03	6.62E-04	2.87E-03
Shoreline	1.39E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03
Swimming	0.00E+00	2.85E-06	2.85E-06	2.85E-06	2.85E-06	2.85E-06	2.85E-06	2.85E-06
Boating	0.00E+00	3.13E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05	3.13E-05
Total	1.39E-03	5.24E-03	7.15E-03	5.89E-03	1.71E-02	3.23E-03	1.88E-03	4.08E-03
Total for 1st and 2nd Quarters	1.62E-03	8.97E-03	8.21E-03	7.80E-03	1.78E-02	3.74E-03	2.19E-03	5.19E-03

[a] Calculated doses are based on the following periods of exposures:
Fishing and boating: from April through November
Drinking water and shoreline: from January through December
Swimming: from June through September

[b] Exposure from drinking water is calculated for the city of St. Joseph, Missouri, nearest public water intake from the Missouri River, 84 river miles down the river, population 85,000.

Other assumptions are listed in Table 6-3.

TABLE 6-3. VALUES OF PARAMETERS USED TO MAKE DOSE ESTIMATES RESULTING FROM LIQUID DISCHARGES, JANUARY - JUNE 1982, COOPER NUCLEAR POWER STATION.

Parameter	Value Assigned		Source of Reference
	Individual	Population	
Population at St. Joseph, Missouri		85,000[a]	
Cooling Flow Rate	773; 700 CFS[b]	773; 700 CFS[b]	Station Data
Dilution Factor	1	22.27; 50.46, 32.91; 44.23[b]	Station Data
Shorewidth Factor	0.2	0.2	U.S. NRC (1977), p. 15
Usage:			
(drinking water)	730 l/hr	370 l/yr/person	U.S. NRC (1977), p. 12,40,69
(fish)	21 Kg/yr	6.9 Kg/yr	U.S. NRC (1977), p. 12,40,69
(shoreline exposure)	12 hr/yr	8.3 hr/yr	U.S. NRC (1977), p. 40
(swimming)	8 hr/yr	6 hr/yr	Oak Ridge (1980), p. 144
(boating)	76 hr/yr	44 hr/yr	Oak Ridge (1980), p. 144
Holding time:			
(drinking water)	12 hr	22.4 hr[c]	U.S. NRC (1977), p. 40
(fish)	24 hr	168 hr	U.S. NRC (1977), p. 40
(shoreline exposure)	0 hr	22.4[c] hr	U.S. NRC (1977), p. 12,69
(swimming)	0 hr	22.4[c] hr	U.S. NRC (1977), p. 12,69
(boating)	0 hr	22.4[c] hr	U.S. NRC (1977), p. 12,69

[a] Assumed population for 1974. Last available population data is 69,673 persons for 1964
[b] First and second quarters for 1982, respectively.
[c] Based on an average Missouri River water flow of 5.5 ft/sec. 84 river miles down the river.

For definitions of parameters, refer to Oak Ridge (1980) and U.S. NRC (1977).

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APPENDIX A

MONTHLY DATA TABLES

Data from the continuously monitored meteorological parameters collected at the Cooper Nuclear Station were reduced to hourly averages, reviewed for errors, scaled for calibration, and prepared for further analysis by computer. The hourly average values are presented in the monthly data tables in this section.

Data strip charts were reduced to hourly average values using an automatic digitizer. The averaging period was centered on the hour; that is, the hourly average for 1400 was obtained from the data trace between 13:30 and 14:30 on the strip chart. The hourly average values were computed from a minimum of 15 minutes of strip chart data trace. Precipitation data was reduced manually by totalling the number of tick marks (each tick mark equaling 0.01 inches of precipitation) within an hour centered on the hour as for the other parameters.

Each table contains one month of data for one parameter. The tables are captioned with the parameter name, unit of measurement, site name, month, and year. The mean hourly average for each hour of the day is shown in the last row of the main table. The mean hourly average, maximum hourly average, and minimum hourly average for the month are shown beneath the main table. The number of valid observations and the percentage of data recovered also are shown beneath the main table. Daily statistics are shown at the foot of the page. These statistics are the daily maximum, daily minimum, and daily mean hourly averages. Beneath the daily statistics table, the mean daily maximum and mean daily minimum hourly averages are shown. Totals, rather than means, are reported for precipitation data. Only the hourly average values, number of valid observations, and the percentage of data recovered are reported for wind direction data.

The notation "-M-" in the tables indicates a missing data value. The value may be missing because of any of several reasons: equipment failure, power failure, calibrations, recorder inking problems, or sensor icing.

ARRANGEMENT OF MONTHLY DATA TABLES

ARRANGEMENT OF MONTHLY DATA TABLES (CONT.)

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	13	10	8	8	8	5	2	0	0	1	2	3	7	12	13	13	14	13	14	14	15	13	16	16
2	13	15	23	25	19	18	16	18	16	10	8	8	6	4	12	16	18	24	17	18	15	13	17	12
3	8	5	5	7	6	8	8	13	10	8	8	11	14	12	11	14	15	15	15	16	16	16	19	17
4	19	16	12	15	17	14	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
5	-M-	14	13	13	14	14	12	13	13	11	8	11	20	23	20	16	11	14	13	10	13	13	20	24
6	20	19	21	25	22	20	20	21	22	22	19	18	18	20	18	17	17	17	15	14	16	14	18	15
7	13	14	15	14	11	12	9	5	11	9	6	6	4	5	8	9	9	9	11	15	14	13	15	16
8	12	14	16	18	16	15	14	15	13	12	4	4	5	6	5	5	6	10	9	10	10	8	10	14
9	18	19	20	19	18	20	21	19	12	9	10	12	14	14	19	19	15	17	22	27	30	35	35	32
10	33	28	27	24	25	23	21	20	21	20	19	18	17	20	17	18	17	18	17	18	20	20	21	21
11	16	16	15	16	21	15	14	15	8	6	9	8	3	6	7	4	1	3	5	7	5	7	7	5
12	7	7	7	7	7	6	7	7	9	6	6	6	8	9	10	10	10	12	14	16	16	16	12	13
13	11	11	12	11	9	10	10	13	11	8	6	3	2	6	7	6	6	5	6	7	4	3	3	4
14	4	5	6	4	5	3	8	10	6	5	4	4	4	3	2	2	4	6	4	6	10	6	12	12
15	9	8	7	8	10	9	7	6	3	2	3	15	23	26	30	32	28	28	26	27	33	31	32	31
16	34	31	29	24	16	13	16	18	20	18	17	16	15	15	11	11	7	6	6	6	13	13	14	16
17	15	16	17	19	19	23	27	28	29	29	23	22	25	24	22	20	17	13	15	14	15	14	12	12
18	10	6	7	5	5	2	4	4	4	5	5	4	8	12	7	7	13	10	10	8	12	13	12	15
19	14	9	7	8	8	7	7	2	1	2	3	2	8	13	16	14	11	12	12	14	15	14	11	11
20	9	11	10	10	10	11	11	11	12	12	14	13	12	10	8	9	10	13	13	11	10	10	11	10
21	12	9	10	11	15	16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	13	13	11	11	9	13
22	14	14	16	18	16	11	14	11	-M-	-M-	-M-	-M-	-M-	-M-	-M-	22	22	29	35	39	37	34	33	33
23	32	31	30	27	26	24	23	22	21	22	27	27	28	26	25	22	20	18	14	17	18	19	16	16
24	13	12	10	10	11	7	6	5	4	4	2	2	4	6	7	8	9	8	7	10	14	8	6	15
25	14	26	28	35	32	23	22	15	10	10	12	11	11	10	11	14	15	11	10	9	5	3	2	5
26	5	7	10	10	12	11	13	13	16	14	13	15	17	22	21	21	22	22	24	27	26	26	27	26
27	29	29	30	29	23	17	18	19	20	13	11	12	9	13	12	19	22	12	20	20	25	24	20	19
28	21	21	18	20	14	18	12	9	9	5	6	5	4	5	6	7	9	11	12	15	16	18	21	19
29	16	16	17	19	20	19	18	13	17	16	15	12	9	10	9	9	9	6	7	13	13	16	17	19
30	18	14	16	16	15	14	13	11	14	13	11	10	13	14	19	17	15	19	20	22	21	19	22	21
31	20	19	20	19	18	18	16	16	16	14	11	9	6	9	13	9	9	7	5	4	3	2	7	9
HOURLY MEAN	16	15	16	16	15	14	13	13	12	11	10	10	11	13	13	13	13	13	14	15	16	15	16	16

MAXIMUM = 39 MINIMUM = 0 MEAN = 14 706 VALID OBSERVATIONS (94.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	16	25	19	19	24	25	16	18	35	33	21	16	13	12	33	34
MIN	0	4	5	12	8	14	4	4	9	17	1	6	2	2	2	6
MEAN	9	15	12	16	14	19	10	10	20	21	9	9	7	6	18	16

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	29	15	16	14	16	39	32	15	35	27	30	21	20	22	20
MIN	12	2	1	8	9	11	14	2	2	5	9	4	6	10	2
MEAN	20	8	9	11	12	23	23	8	14	17	19	13	14	16	12

MEAN MAXIMUM = 23 MEAN MINIMUM = 6

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	9	11	9	10	12	13	14	13	14	14	14	9	8	11	12	15	16	13	15	12	11	7	8	13
2	10	7	7	6	4	6	8	12	14	15	15	14	12	16	17	18	20	21	22	21	22	23	23	22
3	25	25	26	24	25	25	25	21	20	20	19	18	19	18	17	17	17	15	15	14	15	14	16	16
4	14	14	14	13	11	12	9	10	7	7	7	6	7	7	6	8	14	12	12	12	10	11	12	13
5	11	12	12	14	16	17	17	17	15	13	12	11	14	12	14	14	14	11	7	8	10	11	19	19
6	11	6	8	12	13	11	11	12	11	7	6	6	6	9	11	12	14	16	16	17	17	13	15	15
7	12	10	10	8	7	7	-M-	-M-	-M-	-M-	-M-	6	8	7	7	4	3	3	6	8	10	9	10	12
8	14	18	18	18	18	17	16	14	12	12	12	11	11	14	16	17	19	18	15	15	14	12	15	15
9	18	23	20	17	14	13	14	19	17	16	12	11	15	13	13	13	9	6	2	3	8	12	12	14
10	15	13	11	13	12	11	11	10	12	12	11	15	15	12	10	8	7	5	8	7	5	6	9	10
11	8	8	9	6	7	10	10	9	8	6	6	4	2	1	2	0	0	0	2	5	7	7	6	1
12	0	0	5	4	1	2	3	6	4	0	0	1	1	5	3	5	5	7	11	14	12	10	12	11
13	9	7	8	9	7	10	11	12	12	12	15	15	19	20	15	13	15	13	15	16	18	19	16	17
14	15	15	18	19	15	19	19	16	18	20	17	20	22	22	23	21	18	17	17	19	20	15	12	15
15	16	14	9	9	8	6	9	13	12	10	9	7	6	6	5	3	2	6	7	7	7	7	6	6
16	6	10	13	10	7	7	10	12	16	15	14	12	11	10	11	10	8	6	6	4	2	7	8	5
17	6	8	6	5	5	7	4	5	6	6	3	2	1	0	2	2	4	7	3	3	2	4	3	2
18	5	4	3	3	3	6	6	9	8	9	8	8	6	6	6	3	2	1	2	3	5	9	8	7
19	9	11	11	11	7	8	8	8	6	10	8	9	12	12	11	18	20	18	17	16	18	17	17	19
20	20	19	16	11	11	6	8	15	11	5	8	11	16	14	17	20	17	16	16	15	12	11	14	14
21	11	15	9	9	5	5	4	3	2	4	1	2	4	5	4	2	2	3	5	10	13	9	14	15
22	13	10	6	6	9	9	13	13	12	12	10	8	10	9	10	14	16	12	14	17	14	12	22	27
23	23	24	26	21	19	15	-M-	-M-	18	17	16	[illegible]	14	12	11	12	14	13	14	14	13	9	10	10
24	13	17	11	12	17	18	15	16	18	21	22	20	20	22	24	25	25	22	15	16	17	18	16	17
25	17	15	14	11	11	9	8	11	9	8	9	9	7	7	[illegible]	7	7	7	7	8	10	11	10	8
26	7	9	7	6	7	8	8	5	4	3	7	6	[illegible]	6	[illegible]	6	7	8	9	12	12	13	11	9
27	8	8	5	5	7	10	11	10	7	4	5	9	9	10	11	9	12	12	13	15	15	17	17	15
28	12	16	15	12	11	12	14	13	14	12	12	14	15	15	14	13	12	10	10	10	13	12	9	7
HOURLY MEAN	12	12	12	11	10	11	11	12	11	11	10	10	11	11	11	11	11	11	11	11	12	12	12	13

MAXIMUM = 27 MINIMUM = 0 MEAN = 11 665 VALID OBSERVATIONS (99.0%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAX	16	23	26	14	19	17	12	19	23	15	10	14	20	23
MIN	7	4	14	6	7	6	3	11	2	5	0	0	7	12
MEAN	12	15	19	10	13	12	8	15	13	10	5	5	13	18

DAY	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAX	16	16	8	9	20	20	15	27	26	25	17	13	17	16
MIN	2	2	0	1	6	5	1	6	9	11	7	3	4	7
MEAN	8	9	4	5	13	13	7	12	15	18	9	8	10	12

MEAN MAXIMUM = 18 MEAN MINIMUM = 5

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	7	5	6	4	3	5	4	1	0	5	7	8	11	14	15	16	15	14	16	23	22	19	19	20
2	23	21	18	20	18	11	6	6	19	20	19	16	22	19	21	20	20	17	20	20	18	19	18	17
3	16	15	18	20	17	16	15	16	15	17	16	14	13	13	12	-M-	10	11	11	11	13	14	13	14
4	17	19	20	18	16	15	16	15	15	16	15	16	15	14	14	13	11	12	11	9	10	10	11	11
5	16	17	14	17	17	15	16	18	15	16	16	13	11	11	7	8	7	8	9	9	7	4	3	5
6	2	4	3	3	5	8	6	8	7	4	8	7	11	12	14	17	24	24	22	16	16	18	19	18
7	12	13	10	10	7	6	4	2	1	0	2	2	3	2	3	6	8	5	5	6	11	13	16	16
8	17	14	13	12	10	8	8	8	4	5	7	25	29	23	22	23	24	22	16	13	13	9	6	8
9	2	5	4	3	5	5	6	9	12	14	13	8	8	10	10	11	11	9	8	10	8	12	12	10
10	9	11	13	11	9	11	10	11	13	13	12	12	11	15	17	15	11	10	19	18	14	23	27	13
11	17	20	24	20	19	19	14	8	3	4	5	4	2	3	2	0	2	7	8	-M-	-M-	-M-	-M-	-M-
12	-M-	-M-	-M-	-M-	18	18	19	17	17	20	21	22	29	30	24	30	30	18	15	23	18	18	18	17
13	15	17	17	17	15	20	6	9	10	9	7	6	8	11	10	7	5	3	3	0	4	7	9	12
14	12	9	12	14	16	15	15	16	15	17	17	21	21	22	17	15	17	20	20	16	17	16	13	13
15	11	9	8	8	9	9	7	9	9	10	10	11	11	9	11	9	9	8	11	10	29	20	13	12
16	8	6	9	9	6	4	7	6	9	7	10	13	11	11	9	9	7	9	11	11	8	10	8	9
17	7	11	10	8	10	11	13	13	17	15	12	9	10	8	7	6	6	7	7	8	8	7	5	7
18	6	8	6	5	7	10	11	11	11	11	11	12	11	14	16	16	14	12	11	13	13	11	19	20
19	14	15	19	20	17	15	13	16	19	24	22	22	19	19	16	13	9	5	2	7	11	8	7	5
20	6	5	7	5	8	21	14	12	13	15	15	14	11	14	19	24	25	22	21	19	19	18	21	22
21	21	21	18	18	15	12	12	8	14	18	18	15	16	15	14	12	12	8	7	7	9	10	11	10
22	12	13	15	12	10	5	10	11	8	10	11	11	8	6	5	3	3	3	0	2	6	9	11	13
23	14	14	16	15	14	14	12	15	15	16	19	20	28	28	26	24	24	24	21	18	14	14	11	13
24	13	12	8	6	9	8	14	12	7	5	7	4	6	9	9	10	9	11	9	11	16	11	9	14
25	21	23	20	19	22	16	14	16	13	12	14	16	21	21	21	21	21	19	17	13	13	13	12	11
26	6	4	4	1	0	0	1	3	4	3	5	4	2	3	2	1	2	2	6	11	14	16	17	17
27	14	12	13	13	13	14	16	14	13	13	11	9	9	10	10	9	7	9	10	14	15	17	18	18
28	18	15	12	13	13	12	10	11	12	13	15	15	18	21	23	20	21	22	20	-M-	-M-	-M-	-M-	-M-
29	-M-	23	26	21	18	20	21	18	23	27	33	33	35	35	34	32	33	29	32	29	28	34	28	31
30	32	32	33	34	38	28	31	30	26	24	26	27	28	28	31	31	33	30	23	19	23	19	19	21
31	17	15	17	17	18	21	19	17	16	10	8	10	11	13	15	16	14	10	8	9	14	17	19	16
HOURLY MEAN	13	14	14	13	13	13	12	12	12	13	13	14	14	15	15	15	14	13	13	13	14	14	14	14

MAXIMUM = 38 MINIMUM = 0 MEAN = 13 728 VALID OBSERVATIONS (97.8%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	23	23	20	20	18	24	16	29	14	27	24	30	20	22	29	13
MIN	0	6	10	9	3	2	0	4	2	9	0	15	0	9	7	4
MEAN	11	18	14	14	12	12	7	14	8	14	10	21	9	16	11	9

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	17	20	24	25	21	15	28	16	23	17	18	23	35	38	21
MIN	5	5	2	5	7	0	11	4	11	0	7	10	18	19	8
MEAN	9	12	14	15	13	8	18	10	17	5	12	16	28	28	14

MEAN MAXIMUM = 22 MEAN MINIMUM = 6

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	17	13	12	11	12	14	13	13	10	20	23	27	23	23	22	22	22	20	20	19	21	18	23	25
2	24	23	24	27	23	22	25	30	33	35	38	36	35	35	38	37	21	29	40	39	39	40	41	45
3	40	39	43	43	42	33	33	31	30	26	25	28	26	27	26	24	21	18	15	12	11	11	13	12
4	13	15	14	13	13	12	11	12	14	15	15	17	17	18	18	17	16	16	17	17	17	16	19	16
5	14	19	20	19	18	19	24	24	24	22	25	24	24	26	25	24	23	19	19	17	15	16	14	10
6	9	8	9	8	6	6	6	4	3	3	1	3	3	4	7	7	7	8	9	12	12	12	12	16
7	16	16	15	15	19	19	20	20	19	20	23	25	24	25	22	20	18	15	13	11	10	9	9	8
8	5	6	5	3	4	3	3	2	1	0	0	0	3	4	4	3	5	11	13	15	18	17	18	18
9	15	11	14	14	13	10	9	7	3	5	7	5	4	5	5	5	6	6	8	10	12	12	8	7
10	11	16	15	19	14	15	16	13	11	13	16	17	18	18	20	23	19	15	7	3	11	11	10	10
11	10	11	12	12	12	14	12	9	6	5	8	9	14	16	18	23	25	24	22	20	16	22	22	23
12	21	23	23	21	17	17	14	15	11	13	20	20	18	11	14	13	23	24	18	15	14	17	19	18
13	17	10	11	15	15	14	13	14	9	6	5	6	4	5	3	1	0	1	1	2	6	12	16	14
14	15	17	17	16	13	18	9	13	16	15	14	17	18	20	23	24	22	24	24	-M-	-M-	-M-	-M-	-M-
15	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	19	6	8	13	17	19	25	23	23	25	27	24	21	12	11
16	14	18	21	18	17	17	15	11	9	16	21	24	26	35	35	33	34	30	30	27	22	22	19	17
17	21	22	22	20	15	18	18	14	13	10	11	13	15	15	13	14	12	9	7	3	9	15	15	13
18	12	14	15	15	14	12	14	24	23	24	27	30	31	31	28	28	26	25	22	19	19	21	18	21
19	21	15	13	12	13	8	10	5	4	4	4	18	23	24	22	23	24	21	20	18	18	18	16	18
20	17	16	16	21	18	18	17	20	24	26	25	23	20	20	20	22	22	19	18	15	10	8	5	3
21	4	4	3	1	3	5	6	7	4	3	6	6	6	6	7	9	11	6	4	7	10	7	1	3
22	2	12	10	8	8	11	10	8	7	8	4	4	3	3	1	2	1	1	0	1	2	8	12	12
23	12	14	15	17	14	15	15	14	14	20	19	17	18	18	18	19	19	17	17	16	17	15	17	18
24	18	18	16	15	17	19	18	17	18	18	22	22	22	22	23	25	19	20	20	20	19	22	20	17
25	11	7	7	9	8	7	7	7	4	4	3	5	9	13	10	7	7	7	8	9	9	8	5	8
26	3	19	20	18	17	17	18	19	15	16	16	17	18	16	15	14	13	14	12	11	12	12	12	14
27	14	9	9	11	11	7	7	8	10	13	12	9	7	4	5	8	9	8	10	10	9	8	10	12
28	12	14	13	9	8	17	18	20	18	20	21	13	12	13	14	16	15	17	19	16	15	14	11	11
29	10	12	15	11	7	6	7	8	5	6	12	11	9	9	9	7	7	7	8	7	8	6	3	3
30	1	4	5	8	4	4	1	1	1	3	2	3	1	1	6	7	5	3	1	2	1	0	0	2
HOURLY MEAN	14	15	15	15	14	14	13	13	12	14	14	15	16	16	16	17	16	15	15	14	14	14	14	14

MAXIMUM = 45 MINIMUM = 0 MEAN = 15 706 VALID OBSERVATIONS (98.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	27	45	43	19	26	16	25	18	15	23	25	24	17	24	27
MIN	10	21	11	11	10	1	8	0	3	3	5	11	0	9	6
MEAN	18	33	26	15	20	7	17	7	8	14	15	17	8	18	18

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	35	22	31	24	26	11	12	20	25	13	20	14	21	15	8
MIN	9	3	12	4	3	1	0	12	15	3	3	4	8	3	0
MEAN	22	14	21	15	18	5	6	17	19	7	15	9	15	8	3

MEAN MAXIMUM = 22 MEAN MINIMUM = 6

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3	4	3	2	4	2	3	3	2	3	2	3	7	5	5	5	4	1	1	-M-	3	6	6	6
2	7	6	6	5	6	6	4	4	4	4	8	10	10	9	11	11	13	12	12	12	14	15	15	13
3	12	12	11	10	7	10	11	11	12	14	18	19	19	19	19	19	19	19	19	18	19	19	19	23
4	19	18	21	20	21	21	22	25	23	25	24	26	30	31	30	25	28	25	23	24	22	21	23	15
5	6	14	7	7	9	11	10	6	5	9	9	12	17	23	23	20	21	20	21	21	18	17	15	16
6	15	13	15	15	13	22	24	26	25	19	18	15	12	9	8	7	6	5	5	8	13	16	18	18
7	16	18	17	9	7	7	6	5	4	4	5	8	9	10	11	11	11	12	14	12	12	12	15	15
8	15	16	20	20	15	11	15	16	19	19	14	16	17	18	20	21	24	25	23	20	21	22	23	22
9	21	18	18	19	19	19	20	20	19	27	28	31	30	32	35	34	34	31	28	24	21	21	23	24
10	24	25	21	22	22	20	23	21	23	29	32	31	31	30	30	29	27	27	23	22	21	15	14	14
11	14	13	15	16	15	23	18	15	15	16	17	9	11	14	17	15	15	17	15	12	12	16	24	6
12	10	6	9	11	2	5	7	5	7	8	7	5	6	8	9	13	12	10	9	8	9	11	11	11
13	11	12	11	11	10	11	8	7	9	9	12	9	7	6	3	8	7	8	9	7	11	15	18	21
14	15	13	13	11	12	11	11	10	10	8	9	9	6	6	8	11	17	14	12	13	13	13	7	8
15	6	7	6	9	8	7	7	7	11	10	10	15	16	16	19	20	16	17	1	2	6	13	15	12
16	9	11	11	14	11	11	12	-M-	-M-	-M-	-M-	-M-	5	11	13	12	15	13	9	6	12	12	16	17
17	9	11	10	10	8	4	3	2	5	5	10	9	9	10	12	13	11	10	-M-	-M-	-M-	-M-	-M-	-M-
18	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	3	1	2	4	5	7	7	6	8	11	12	9	9	12	11	11
19	14	14	11	11	9	9	10	8	7	7	10	9	11	12	15	16	15	14	14	11	13	12	13	8
20	10	10	11	7	8	12	15	6	5	4	4	6	5	2	6	9	9	13	24	29	19	22	25	19
21	16	6	19	21	19	13	5	7	9	9	9	7	8	9	9	12	12	12	12	13	12	10	9	13
22	9	11	12	13	13	14	15	16	14	13	14	15	13	10	10	10	9	11	8	7	4	3	3	6
23	6	2	4	5	1	1	1	2	2	1	2	1	1	0	2	2	2	4	4	8	11	10	10	10
24	10	9	11	8	11	11	9	7	4	3	4	3	4	5	8	11	11	10	9	10	10	11	12	11
25	9	10	10	13	13	13	12	13	14	14	14	12	11	11	11	11	13	12	9	6	9	8	4	1
26	5	12	6	5	9	10	5	8	7	5	10	9	10	12	11	11	10	11	7	2	3	5	4	4
27	6	10	9	10	9	6	4	6	4	4	4	3	3	8	5	5	5	5	4	3	5	7	8	8
28	8	10	11	8	10	10	11	9	9	11	13	11	15	15	19	18	14	16	13	15	15	17	12	9
29	10	7	3	9	11	12	7	6	9	13	10	10	10	13	10	8	6	7	5	5	7	7	9	9
30	9	9	10	12	12	7	11	15	13	21	19	10	5	3	3	5	8	7	5	16	19	18	19	23
31	23	24	18	20	18	25	20	22	21	25	27	22	23	22	21	22	22	20	18	18	16	16	15	14
HOURLY MEAN	12	12	12	12	11	11	11	11	10	11	12	12	12	12	13	14	14	14	12	12	12	13	14	13

MAXIMUM = 35 MINIMUM = 0 MEAN = 12 724 VALID OBSERVATIONS (97.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	7	15	23	31	23	26	18	25	35	32	24	13	21	17	20	17
MIN	1	4	7	15	5	5	4	11	18	14	6	2	3	6	1	5
MEAN	4	9	16	24	14	14	10	19	25	24	15	8	10	11	11	12

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	13	12	16	29	21	16	11	12	14	12	10	19	13	23	27
MIN	2	1	7	2	5	3	0	3	1	2	3	8	3	3	14
MEAN	8	7	11	12	11	11	4	8	11	8	6	12	8	12	20

MEAN MAXIMUM = 19 MEAN MINIMUM = 5

318 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	14	11	10	10	11	7	6	3	2	3	2	2	1	3	3	3	1	3	0	1	2	7	3	9
2	6	9	6	8	7	2	0	3	5	7	2	4	2	7	7	8	8	8	5	9	10	12	10	9
3	8	8	6	7	9	10	9	9	7	8	7	8	10	11	10	9	11	10	-M-	-M-	-M-	-M-	-M-	M-
4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	2	4	6	8	9	12	11	9
5	9	9	7	8	8	8	9	7	7	11	12	12	15	16	16	18	20	20	17	17	14	14	12	13
6	19	20	20	21	21	18	22	25	26	27	28	24	21	18	16	18	19	18	14	12	14	14	8	8
7	7	3	14	21	12	15	13	12	9	10	10	9	5	4	3	3	4	8	4	1	4	5	6	3
8	6	8	10	9	8	11	9	12	18	12	14	19	17	19	20	18	17	12	10	7	10	7	8	10
9	11	9	22	8	9	14	13	12	20	12	14	18	17	18	18	19	17	17	17	17	16	11	6	3
10	3	3	5	7	7	10	5	4	3	5	5	4	3	2	3	3	2	3	3	4	6	9	9	9
11	11	11	4	4	7	3	1	5	6	7	4	8	8	8	9	8	9	9	8	7	9	10	8	9
12	6	5	5	6	1	4	3	1	2	3	2	3	2	1	3	2	1	3	10	0	0	1	0	1
13	2	2	1	6	0	0	1	0	0	3	4	7	9	10	11	14	11	8	11	13	12	13	16	15
14	13	13	11	10	10	10	13	17	21	17	16	13	13	13	16	25	26	22	17	20	21	28	35	29
15	26	13	6	7	11	6	5	5	2	4	10	15	14	15	14	12	13	17	15	8	14	16	17	16
16	11	15	14	10	9	10	10	7	5	3	4	4	4	3	2	1	1	3	3	3	2	6	8	11
17	12	14	13	15	12	11	13	14	13	12	13	12	9	8	6	3	3	7	8	5	7	7	5	8
18	5	1	2	4	3	13	12	9	13	14	17	15	14	14	15	14	13	12	12	12	8	8	9	13
19	13	14	12	12	10	11	9	6	5	5	5	5	7	8	11	12	11	11	9	3	4	11	16	19
20	17	16	15	16	14	12	8	4	3	5	5	8	9	6	9	8	10	-M-	-M-	-M-	7	7	8	6
21	6	4	2	0	1	3	4	2	1	2	5	4	2	2	2	3	5	3	3	9	13	12	9	9
22	13	6	8	10	11	10	7	6	6	8	8	9	8	6	4	1	1	1	2	6	9	11	11	12
23	13	12	13	14	14	14	11	-M-	-M-	-M-	12	14	15	14	13	14	11	7	7	11	11	10	10	10
24	10	12	8	8	8	7	7	6	5	6	6	10	12	10	12	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
25	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	11	11	-M-	-M-	-M-	11	11	11	11	11	11	12	8
26	7	8	8	7	9	8	6	2	3	2	1	2	6	9	9	12	11	8	9	11	12	10	11	10
27	8	7	7	7	7	8	7	7	8	9	6	5	3	8	4	3	1	3	3	3	3	4	7	4
28	2	2	2	5	4	3	2	1	0	1	0	0	0	0	2	1	3	4	7	8	5	5	5	8
29	11	12	9	7	7	12	5	4	3	4	5	4	4	10	12	14	8	2	6	6	11	14	14	11
30	9	10	11	12	9	7	7	21	19	11	15	17	18	15	10	6	16	15	10	10	16	14	7	8
HOURLY MEAN	10	9	9	9	9	9	8	8	8	8	8	9	9	9	9	9	9	9	8	8	9	10	10	10

MAXIMUM = 35 MINIMUM = 0 MEAN = 9 669 VALID OBSERVATIONS (92.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	14	12	11	12	20	28	21	20	22	10	11	10	16	35	26
MIN	0	0	6	2	7	8	1	6	3	2	1	0	0	10	2
MEAN	5	6	9	8	12	19	8	12	14	5	7	3	7	18	12

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	15	15	17	19	17	13	13	15	12	12	12	9	8	14	21
MIN	1	3	1	3	3	0	1	7	5	8	1	1	0	2	6
MEAN	6	10	11	10	9	4	7	12	9	11	8	6	3	8	12

MEAN MAXIMUM = 16 MEAN MINIMUM = 3

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	341	347	321	290	315	314	332	30	110	133	160	150	129	114	135	136	122	119	126	115	106	115	118	120
2	124	125	128	125	125	123	126	128	129	129	130	137	140	256	318	333	326	325	324	323	331	339	348	352
3	350	351	360	351	336	356	1	20	46	35	19	22	14	21	34	13	9	9	3	360	353	346	337	342
4	333	317	315	302	313	307	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
5	-M-	166	163	169	173	178	190	200	220	236	273	319	347	347	349	356	11	26	16	4	19	9	9	15
6	20	22	18	20	23	14	11	8	8	8	6	9	8	4	3	5	11	2	360	350	353	352	353	351
7	349	344	344	341	337	334	317	318	319	300	291	278	256	246	221	210	208	206	207	213	212	218	234	243
8	241	233	241	244	247	243	243	245	247	246	269	261	258	265	287	268	321	332	342	354	17	13	12	12
9	10	16	12	8	8	355	353	356	335	336	323	303	295	299	298	303	310	326	334	343	354	350	354	351
10	354	354	354	342	342	342	332	331	329	332	330	331	320	311	303	301	301	297	293	290	291	295	298	303
11	302	301	301	290	301	298	290	306	296	277	295	280	267	258	252	257	227	182	151	158	151	135	115	104
12	62	73	82	66	52	55	36	21	14	18	8	360	349	345	350	347	339	338	342	344	342	343	339	343
13	338	336	330	318	322	330	326	331	330	336	338	325	304	302	309	292	293	289	268	269	268	314	308	253
14	239	232	211	204	194	134	119	126	101	78	65	76	98	94	116	111	125	118	137	133	151	142	129	138
15	146	161	153	132	136	161	149	147	153	211	317	344	349	346	347	357	355	351	342	345	342	344	342	345
16	345	341	343	339	330	317	295	293	297	295	306	314	321	317	309	298	293	291	273	234	224	214	203	194
17	190	193	190	192	186	185	176	180	175	183	194	200	205	210	214	214	210	199	193	197	211	217	217	223
18	261	246	246	238	261	355	119	132	155	183	192	179	133	127	101	117	137	140	136	120	117	121	126	136
19	139	132	135	134	138	148	170	173	171	225	216	271	335	348	350	4	352	354	353	360	20	27	29	45
20	61	62	58	59	68	58	26	23	25	12	6	7	356	360	354	345	338	345	347	346	339	343	343	352
21	348	341	341	351	357	358	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	103	104	111	115	100	103
22	115	114	120	120	116	115	117	117	-M-	-M-	-M-	-M-	-M-	-M-	176	213	231	265	285	286	288	287	287	287
23	288	286	283	284	282	282	278	281	285	292	295	296	292	291	290	290	295	297	293	287	289	294	301	316
24	311	318	326	322	327	326	330	334	354	13	95	119	142	142	146	144	129	131	138	148	167	268	200	230
25	259	299	319	327	330	333	331	326	317	321	318	309	324	336	349	347	341	339	356	349	18	24	102	132
26	142	145	168	158	162	166	164	163	164	159	150	149	149	154	155	163	159	157	153	158	159	167	169	175
27	179	183	187	185	184	182	181	179	179	193	206	228	261	322	336	333	331	332	313	311	305	303	302	309
28	304	314	320	323	333	336	331	341	345	354	1	15	30	61	67	88	110	118	111	109	119	121	124	125
29	138	139	135	141	141	139	133	145	140	143	145	146	133	119	105	95	123	124	39	358	360	5	1	360
30	3	1	356	350	350	2	2	5	353	7	17	7	360	13	17	11	8	5	4	9	11	5	3	6
31	2	4	3	5	360	358	5	3	353	351	1	347	333	310	302	299	305	310	341	10	44	87	113	128

707 VALID OBSERVATIONS (95.0%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	127	133	128	126	125	127	123	126	123	125	128	139	139	148	142	130	133	133	126	120	116	102	101	115
2	109	92	97	88	72	353	358	354	355	356	354	354	359	359	360	358	356	4	6	359	357	2	1	2
3	356	359	359	360	355	355	355	359	356	355	355	359	357	359	1	1	2	1	352	348	346	349	357	357
4	352	358	360	5	5	10	6	2	350	11	19	16	1	12	10	10	9	17	15	14	14	15	11	6
5	9	9	3	358	351	353	348	345	340	337	326	317	309	304	303	305	307	299	294	293	287	279	281	276
6	260	246	218	214	204	212	213	215	225	235	238	239	232	224	218	210	216	221	216	226	235	233	223	227
7	234	236	232	233	245	245	-M-	-M-	-M-	-M-	-M-	240	216	216	222	238	281	285	332	1	4	360	7	19
8	12	10	18	13	16	22	32	41	50	50	50	42	38	31	22	26	23	18	14	15	12	4	354	356
9	349	348	352	346	338	329	313	314	313	316	310	309	310	311	305	304	301	294	269	228	232	224	210	202
10	206	206	193	190	186	185	184	183	178	178	169	176	186	202	219	224	226	258	301	291	256	239	243	248
11	257	243	240	244	248	249	251	239	235	242	256	288	277	227	250	210	275	312	44	41	66	71	84	111
12	276	220	179	177	318	3	23	13	10	245	298	243	239	208	229	257	255	235	214	208	222	238	229	237
13	239	243	240	238	232	201	191	189	194	195	203	198	202	199	191	202	203	222	214	214	215	217	211	204
14	194	188	195	198	178	171	183	178	177	186	198	203	201	204	205	206	209	208	202	207	208	203	195	195
15	198	205	209	201	199	192	166	167	172	176	165	168	164	162	164	157	146	122	91	89	89	78	72	46
16	47	13	24	32	39	16	1	3	357	359	2	11	8	11	30	38	51	64	69	63	15	37	61	73
17	106	96	80	86	86	104	102	81	89	96	111	128	126	201	255	326	357	33	29	98	57	74	33	360
18	342	335	336	330	314	315	316	317	310	303	298	288	278	280	271	287	276	261	226	230	247	273	265	245
19	257	266	277	295	295	264	249	247	216	205	193	195	203	214	213	211	201	209	214	221	222	224	231	233
20	259	262	268	223	312	293	296	311	315	310	320	320	330	329	314	317	317	321	323	330	337	331	324	327
21	305	287	303	279	307	324	339	326	360	244	308	125	142	131	137	165	129	108	127	133	143	157	165	181
22	191	201	197	192	186	180	183	192	191	194	198	194	183	181	179	197	202	185	164	168	182	189	308	351
23	359	9	16	19	13	12	-M-	-M-	29	39	39	36	38	44	24	4	352	352	343	345	349	321	317	308
24	311	315	310	315	318	321	319	329	337	349	348	346	337	334	349	356	359	6	8	11	14	7	14	22
25	24	28	31	31	29	22	40	47	28	65	53	52	53	54	84	69	85	90	85	111	118	112	114	106
26	114	108	111	108	126	131	130	133	139	145	140	127	128	130	131	132	129	136	136	153	158	163	159	157
27	160	172	161	144	133	141	148	158	157	155	148	149	164	161	171	172	168	162	156	147	140	139	142	145
28	155	158	161	162	168	171	171	171	176	186	193	204	221	223	232	236	236	242	271	318	329	339	338	336

665 VALID OBSERVATIONS (99.0%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	333	320	317	309	294	294	311	332	122	153	169	162	167	171	185	210	203	199	193	206	203	196	200	202
2	207	214	221	225	231	251	319	345	360	16	27	35	37	38	38	37	40	47	51	47	45	51	56	64
3	61	61	71	79	79	81	77	76	76	83	88	86	81	75	71	-M-	54	44	41	39	35	29	22	16
4	17	10	10	5	360	351	351	352	348	345	347	346	346	352	348	347	340	333	336	334	339	340	343	340
5	338	338	340	339	343	341	339	336	337	343	342	342	345	346	350	339	341	342	334	333	333	314	307	311
6	308	290	256	254	255	260	245	240	242	236	224	234	281	307	324	333	346	336	340	332	323	329	334	338
7	345	341	337	341	340	338	347	340	12	114	90	137	165	176	136	124	111	111	128	122	108	112	129	127
8	129	144	156	154	163	174	157	142	225	228	276	336	337	327	335	340	344	347	334	331	335	333	356	357
9	342	21	42	81	79	114	130	114	120	130	132	136	148	118	133	148	163	166	138	126	115	130	145	162
10	161	169	179	182	180	175	175	173	186	200	210	211	212	208	217	229	237	274	308	318	331	339	348	345
11	333	329	338	339	340	344	349	339	326	322	26	342	337	3	327	165	113	129	119	-M-	-M-	-M-	-M-	-M-
12	-M-	-M-	-M-	-M-	134	140	136	148	155	159	164	185	203	226	275	307	319	318	316	326	320	310	304	297
13	283	273	266	258	258	269	315	264	260	261	265	247	258	272	279	266	259	246	244	212	123	129	126	133
14	143	141	132	122	124	118	119	119	116	113	102	116	115	108	86	65	64	79	92	100	102	110	109	101
15	110	109	110	108	108	119	133	123	129	130	139	135	141	141	141	130	106	50	74	87	101	118	104	107
16	120	274	334	332	335	311	283	263	265	255	263	295	302	306	311	315	327	349	5	8	8	27	37	38
17	29	23	52	76	90	113	119	122	124	124	127	116	103	110	106	80	62	44	30	11	5	10	33	46
18	82	92	91	74	51	47	40	52	66	72	78	69	68	56	58	71	70	55	83	91	94	73	96	109
19	97	101	108	96	40	80	64	71	89	95	96	101	101	101	103	117	135	150	209	247	251	233	202	180
20	159	181	182	215	264	291	307	293	296	305	307	291	271	263	267	272	286	300	306	310	314	304	302	298
21	299	308	302	299	304	309	296	290	302	311	316	324	327	325	336	327	334	328	315	311	294	308	324	321
22	303	300	306	313	318	308	298	289	301	301	308	310	303	302	283	321	264	236	244	199	152	150	153	162
23	166	181	187	188	188	192	191	200	214	224	229	228	230	224	221	221	218	209	212	201	199	214	311	19
24	11	1	12	4	357	348	353	358	354	352	9	12	24	29	34	17	30	27	14	1	357	359	357	349
25	343	347	349	348	344	339	333	333	329	341	319	327	337	338	333	334	332	332	337	341	346	347	353	355
26	344	308	348	327	308	258	212	213	217	190	178	174	185	194	175	150	171	105	99	77	80	84	82	86
27	102	105	101	108	110	107	106	105	111	130	126	127	127	130	131	133	130	137	125	114	117	125	129	139
28	143	144	146	143	146	152	150	159	170	174	180	184	194	201	194	196	195	197	191	-M-	-M-	-M-	-M-	-M-
29	-M-	177	178	181	176	166	161	160	167	177	181	175	178	183	178	168	169	166	175	183	177	182	182	188
30	197	184	195	207	236	233	225	235	246	256	267	257	255	262	264	269	277	271	264	258	231	259	307	328
31	329	332	338	329	312	299	298	281	293	297	257	253	264	259	273	275	279	273	265	248	236	229	228	224

728 VALID OBSERVATIONS (97.8%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	221	209	202	197	190	192	187	178	167	179	176	176	177	178	182	182	181	168	164	158	158	161	168	171
2	170	175	175	177	181	181	177	179	183	187	189	189	191	202	221	232	238	275	326	321	320	319	306	309
3	312	310	307	307	309	309	308	310	319	315	306	304	301	304	305	310	309	321	324	341	355	358	10	31
4	29	39	44	48	45	53	65	78	82	85	91	92	91	95	102	104	102	84	83	72	69	70	78	76
5	45	40	48	57	20	4	5	9	12	5	1	3	2	351	349	351	357	2	3	2	4	5	2	358
6	354	337	339	350	346	350	329	336	330	9	7	311	117	109	110	116	132	125	122	122	119	108	116	122
7	126	120	111	113	113	110	111	112	113	113	117	119	125	121	120	107	109	103	101	103	100	100	110	104
8	100	106	89	76	56	49	67	82	95	113	156	250	271	278	282	300	316	321	324	323	316	325	330	321
9	324	324	326	330	315	303	322	325	290	280	286	261	255	227	232	243	250	234	187	160	147	149	202	347
10	20	3	348	342	332	308	299	297	311	311	310	297	292	290	294	301	299	285	294	323	60	62	82	92
11	104	109	120	116	114	116	123	125	148	157	183	193	212	202	202	215	212	210	214	207	194	201	199	205
12	205	207	206	200	191	198	188	187	199	200	181	202	220	244	287	306	322	333	329	325	328	330	340	342
13	342	335	340	346	352	358	360	13	7	9	354	358	349	350	345	166	331	285	216	150	142	133	134	154
14	157	160	158	159	150	142	158	143	160	161	165	157	159	159	164	162	156	159	155	-M-	-M-	-M-	-M-	-M-
15	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	174	208	157	153	168	171	181	170	167	172	183	177	174	130	88
16	71	97	115	117	123	137	162	188	344	8	3	344	339	349	359	343	341	361	347	348	344	342	344	323
17	311	312	317	328	327	329	332	333	331	335	330	319	320	317	316	315	309	299	300	270	237	233	236	232
18	211	196	186	175	174	181	189	199	196	194	191	199	195	200	199	201	205	216	225	217	183	175	178	192
19	198	191	217	216	219	152	240	255	266	285	21	330	328	330	332	327	323	328	333	331	333	331	328	321
20	312	314	299	300	304	308	322	348	351	353	361	355	346	342	346	346	357	353	357	357	354	356	361	361
21	345	346	357	331	279	278	273	285	286	257	284	302	281	265	277	289	263	292	315	285	349	264	268	345
22	305	319	353	350	343	345	356	359	13	18	27	24	65	304	223	298	319	248	260	270	238	211	200	189
23	178	178	187	195	192	189	198	199	207	215	215	219	206	215	211	206	213	215	201	190	196	191	186	194
24	209	209	198	192	196	196	196	203	202	202	205	201	200	189	184	184	197	197	197	209	210	191	187	185
25	184	187	177	172	178	173	169	175	177	192	179	159	149	167	165	168	179	174	169	166	171	198	260	313
26	323	358	11	7	4	361	359	360	2	354	353	355	359	8	8	6	12	11	22	23	24	25	36	47
27	54	67	83	86	96	104	106	99	104	97	100	104	109	129	137	150	108	78	89	95	78	102	119	124
28	124	118	117	107	89	90	111	105	85	85	78	78	79	90	94	87	93	91	89	76	68	70	73	77
29	79	85	85	84	98	93	105	109	98	103	122	122	135	128	110	116	104	115	111	111	123	131	139	180
30	253	282	310	317	332	341	323	132	330	353	357	352	2	314	349	2	2	21	48	81	86	46	206	261

706 VALID OBSERVATIONS (98.1%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	279	246	256	280	304	335	358	360	361	354	273	266	245	240	236	235	247	271	240	-M-	198	182	189	192
2	191	187	220	233	223	210	172	156	167	176	169	179	189	200	195	209	205	202	193	182	172	176	172	173
3	166	170	171	167	168	175	177	175	173	184	184	186	187	186	187	186	183	181	177	172	166	165	169	175
4	183	183	188	188	182	183	189	189	191	192	194	198	194	201	198	192	196	190	192	189	191	194	206	281
5	71	47	75	114	143	165	167	214	319	6	359	355	349	349	359	4	9	8	17	16	22	17	21	26
6	27	27	14	7	354	5	361	345	354	2	7	5	350	3	344	332	305	275	253	228	218	225	223	214
7	227	243	251	271	265	255	254	249	246	242	244	249	248	242	237	249	247	239	212	195	190	181	189	199
8	203	200	205	204	205	205	209	216	222	233	234	220	211	197	182	179	177	178	177	169	166	163	167	169
9	171	166	170	169	169	177	178	183	185	196	191	187	183	184	187	190	186	184	182	181	176	175	175	183
10	190	187	187	180	181	180	177	180	191	198	202	201	192	192	188	195	188	188	184	176	172	168	167	168
11	175	181	175	210	275	355	20	33	98	128	138	153	173	176	196	194	184	186	175	163	152	162	307	251
12	305	56	111	132	217	86	125	267	133	179	228	184	173	175	161	164	164	164	169	158	144	135	153	159
13	158	144	140	133	142	145	157	141	125	132	137	158	174	194	147	127	135	128	186	181	160	156	157	168
14	158	152	157	149	149	144	134	137	144	163	178	177	151	144	130	136	269	155	152	129	131	123	128	144
15	166	163	159	168	175	160	144	154	165	183	191	205	219	223	225	225	214	295	309	144	163	188	206	201
16	171	188	181	211	214	248	237	191	175	181	191	167	160	176	175	194	181	200	201	177	159	186	190	202
17	188	193	162	164	216	231	266	10	56	292	281	271	256	252	250	241	235	267	-M-	-M-	-M-	-M-	-M-	-M-
18	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	217	146	192	199	210	193	218	197	227	173	180	170	158	152	166	178
19	195	201	203	207	256	28	46	76	110	150	148	172	179	176	186	184	194	190	180	167	158	169	174	166
20	169	163	157	164	167	142	210	145	27	117	83	82	139	97	62	63	53	61	150	300	324	339	326	343
21	350	331	297	314	317	4	346	15	30	24	26	24	6	3	9	356	2	351	354	355	340	331	328	324
22	296	298	314	310	298	303	323	324	321	316	328	332	324	332	318	308	322	341	345	4	47	8	342	12
23	11	6	23	54	104	136	128	137	129	145	121	126	49	54	2	17	58	71	90	97	107	116	117	119
24	132	132	129	124	117	124	125	127	150	129	122	108	95	99	96	96	86	76	77	89	84	88	86	93
25	101	106	109	109	114	114	109	102	109	112	114	113	115	123	115	118	114	109	102	100	106	108	119	139
26	199	270	257	250	272	282	273	282	276	248	224	231	253	241	253	249	251	263	253	253	239	206	210	205
27	195	207	216	249	256	261	291	299	302	313	353	7	333	291	299	311	337	44	66	92	101	107	116	127
28	125	117	127	120	135	127	112	109	128	127	122	117	108	110	117	127	129	129	112	108	104	128	187	15
29	107	118	122	351	357	9	8	326	334	355	358	345	352	5	9	361	352	358	49	48	69	81	104	119
30	138	131	121	106	124	127	123	129	124	168	330	56	151	186	238	266	326	325	323	346	349	351	352	360
31	354	360	361	357	358	357	356	358	355	348	352	349	347	346	345	343	338	336	338	337	333	336	343	333

729 VALID OBSERVATIONS (98.0%)

318 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN 1982	HOUR																							
DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	328	334	327	326	335	331	330	314	292	301	312	16	70	181	222	168	208	191	38	105	149	117	160	159
2	165	173	143	137	134	106	290	112	142	114	111	141	106	122	100	94	110	109	63	58	51	64	71	79
3	90	77	77	39	34	31	24	36	60	81	90	82	79	85	98	93	92	100	-M-	-M-	-M-	-M-	-M-	-M-
4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	89	134	139	140	138	143	148	157
5	152	164	164	156	156	161	162	157	149	162	163	153	163	150	147	147	147	146	140	149	149	151	157	142
6	140	142	142	146	145	157	162	168	176	181	188	195	199	201	200	207	229	225	220	197	186	195	212	209
7	218	240	5	12	339	36	52	9	8	18	9	360	348	356	361	2	12	361	340	81	90	82	82	119
8	138	117	116	102	119	106	99	126	126	153	93	108	122	51	76	92	104	118	126	117	121	108	119	112
9	138	136	205	170	246	138	221	293	326	331	328	325	325	331	339	340	342	343	351	345	349	361	18	9
10	322	286	266	269	269	252	268	289	309	295	296	299	271	251	276	226	242	213	176	159	150	163	176	190
11	202	217	212	185	173	168	125	133	134	134	144	170	160	164	163	153	154	154	153	149	158	153	143	148
12	147	176	202	230	214	180	163	146	155	170	186	184	270	340	137	145	133	165	342	16	69	76	74	46
13	57	112	84	10	10	110	164	324	151	215	229	188	198	199	200	220	202	188	183	190	179	175	176	178
14	181	176	175	168	165	162	169	170	171	162	172	185	165	139	152	175	180	179	165	161	170	177	184	294
15	318	343	264	225	265	260	281	257	341	354	357	5	2	8	15	358	361	361	5	15	11	9	6	5
16	360	7	5	359	359	4	7	14	14	6	356	4	9	360	359	47	142	235	200	234	242	239	232	224
17	203	194	199	198	201	215	222	219	225	223	222	212	210	233	243	263	192	338	35	153	202	257	244	222
18	274	9	91	216	341	6	19	36	44	46	43	42	34	29	25	10	9	16	19	17	6	361	348	335
19	348	351	355	356	352	343	350	361	7	356	355	337	297	292	293	308	307	319	308	282	221	201	210	220
20	226	230	239	249	268	267	313	29	347	359	352	8	6	9	345	352	338	-M-	-M-	-M-	325	28	40	46
21	57	55	97	148	153	28	46	97	171	165	167	114	100	92	180	218	304	300	169	224	257	261	273	300
22	309	293	296	356	44	54	55	57	54	70	75	63	63	70	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
23	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	145	146	157	165	170	189	176	160	149	139	146	149	165	172
24	160	169	173	160	159	164	156	157	188	191	167	188	186	189	183	188	194	200	198	212	202	231	255	241
25	216	190	240	312	355	8	349	10	14	16	19	10	6	23	18	349	8	14	25	34	37	38	70	71
26	53	55	53	39	32	42	51	60	91	104	78	25	94	100	111	103	101	96	101	102	98	96	94	99
27	96	90	81	72	58	39	51	45	47	59	79	78	47	252	281	241	278	156	80	66	100	44	18	45
28	54	44	38	40	43	56	80	43	124	69	89	62	72	42	18	287	243	234	220	234	254	258	246	226
29	224	232	230	246	257	261	268	280	281	267	269	281	309	359	21	32	31	359	13	58	46	42	50	62
30	74	89	104	107	114	116	115	42	54	100	115	135	135	147	146	137	18	74	94	118	135	118	81	65

675 VALID OBSERVATIONS (93.7%)

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	8	7	6	5	3	2	2	2	2	2	4	5	7	9	11	11	10	9	10	9	9	8	9	11
2	8	10	15	16	11	11	11	12	11	-M-	-M-	-M-	4	4	10	14	12	-M-	-M-	-M-	-M-	-M-	-M-	-M-
3	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	2	6	14	19	15	12	10	10	10	8	10	10	15	18
6	14	13	14	16	16	14	15	16	16	17	17	17	16	16	14	14	14	13	12	11	11	9	10	11
7	9	10	10	9	7	6	6	2	4	3	5	6	5	6	7	7	6	5	4	4	5	4	6	9
8	7	6	10	11	11	9	9	13	-M-	11	3	5	6	7	5	5	5	6	5	4	5	6	8	11
9	14	14	16	15	13	14	14	12	-M-	-M-	9	11	12	13	17	15	13	13	16	18	21	24	24	26
10	21	18	18	17	18	17	17	15	16	15	15	15	15	17	14	15	14	13	11	12	13	14	15	15
11	12	12	9	10	16	10	9	10	5	4	8	7	5	7	8	6	3	2	4	4	3	4	3	3
12	4	3	3	3	4	4	4	5	7	6	6	6	7	7	8	8	8	10	10	11	11	10	8	7
13	7	7	8	7	5	5	4	7	6	6	6	4	4	6	7	6	5	3	2	1	3	2	3	2
14	2	3	3	2	2	2	3	4	3	4	5	5	4	4	3	3	5	5	3	4	6	4	6	8
15	7	6	5	6	7	6	5	5	1	1	2	5	15	18	20	21	18	18	18	18	22	22	24	22
16	23	23	21	16	12	8	8	8	10	10	13	13	14	14	11	10	8	5	3	2	4	4	5	5
17	6	8	9	12	12	15	16	18	19	20	17	18	21	18	18	15	12	7	6	6	6	5	5	4
18	3	3	2	1	2	1	1	1	1	1	2	2	4	7	5	6	9	6	4	2	3	3	3	5
19	5	1	1	0	1	1	3	3	2	1	3	1	6	9	11	9	6	8	8	9	9	8	8	7
20	4	7	7	8	7	7	6	6	6	6	7	7	5	6	5	7	7	8	8	7	6	5	8	7
21	8	7	7	8	10	10	10	9	9	9	7	6	6	6	6	6	6	7	8	9	8	7	6	8
22	9	10	10	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	13	17	22	26	28	28	26	25	24
23	23	23	21	20	19	18	16	15	15	17	22	21	21	20	20	18	16	13	10	11	11	13	12	10
24	9	9	5	7	8	6	5	3	2	2	2	2	5	6	7	8	8	8	6	6	7	7	3	8
25	10	15	19	27	24	18	16	13	8	9	12	11	10	9	8	10	11	8	7	5	3	2	1	2
26	2	3	5	4	3	4	5	6	7	9	10	10	14	15	15	16	16	16	16	17	17	15	16	15
27	17	19	20	18	14	9	8	8	9	5	6	7	6	11	9	13	14	6	10	10	13	11	10	9
28	8	9	9	11	8	10	7	-M-	-M-	-M-	-M-	4	4	5	5	5	6	4	6	5	5	5	7	7
29	8	6	7	8	9	9	10	9	9	10	8	7	5	5	4	3	3	3	3	5	5	8	10	12
30	12	10	10	10	9	9	10	8	10	9	8	9	10	12	12	12	12	13	14	14	15	14	16	15
31	15	14	14	13	14	13	11	11	11	10	8	7	5	8	11	9	7	5	3	2	2	2	4	6
HOURLY MEAN	10	10	10	10	10	9	9	9	8	8	8	8	9	10	10	10	10	9	9	9	9	9	10	10

MAXIMUM = 28 MINIMUM = 0 MEAN = 9 657 VALID OBSERVATIONS (88.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	11	16	-M-	-M-	19	17	10	13	26	21	16	11	8	8	24	23
MIN	2	4	-M-	-M-	2	9	2	3	9	11	2	3	1	2	1	2
MEAN	7	11	-M-	-M-	11	14	6	7	16	15	7	7	5	4	12	10

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	21	9	11	8	10	28	23	9	27	17	20	11	12	16	15
MIN	4	1	0	4	6	9	10	2	1	2	5	4	3	8	8
MEAN	12	3	5	6	8	20	17	6	11	11	11	6	7	11	9

MEAN MAXIMUM = 16 MEAN MINIMUM = 4

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	6	7	9	7	7	7	8	9	7	10	10	9	8	10	11	10	11	8	7	6	4	3	3	7
2	4	2	2	2	2	4	5	8	9	9	11	10	10	13	12	12	13	14	14	14	16	16	16	16
3	18	18	19	18	17	17	17	14	14	13	13	14	15	16	14	13	13	12	11	10	9	9	11	11
4	8	10	10	8	8	9	8	7	7	6	7	7	7	7	7	8	10	8	8	9	7	7	9	9
5	9	10	9	9	11	10	11	11	10	10	11	11	12	11	12	12	11	7	2	2	1	2	8	8
6	6	4	4	5	5	4	5	4	6	6	5	6	6	8	10	10	10	10	9	10	10	6	8	10
7	9	8	5	5	3	4	3	4	2	6	7	5	7	5	4	3	4	2	4	4	2	2	2	5
8	4	8	8	10	10	9	8	7	6	7	8	8	8	10	11	11	11	12	11	10	10	8	9	9
9	11	13	12	11	8	8	7	10	10	12	10	10	13	13	12	12	8	6	2	2	2	4	6	4
10	5	4	3	5	5	6	6	6	7	6	8	11	12	10	7	7	5	4	4	2	2	2	2	3
11	1	3	3	4	4	3	4	4	3	4	3	3	3	2	3	1	1	2	2	3	4	4	3	2
12	2	0	3	2	1	2	2	3	3	2	2	2	0	3	-M-	-M-	14	11	12	12	11	9	11	10
13	8	6	7	7	9	6	7	8	10	11	15	20	30	31	19	17	19	17	14	13	19	23	17	17
14	12	11	15	14	15	19	18	15	15	20	20	26	27	32	31	26	24	19	19	20	23	14	11	10
15	17	11	3	3	2	3	4	7	14	12	13	13	12	10	7	6	-M-	7	5	4	6	7	6	9
16	7	13	14	12	8	8	9	13	17	18	16	15	14	12	13	11	8	6	7	5	5	7	6	5
17	5	5	4	3	4	6	-M-	4	5	8	7	6	5	3	5	5	7	8	3	5	5	6	6	4
18	4	2	2	2	4	5	2	8	7	12	13	14	13	13	13	4	2	2	2	-M-	-M-	3	4	4
19	3	3	3	2	5	5	7	3	2	7	9	11	16	17	15	19	18	14	9	6	11	10	14	20
20	21	19	19	10	10	4	4	9	5	6	15	17	24	22	30	29	25	21	17	12	10	5	3	7
21	4	6	4	5	2	1	2	2	2	7	4	5	8	12	10	6	6	6	4	3	3	2	7	9
22	7	2	2	2	2	1	4	2	4	8	7	13	16	15	16	22	23	14	9	5	7	9	22	-M-
23	31	30	32	26	23	20	23	20	20	19	19	17	15	16	14	17	16	15	17	17	14	11	15	15
24	22	22	15	18	24	25	23	23	25	22	32	27	28	32	31	31	31	28	19	23	22	22	21	20
25	20	18	16	14	14	12	9	12	11	13	12	14	13	12	12	10	12	10	7	8	9	9	9	8
26	7	10	7	6	5	7	5	4	4	8	16	12	13	12	11	13	13	13	13	10	8	5	5	3
27	1	2	4	2	2	4	4	4	5	8	9	15	16	18	18	15	17	17	15	9	6	12	10	9
28	5	8	9	8	8	8	12	14	18	17	19	23	26	24	25	23	21	16	11	8	9	6	3	5
HOURLY MEAN	9	9	9	8	8	8	9	8	9	10	11	12	13	14	14	13	13	11	9	9	9	8	9	9

MAXIMUM = 32 MINIMUM = 0 MEAN = 10 665 VALID OBSERVATIONS (99.0%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAX	11	16	19	10	12	10	9	12	13	12	4	14	31	32
MIN	3	2	9	6	1	4	2	4	2	2	1	0	6	10
MEAN	8	10	14	8	9	7	4	9	8	5	3	5	15	19

DAY	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAX	17	18	8	14	20	30	12	23	32	32	20	16	18	26
MIN	2	5	3	2	2	3	1	1	11	15	7	3	1	3
MEAN	8	10	5	6	10	14	5	9	19	24	12	9	9	13

MEAN MAXIMUM = 18 MEAN MINIMUM = 4

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	4	3	2	4	4	4	2	2	4	7	10	15	16	22	-M-	26	23	17	9	17	18	17	16	16
2	22	21	21	26	23	14	5	4	19	23	24	19	24	24	23	22	22	18	22	21	21	21	23	21
3	22	19	21	22	21	20	17	18	18	20	18	17	17	17	16	15	-M-	7	7	7	7	9	9	10
4	10	12	14	13	12	10	9	9	10	12	11	-M-	-M-	-M-	13	12	11	12	-M-	-M-	-M-	-M-	-M-	-M-
5	-M-	-M-	-M-	-M-	-M-	13	14	17	13	13	15	12	11	11	8	9	8	10	10	8	6	3	4	3
6	2	3	3	3	3	3	5	5	6	7	9	9	12	14	16	16	17	20	20	15	13	15	-M-	-M-
7	-M-	9	7	6	5	5	4	4	4	3	5	5	5	5	6	8	9	8	7	7	8	8	8	9
8	10	8	8	7	8	7	7	8	5	7	8	19	24	24	20	19	21	16	14	11	11	7	6	7
9	4	4	4	4	5	6	7	8	10	13	13	10	11	9	11	12	12	9	7	6	4	5	6	5
10	4	4	6	7	7	6	4	5	5	7	-M-	13	11	14	15	14	11	8	10	10	7	-M-	-M-	-M-
11	-M-	-M-	19	17	15	14	13	9	6	7	7	5	5	5	5	4	5	8	7	5	3	4	8	8
12	7	9	9	9	9	11	12	10	11	14	15	-M-	24	26	20	25	23	16	12	18	12	8	9	8
13	9	11	11	11	11	13	4	7	10	12	8	9	10	14	11	10	8	6	4	2	3	2	2	2
14	2	2	2	3	8	5	6	8	5	9	10	13	13	16	11	10	11	13	14	11	12	11	8	7
15	7	6	4	5	5	6	6	7	8	9	10	10	11	10	10	7	5	5	7	5	17	12	7	6
16	4	6	6	7	5	4	7	8	11	10	12	13	11	11	10	10	8	9	9	6	2	5	5	6
17	5	7	4	3	3	5	6	8	11	11	10	9	9	7	7	6	7	7	6	7	7	6	4	4
18	5	5	4	3	4	6	8	9	9	8	9	9	10	12	11	11	11	9	7	8	8	7	10	13
19	10	10	12	13	12	9	9	11	12	15	14	16	14	13	12	11	8	6	4	4	6	3	3	2
20	2	3	2	3	3	8	8	6	11	14	14	14	13	16	21	23	22	20	17	14	14	13	16	17
21	17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	15	14	12	11	10	8	7	5	6	7	7	7
22	7	8	9	9	5	3	5	6	8	10	12	11	11	9	8	5	6	4	3	2	2	3	3	4
23	7	6	7	9	7	8	7	7	10	14	16	18	24	24	24	20	20	20	17	12	10	8	8	8
24	6	6	4	3	4	4	7	6	5	5	8	7	-M-	-M-	9	11	8	9	9	9	13	10	7	10
25	17	17	15	13	17	13	11	13	13	10	14	16	18	19	20	20	17	15	14	9	7	6	5	5
26	3	3	3	3	3	2	2	2	4	4	6	6	6	6	5	5	5	4	6	6	7	6	9	9
27	9	9	10	10	-M-	10	10	11	11	-M-	10	9	10	11	11	10	10	9	9	7	7	8	8	8
28	8	7	6	7	7	6	5	8	11	12	-M-	-M-	19	20	21	20	19	20	17	11	13	13	13	15
29	15	15	17	14	12	15	13	13	17	20	24	24	27	26	25	27	27	25	24	22	20	23	21	20
30	22	19	21	24	28	18	19	21	21	25	27	27	29	29	33	34	31	30	22	11	10	13	11	13
31	15	11	12	-M-	-M-	13	12	-M-	14	14	10	12	-M-	15	16	17	15	11	9	6	6	7	6	6
HOURLY MEAN	9	9	9	9	9	9	8	9	10	12	13	13	15	15	14	15	14	12	11	9	9	9	9	9

MAXIMUM = 34 MINIMUM = 2 MEAN = 11 697 VALID OBSERVATIONS (93.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	26	26	22	14	17	20	9	24	13	15	19	26	14	16	17	13
MIN	2	4	7	9	3	2	3	5	4	4	3	7	2	2	4	2
MEAN	11	20	15	12	10	10	6	12	8	8	8	14	8	9	8	8

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	11	13	16	23	17	12	24	13	20	9	11	21	27	34	17
MIN	3	3	2	2	5	2	6	3	5	2	7	5	12	10	6
MEAN	7	8	9	12	10	6	13	7	13	5	9	13	20	22	11

MEAN MAXIMUM = 18 MEAN MINIMUM = 4

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-M-	M-	2	3	2	4	5	5	6	15	19	-M-	19	19	18	17	19	17	15	12	14	12	14	17
2	17	16	18	18	15	14	18	20	26	27	31	30	29	30	33	33	21	25	33	34	33	33	34	36
3	32	32	35	35	35	26	27	26	26	23	23	25	25	25	24	23	20	18	13	9	7	6	7	8
4	7	9	9	8	8	7	7	8	12	13	13	14	14	15	15	14	14	14	12	9	11	10	11	11
5	10	12	13	13	14	13	17	18	17	18	18	19	19	18	20	20	19	16	15	15	13	13	11	7
6	6	4	3	4	5	3	4	3	4	5	4	5	5	6	8	8	9	8	9	9	8	8	8	11
7	11	10	10	10	13	14	15	15	15	15	17	21	20	19	16	15	12	10	10	-M-	-M-	-M-	-M-	-M-
8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	5	7	7	6	5	10	12	12	14	15	15	15
9	12	8	11	10	9	7	6	5	5	6	7	7	7	6	6	6	7	7	7	6	4	3	4	5
10	6	8	8	13	11	10	9	8	11	13	15	16	17	17	19	22	18	14	7	4	5	5	4	4
11	5	5	5	4	4	5	5	5	7	7	8	9	14	16	18	21	20	22	18	13	10	13	15	15
12	15	16	16	13	10	11	8	10	11	14	18	20	17	14	15	13	21	22	14	9	6	8	-M-	-M-
13	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	7	7	6	5	5	4	4	3	2	2	3	4	4
14	3	3	5	4	3	8	4	8	14	15	13	16	18	20	21	22	23	21	20	17	15	16	16	-M-
15	-M-	-M-	-M-	-M-	-M-	19	12	15	15	14	6	9	12	15	16	-M-	18	21	19	18	17	15	10	9
16	7	10	12	9	9	9	8	6	10	11	-M-	24	20	27	26	26	30	23	23	21	18	18	14	13
17	13	15	16	15	12	12	11	12	14	12	13	14	15	15	12	13	11	9	7	3	3	5	6	5
18	4	4	4	6	4	5	7	15	18	22	21	26	26	29	27	26	24	23	19	13	11	12	9	12
19	12	9	10	7	8	7	7	4	4	4	5	17	22	23	21	20	22	20	17	13	12	11	9	10
20	9	9	7	10	11	11	11	16	20	22	21	20	19	18	18	20	19	16	15	11	7	6	3	3
21	3	2	2	2	2	2	2	2	3	7	8	8	8	9	10	11	11	7	5	5	10	7	3	4
22	4	9	5	3	3	5	5	6	7	8	7	7	6	6	6	5	5	4	4	3	3	3	4	3
23	3	5	6	7	6	5	5	8	15	19	19	18	17	18	17	18	18	-M-	14	10	8	7	7	8
24	8	8	6	8	9	10	9	12	15	17	21	22	21	19	20	21	17	21	-M-	19	16	15	-M-	-M-
25	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
26	-M-	12	16	13	12	11	12	14	13	14	14	17	16	16	16	14	13	14	11	8	7	6	6	7
27	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	10	13	13	11	7	3	7	9	7	6	7	6	4	4	5	7
28	7	8	8	5	4	7	8	13	11	13	13	9	8	9	11	11	11	11	13	10	11	9	8	8
29	7	7	9	7	5	5	5	5	6	8	10	10	9	9	9	7	7	7	7	5	4	2	3	3
30	3	2	2	4	2	2	2	2	2	4	5	5	4	4	6	6	6	4	3	3	2	3	2	2
HOURLY MEAN	9	9	10	9	9	9	9	10	12	13	14	15	15	15	15	15	15	14	12	11	10	10	9	9

MAXIMUM = 36 MINIMUM = 2 MEAN = 12 642 VALID OBSERVATIONS (89.2%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	19	36	35	15	20	11	21	15	12	22	22	22	7	23	21
MIN	2	14	6	7	7	3	10	5	3	4	4	6	2	3	6
MEAN	12	26	22	11	15	6	14	10	7	11	11	14	4	13	14

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	30	16	29	23	22	11	9	19	22	-M-	17	13	13	10	6
MIN	6	3	4	4	3	2	3	3	6	-M-	6	3	4	2	2
MEAN	16	11	15	12	13	6	5	11	15	-M-	12	7	9	6	3

MEAN MAXIMUM = 19 MEAN MINIMUM = 5

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3	2	2	3	2	2	2	2	3	6	5	7	8	7	7	6	6	3	4	2	2	2	3	3
2	2	3	2	2	2	1	2	3	5	6	8	10	9	9	9	11	12	11	10	9	7	7	9	4
3	3	5	5	6	5	6	5	8	11	13	16	17	16	17	17	17	17	16	16	14	15	14	15	16
4	11	11	12	11	12	13	13	15	17	17	4	-M-	-M-	27	24	21	23	19	17	15	14	14	16	11
5	8	10	4	3	3	3	4	5	7	8	9	10	15	19	17	15	16	15	17	16	13	15	12	12
6	10	9	10	11	10	15	18	21	21	13	13	11	10	8	7	8	8	7	6	6	6	6	9	8
7	8	10	11	5	2	2	2	3	6	7	7	10	10	13	12	12	12	11	11	7	4	4	5	6
8	6	7	10	11	8	8	9	11	16	18	14	16	16	17	18	19	18	-M-	-M-	-M-	-M	-M-	-M-	-M-
9	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	16	22	24	24	24	27	28	26	26	23	20	17	15	15	15	15
10	15	16	14	14	14	12	15	15	18	24	28	28	26	24	25	25	22	20	16	15	14	11	9	9
11	8	7	9	10	13	16	11	8	10	13	15	10	11	12	15	13	13	13	11	10	8	10	19	7
12	7	5	7	7	3	5	3	5	7	8	8	6	7	7	8	13	12	11	8	6	6	7	9	7
13	7	5	4	6	7	8	5	6	7	10	11	8	8	8	6	10	7	9	8	5	6	11	13	12
14	12	11	11	8	10	7	6	7	6	7	8	9	9	8	8	9	13	10	10	10	7	10	7	4
15	4	5	5	6	6	7	7	9	11	12	12	15	15	14	16	16	11	12	3	4	3	3	4	3
16	3	2	6	8	8	9	11	7	6	6	7	6	8	10	10	9	11	6	5	6	5	5	7	7
17	5	8	4	4	3	5	3	3	4	7	10	10	12	13	15	13	13	10	9	6	5	3	2	4
18	6	4	2	3	4	4	4	4	4	5	6	6	7	8	9	6	10	10	10	7	5	5	4	6
19	8	7	5	5	5	7	5	5	9	10	12	10	10	11	13	12	14	15	12	9	7	6	7	6
20	5	5	5	4	4	9	13	8	4	5	7	8	7	4	7	10	9	9	15	24	19	20	21	15
21	11	5	14	15	13	-M-	-M-	-M-	7	7	7	7	7	9	9	11	10	10	10	12	9	8	9	11
22	6	6	7	8	10	9	14	16	15	13	14	13	12	9	10	9	10	9	8	5	3	3	4	5
23	4	3	3	3	2	2	2	3	4	4	4	4	4	4	4	4	5	6	6	6	6	6	6	7
24	6	6	7	4	7	7	7	8	7	6	6	6	5	6	7	9	7	8	6	6	6	7	7	5
25	6	6	6	2	9	9	8	9	9	11	11	8	7	8	9	7	9	9	7	4	5	4	2	2
26	4	11	7	5	8	9	6	7	8	7	9	10	11	11	11	12	10	11	7	3	3	3	1	1
27	2	3	3	6	6	4	2	6	6	7	5	4	5	7	6	6	5	6	6	3	3	2	2	2
28	2	2	3	2	3	4	4	5	7	6	6	8	12	12	15	13	12	12	8	11	9	10	9	7
29	6	4	3	6	7	5	4	6	8	9	8	10	8	9	8	8	6	6	4	4	3	2	3	2
30	3	3	5	4	5	3	5	10	9	14	15	6	6	6	6	7	9	8	4	13	15	14	15	15
31	15	15	11	13	11	14	13	14	15	19	18	18	18	18	17	18	19	18	16	13	11	12	11	9
HOURLY MEAN	7	6	7	7	7	7	7	8	9	10	11	11	11	12	12	12	12	11	10	9	8	8	8	7

MAXIMUM = 28 MINIMUM = 1 MEAN = 9 724 VALID OBSERVATIONS (97.3%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	8	12	17	27	19	21	13	19	28	28	19	13	13	13	16	11
MIN	2	1	3	4	3	6	2	6	15	9	7	3	4	4	3	2
MEAN	4	6	12	15	11	11	7	13	21	18	11	7	8	9	8	7

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	15	10	15	24	15	16	7	9	11	12	7	15	10	15	19
MIN	2	2	5	4	5	3	2	4	2	1	2	2	2	3	9
MEAN	7	6	9	10	9	9	4	7	7	7	4	8	6	8	15

MEAN MAXIMUM = 15 MEAN MINIMUM = 4

35 FT WIND SPEED (MPH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	9	4	1	1	3	3	2	3	3	5	4	3	4	4	5	5	4	4	4	2	2	4	4	2
2	3	4	2	2	2	3	3	2	4	6	3	4	3	6	5	7	7	6	4	6	5	-M-	-M-	5
3	4	4	4	3	6	6	6	7	6	7	7	8	8	8	8	9	10	7	8	7	5	4	4	4
4	4	3	3	3	4	5	5	5	5	5	6	5	4	3	4	5	3	5	7	7	6	7	6	3
5	3	3	2	2	2	2	3	4	7	10	12	12	14	15	15	16	17	17	16	14	11	11	10	10
6	12	13	15	16	15	12	17	18	17	19	20	20	18	17	15	15	16	15	11	8	9	9	4	3
7	3	2	6	11	9	7	5	7	8	8	9	9	6	6	4	4	5	7	6	-M-	3	3	2	2
8	3	3	2	3	2	4	4	7	12	8	10	13	11	13	11	11	11	7	7	5	7	5	4	5
9	7	6	16	6	9	11	10	9	17	12	13	17	17	17	17	17	14	14	14	14	-M-	-M-	2	1
10	2	3	2	4	3	3	3	4	4	7	7	6	5	5	5	5	4	4	4	3	1	1	2	2
11	4	3	3	2	2	3	3	2	4	7	5	9	9	9	9	9	9	9	8	8	6	5	5	5
12	2	2	2	3	3	2	2	3	5	5	5	5	4	4	5	4	4	4	7	2	2	2	2	2
13	2	2	3	3	2	2	2	2	3	5	7	8	9	9	10	12	9	8	8	8	6	6	7	7
14	6	6	5	6	5	5	7	12	14	13	12	10	11	12	13	19	18	18	14	14	13	18	21	27
15	19	7	5	6	8	3	2	3	3	5	8	10	9	10	10	10	8	13	10	5	7	7	9	8
16	6	6	6	5	4	4	6	5	6	5	5	5	5	4	4	3	4	4	4	3	1	2	2	3
17	4	4	5	5	3	4	6	10	9	8	8	9	8	8	6	3	4	5	6	4	3	3	4	5
18	3	3	2	3	3	8	7	8	9	11	12	11	10	11	11	11	9	10	10	8	4	3	4	7
19	6	6	6	6	6	7	6	5	5	5	6	8	9	10	12	11	11	11	8	3	2	3	5	7
20	-M-	9	11	10	9	9	5	3	4	6	6	8	8	7	8	8	9	9	7	5	3	3	3	2
21	1	1	2	1	2	3	2	2	3	3	5	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
22	-M-	-M-	-M-	-M-	-M-	5	4	4	5	6	8	9	7	6	4	4	4	2	3	4	3	3	2	2
23	2	2	5	5	5	6	4	7	7	9	13	14	15	13	12	13	11	9	7	7	7	6	7	6
24	5	6	5	4	3	3	3	5	7	6	8	11	11	11	12	12	10	11	11	8	6	2	3	3
25	2	4	3	3	5	7	8	11	10	9	8	10	10	8	7	9	8	9	8	8	7	7	6	5
26	5	5	4	4	5	5	4	4	3	4	3	4	5	6	7	9	9	7	7	6	7	5	5	6
27	5	4	5	4	4	6	5	6	6	6	5	5	3	9	7	6	5	4	3	2	2	4	3	2
28	2	1	2	2	2	2	1	2	2	2	3	3	3	4	4	4	5	6	7	7	3	1	2	3
29	4	4	3	3	6	9	4	4	5	6	7	7	6	8	9	11	7	3	4	4	7	10	10	8
30	6	6	7	6	6	4	4	13	12	9	12	15	15	14	10	6	13	10	8	7	-M-	-M-	4	5
HOURLY MEAN	5	4	5	5	5	5	5	6	7	7	8	9	9	9	9	9	9	8	8	6	5	5	5	5

MAXIMUM = 27 MINIMUM = 1 MEAN = 7 694 VALID OBSERVATIONS (96.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	9	7	10	7	17	20	11	13	17	7	9	7	12	27	19
MIN	1	2	4	3	2	3	2	2	1	1	2	2	2	5	2
MEAN	4	4	6	5	9	14	6	7	12	4	6	3	6	12	8

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	6	10	12	12	11	5	9	15	12	11	9	9	7	11	15
MIN	1	3	2	2	2	1	2	2	2	2	3	2	1	3	4
MEAN	4	6	7	7	7	2	4	8	7	7	5	5	3	6	9

MEAN MAXIMUM = 12 MEAN MINIMUM = 2

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	354	352	311	287	313	305	307	137	61	168	178	161	144	137	153	145	138	130	142	126	125	129	135	139
2	141	141	151	147	147	140	145	146	142	139	-M-	127	142	268	327	340	334	334	328	327	339	348	356	360
3	347	291	107	360	337	359	1	30	48	34	24	28	22	26	37	18	19	16	9	12	2	355	348	353
4	340	328	326	312	327	323	318	335	279	235	259	259	269	245	222	201	207	190	163	158	150	141	153	157
5	148	156	141	155	160	158	145	163	161	141	208	313	352	351	353	1	15	30	23	9	22	15	13	23
6	24	22	19	23	23	16	13	12	11	10	8	12	11	9	7	5	15	6	5	353	356	356	357	354
7	346	343	348	347	333	326	304	252	309	223	274	275	255	246	219	200	196	196	188	195	201	200	208	240
8	231	204	236	239	240	240	238	256	-M-	246	272	251	261	267	284	274	327	337	333	340	10	7	11	12
9	11	20	11	10	8	360	353	358	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	351
10	-M-	-M-	353	347	346	347	338	336	334	337	336	337	326	313	308	307	311	303	300	293	294	300	308	312
11	308	303	311	299	302	306	295	312	302	256	292	279	260	262	258	257	231	175	154	161	160	110	89	55
12	37	52	64	49	48	49	34	27	15	26	14	6	3	356	2	355	348	344	346	348	347	349	335	332
13	326	324	316	315	325	327	336	327	333	326	348	336	307	300	323	299	302	245	249	148	136	200	195	201
14	192	182	178	136	198	98	134	115	63	66	53	60	92	98	127	135	137	124	144	129	164	148	133	152
15	154	154	135	123	139	152	121	142	295	14	21	12	359	353	353	359	357	355	349	353	350	351	349	352
16	351	346	352	347	338	325	296	285	299	295	310	320	324	324	318	310	305	290	247	181	208	186	186	183
17	181	189	188	190	194	194	185	189	188	191	195	203	207	213	220	214	211	197	191	187	200	194	184	186
18	114	176	167	112	76	100	105	282	130	133	178	175	132	133	112	130	150	145	128	83	110	130	144	151
19	150	91	146	67	78	121	139	23	117	144	173	82	347	355	352	1	351	352	353	3	17	22	20	31
20	56	59	51	55	55	48	22	17	14	8	10	10	360	360	357	349	341	348	349	349	348	349	352	355
21	352	346	347	357	360	5	8	14	13	23	21	25	65	103	97	65	78	110	108	110	116	122	99	110
22	123	119	126	127	129	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	210	229	273	296	299	299	302	301	298
23	296	296	292	294	292	293	289	290	294	303	303	303	298	297	299	301	310	310	306	297	304	305	314	324
24	320	326	338	330	338	336	332	310	347	19	13	145	165	157	163	158	145	148	148	162	170	59	178	223
25	264	303	332	337	344	341	345	338	334	339	334	321	330	346	3	359	351	349	8	357	35	71	158	173
26	187	195	204	165	163	155	147	142	154	161	163	160	165	175	171	179	175	170	167	171	172	179	182	182
27	190	197	201	196	190	174	177	179	179	196	194	197	258	321	343	340	337	337	312	306	302	301	298	290
28	306	319	317	326	346	345	336	-M-	-M-	-M-	-M-	26	38	56	62	87	105	117	111	107	123	115	126	133
29	147	133	131	142	144	138	144	148	145	152	147	144	125	123	100	93	134	130	5	2	9	15	12	8
30	9	10	4	355	355	6	8	12	359	8	24	19	15	17	25	21	18	15	10	9	14	13	13	13
31	6	11	13	16	10	5	16	10	360	2	7	7	359	315	311	305	312	320	349	22	49	61	101	129

711 VALID OBSERVATIONS (95.6%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	126	141	151	146	144	145	140	147	142	141	146	156	151	167	162	144	146	145	142	142	117	54	75	119
2	113	76	84	47	38	2	5	2	3	1	360	360	2	7	7	4	6	8	9	6	9	12	14	10
3	6	10	10	9	6	1	5	8	3	360	1	5	5	8	9	8	10	5	357	358	357	358	3	3
4	358	4	3	11	8	17	17	6	356	13	19	16	6	16	16	21	18	24	25	26	26	26	15	8
5	18	18	10	4	357	4	355	352	349	342	331	320	322	318	317	318	319	313	344	348	228	215	293	291
6	255	224	183	180	179	182	170	189	227	245	248	253	248	241	226	217	216	224	222	229	242	235	218	236
7	234	217	161	159	167	181	192	190	174	194	219	243	212	206	207	237	289	297	359	16	42	129	64	20
8	18	19	15	12	16	19	24	37	46	45	53	45	44	36	26	26	25	21	20	19	15	8	1	3
9	355	356	354	354	344	328	312	316	319	324	320	313	325	325	317	315	314	309	270	193	184	207	213	206
10	209	186	176	183	180	181	169	178	173	186	186	183	196	201	223	231	229	253	312	280	187	193	205	189
11	194	192	174	164	170	178	168	166	193	181	190	244	242	208	264	19	15	47	62	42	58	69	72	47
12	11	121	205	159	48	56	25	4	3	253	164	215	193	199	220	264	264	244	218	206	204	220	210	222
13	200	180	189	190	197	191	185	178	175	178	192	196	211	207	194	196	200	221	212	206	214	218	208	204
14	192	179	170	175	155	178	181	174	181	188	197	208	208	213	213	212	214	209	201	205	213	197	179	186
15	198	191	102	97	114	131	176	171	175	175	173	177	177	169	154	142	100	123	75	41	18	9	13	11
16	12	7	14	14	12	4	360	6	4	3	2	12	10	10	17	25	31	47	31	15	359	27	19	59
17	85	71	64	64	76	81	72	51	79	89	90	117	106	168	223	335	4	28	10	62	354	43	330	23
18	357	31	75	11	312	309	8	303	296	291	286	269	265	263	248	291	99	129	76	72	96	116	132	136
19	106	98	114	120	131	156	167	126	129	130	139	146	180	207	207	212	202	208	209	219	241	251	251	239
20	270	271	272	206	320	234	109	340	287	251	328	332	345	343	328	330	328	333	331	338	327	253	46	3
21	260	338	245	202	163	122	155	133	128	193	117	146	160	144	142	155	127	124	158	155	195	146	188	208
22	190	137	140	145	145	125	159	127	144	163	160	185	194	186	180	206	209	195	164	170	181	191	330	2
23	7	19	29	26	21	18	18	24	31	39	40	39	43	51	25	3	354	352	345	344	347	311	307	297
24	306	313	304	312	323	329	326	334	340	350	352	353	348	341	356	1	1	4	11	10	13	4	14	20
25	28	27	36	30	36	28	42	51	29	60	67	63	57	59	64	77	78	82	87	101	102	97	101	99
26	145	115	103	97	149	158	157	153	147	160	161	133	137	142	147	144	144	150	148	165	175	168	182	147
27	97	85	18	70	130	176	170	168	153	148	147	165	184	179	184	187	186	175	168	164	191	157	168	156
28	144	175	181	175	165	158	172	176	179	190	196	210	233	233	239	244	245	249	269	309	324	343	126	232

672 VALID OBSERVATIONS (100.0%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	351	149	124	166	227	203	125	120	150	167	163	170	189	188	195	220	211	207	191	211	211	203	199	204
2	212	219	223	230	236	260	341	111	6	22	33	41	44	42	39	40	42	51	47	48	48	53	66	65
3	64	62	74	82	82	84	76	82	81	90	95	97	93	91	83	70	50	42	44	40	35	31	29	23
4	22	19	16	14	7	356	354	356	354	349	1	2	358	-M-	355	359	353	346	347	340	348	349	354	351
5	344	346	345	346	355	354	350	346	345	351	354	354	359	5	11	8	359	358	349	342	343	37	291	346
6	134	148	177	164	178	196	184	189	235	245	235	238	287	319	333	341	357	349	349	345	335	343	-M-	-M-
7	-M-	341	339	341	330	326	324	323	354	97	53	157	192	177	163	147	139	128	153	146	124	132	156	147
8	147	148	156	165	168	185	168	140	230	229	270	341	350	336	337	353	357	357	345	344	341	333	355	8
9	321	30	63	88	75	128	148	130	139	150	151	147	174	138	154	168	181	182	159	141	106	159	163	177
10	172	155	176	180	173	171	149	162	172	189	210	216	209	213	224	235	241	273	322	326	13	15	356	2
11	338	339	346	347	349	354	357	345	336	326	47	7	11	34	342	119	117	149	144	145	157	161	153	156
12	145	147	137	135	150	154	150	150	149	168	165	188	211	231	273	306	325	323	321	327	325	303	295	282
13	265	265	271	262	262	272	335	242	250	262	268	248	263	276	283	270	269	248	236	36	22	67	60	76
14	158	40	79	57	135	97	122	132	120	122	110	133	134	127	98	70	67	73	91	103	114	116	107	99
15	108	101	97	93	96	120	147	133	135	137	147	140	149	152	149	142	105	25	59	92	96	120	111	105
16	127	295	342	338	343	307	268	255	261	248	261	297	310	315	318	321	335	2	11	16	28	15	34	20
17	14	16	36	47	58	114	132	120	129	130	132	116	108	111	107	85	56	44	35	18	6	11	19	23
18	68	79	75	42	41	44	34	50	62	65	75	67	66	56	57	67	58	52	76	88	100	75	92	125
19	94	98	112	101	41	84	63	69	92	102	105	114	116	115	116	131	143	140	120	179	218	142	107	126
20	168	58	60	354	138	276	326	291	299	311	319	305	284	275	275	284	300	308	319	319	322	313	308	306
21	305	318	313	311	315	317	305	292	306	320	328	331	336	337	345	339	345	338	326	319	300	305	318	315
22	302	302	307	308	334	125	342	292	312	312	324	324	311	304	286	298	282	248	245	176	109	115	175	192
23	195	188	192	202	180	175	172	193	202	223	232	230	234	230	226	226	222	221	221	206	203	213	330	21
24	8	7	110	53	55	308	360	8	6	13	15	12	34	38	39	21	28	31	21	12	2	4	3	357
25	346	350	353	354	350	346	338	336	335	352	332	334	343	344	340	337	337	340	344	349	350	353	2	358
26	285	291	349	268	188	154	206	155	190	189	185	175	223	253	247	117	172	120	94	76	74	76	75	87
27	119	118	111	120	118	116	116	117	122	138	140	144	145	147	150	150	156	153	139	136	143	144	150	149
28	144	152	142	149	154	156	169	176	182	187	191	196	205	206	202	205	204	207	202	197	172	179	181	182
29	183	182	182	188	186	176	167	165	171	183	187	184	182	182	184	176	177	176	182	186	180	183	185	190
30	193	183	191	200	225	227	217	223	238	254	266	258	253	262	264	265	279	271	268	249	230	255	300	329
31	329	327	332	325	307	296	291	270	284	299	261	255	274	261	277	273	282	278	264	241	213	211	207	205

740 VALID OBSERVATIONS (99.5%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982	HOUR																							
DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	208	183	141	104	136	176	191	164	144	174	179	181	188	187	189	187	185	177	166	164	163	167	177	179
2	179	182	183	183	189	186	187	187	191	194	197	200	201	209	222	234	240	276	329	326	324	324	314	313
3	317	317	313	311	317	317	318	317	320	322	313	314	312	310	313	317	315	327	330	349	359	6	18	36
4	26	42	47	46	46	52	62	75	87	92	89	97	98	103	105	109	107	106	104	90	88	85	101	88
5	48	39	44	54	25	9	8	12	17	8	6	9	5	358	356	358	4	7	7	7	13	12	12	359
6	349	334	16	344	335	357	306	302	332	20	26	85	159	123	134	125	147	137	134	137	133	115	127	137
7	137	134	127	128	129	129	127	127	131	132	137	136	140	136	135	127	126	120	113	-M-	-M-	-M-	-M-	-M-
8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	318	277	286	295	318	329	328	334	333	326	336	340	333
9	329	330	333	331	320	306	325	326	296	288	290	278	267	239	246	244	258	238	189	164	157	141	256	35
10	13	12	5	345	-M-	-M-	-M-	-M-	-M-	-M-	-M-	306	304	298	301	308	306	291	299	124	62	39	73	70
11	88	81	91	75	101	113	128	154	151	156	190	207	222	216	217	224	221	220	224	215	201	211	207	215
12	214	215	216	208	195	198	186	197	205	213	192	218	225	260	293	310	327	341	338	330	320	321	344	353
13	346	327	326	351	3	17	19	22	24	31	25	24	15	19	38	306	172	325	212	157	126	138	167	176
14	163	155	151	137	130	152	147	149	173	181	182	169	169	169	173	174	170	171	167	164	161	168	174	174
15	167	161	146	163	168	200	180	194	180	186	95	162	160	176	179	183	173	171	171	183	180	171	42	50
16	48	87	101	99	103	137	157	163	318	-M-	-M-	337	336	344	356	-M-	341	355	346	347	342	339	338	319
17	308	312	315	-M-	-M-	-M-	-M-	-M-	330	329	330	319	319	311	312	311	310	294	299	253	174	211	211	198
18	200	184	160	172	136	166	169	203	203	200	195	201	200	202	206	202	204	218	224	216	188	183	180	193
19	199	191	220	199	210	152	253	214	202	282	76	332	327	328	331	329	327	332	333	332	333	330	328	321
20	309	310	286	289	299	306	316	349	352	353	2	360	350	347	346	349	356	354	355	356	339	337	94	334
21	102	48	107	159	108	162	146	147	311	264	279	308	299	257	287	302	274	236	337	142	2	278	185	337
22	282	319	339	356	321	346	7	9	18	22	26	28	53	3	184	131	285	41	305	286	159	176	197	160
23	166	191	203	210	202	198	190	213	214	225	230	227	217	218	220	218	217	222	209	196	197	199	200	207
24	206	208	200	199	204	204	202	209	206	209	209	211	211	199	195	195	201	204	204	217	216	202	201	196
25	193	187	172	177	179	166	160	174	178	205	184	178	169	189	175	191	190	186	182	181	185	211	283	5
26	50	357	6	6	5	358	353	358	360	354	1	357	9	15	18	7	10	13	21	23	14	10	10	22
27	18	19	58	71	88	107	92	78	119	112	112	115	127	137	152	168	124	71	108	105	88	137	147	144
28	136	127	130	98	63	91	130	122	99	99	93	92	91	105	111	103	105	106	100	83	67	64	66	66
29	64	81	81	73	94	90	102	95	92	121	137	138	147	141	130	132	127	130	121	110	122	53	9	357
30	351	176	199	23	40	32	148	133	130	7	31	37	58	349	355	14	11	31	65	85	21	350	92	320

689 VALID OBSERVATIONS (95.7%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	102	101	107	47	101	124	129	122	42	17	195	279	252	260	245	255	259	277	262	34	164	299	64	5
2	39	30	34	132	121	124	142	148	148	169	186	184	197	204	203	218	210	205	197	177	176	181	179	176
3	204	185	170	161	155	164	168	170	178	193	199	195	195	191	192	197	193	196	185	179	175	176	177	182
4	185	184	197	191	185	189	191	196	199	198	196	199	196	205	198	197	200	198	194	193	193	196	209	294
5	33	51	48	90	90	163	172	227	355	5	1	357	349	352	354	357	3	4	15	16	18	16	23	22
6	26	17	9	10	343	358	2	348	353	356	1	360	353	7	358	337	306	279	257	228	210	221	217	217
7	230	248	259	327	255	173	131	181	243	253	255	256	262	255	242	246	252	239	217	199	185	186	184	201
8	200	201	208	209	212	210	205	212	224	230	235	224	217	205	192	188	191	190	185	179	177	179	179	180
9	180	172	174	176	184	186	186	190	193	204	201	197	195	196	194	197	195	196	189	187	179	179	176	185
10	191	190	186	181	183	187	183	186	197	203	208	202	198	196	196	199	192	193	188	181	181	177	173	174
11	176	175	175	214	279	350	19	26	113	147	155	159	184	188	201	200	191	204	189	175	162	177	321	240
12	319	108	132	117	14	86	110	280	128	185	232	198	176	184	177	179	177	175	179	167	140	133	158	167
13	171	136	146	133	131	140	145	108	129	141	149	169	185	211	143	141	135	135	188	197	154	155	170	177
14	165	156	153	146	151	139	130	141	140	167	186	185	154	153	145	157	118	164	152	109	137	128	158	168
15	195	183	153	160	171	160	151	148	175	190	203	216	228	234	230	229	214	305	92	129	163	194	199	145
16	115	141	186	221	210	252	232	164	171	192	187	168	170	188	183	201	180	178	188	153	188	200	190	207
17	175	191	154	194	131	58	293	49	51	299	282	279	254	254	249	243	234	277	275	256	243	41	189	205
18	223	180	121	159	175	186	159	153	198	146	181	189	211	213	231	216	235	177	184	180	155	154	174	180
19	194	207	187	196	151	20	43	68	119	164	154	180	188	189	193	189	202	199	193	180	164	173	179	157
20	154	157	143	141	150	135	206	109	25	133	70	72	149	101	73	53	49	49	5	290	322	339	331	346
21	353	4	294	314	308	-M-	-M-	-M-	-M-	16	22	17	19	7	10	351	355	350	355	356	347	340	330	331
22	296	287	316	310	298	310	324	328	325	324	331	336	330	334	314	311	320	341	346	5	48	33	345	11
23	20	326	28	80	296	233	85	174	145	152	130	84	88	13	35	53	35	67	89	107	115	111	112	113
24	137	142	136	112	121	135	133	141	165	138	132	119	100	113	104	111	94	82	79	94	93	96	104	103
25	95	103	111	115	125	123	113	110	122	126	122	125	126	129	122	122	120	111	114	108	113	121	126	30
26	228	221	240	218	261	282	265	281	273	239	220	234	257	242	249	250	253	262	250	170	159	178	136	129
27	157	183	158	235	239	231	61	356	306	305	14	31	7	292	5	314	334	34	63	102	67	26	23	28
28	37	305	107	54	123	125	90	97	125	118	114	129	120	118	126	138	133	135	118	120	118	138	31	33
29	104	99	86	344	358	12	347	304	338	7	10	349	359	5	1	356	354	360	39	50	49	25	45	116
30	116	106	99	90	136	105	109	134	138	174	342	87	156	225	237	264	322	328	343	343	355	351	350	358
31	357	360	356	359	356	357	354	358	357	355	360	354	351	349	353	348	338	336	345	341	332	338	341	324

740 VALID OBSERVATIONS (99.5%)

35 FT WIND DIRECTION (DEG)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	320	358	49	69	16	274	311	302	301	314	313	11	83	234	175	173	192	211	358	87	204	130	197	164
2	168	180	135	90	139	16	65	116	148	124	111	153	99	132	114	111	123	127	85	65	40	56	61	64
3	67	55	29	13	21	17	13	25	55	77	87	94	80	86	96	102	106	112	108	123	121	89	53	93
4	106	70	58	55	9	10	21	28	91	85	83	69	78	62	106	111	11	145	146	145	143	148	145	160
5	148	159	165	128	131	158	156	130	138	167	175	163	174	159	160	157	155	155	157	157	152	156	181	150
6	149	149	152	154	156	162	171	176	181	187	189	199	201	205	207	208	227	221	219	204	194	203	161	191
7	175	60	4	20	343	35	38	1	5	20	22	4	3	11	360	17	33	4	28	70	37	15	95	95
8	14	30	74	46	47	59	79	129	133	107	74	125	133	47	67	81	103	111	139	122	134	114	122	105
9	138	142	209	157	252	139	217	293	324	331	328	328	330	334	344	348	349	345	349	346	-M-	-M-	345	133
10	124	188	36	277	261	174	209	281	294	296	-M-	-M-	-M-	-M-	-M-	-M-	256	219	193	169	36	70	155	164
11	196	176	67	141	144	19	28	158	136	143	148	185	171	169	174	166	159	162	167	161	172	161	154	152
12	129	265	111	275	89	182	127	152	168	178	178	210	267	332	182	160	79	162	356	102	53	359	12	25
13	46	356	16	11	300	137	128	56	115	226	224	202	207	210	203	226	214	200	189	199	182	185	191	183
14	181	178	170	159	143	134	169	179	180	169	178	191	173	149	162	183	189	192	176	176	185	189	193	293
15	321	46	202	228	248	253	137	159	66	356	354	4	3	10	16	354	360	357	360	6	9	12	4	2
16	356	358	358	349	14	354	358	5	7	32	4	10	3	10	27	81	141	222	212	267	99	163	177	174
17	190	194	200	206	176	200	210	219	225	223	221	211	216	238	235	288	61	358	27	135	156	342	181	191
18	101	319	117	286	2	358	18	21	41	39	42	31	30	27	25	8	2	18	17	15	357	5	351	328
19	349	355	355	352	335	334	340	360	7	31	17	344	306	299	297	313	309	318	311	272	157	184	206	220
20	226	228	235	242	272	259	39	94	15	9	6	17	11	33	347	358	346	347	343	323	33	17	34	59
21	62	85	109	92	63	53	165	104	141	131	165	110	49	34	110	312	316	11	120	248	259	259	273	298
22	300	277	83	358	16	13	10	21	33	67	73	58	47	56	41	22	39	63	110	151	144	16	26	96
23	158	129	143	142	146	138	162	174	187	181	172	167	177	189	184	197	192	176	161	147	159	161	181	188
24	183	180	180	175	167	144	148	155	190	205	194	198	207	206	203	202	210	214	209	224	215	166	264	171
25	147	140	301	68	357	16	351	12	18	16	25	21	14	23	21	1	10	23	26	32	25	28	66	51
26	55	47	39	33	19	24	35	51	74	127	62	27	78	116	122	122	119	108	113	118	116	108	111	111
27	100	87	82	52	42	28	38	35	38	48	69	84	53	252	281	238	269	161	63	66	65	26	30	69
28	8	55	69	15	38	257	135	43	74	78	81	21	86	69	21	138	48	236	226	241	325	111	148	178
29	185	176	178	161	228	268	269	277	285	269	275	289	299	2	18	29	26	9	40	44	17	10	18	55
30	56	-M-	115	-M-	-M-	-M-	-M-	22	53	85	-M-	154	147	162	159	135	18	72	92	123	-M-	-M-	77	65

704 VALID OBSERVATIONS (97.8%)

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-12.3	-12.9	-13.9	-15.1	-14.7	-15.5	-16.1	-16.3	-15.4	-14.2	-13.5	-12.6	-12.1	-11.3	-9.8	-9.3	-8.4	-7.4	-6.8	-6.9	-7.4	-7.6	-7.2	-6.5
2	-5.7	-4.4	-3.8	-3.3	-2.8	-2.3	-1.7	-1.6	-1.3	-0.8	-0.5	-0.4	-0.1	0.1	0.1	-0.7	-1.0	-2.3	-4.3	-6.6	-7.3	-8.0	-9.0	-9.6
3	-10.7	-12.1	-12.1	-12.1	-12.1	-11.9	-12.4	-12.5	-12.3	-11.9	-11.0	-10.2	-9.4	-9.3	-9.1	-9.2	-9.6	-10.0	-10.1	-10.1	-10.0	-9.9	-10.4	-10.5
4	-11.0	-11.8	-12.2	-12.4	-12.4	-12.7	-13.4	-14.2	-M-	-15.0	-14.5	-13.1	-11.9	-11.1	-10.7	-10.0	-9.8	-10.0	-10.3	-10.4	-10.6	-10.7	-10.0	-7.7
5	-7.5	-6.9	-7.0	-6.1	-5.7	-5.6	-5.3	-5.7	-5.6	-5.6	-3.6	-1.2	-0.3	-4.4	-5.7	-6.1	-7.0	-8.5	-9.5	-9.6	-9.8	-9.8	-10.4	-11.0
6	-11.4	-11.3	-11.3	-12.1	-13.2	-13.5	-14.4	-15.0	-15.2	-14.5	-13.6	-12.8	-13.0	-13.0	-12.9	-12.9	-13.7	-13.6	-14.3	-14.7	-14.9	-15.1	-15.4	-15.6
7	-16.0	-16.3	-16.4	-16.6	-17.4	-18.2	-19.5	-20.5	-20.6	-22.3	-19.6	-18.1	-17.1	-15.8	-14.6	-13.4	-12.9	-12.9	-13.8	-14.3	-14.6	-13.7	-14.3	-13.3
8	-13.0	-13.4	-12.1	-10.9	-10.3	-11.5	-12.6	-9.9	-9.8	-9.1	-8.0	-6.8	-5.6	-5.0	-4.5	-4.1	-4.2	-4.8	-6.0	-6.7	-7.6	-8.3	-9.8	-10.8
9	-11.2	-11.9	-13.3	-14.6	-15.5	-16.3	-17.2	-17.5	-18.0	-17.6	-17.2	-16.9	-16.8	-16.1	-15.3	-14.4	-13.8	-13.2	-13.1	-13.4	-15.4	-18.7	-20.8	-22.7
10	-24.1	-25.0	-25.8	-26.5	-27.1	-27.3	-27.9	-28.1	-28.1	-27.6	-26.7	-25.8	-25.1	-24.4	-23.7	-22.6	-21.7	-21.6	-22.3	-22.0	-21.8	-21.4	-21.1	-20.9
11	-20.8	-20.8	-20.8	-20.8	-20.7	-20.9	-20.9	-20.2	-20.1	-19.7	-18.0	-16.7	-15.6	-14.3	-13.2	-12.8	-12.8	-12.8	-12.8	-13.0	-12.7	-12.8	-12.8	-12.8
12	-12.8	-12.3	-12.2	-12.1	-12.1	-11.9	-12.0	-11.9	-11.8	-12.2	-11.9	-11.1	-11.0	-10.5	-10.3	-10.7	-11.0	-11.4	-12.1	-12.6	-13.8	-14.4	-16.0	-17.1
13	-18.2	-19.0	-19.8	-20.4	-21.0	-21.6	-21.5	-21.4	-21.4	-20.6	-18.7	-17.6	-17.0	-16.0	-14.8	-14.3	-13.7	-14.4	-15.1	-16.6	-17.8	-18.3	-19.5	-17.2
14	-15.9	-15.7	-15.7	-15.8	-16.4	-16.5	-16.6	-16.0	-15.0	-14.3	-13.5	-12.7	-12.4	-12.1	-11.7	-11.3	-11.3	-10.8	-11.2	-11.3	-11.9	-11.8	-11.9	-11.5
15	-11.3	-10.9	-10.5	-10.1	-9.8	-9.2	-9.0	-8.6	-8.7	-8.4	-7.3	-4.9	-1.8	-3.9	-6.0	-8.4	-9.6	-10.7	-11.9	-13.1	-14.2	-15.9	-17.6	-19.1
16	-20.2	-21.1	-21.5	-21.8	-22.3	-22.7	-23.2	-23.5	-22.9	-21.8	-20.6	-19.8	-19.0	-18.9	-18.7	-18.3	-18.3	-18.7	-20.0	-21.1	-22.2	-22.0	-21.9	-21.5
17	-21.1	-19.4	-17.1	-15.3	-14.2	-13.6	-13.4	-13.1	-12.9	-13.0	-12.6	-11.6	-10.2	-8.6	-7.0	-5.8	-5.4	-5.6	-5.9	-5.9	-6.8	-7.4	-7.9	-8.0
18	-6.8	-7.6	-7.4	-8.3	-7.9	-8.9	-9.1	-8.7	-10.5	-9.6	-7.7	-5.1	-3.8	-2.2	-0.4	-0.0	-0.6	-0.9	-1.9	-2.5	-3.1	-4.2	-4.8	-5.4
19	-5.4	-6.2	-6.4	-7.0	-7.3	-7.5	-8.5	-7.9	-10.1	-9.9	-8.4	-5.8	-2.4	-1.0	-1.2	-1.3	-1.6	-2.5	-3.3	-3.5	-3.8	-4.6	-5.2	-5.5
20	-5.5	-6.0	-6.7	-7.1	-7.7	-7.7	-7.7	-7.7	-7.6	-7.5	-7.9	-8.4	-7.7	-7.0	-6.3	-6.1	-6.3	-6.4	-7.3	-7.3	-7.3	-7.1	-7.4	-7.4
21	-7.3	-7.4	-7.1	-6.7	-6.7	-6.8	-7.1	-7.1	-7.0	-6.8	-6.4	-5.7	-4.7	-4.1	-3.7	-3.8	-3.6	-3.6	-3.8	-3.8	-3.7	-3.8	-3.6	-3.4
22	-3.2	-2.9	-2.3	-2.3	-2.3	-2.1	-1.8	-1.5	-1.1	-1.2	-0.9	-0.5	-0.4	-0.6	-0.4	0.2	1.5	0.1	-4.0	-7.9	-10.1	-11.9	-13.4	-14.1
23	-14.7	-15.3	-16.0	-16.6	-16.8	-16.9	-17.4	-17.5	-17.6	-17.3	-16.6	-16.0	-15.0	-13.9	-12.8	-12.5	-11.7	-11.8	-12.3	-M-	-12.4	-12.2	-12.1	-12.2
24	-12.8	-13.3	-13.4	-13.3	-13.5	-13.8	-14.3	-15.0	-14.7	-14.1	-13.4	-12.9	-12.7	-11.8	-10.9	-10.2	-9.5	-8.8	-8.1	-7.6	-6.7	-5.4	-6.2	-5.2
25	-4.1	-2.2	-1.5	-4.1	-7.7	-9.6	-11.2	-12.6	-13.2	-12.5	-11.4	-10.3	-8.9	-7.9	-7.7	-7.7	-7.9	-8.6	-9.8	-10.6	-12.1	-12.7	-13.2	-13.5
26	-13.8	-14.2	-14.7	-13.8	-13.8	-13.4	-13.4	-13.1	-12.1	-10.0	-7.7	-5.5	-3.5	-0.6	0.9	2.3	3.3	3.5	3.7	4.0	4.0	4.2	4.4	4.4
27	4.3	4.6	4.3	4.1	4.0	3.3	2.3	2.1	1.8	1.6	2.7	3.7	4.9	5.2	5.4	5.9	5.5	5.2	4.0	4.0	3.9	3.6	2.9	2.2
28	2.1	2.3	1.4	0.5	-0.6	-2.1	-3.4	-4.5	-5.2	-5.2	-4.9	-4.4	-4.1	-3.4	-3.3	-3.0	-2.7	-2.6	-3.0	-3.2	-2.7	-2.5	-2.5	-2.0
29	-1.5	-0.8	-0.5	0.3	0.8	0.7	1.3	1.7	1.1	1.2	1.5	1.5	1.3	1.5	1.3	1.3	1.0	0.6	0.6	0.7	0.8	1.0	1.1	1.0
30	0.8	0.7	-0.1	-0.5	-1.1	-1.3	-2.3	-3.1	-3.9	-4.3	-4.8	-4.8	-4.7	-4.2	-4.5	-4.4	-4.5	-5.0	-5.7	-6.8	-7.3	-7.9	-8.4	-9.3
31	-10.3	-11.4	-12.5	-13.1	-13.2	-13.4	-13.9	-14.3	-14.8	-14.7	-14.5	-13.5	-11.9	-10.5	-9.9	-9.8	-9.7	-9.9	-10.2	-10.5	-10.4	-10.3	-10.4	-10.7
HOURLY MEAN	-10.4	-10.5	-10.6	-10.8	-11.0	-11.3	-11.7	-11.8	-11.8	-11.6	-10.7	-9.7	-8.8	-8.2	-7.8	-7.5	-7.4	-7.7	-8.4	-8.8	-9.3	-9.7	-10.2	-10.2

MAXIMUM = 5.9 MINIMUM =-28.1 MEAN = -9.8 742 VALID OBSERVATIONS (99.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	-6.5	0.1	-9.1	-7.7	-0.3	-11.3	-12.9	-4.1	-11.2	-20.9	-12.7	-10.3	-13.7	-10.8	-1.8	-18.3
MIN	-16.3	-9.6	-12.5	-15.0	-11.0	-15.6	-22.3	-13.4	-22.7	-28.1	-20.9	-17.1	-21.6	-16.6	-19.1	-23.5
MEAN	-11.4	-3.2	-10.8	-11.6	-6.6	-13.6	-16.3	-8.5	-15.9	-24.5	-16.6	-12.3	-18.2	-13.5	-10.0	-20.9

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	-5.4	-0.0	-1.0	-5.5	-3.4	1.5	-11.7	-5.2	-1.5	4.4	5.9	2.3	1.7	0.8	-9.7
MIN	-21.1	-10.5	-10.1	-8.4	-7.4	-14.1	-17.6	-15.0	-13.5	-14.7	1.6	-5.2	-1.5	-9.3	-14.8
MEAN	-10.9	-5.3	-5.2	-7.1	-5.3	-3.5	-14.7	-11.2	-9.2	-4.8	3.8	-2.5	0.8	-4.1	-11.8

MEAN MAXIMUM = -5.8 MEAN MINIMUM =-14.4

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB 1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-10.6	-10.4	-10.2	-10.2	-9.9	-10.1	-9.6	-9.2	-8.5	-7.9	-7.0	-5.8	-4.5	-3.0	-2.7	-1.9	-1.4	-1.2	-1.6	-2.1	-2.9	-3.4	-3.9	-4.5
2	-4.3	-4.5	-4.5	-5.0	-5.1	-5.0	-4.9	-5.2	-5.5	-5.7	-6.0	-5.8	-5.8	-5.9	-6.1	-5.7	-5.8	-6.5	-7.8	M	-8.4	-9.2	-10.6	-11.7
3	-13.1	-15.1	-16.6	-17.7	-18.2	-18.7	-19.2	-19.5	-19.9	-19.7	-19.0	-18.3	-17.9	-17.0	-16.3	-15.9	-16.3	-16.8	-17.8	-18.3	-18.9	-19.3	-19.7	-19.9
4	-20.2	-20.3	-20.5	-20.8	-20.5	-20.7	-20.3	-19.8	-19.5	-18.8	-17.9	-16.9	-16.4	-16.3	-16.3	-16.0	-15.9	-16.0	-16.3	-16.2	-16.3	-16.2	-15.9	-15.7
5	-15.8	-15.6	-15.5	-15.4	-15.7	-15.9	-16.2	-16.5	-16.3	-16.6	-16.5	-16.3	-16.3	-16.3	-16.3	-16.3	-16.3	-16.5	-17.3	-17.6	-18.2	-19.8	-19.4	-19.4
6	-20.4	-20.3	-21.2	-21.6	-22.0	-21.6	-21.3	-21.2	-21.0	-19.7	-18.4	-16.3	-14.8	-13.4	-11.9	-10.8	-9.7	-9.4	-10.2	-11.2	-10.6	-11.7	-13.4	-13.4
7	-12.8	-12.3	-11.7	-11.2	-11.3	-11.8	-13.1	-13.7	-13.2	-12.9	-11.0	-9.2	-8.0	-6.9	-5.6	-4.3	-4.0	-4.6	-5.0	-6.4	-7.9	-10.8	-10.8	-9.5
8	-9.2	-9.1	-9.8	-10.3	-11.0	-11.6	-11.8	-11.3	-11.3	-10.9	-10.1	-9.7	-9.0	-8.3	-8.3	-8.2	-8.5	-8.9	-9.3	-9.5	-9.4	-9.3	-9.4	-9.3
9	-9.7	-11.2	-13.1	-14.0	-15.1	-16.1	-17.4	-17.8	-17.6	-16.7	-15.9	-15.1	-14.3	-13.4	-12.9	-13.0	-13.2	-13.8	-14.8	-15.5	-16.8	-17.3	-17.2	-17.3
10	-18.0	-17.7	-17.2	-17.2	-17.1	-16.8	-16.3	-15.8	-15.1	-14.5	-13.4	-12.1	-10.8	-10.0	-8.7	-8.1	-7.7	-7.7	-8.4	-9.6	-11.8	-12.3	-12.1	-14.2
11	-14.3	-14.1	-15.1	-15.2	-15.7	-15.8	-14.6	-14.0	-13.7	-12.9	-11.1	-8.6	-7.0	-5.9	-4.9	-4.4	-3.7	-3.9	-4.0	-4.4	-4.8	-5.1	-5.0	-5.6
12	-5.9	-5.9	-6.1	-6.1	-5.8	-5.9	-5.9	-5.9	-5.6	-5.6	-4.8	-4.0	-3.5	-2.6	-1.8	-0.8	-0.8	-1.5	-3.0	-3.8	-4.7	-4.6	-5.9	-6.5
13	-6.7	-7.5	-8.1	-8.7	-9.6	-10.1	-10.2	-10.4	-10.3	-9.4	-7.1	-3.6	-1.1	-0.5	-0.4	1.0	1.9	1.7	0.3	-0.4	-0.7	-0.9	-1.4	-1.7
14	-2.4	-2.0	-2.6	-2.1	-1.6	-1.8	-2.1	-2.3	-1.7	-0.7	1.4	3.5	4.3	5.0	5.2	5.2	5.0	4.4	3.7	3.6	3.7	3.4	3.3	2.3
15	3.8	4.7	3.3	1.5	1.4	1.4	1.4	1.8	2.7	2.8	3.1	3.5	4.0	4.2	4.1	4.0	4.1	3.5	2.9	2.2	2.3	2.1	1.9	1.9
16	1.7	1.4	1.1	1.2	1.1	1.2	1.2	1.4	1.2	1.1	1.0	1.1	1.2	1.2	1.3	1.5	1.5	1.5	1.7	1.7	1.6	1.2	0.7	0.6
17	0.5	0.4	0.3	0.3	0.2	0.2	0.0	0.0	0.2	0.5	0.7	0.9	1.1	1.0	1.1	1.2	1.3	0.9	0.8	0.8	0.8	0.6	0.5	0.4
18	0.4	0.5	0.4	0.3	0.0	0.3	0.3	0.7	1.1	1.2	0.9	0.3	0.5	1.1	2.1	4.4	6.1	5.9	4.7	3.4	2.9	0.5	-0.5	-0.4
19	0.6	-0.3	-0.4	-0.0	-1.4	-0.5	-0.1	-0.1	0.1	1.4	3.9	6.1	8.8	11.1	13.0	14.4	14.0	13.4	12.2	11.1	10.3	9.8	9.5	9.3
20	8.7	8.0	7.2	6.2	6.0	4.6	3.5	4.5	5.5	5.9	8.9	11.0	12.2	13.4	14.4	15.0	15.2	14.5	12.7	10.8	9.7	7.3	5.4	6.9
21	4.3	4.5	2.2	1.9	1.5	1.2	0.5	0.1	0.5	2.4	5.6	7.1	9.4	11.3	12.7	14.5	15.6	15.3	13.9	12.6	11.3	10.1	6.6	7.8
22	7.4	6.7	5.2	4.4	3.8	3.2	2.6	2.7	2.7	4.9	8.1	13.0	16.2	18.4	20.0	21.2	20.9	20.2	18.4	15.8	15.2	13.8	13.3	7.9
23	5.5	4.6	3.9	3.4	2.6	2.2	1.3	1.0	1.0	1.1	1.4	1.7	1.9	2.1	2.0	1.7	1.5	1.5	1.2	1.2	1.2	1.1	1.2	1.0
24	0.6	0.6	0.5	0.6	0.3	0.1	-0.2	-0.0	0.7	1.3	1.7	2.0	2.4	2.0	1.3	1.0	0.5	-0.6	-1.3	-1.7	-2.2	-2.2	-2.4	-2.8
25	-3.0	-2.9	-3.3	-3.7	-3.8	-3.9	-4.0	-4.1	-4.0	-3.9	-3.6	-2.9	-2.3	-1.7	-0.9	-0.2	0.3	0.2	-0.2	-0.8	-1.3	-1.8	-2.3	-2.8
26	-3.3	-3.4	-3.8	-4.2	-4.6	-4.9	-5.3	-5.7	-5.2	-4.0	-3.0	-2.3	-1.7	-1.0	-0.2	0.7	1.1	1.2	0.8	0.2	-0.8	-1.3	-1.7	-1.8
27	-2.5	-2.8	-3.2	-3.4	-3.5	-4.1	-4.4	-4.4	-3.5	-1.9	-0.7	1.0	2.7	3.8	4.4	4.9	5.7	5.5	4.7	4.0	2.8	2.3	2.0	1.0
28	0.3	1.4	1.3	0.8	0.3	-0.1	0.2	0.0	0.8	2.4	4.4	7.4	9.3	9.7	11.0	11.3	11.1	10.6	9.8	8.4	6.4	5.1	1.5	1.0
HOURLY MEAN	-4.9	-5.1	-5.6	-5.9	-6.2	-6.5	-6.6	-6.6	-6.3	-5.6	-4.4	-3.2	-2.1	-1.4	-0.7	-0.1	0.1	-0.2	-1.0	-1.6	-2.4	-3.1	-3.8	-4.2

MAXIMUM = 21.2 MINIMUM =-22.0 MEAN = -3.7 671 VALID OBSERVATIONS (99.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAX	-1.2	-4.3	-13.1	-15.7	-15.4	-9.4	-4.0	-8.2	-9.7	-7.7	-3.7	-0.8	1.9	5.2
MIN	-10.6	-11.7	-19.9	-20.8	-19.8	-22.0	-13.7	-11.8	-17.8	-18.0	-15.8	-6.5	-10.4	-2.6
MEAN	-5.9	-6.3	-17.9	-17.9	-16.8	-16.1	-9.5	-9.7	-15.0	-13.0	-9.3	-4.5	-4.3	1.4

DAY	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAX	4.7	1.7	1.3	6.1	14.4	15.2	15.6	21.2	5.5	2.4	0.3	1.2	5.7	11.3
MIN	1.4	0.6	0.0	-0.5	-1.4	3.5	0.1	2.6	1.0	-2.8	-4.1	-5.7	-4.4	-0.1
MEAN	2.9	1.3	0.6	1.6	6.1	9.1	7.2	11.1	2.0	0.1	-2.4	-2.3	0.4	4.8

MEAN MAXIMUM = 0.7 MEAN MINIMUM = -7.5

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.2	-1.3	-1.0	-2.2	-1.7	-2.1	-2.7	-3.1	-2.5	0.3	3.4	7.5	10.0	11.5	13.3	15.4	16.3	16.9	14.7	13.5	13.2	12.6	12.2	12.2
2	12.7	12.6	12.3	12.4	12.6	12.5	11.6	9.8	5.3	3.6	2.9	2.5	1.8	1.3	1.0	1.1	0.9	0.6	0.1	-0.2	-0.7	-1.0	-1.4	-1.5
3	-2.1	-2.5	-2.8	-3.3	-3.6	-3.8	-3.9	-4.0	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-3.2	-3.2	-3.0	-2.9	-3.1	-3.4	-3.6	-3.5	-3.4
4	-3.9	-4.1	-4.8	-5.2	-5.2	-5.3	-5.5	-5.5	-5.2	-4.9	-4.4	-3.8	-3.6	-3.2	-3.2	-3.0	-2.9	-3.0	-3.1	-3.2	-3.2	-3.0	-3.0	-3.1
5	-3.3	-3.4	-4.5	-5.6	-6.2	-5.7	-5.6	-6.5	-7.1	-7.5	-7.6	-7.6	-6.4	-5.8	-5.6	-5.1	-5.1	-5.3	-6.5	-7.4	-8.2	-9.1	-9.9	-10.6
6	-11.3	-12.3	-12.3	-12.9	-12.8	-14.1	-14.5	-14.5	-12.3	-9.4	-6.9	-5.2	-1.7	-1.2	-0.5	-0.0	-1.1	-2.3	-2.6	-3.4	-4.2	-4.5	-5.3	5.9
7	-6.7	-7.5	-8.3	-9.3	-9.9	-10.7	-11.0	-11.2	-9.9	-9.2	-8.2	-7.9	-7.4	-6.5	-5.5	-5.6	-5.8	-5.8	-5.8	-5.8	-6.0	-6.3	-6.6	-6.5
8	-6.4	-6.4	-6.1	-5.2	-4.4	-4.0	-4.4	-4.0	-3.5	-2.6	-0.6	2.2	1.5	0.3	-1.4	-2.7	-3.1	-3.6	-4.7	-5.6	-6.4	-7.1	-7.5	-8.1
9	-8.4	-8.7	-9.1	-9.5	-9.8	-9.6	-9.8	-9.7	-8.8	-7.8	-7.0	-5.8	-5.0	-4.4	-3.0	-1.7	-0.9	-0.1	-0.2	-0.9	-1.3	-1.9	-1.8	-2.5
10	-2.6	-3.3	-3.1	-2.0	-2.3	-2.6	-3.5	-3.3	-1.6	2.9	6.2	9.4	12.2	14.0	15.8	17.0	18.0	17.7	16.2	15.0	12.3	10.7	9.4	7.5
11	7.1	5.5	3.8	3.5	3.2	2.3	1.4	0.9	0.7	0.9	1.1	1.7	2.3	3.2	4.0	4.9	5.3	5.6	5.1	4.6	4.3	4.1	3.5	2.9
12	2.4	2.6	2.9	3.0	3.2	4.1	4.4	5.0	6.6	7.8	10.6	14.1	17.0	18.7	17.8	15.2	8.9	7.6	7.3	7.0	5.8	4.8	4.0	3.1
13	2.3	2.5	2.3	1.6	0.7	1.1	0.6	-1.6	-M-	4.0	7.3	10.0	12.0	13.4	13.9	14.1	14.5	14.4	13.5	11.1	9.2	8.8	7.7	6.3
14	5.1	5.0	4.9	5.1	4.9	5.2	5.2	5.0	5.3	6.3	7.1	7.4	5.8	4.5	3.7	3.4	3.1	3.4	3.5	3.6	3.4	3.0	2.9	2.5
15	2.5	2.4	2.4	2.5	2.6	2.7	2.8	3.1	3.3	3.6	4.0	4.7	5.6	6.2	7.0	8.0	8.8	9.1	8.7	8.4	8.2	9.0	9.1	8.3
16	7.8	7.8	7.9	7.8	7.2	6.8	6.1	6.0	5.8	5.7	7.0	7.5	8.1	9.2	10.2	11.0	11.7	11.8	10.8	9.7	8.7	7.8	6.6	5.7
17	5.0	4.3	3.4	2.7	2.8	3.0	3.1	4.0	4.5	4.5	5.1	5.8	6.0	6.4	7.2	7.6	8.1	8.1	7.7	7.5	6.9	6.3	5.9	5.8
18	6.0	5.8	5.9	5.7	5.4	5.4	5.1	4.6	4.6	4.7	4.8	5.2	6.0	6.3	6.7	7.0	6.8	6.3	6.5	6.5	6.3	5.9	5.9	5.8
19	5.3	5.5	5.8	5.7	5.3	5.2	5.3	5.4	5.2	4.9	4.9	4.6	4.9	5.5	6.1	6.8	7.4	7.5	7.7	8.9	8.9	5.8	4.7	3.6
20	3.3	2.7	2.2	1.7	2.3	2.5	4.6	4.2	4.4	4.8	5.6	6.3	7.0	8.2	9.1	9.4	9.4	8.4	6.9	5.1	3.7	2.4	0.9	0.3
21	-0.4	-1.3	-2.1	-2.6	-2.8	-2.9	-2.9	-2.7	-1.4	-0.5	-0.0	1.2	1.9	2.2	2.3	2.6	2.9	3.1	3.1	2.9	2.7	2.6	2.7	2.5
22	1.3	0.5	-0.0	-0.8	-1.5	-2.4	-2.8	-2.6	-0.6	1.2	3.1	5.0	6.7	7.7	8.3	8.9	9.2	9.1	8.9	7.5	-M-	4.7	3.8	3.4
23	3.2	2.6	2.3	2.4	2.1	1.9	1.9	1.3	3.7	7.2	9.4	11.4	13.5	13.5	13.6	12.4	12.1	11.8	10.6	8.9	8.0	7.6	7.0	6.6
24	5.9	5.4	2.7	2.1	2.1	1.3	2.7	2.2	2.1	3.8	5.3	6.0	6.6	7.2	7.3	6.8	6.5	6.3	6.0	5.1	3.1	2.2	2.3	2.6
25	1.9	1.3	1.2	1.5	1.2	0.5	-0.1	-0.1	0.6	1.8	2.2	3.4	4.6	4.9	4.9	5.1	5.0	4.8	4.5	3.5	2.6	2.0	1.5	0.9
26	-1.7	-2.6	-1.8	-3.7	-4.4	-5.7	-5.9	-4.5	-2.0	-0.4	1.5	2.7	4.3	5.4	6.2	6.9	7.4	7.5	6.9	5.4	4.0	3.0	1.9	1.2
27	0.9	0.9	0.6	0.4	-0.0	-0.5	-1.0	-1.2	-0.7	0.0	1.0	2.3	4.1	5.5	6.4	7.1	7.4	7.4	6.9	5.3	3.8	2.5	2.0	1.4
28	0.8	0.5	-0.0	-0.5	-0.7	-0.9	-0.6	-0.2	0.7	1.9	3.8	5.9	8.1	9.6	10.1	10.4	10.7	10.6	10.2	8.8	7.9	7.0	6.5	6.2
29	6.0	5.6	5.9	5.3	5.2	4.9	4.1	4.1	5.2	6.8	9.0	10.1	12.1	12.5	13.0	13.6	13.8	14.0	14.3	12.3	12.0	11.7	11.1	11.8
30	10.9	11.8	12.2	12.7	12.9	11.1	10.4	10.3	11.2	12.5	14.1	15.3	16.2	17.0	17.2	17.7	18.4	18.7	17.9	15.9	12.9	14.7	14.7	13.6
31	12.1	10.6	9.6	8.3	7.5	6.0	4.7	4.5	6.9	10.1	12.1	14.0	15.5	16.4	17.4	17.8	18.1	18.2	17.6	15.4	12.3	11.3	9.8	9.8
HOURLY MEAN	1.8	1.4	1.0	0.7	0.5	0.2	-0.0	-0.1	0.7	1.9	3.2	4.5	5.6	6.3	6.8	6.7	6.7	6.6	6.1	5.2	4.2	3.7	3.1	2.7

MAXIMUM = 18.7 MINIMUM =-14.5 MEAN = 3.3 735 VALID OBSERVATIONS (98.8%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	16.9	12.7	-2.1	-2.9	-3.3	-0.0	-5.5	2.2	-0.1	18.0	7.1	18.7	14.5	7.4	9.1	11.8
MIN	-3.1	-1.5	-4.0	-5.5	-10.6	-14.5	-11.2	-8.1	-9.8	-3.5	0.7	2.4	-1.6	2.5	2.4	5.7
MEAN	6.5	4.7	-3.2	-4.0	-6.5	-7.1	-7.6	-3.9	-5.3	6.7	3.4	7.7	7.4	4.6	5.5	8.1

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	8.1	7.0	8.9	9.4	3.1	9.2	13.6	7.3	5.1	7.5	7.4	10.7	14.3	18.7	18.2
MIN	2.7	4.6	3.6	0.3	-2.9	-2.8	1.3	1.3	-0.1	-5.9	-1.2	-0.9	4.1	10.3	4.5
MEAN	5.5	5.8	5.9	4.8	0.5	3.4	7.3	4.3	2.5	1.3	2.6	4.9	9.3	14.2	11.9

MEAN MAXIMUM = 8.2 MEAN MINIMUM = -1.3

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	9.5	7.3	6.2	4.7	4.3	5.2	5.6	5.7	7.7	13.4	16.6	18.5	19.9	20.8	22.2	23.2	23.5	23.2	22.9	21.5	20.5	19.6	19.3	18.5
2	18.7	18.8	18.6	18.6	18.6	18.4	18.9	19.3	20.4	21.5	22.4	23.9	25.6	26.4	26.8	24.6	24.0	21.4	11.6	6.4	3.9	1.8	0.3	-1.2
3	-2.4	-2.9	-3.2	-3.3	-3.5	-3.9	-4.0	-3.6	-3.2	-2.4	-1.2	1.0	3.0	5.0	7.0	8.3	9.1	9.1	8.3	7.0	5.8	4.5	3.9	2.6
4	1.8	0.6	-0.2	-1.0	-1.5	-2.0	-2.5	-2.3	-1.5	-0.6	0.8	2.2	4.0	5.1	6.1	6.7	6.8	7.2	6.6	5.3	4.6	4.0	3.6	3.4
5	3.5	3.3	2.8	2.2	1.2	-0.4	-1.0	-0.9	-1.1	-1.1	-1.5	-1.3	-0.9	-0.6	-0.6	-0.5	-0.5	-0.9	-1.4	-1.6	-1.9	-2.6	-3.4	-4.0
6	-4.4	-5.3	-5.8	-6.0	-6.6	-6.9	-6.9	-6.6	-4.8	-3.4	-2.3	-1.7	-1.1	-0.5	0.1	0.5	0.8	1.2	1.7	1.7	1.5	0.9	0.8	0.8
7	0.6	0.4	-0.3	-0.2	-0.4	-0.8	-1.0	-1.1	-0.9	-0.6	0.2	1.5	2.4	1.7	0.2	0.0	0.0	-0.1	0.3	-0.4	-0.7	-0.9	-1.0	-0.7
8	-0.6	-0.5	-0.8	-0.8	-0.9	-1.0	-1.0	-1.0	-0.9	-0.7	-0.6	-0.1	0.3	0.8	1.2	1.3	1.1	1.9	1.8	1.3	0.8	0.4	0.0	-0.8
9	-1.3	-1.9	-2.0	-2.4	-2.9	-3.4	-3.9	-3.5	-2.5	-1.5	-0.4	0.8	2.8	4.6	6.3	7.6	9.1	9.9	9.6	8.8	6.7	5.3	5.3	5.9
10	5.3	5.0	4.6	3.8	3.3	2.5	1.7	1.9	4.2	5.4	6.7	7.7	8.9	10.2	11.7	12.9	13.4	13.5	13.4	12.1	9.8	8.3	7.4	6.4
11	5.3	4.4	3.8	3.3	2.7	-M-	-M-	2.2	4.4	7.6	11.0	14.6	17.5	18.9	20.8	22.2	22.7	22.5	21.0	18.8	17.4	16.6	15.6	15.6
12	15.2	14.4	13.8	13.2	12.3	11.1	10.2	10.8	12.1	13.5	15.0	16.9	18.7	20.7	22.2	23.0	24.5	23.8	23.3	22.1	19.3	18.3	19.0	17.9
13	16.4	14.7	12.1	12.1	11.4	11.1	9.5	9.0	9.9	10.8	12.1	14.5	16.5	18.2	19.0	19.3	20.0	20.3	19.9	18.6	16.2	15.0	13.7	13.7
14	12.2	11.2	10.7	9.9	9.7	9.4	9.6	10.3	13.6	15.9	17.9	19.9	22.5	24.3	25.4	25.9	26.0	25.7	25.1	23.9	22.6	21.7	20.7	19.7
15	18.9	18.8	17.8	17.8	17.8	17.4	15.8	13.6	17.4	17.3	17.5	19.0	21.5	24.0	24.7	25.8	25.6	25.3	24.6	24.1	23.4	23.0	19.9	18.5
16	18.0	18.1	16.9	17.1	17.2	17.2	17.6	17.9	17.4	15.5	15.2	14.9	14.4	11.5	11.1	10.8	10.1	10.2	9.6	9.4	9.3	9.3	9.0	7.9
17	6.8	6.3	5.9	5.8	5.1	4.8	4.8	5.7	7.7	9.9	11.7	13.1	13.9	14.2	14.8	15.2	15.4	15.6	15.3	14.0	12.0	10.0	8.8	7.9
18	7.3	6.7	6.3	5.8	4.8	6.6	7.1	9.0	11.3	13.6	15.2	16.7	17.3	18.2	19.4	20.4	21.0	21.3	20.7	19.1	17.4	16.0	14.9	14.5
19	14.2	13.7	12.9	12.5	12.1	10.8	10.2	10.1	10.4	11.4	12.4	12.8	12.1	13.3	14.4	14.8	14.8	14.8	13.8	12.5	11.0	10.0	9.4	8.5
20	7.4	6.4	4.4	4.2	4.1	3.6	3.7	4.7	4.8	5.5	6.6	7.6	8.8	10.1	11.1	11.4	11.4	11.5	11.0	10.0	8.4	7.4	3.4	2.2
21	1.6	1.2	-1.1	-1.2	-M-	-M-	-3.9	-0.5	3.5	8.5	10.5	11.8	12.2	12.7	13.3	13.6	13.6	12.9	12.3	11.7	10.6	9.7	9.0	9.0
22	6.8	6.4	5.5	4.3	2.5	3.3	2.9	3.9	5.8	7.9	9.2	10.5	11.7	12.9	13.3	14.2	14.8	15.1	14.9	14.0	12.1	10.4	9.0	8.4
23	7.5	6.7	6.0	5.9	5.0	4.3	4.0	6.6	11.1	13.8	15.5	16.7	17.6	18.7	19.7	20.3	20.5	20.4	19.5	17.8	15.5	13.4	12.1	11.4
24	10.9	10.0	9.5	9.2	8.9	8.8	8.9	10.2	13.0	15.1	17.0	18.1	18.6	19.4	20.0	18.3	18.6	19.2	18.7	17.1	15.8	15.0	13.8	12.9
25	12.2	11.6	11.2	10.9	10.4	10.2	10.2	10.7	12.4	13.9	15.2	16.7	17.4	17.5	17.5	18.0	18.0	17.8	17.3	16.1	14.6	13.4	13.4	13.8
26	13.7	14.0	12.1	10.7	10.4	10.2	9.8	9.7	10.5	12.0	13.2	14.8	15.8	16.8	17.7	18.4	18.3	18.2	17.9	17.2	16.0	14.4	13.3	12.4
27	11.6	10.6	10.1	9.4	8.8	8.2	7.8	8.6	11.2	12.8	13.6	13.7	13.7	13.6	12.1	12.1	12.0	13.0	13.5	13.3	13.2	12.6	12.1	12.0
28	11.6	11.2	11.0	9.3	7.7	7.5	7.5	6.5	6.5	7.0	6.2	6.3	6.1	6.5	6.4	6.4	6.3	6.0	5.8	5.6	5.6	5.8	6.0	5.8
29	5.8	6.6	7.1	7.1	7.4	7.4	7.6	7.8	8.4	9.6	10.3	10.9	11.3	12.2	12.8	12.7	13.3	13.8	13.7	13.3	12.9	12.6	12.6	12.5
30	11.9	11.1	10.9	11.6	11.2	10.4	10.1	10.0	10.2	11.5	13.1	14.5	15.1	14.9	15.0	15.1	15.5	15.6	15.4	14.9	13.7	12.7	11.4	10.4
HOURLY MEAN	8.2	7.6	6.9	6.5	6.2	6.1	5.5	5.9	7.4	8.8	10.0	11.2	12.3	13.1	13.7	14.1	14.3	14.3	13.6	12.5	11.3	10.3	9.4	8.9

MAXIMUM = 26.8 MINIMUM = -6.9 MEAN = 9.9 716 VALID OBSERVATIONS (99.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	23.5	26.8	9.1	7.2	3.5	1.7	2.4	1.9	9.9	13.5	22.7	24.5	20.3	26.0	25.8
MIN	4.3	-1.2	-4.0	-2.5	-4.0	-6.9	-1.1	-1.0	-3.9	1.7	2.2	10.2	9.0	9.4	15.6
MEAN	15.0	17.1	1.7	2.4	-0.6	-2.2	-0.1	0.0	2.4	7.5	13.1	17.1	14.7	18.1	20.5

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	18.1	15.6	21.3	14.8	11.5	13.6	15.1	20.5	20.0	18.0	18.4	13.7	11.6	13.8	15.6
MIN	7.9	4.8	4.8	8.5	2.2	-3.9	2.5	4.0	8.8	10.2	9.7	7.8	5.6	5.8	10.0
MEAN	13.6	10.2	13.8	12.2	7.1	7.9	9.2	12.9	14.5	14.2	14.1	11.6	7.1	10.4	12.8

MEAN MAXIMUM = 15.3 MEAN MINIMUM = 3.9

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	9.1	8.0	8.2	8.2	7.1	7.7	7.8	8.7	11.2	13.9	15.7	16.4	16.8	17.2	17.6	18.3	18.4	18.7	18.6	18.0	16.8	16.4	15.0	13.8
2	12.8	11.5	10.8	9.2	9.4	9.4	10.1	11.0	12.9	15.6	18.0	19.0	19.7	20.1	20.7	21.2	21.4	21.4	21.2	20.2	19.1	18.3	17.7	16.4
3	15.6	14.9	15.4	15.5	15.4	15.1	14.8	16.4	17.9	20.1	21.8	23.1	24.0	24.8	25.1	25.7	25.6	25.4	25.1	23.9	22.7	21.8	20.9	20.1
4	19.2	18.5	18.7	18.0	18.0	17.8	18.3	19.5	20.9	23.1	24.8	26.2	27.2	27.8	27.8	27.8	28.4	28.3	27.7	26.7	25.5	24.5	24.0	23.0
5	21.4	19.6	18.1	17.8	18.2	18.8	19.1	19.0	17.5	15.7	16.0	15.0	13.7	11.5	10.9	11.2	10.9	10.2	10.0	10.1	10.0	9.7	9.7	9.8
6	9.2	8.7	8.3	7.9	7.9	7.8	7.7	7.5	7.1	7.5	7.9	8.4	9.0	10.1	11.1	12.1	12.5	12.7	13.0	12.2	11.1	9.5	9.1	8.8
7	8.1	9.3	9.0	8.6	8.0	6.8	6.4	8.0	10.9	13.4	16.3	18.6	20.0	20.8	21.3	21.6	21.8	21.9	21.3	19.2	17.5	16.8	15.2	14.8
8	14.6	14.8	15.4	14.7	13.8	13.0	12.8	14.4	16.4	17.7	19.7	21.3	22.9	24.1	24.9	25.3	25.5	25.3	24.4	22.9	21.7	20.6	20.0	19.2
9	18.7	17.9	17.1	16.7	15.6	15.3	15.6	16.5	18.4	20.8	21.5	23.0	23.9	25.4	25.9	26.0	25.9	25.3	24.8	23.7	22.3	21.6	20.7	20.3
10	20.0	19.6	18.6	18.1	17.3	16.9	17.0	-M-	19.4	21.4	22.8	23.8	24.8	25.5	26.1	26.3	25.6	25.2	24.7	23.8	22.9	22.2	21.3	20.8
11	20.9	20.8	20.9	20.8	19.4	15.6	15.0	14.7	14.6	17.7	20.2	21.4	23.3	24.8	25.9	26.4	26.4	25.9	24.2	23.1	22.0	21.7	16.2	15.0
12	14.8	14.3	14.3	14.6	15.0	15.2	15.0	15.0	15.1	16.2	17.8	18.7	19.3	19.7	19.9	19.8	20.0	20.4	20.2	19.7	19.2	18.1	18.0	17.5
13	17.3	16.7	16.3	16.3	15.9	15.9	16.3	16.7	17.3	17.6	18.2	18.0	18.2	16.9	17.2	18.5	18.3	18.6	18.2	17.7	17.8	17.7	17.8	16.9
14	16.6	16.2	15.7	15.8	15.7	15.7	15.5	15.3	15.7	16.3	16.7	17.9	18.9	19.5	19.9	19.7	14.9	14.5	13.7	13.6	13.9	13.2	12.7	12.6
15	12.7	12.8	12.8	12.7	12.8	12.9	13.3	13.4	13.8	14.8	16.2	18.0	19.0	19.8	20.5	21.3	20.9	17.7	18.0	17.4	16.8	16.3	17.0	16.7
16	15.9	16.3	16.3	16.2	16.3	16.4	16.6	16.7	16.9	17.0	17.5	18.4	19.3	21.1	21.1	21.7	19.6	18.6	19.7	19.2	18.6	17.6	17.6	18.2
17	17.8	17.4	16.9	16.4	15.4	15.3	15.0	15.1	15.1	15.1	15.1	15.9	16.1	17.6	19.2	19.3	20.1	20.7	20.4	19.3	17.9	16.6	16.5	15.7
18	15.1	14.1	14.2	13.1	12.5	12.4	12.6	14.4	16.6	19.1	20.9	22.1	22.9	23.4	24.0	24.2	25.1	23.9	23.5	22.3	20.9	20.5	20.1	19.8
19	19.2	18.4	17.5	16.7	16.0	16.9	17.1	18.3	19.3	20.5	21.7	22.7	23.1	23.9	24.9	25.5	25.7	25.6	24.8	23.7	22.3	21.6	20.9	20.4
20	19.9	19.5	18.8	18.7	18.7	18.4	17.4	17.0	17.7	19.5	22.9	24.9	22.4	22.8	23.7	24.0	23.2	21.9	20.1	14.9	15.1	15.5	15.4	15.7
21	15.5	15.3	15.3	15.9	15.6	15.5	15.1	14.9	13.7	13.6	13.0	13.3	13.2	13.4	13.5	13.4	13.1	12.7	12.5	12.2	12.0	11.8	11.8	11.9
22	11.1	10.7	10.6	10.1	10.5	10.9	11.3	12.0	12.7	13.7	14.7	15.5	15.7	15.9	16.5	16.3	16.2	16.1	16.0	15.7	15.3	15.0	14.9	14.2
23	13.9	13.7	13.5	13.0	12.3	12.1	12.2	12.8	14.2	15.1	16.3	17.0	18.1	19.0	19.4	19.8	20.3	20.0	19.3	18.5	17.2	16.5	15.8	15.3
24	15.0	14.8	14.6	14.4	14.0	13.8	13.9	14.8	15.8	16.8	17.1	18.1	19.1	19.8	19.9	19.7	19.3	19.1	18.8	18.4	18.0	17.8	17.4	16.7
25	16.4	16.4	16.3	16.5	16.5	16.5	16.5	16.4	16.1	16.0	16.2	16.2	16.3	16.8	17.0	17.4	17.6	17.5	16.9	16.8	16.6	16.4	16.5	16.7
26	16.7	16.1	15.4	14.7	14.8	15.1	15.2	15.4	15.3	15.6	16.6	17.5	18.4	19.2	20.0	19.0	16.8	16.7	16.6	16.5	15.9	14.9	14.4	13.8
27	13.6	13.2	13.1	12.8	12.2	13.1	13.3	14.1	15.5	17.6	19.1	20.1	20.8	22.3	22.9	23.4	24.0	23.6	23.3	22.5	21.4	19.9	18.8	18.5
28	18.0	17.6	17.2	17.2	17.3	16.9	17.4	17.8	18.3	17.7	18.0	18.6	20.3	21.3	22.3	21.8	21.6	21.6	21.7	21.3	20.6	19.9	18.7	18.6
29	18.3	17.6	17.2	17.1	16.9	16.8	16.7	17.7	19.5	19.9	20.7	22.4	23.7	24.2	24.1	25.0	25.5	25.4	24.7	24.2	23.2	21.8	21.3	20.0
30	19.7	19.1	18.5	18.4	-M-	17.6	17.7	18.7	19.3	17.4	15.4	16.3	18.6	19.6	21.2	22.4	23.4	22.6	21.8	20.5	18.6	16.8	16.2	16.1
31	15.7	15.4	15.0	14.4	14.0	13.4	12.9	13.0	13.4	13.7	14.0	15.1	15.5	15.6	16.4	16.7	16.4	15.8	15.3	14.4	13.5	13.2	13.1	12.1
HOURLY MEAN	15.9	15.5	15.2	14.9	14.4	14.4	14.4	14.8	15.8	16.8	17.8	18.8	19.5	20.1	20.7	21.0	20.8	20.4	20.0	19.1	18.3	17.6	16.9	16.4

MAXIMUM = 28.4 MINIMUM = 6.4 MEAN = 17.5 742 VALID OBSERVATIONS (99.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	18.7	21.4	25.7	28.4	21.4	13.0	21.9	25.5	26.0	26.3	26.4	20.4	18.6	19.9	21.3	21.7
MIN	7.1	9.2	14.8	17.8	9.7	7.1	6.4	12.8	15.3	16.9	14.6	14.3	15.9	12.6	12.7	15.9
MEAN	13.7	16.1	20.5	23.4	14.3	9.5	14.8	19.4	20.9	21.9	20.7	17.4	17.4	15.8	16.2	18.0

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	20.7	25.1	25.7	24.9	15.9	16.5	20.3	19.9	17.6	20.0	24.0	22.3	25.5	23.4	16.7
MIN	15.0	12.4	16.0	14.9	11.8	10.1	12.1	13.8	16.0	13.8	12.2	16.9	16.7	15.4	12.1
MEAN	17.1	19.1	21.1	19.5	13.7	13.8	16.0	17.0	16.6	16.3	18.3	19.2	21.0	19.0	14.5

MEAN MAXIMUM = 21.8 MEAN MINIMUM = 13.3

35 FT AMBIENT TEMPERATURE (DEG C)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	11.1	10.5	9.9	9.4	9.0	8.1	8.3	9.9	12.0	13.9	15.1	16.3	17.3	17.6	18.2	18.7	19.0	19.0	19.1	18.1	17.6	17.1	16.2	15.9
2	15.5	14.7	14.9	14.6	14.4	14.6	14.6	14.5	15.0	15.5	16.1	15.9	16.0	15.3	15.7	16.2	16.5	16.0	15.8	15.2	14.3	13.8	13.1	12.7
3	12.8	12.6	11.9	11.2	10.7	10.4	11.1	12.2	13.5	14.1	14.7	15.9	16.3	17.0	17.3	17.5	17.5	17.0	17.0	16.7	15.9	15.7	15.2	15.1
4	14.8	14.3	13.8	13.2	12.6	11.9	12.0	13.1	14.7	15.8	16.8	17.7	17.9	18.4	18.6	19.6	19.3	19.7	19.2	18.6	17.9	16.9	15.9	15.0
5	14.5	13.3	13.4	13.1	12.4	11.7	11.7	12.8	14.3	16.3	17.8	18.6	19.2	20.1	20.8	20.8	21.3	21.5	21.1	20.6	20.0	19.5	19.3	18.9
6	18.2	17.9	17.6	17.4	17.3	17.7	18.2	18.7	19.5	19.8	20.9	22.5	24.3	25.9	27.3	28.5	29.6	29.7	29.5	28.2	25.8	24.7	24.0	23.2
7	22.5	21.0	20.1	20.5	17.9	14.3	14.9	16.2	17.6	18.9	19.5	20.6	22.1	23.4	24.6	25.2	25.3	25.7	25.7	24.1	22.3	20.5	18.8	17.9
8	17.5	17.2	17.0	16.4	16.4	16.3	16.7	18.0	20.1	20.5	18.3	19.1	20.4	19.8	17.9	17.2	17.6	18.6	20.1	20.0	19.3	18.5	18.5	18.6
9	18.4	18.1	18.1	17.9	-M-	17.4	17.4	18.2	18.3	17.2	17.6	18.1	18.9	19.2	19.6	19.8	20.2	20.3	19.6	18.6	17.2	16.3	14.9	13.1
10	12.1	10.5	10.6	11.3	10.3	10.2	12.2	13.6	15.6	18.2	20.1	21.4	22.0	22.8	23.3	23.1	23.5	23.5	23.1	22.0	20.1	18.4	18.5	17.8
11	17.4	16.9	16.2	15.4	15.3	14.8	15.2	15.2	16.5	17.5	19.1	19.9	20.1	20.6	20.4	20.5	20.3	19.8	18.9	18.4	17.3	16.6	15.9	15.1
12	14.5	13.8	13.5	12.1	12.5	11.4	12.2	13.1	14.6	16.5	17.7	19.2	20.9	22.8	23.3	24.0	24.7	23.4	20.6	20.5	19.4	18.5	17.3	17.2
13	16.4	16.2	16.0	15.8	14.7	13.9	14.1	17.2	19.2	21.2	22.6	23.7	24.6	25.0	25.4	24.6	24.0	24.4	24.5	23.5	21.8	21.1	20.1	20.1
14	19.5	18.6	18.0	17.7	17.0	16.5	17.4	18.7	19.0	18.8	19.5	20.4	21.8	21.1	22.1	24.5	24.8	25.1	24.7	24.6	24.3	24.5	24.6	18.6
15	17.3	17.4	16.9	16.8	17.0	16.7	17.3	17.1	17.4	18.5	18.8	17.7	17.5	18.1	17.9	18.8	19.5	19.8	20.1	20.4	19.8	18.8	17.9	17.1
16	16.3	15.7	15.5	14.7	13.7	12.1	13.7	15.3	16.3	17.5	19.3	20.5	21.1	21.8	22.3	22.7	22.6	22.7	22.4	21.7	19.4	17.8	17.1	16.5
17	15.7	16.0	15.2	14.2	14.2	14.9	14.6	16.0	17.2	17.4	18.1	19.7	21.7	23.5	24.6	25.0	23.6	24.0	24.0	23.4	21.5	20.5	19.4	18.6
18	19.7	19.3	18.9	18.2	18.1	17.9	17.6	18.4	19.2	20.0	20.3	20.6	21.1	21.0	20.7	20.9	20.7	-M-	-M-	-M-	18.7	18.0	17.2	16.9
19	16.7	16.0	15.2	14.4	13.8	13.0	13.4	15.1	16.3	17.9	19.8	20.3	21.0	21.6	22.3	22.6	23.2	23.7	23.4	22.0	20.0	18.7	18.6	18.0
20	17.3	17.6	17.4	17.1	17.5	16.8	17.0	18.6	19.9	21.2	22.6	23.5	24.0	25.2	26.4	26.7	26.8	26.8	26.4	24.4	22.1	22.1	20.2	17.6
21	16.6	15.7	14.4	14.0	13.5	13.8	13.6	16.3	18.7	21.2	23.5	25.2	26.4	27.5	28.3	28.5	27.6	25.8	25.3	24.9	22.6	20.9	20.0	19.0
22	19.1	18.1	17.0	17.1	17.6	17.3	17.5	18.1	19.4	21.2	22.7	23.8	24.5	25.3	26.1	26.5	26.7	26.7	25.1	24.3	22.9	21.3	20.0	19.3
23	18.7	18.2	17.5	17.0	16.6	16.4	16.8	18.3	19.1	21.5	23.0	24.1	25.3	25.3	25.5	25.9	25.7	26.0	26.1	25.2	24.1	23.1	21.8	20.7
24	20.4	19.7	18.9	18.8	18.3	17.9	18.3	19.7	21.6	23.3	24.8	26.4	27.7	28.7	29.2	29.1	29.2	29.2	28.4	27.5	25.9	24.9	24.0	23.0
25	22.2	21.9	21.3	21.3	21.3	21.0	20.5	20.4	20.3	20.5	21.2	22.0	22.4	23.1	23.5	25.4	25.9	25.4	25.0	24.4	23.7	22.9	22.0	21.5
26	20.6	19.9	19.2	19.1	18.5	18.1	18.4	19.7	20.7	22.4	24.1	25.0	25.2	25.6	26.6	26.9	27.4	27.6	27.3	26.4	25.3	24.3	23.4	22.5
27	21.9	21.7	21.3	20.9	20.8	20.7	20.6	21.1	21.7	22.0	22.1	22.4	22.6	20.8	22.2	23.3	24.5	23.5	22.2	21.5	21.4	21.1	21.1	20.5
28	20.2	19.7	18.7	18.8	18.3	18.5	18.1	-M-	-M-	-M-	-M-	-M-	27.7	28.9	29.0	29.1	29.8	29.6	29.2	28.6	26.8	24.7	23.3	22.7
29	22.4	22.3	21.9	21.5	21.2	21.9	21.7	23.2	25.1	27.9	29.9	31.5	32.6	33.0	33.0	31.4	31.0	31.3	30.6	29.6	28.4	25.8	23.8	22.7
30	22.0	21.5	20.8	20.3	19.8	19.4	19.2	19.1	17.8	18.5	19.4	21.8	24.0	25.2	26.0	26.5	24.2	21.9	21.5	21.3	21.0	20.8	20.3	19.7
HOURLY MEAN	17.7	17.2	16.7	16.3	15.9	15.5	15.8	16.8	17.9	19.1	20.2	21.2	22.2	22.8	23.3	23.6	23.7	23.7	23.3	22.6	21.2	20.3	19.4	18.5

MAXIMUM = 33.0 MINIMUM = 8.1 MEAN = 19.8 711 VALID OBSERVATIONS (98.8%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	19.1	16.5	17.5	19.7	21.5	29.7	25.7	20.5	20.3	23.5	20.6	24.7	25.4	25.1	20.4
MIN	8.1	12.7	10.4	11.9	11.7	17.3	14.3	16.3	13.1	10.2	14.8	11.4	13.9	16.5	16.7
MEAN	14.5	15.0	14.5	16.2	17.2	22.8	20.8	18.3	18.0	17.7	17.6	17.7	20.4	20.9	18.1

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	22.7	25.0	21.1	23.7	26.8	28.5	26.7	26.1	29.2	25.9	27.6	24.5	29.8	33.0	26.5
MIN	12.1	14.2	16.9	13.0	16.8	13.5	17.0	16.4	17.9	20.3	18.1	20.5	18.1	21.2	17.8
MEAN	18.3	19.3	19.2	18.6	21.5	21.0	21.6	21.7	23.9	22.5	23.1	21.7	24.3	26.8	21.3

MEAN MAXIMUM = 24.3 MEAN MINIMUM = 15.1

318 - 35 FT DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-1.3	-1.3	-0.6	0.4	-0.2	0.6	1.4	1.2	0.3	-0.6	-0.9	-1.1	-1.4	-1.5	-1.4	-1.3	-1.5	-1.5	-1.5	-1.4	-0.9	-1.0	1.2	-1.5
2	-1.4	-1.2	-1.0	-1.0	-1.1	-1.2	-1.0	-1.2	-1.2	-1.2	-1.0	-0.6	-0.7	-0.6	-1.4	-1.6	-1.7	-1.6	-1.4	-1.3	-1.3	-1.3	-1.5	-1.5
3	-1.2	0.0	-0.4	-0.9	-1.1	-1.6	-1.7	-1.5	-1.3	-1.3	-1.3	-1.3	-1.7	-1.6	-1.3	-1.7	-1.7	-1.7	-1.8	-1.7	-1.7	-1.6	-1.6	M
4	-1.4	-1.3	-1.1	-1.1	-1.0	-0.9	-0.9	-0.9	-0.5	-0.5	-0.9	-1.0	-1.1	-1.1	-1.0	-0.6	-0.1	0.8	2.1	2.8	3.6	3.8	3.2	2.3
5	2.8	3.1	2.8	2.1	2.3	2.7	3.3	4.0	4.1	3.4	0.8	-0.7	-2.3	-2.5	-2.5	-2.3	-1.8	-1.3	-1.2	-1.6	-1.6	-1.6	-1.8	-1.7
6	-1.6	-1.5	-1.6	-1.5	-1.4	-1.7	-1.7	-1.7	-1.8	-2.0	-2.2	-2.2	-2.2	-2.2	-2.1	-2.0	-1.9	-1.9	-1.8	-1.7	-1.8	-1.8	-1.8	-1.7
7	-1.4	-1.4	-1.4	-1.4	-1.3	-1.0	-0.3	0.5	1.1	2.1	-0.1	-0.9	-1.2	-1.3	-1.2	-1.1	-0.7	0.0	1.1	3.6	4.5	2.6	3.5	3.6
8	3.6	3.7	3.6	2.8	2.1	2.4	3.8	1.8	1.1	-0.1	-0.8	-0.5	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-0.3	-0.2	-1.0	-1.0	-1.5	-1.8
9	-1.8	-1.7	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8	-1.5	-1.7	-1.9	-1.9	-1.7	-1.9	-1.7	-1.7	-1.6	-1.4	-1.4	-1.4	-1.6	-1.6	-1.7	-1.7
10	-1.8	-1.7	-1.8	-1.6	-1.5	-1.5	-1.5	-1.4	-1.4	-1.7	-2.0	-2.3	-2.4	-2.4	-2.1	-2.0	-1.8	-1.4	-1.1	-0.9	-0.9	-1.1	1.2	1.2
11	-1.1	-1.2	-1.1	-1.0	-1.1	-1.0	-0.8	-1.2	-1.0	-0.8	-1.4	-1.4	-1.2	-1.4	-1.4	-1.3	-1.1	-0.8	-0.7	-0.4	-0.5	-0.2	-0.4	0.6
12	-0.5	-0.9	-0.9	-0.9	-1.2	-1.2	-1.2	-1.3	-1.5	-1.3	-1.4	-1.7	-1.8	-1.7	-1.9	-1.9	-1.7	-1.6	-1.6	-1.7	-1.6	-1.6	-1.2	-1.0
13	-0.8	-0.7	-0.7	-0.8	-0.6	-0.2	-0.6	-0.1	-0.4	-0.7	-1.6	-1.1	-0.7	-1.3	-2.0	-1.2	-1.2	0.1	1.8	3.8	5.2	5.1	6.6	3.8
14	2.3	1.9	1.8	1.0	1.4	1.0	0.5	-0.8	-1.2	-1.5	-1.5	-1.3	-1.5	-1.5	-1.4	-1.3	-1.3	-1.4	-0.8	-0.9	-0.5	-0.4	-0.5	-0.9
15	-0.9	-0.5	-0.3	-1.0	-1.0	-0.5	0.1	0.5	0.8	1.1	0.7	0.7	-1.8	-1.9	-1.9	-1.9	-1.8	-1.6	-1.5	-1.6	-1.5	-1.6	-1.6	-1.6
16	-1.6	-1.5	-1.6	-1.4	-1.4	-1.3	-0.6	0.1	-0.6	-1.1	-1.8	-2.1	-2.4	-2.4	-2.0	-1.9	-1.3	-0.9	0.4	2.0	3.8	3.6	3.8	2.6
17	1.5	0.6	-0.4	-0.7	-0.9	-0.9	-1.0	-0.9	-0.9	-0.9	-1.1	-1.1	-1.2	-1.2	-1.2	-1.1	-0.9	0.1	1.2	1.0	1.4	1.4	1.5	1.7
18	1.1	2.1	2.4	3.3	3.4	4.4	0.5	1.0	1.5	2.1	1.7	2.8	2.8	3.0	2.8	2.6	2.1	0.9	0.9	0.5	0.8	1.0	0.9	1.4
19	1.4	1.6	1.5	1.5	1.6	1.9	3.4	2.1	4.8	5.1	3.7	0.7	-1.9	-2.4	-2.2	-1.9	-1.8	-1.9	-1.7	-1.8	-1.5	-1.4	-1.4	-1.1
20	-1.2	-1.1	-0.9	-0.8	-0.8	-0.7	-1.0	-1.0	-0.7	-0.7	-1.4	-1.4	-1.6	-1.7	-1.5	-1.7	-1.5	-1.7	-1.7	-1.6	-1.5	-1.5	-1.4	-1.6
21	-1.8	-1.5	-1.6	-1.7	-1.9	-1.9	-1.7	-1.8	-1.7	-1.6	-1.5	-1.4	-1.4	-1.5	-1.4	-1.3	-1.2	-1.3	-1.2	-1.2	-1.3	-1.1	-0.9	-0.9
22	-0.9	-1.1	-1.2	-1.2	-1.2	-1.3	-1.2	-1.1	-1.0	-1.0	-1.2	-1.1	-0.8	-0.7	-0.3	0.3	-0.7	-1.1	-1.2	-1.3	-1.3	-1.2	-1.2	-1.2
23	-1.2	-1.2	-1.2	-1.2	-1.2	-1.1	-1.1	-1.1	-1.2	-1.5	-1.7	-1.8	-1.8	-1.8	-1.9	-1.8	-1.8	-1.5	-1.3	-1.1	-1.1	-1.3	-1.3	-1.3
24	-1.2	-1.2	-1.2	-1.4	-1.6	-1.4	-1.2	-0.4	-0.9	-1.2	-1.3	-1.3	-1.2	-1.3	-1.3	-1.3	-1.5	-1.3	-1.1	-0.8	-0.6	-0.9	0.2	0.2
25	-0.5	-0.3	-1.0	-1.2	-1.3	-1.4	-1.5	-1.3	-1.4	-1.7	-2.1	-2.1	-2.4	-2.6	-2.7	-2.5	-2.2	-1.8	-1.3	-1.3	-0.6	-0.7	-0.3	-0.3
26	0.0	0.5	1.0	0.3	1.3	1.1	1.3	1.2	0.9	-0.4	-1.0	-1.1	-0.8	-1.2	-1.1	-0.8	-0.7	-0.4	-0.2	-0.3	-0.3	-0.3	-0.3	-0.1
27	0.1	0.1	0.1	0.4	0.3	0.4	1.3	0.9	0.5	0.6	-0.0	0.1	-0.8	-1.6	-1.5	-1.3	-0.9	-0.3	0.0	0.2	0.3	0.4	0.4	1.4
28	1.2	0.4	-0.1	-0.1	-0.9	-1.1	-1.0	-0.8	-1.3	-1.6	-1.6	-1.6	-1.5	-1.6	-1.8	-1.8	-1.7	-1.2	-0.9	-0.8	-0.7	-0.6	-0.8	-0.9
29	-0.7	0.1	0.1	0.3	0.0	-0.1	-0.2	-0.3	-0.1	-0.3	-0.1	-0.2	-0.3	-0.6	-0.7	-1.0	-0.8	-0.9	-1.0	-1.3	-1.4	-1.3	-1.5	-1.6
30	-1.5	-1.6	-1.7	-1.8	-1.8	-1.8	-1.8	-1.6	-1.9	-1.6	-1.3	-1.5	-1.9	-2.0	-1.9	-1.9	-1.8	-1.8	-1.7	-1.7	-1.7	-1.7	-1.8	-1.8
31	-1.8	-1.8	-1.8	-1.7	-1.9	-1.9	-1.8	-1.7	-1.8	-2.2	-2.3	-2.5	-2.4	-2.4	-2.3	-2.0	-1.9	-1.5	-1.3	-1.1	-1.1	-1.2	-1.4	-1.5
HOURLY MEAN	-0.4	-0.3	-0.4	-0.5	-0.5	-0.4	-0.3	-0.3	-0.3	-0.5	-0.9	-1.1	-1.4	-1.5	-1.5	-1.4	-1.3	-1.1	-0.7	-0.5	-0.3	-0.3	-0.3	-0.3

MAXIMUM = 6.6 MINIMUM = -2.7 MEAN = -0.7 743 VALID OBSERVATIONS (99.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	1.4	-0.6	0.0	3.8	4.1	-1.4	4.5	3.8	-1.4	-0.9	-0.2	-0.5	6.6	2.3	1.1	3.8
MIN	-1.5	-1.7	-1.8	-1.4	-2.5	-2.2	-1.4	-1.8	-1.9	-2.4	-1.4	-1.9	-2.0	-1.5	-1.9	-2.4
MEAN	-0.7	-1.2	-1.4	0.1	0.4	-1.8	0.3	0.5	-1.7	-1.6	-1.0	-1.4	0.5	-0.4	-0.9	-0.4

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	1.7	4.4	5.1	-0.7	-0.9	0.3	-1.1	0.2	-0.3	1.3	1.4	1.2	0.3	-1.3	-1.1
MIN	-1.2	0.5	-2.4	-1.7	-1.9	-1.3	-1.9	-1.6	-2.7	-1.2	-1.6	-1.8	-1.6	-2.0	-2.5
MEAN	-0.2	1.9	0.3	-1.3	-1.5	-1.0	-1.4	-1.1	-1.4	-0.1	0.0	-1.0	-0.6	-1.7	-1.8

MEAN MAXIMUM = 1.2 MEAN MINIMUM = -1.8

318 - 35 FT DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-1.5	-1.5	-1.3	-1.3	-1.5	-1.2	-1.5	-1.4	-1.5	-1.6	-M-	-1.5	-1.4	-1.3	-1.2	-1.5	-1.4	-1.2	-1.0	-0.6	-0.2	-0.5	-0.4	-0.4
2	-0.8	-0.9	-0.9	-0.9	-0.9	-1.3	-1.4	-1.6	-1.8	-2.0	-2.0	-2.2	-2.1	-2.1	-2.0	-1.9	-1.8	-1.8	-1.7	-1.7	-1.7	-1.6	-1.7	-1.8
3	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-2.2	-2.4	-2.7	-2.5	-2.6	-2.5	-2.5	-2.3	-2.0	-1.8	-1.7	-1.8	-1.7	-1.9	-1.9
4	-1.8	-1.8	-1.8	-1.6	-1.7	-1.6	-1.7	-1.8	-1.5	-1.6	-1.7	-1.9	-2.0	-1.8	-1.6	-1.6	-1.8	-1.5	-1.5	-1.6	-1.5	-1.4	-1.7	-1.7
5	-1.6	-1.7	-1.7	-1.8	-1.8	-1.9	-1.8	-1.7	-1.7	-1.8	-2.1	-2.3	-2.3	-2.3	-2.2	-2.2	-2.1	-1.5	-0.9	-0.5	-0.1	0.6	1.3	1.8
6	1.5	0.5	1.1	1.7	0.6	0.1	-0.0	0.3	-0.2	-0.8	-1.2	-1.3	-1.4	-1.3	-1.3	-1.2	-0.9	-0.1	0.8	1.4	0.9	1.4	3.3	2.8
7	2.0	1.7	0.9	0.1	0.2	1.1	2.7	3.4	1.2	0.2	-0.9	-1.1	-1.4	-1.3	-1.2	-1.1	-0.8	-0.7	-0.7	-0.1	0.8	3.5	4.0	2.7
8	2.1	0.9	-0.2	-1.1	-1.4	-1.2	-1.0	-1.0	-1.1	-1.4	-1.4	-1.5	-1.5	-1.6	-1.8	-1.7	-1.6	-1.7	-1.6	-1.5	-1.7	-1.7	-1.7	-1.7
9	-1.6	-1.6	-1.5	-1.5	-1.3	-0.9	-0.7	-0.5	-1.1	-1.7	-2.0	-1.9	-2.5	-2.6	-2.3	-2.2	-1.9	-1.2	-0.3	0.3	2.2	3.4	3.1	2.0
10	2.1	1.3	1.1	1.1	0.7	0.3	-0.2	-0.5	-0.3	-0.6	-1.1	-1.2	-1.3	-1.3	-1.3	-1.3	-1.2	-1.0	-0.9	0.2	2.9	3.5	3.1	4.7
11	5.1	2.3	1.5	1.2	2.7	4.6	4.0	3.0	2.9	0.9	0.5	-0.6	-1.0	-1.0	-1.0	-0.8	-0.9	-1.1	-1.2	-1.0	-1.0	-1.0	-0.6	-0.4
12	0.2	0.0	-0.2	-0.6	-0.8	-0.7	-0.6	-0.9	-0.9	-0.5	-0.4	-0.8	-0.8	-1.0	-1.0	-1.3	-1.1	-0.7	0.7	1.4	1.2	0.3	0.8	0.9
13	0.4	0.7	1.5	2.1	3.0	2.6	2.2	1.8	1.2	0.5	0.1	-0.5	-1.1	-1.1	-0.9	-0.7	-0.4	-0.1	0.6	0.7	0.4	0.1	0.5	0.5
14	1.6	1.6	2.7	3.5	1.0	0.0	0.6	0.8	0.5	0.3	-0.2	-0.7	-0.5	-0.3	-0.5	-0.5	-0.2	0.0	0.4	0.1	0.3	0.5	0.8	2.5
15	1.5	0.7	2.0	3.9	3.9	3.3	2.2	1.3	-0.1	-0.2	-0.6	-0.5	-0.6	-0.7	-0.6	-0.5	-0.6	0.1	0.4	1.2	0.6	0.0	-0.0	-0.2
16	0.1	0.1	-0.2	0.2	0.1	-0.0	-0.3	-0.5	-0.7	-0.9	-0.9	-0.8	-0.9	-0.9	-0.9	-0.5	-0.5	-0.5	-0.3	-0.7	-0.5	-0.5	-0.1	0.0	-0.6
17	-0.7	-0.6	-0.6	-0.7	-0.7	-0.6	-0.7	-0.6	-0.7	-0.5	-0.6	-0.3	0.0	0.5	0.2	-0.1	-0.7	-0.5	-0.5	-0.7	-0.7	-0.6	-0.5	-0.4
18	-0.6	-0.5	-0.2	-0.1	0.0	-0.1	-0.2	-0.6	-0.6	-0.8	-0.7	-0.3	-0.0	-0.0	0.1	0.6	0.4	0.4	0.7	1.6	3.0	7.3	8.4	8.1
19	6.9	7.3	7.1	5.7	5.7	5.2	4.9	7.7	7.7	2.8	-0.0	-0.4	-0.9	-1.1	-0.9	-0.3	0.4	0.7	1.4	1.3	1.1	1.0	0.4	0.5
20	0.9	1.5	0.7	1.3	0.0	1.6	6.1	3.1	0.5	-M-	-1.7	-2.0	-2.4	-2.5	-2.3	-2.1	-1.9	-1.4	-0.3	1.3	1.5	3.7	6.2	2.9
21	4.7	4.1	6.7	5.0	3.6	4.0	4.8	6.0	6.0	3.6	0.6	-0.2	-1.0	-1.1	-0.7	-1.1	-1.3	-1.1	-0.0	1.6	2.9	3.4	6.5	3.8
22	3.0	2.9	4.1	4.5	4.7	5.0	5.5	5.6	4.7	3.3	1.1	-0.9	-1.4	-1.5	-1.4	-1.2	-0.8	-0.2	1.1	3.0	2.0	1.9	0.5	-1.3
23	-1.5	-1.5	-1.3	-1.3	-1.4	-1.5	-1.5	-1.4	-1.3	-1.2	-1.3	-1.3	-1.3	-1.2	-1.4	-1.6	-1.6	-1.5	-1.4	-1.4	-1.3	-1.0	-1.1	-1.0
24	-1.1	-1.2	-1.2	-1.3	-1.3	-1.3	-1.4	-1.5	-1.4	-1.9	-2.2	-2.4	-2.6	-2.7	-2.6	-2.4	-2.3	-2.0	-1.7	-1.6	-1.6	-1.7	-1.6	-1.6
25	-1.3	-1.3	-1.3	-1.3	-1.4	-1.4	-1.3	-1.2	-1.3	-1.2	-1.3	-1.4	-1.4	-1.5	-1.7	-1.7	-1.6	-1.4	-1.1	-0.8	-0.7	-0.5	-0.7	-0.9
26	-0.9	-0.8	-0.8	-0.7	-0.8	-0.8	-0.7	-0.7	-1.0	-1.4	-1.4	-1.6	-1.7	-1.6	-1.6	-1.6	-1.4	-1.3	-0.8	-0.2	0.0	1.0	0.8	0.5
27	0.4	0.3	0.4	0.4	0.3	0.9	1.0	0.7	-0.3	-1.3	-1.3	-1.4	-1.6	-1.7	-1.6	-1.5	-1.4	-1.1	-0.4	0.1	1.5	1.9	1.5	1.6
28	1.8	0.6	0.1	0.1	0.4	0.9	0.6	0.3	-0.1	-0.8	-1.2	-1.4	-1.6	-1.4	-1.6	-1.5	-1.3	-0.9	-0.3	0.5	2.2	2.6	5.7	5.3
HOURLY MEAN	0.7	0.4	0.5	0.5	0.4	0.5	0.6	0.6	0.2	-0.5	-1.0	-1.2	-1.4	-1.4	-1.3	-1.3	-1.2	-0.9	-0.5	0.0	0.4	0.9	1.3	1.0

MAXIMUM = 8.4 MINIMUM = -2.7 MEAN = -0.1 670 VALID OBSERVATIONS (99.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAX	-0.2	-0.8	-1.7	-1.4	1.8	3.3	4.0	2.1	3.4	4.7	5.1	1.4	3.0	3.5
MIN	-1.6	-2.2	-2.7	-2.0	-2.3	-1.4	-1.4	-1.8	-2.6	-1.3	-1.2	-1.3	-1.1	-0.7
MEAN	-1.2	-1.6	-2.1	-1.7	-1.3	0.3	0.6	-1.2	-0.8	0.4	0.7	-0.3	0.6	0.6

DAY	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAX	3.9	0.2	0.5	8.4	7.7	6.2	6.7	5.6	-1.0	-1.1	-0.5	1.0	1.9	5.7
MIN	-0.7	-0.9	-0.7	-0.8	-1.1	-2.5	-1.3	-1.5	-1.6	-2.7	-1.7	-1.7	-1.7	-1.6
MEAN	0.7	-0.4	-0.5	1.1	2.7	0.6	2.5	1.8	-1.3	-1.8	-1.2	-0.8	-0.1	0.4

MEAN MAXIMUM = 2.6 MEAN MINIMUM = -1.6

318 - 35 FT DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	6.2	7.6	6.7	6.9	5.6	6.3	6.6	6.7	6.7	2.4	0.2	-1.1	-1.7	-1.7	-1.7	-1.5	-1.3	-0.6	1.6	1.5	0.8	0.5	-M-	-M-
2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-1.4	-1.6	-1.5	-1.3	-1.3	-1.3	-1.3	-1.3	-1.1	-1.1	-1.1	-1.1	-1.2	-1.2	-1.2	-1.1
3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.3	-1.2	-1.1	-1.0	-1.1	-1.2	-1.2	-1.2	-1.3	-1.3	-1.5
4	-1.4	-1.6	-1.6	-1.6	-1.7	-1.7	-1.7	-1.7	-1.8	-1.9	-2.1	-2.3	-2.3	-2.3	-2.3	-2.2	-M-	-1.8	-1.6	-1.4	-1.4	-1.5	-1.5	-1.5
5	-1.5	-1.6	-1.6	-1.6	-1.6	-1.7	-1.7	-1.7	-1.7	-M-	-M-	-M-	-M-	-M-	-M-	-2.6	-2.2	-2.2	-1.7	-1.3	-0.9	-0.4	0.4	1.0
6	1.6	2.7	2.7	3.3	2.7	4.9	3.6	3.3	0.8	-1.1	-1.4	-1.6	-1.8	-2.3	-2.6	-2.4	-2.1	-1.7	-1.6	-1.4	-1.2	-1.2	-1.3	-1.5
7	-1.6	-1.3	-1.1	-1.1	-0.9	-0.7	-0.5	-0.3	-1.3	-1.2	-1.7	-1.4	-1.4	-1.3	-1.6	-1.5	-1.5	-1.5	-1.1	-1.1	-0.7	-0.6	0.0	-0.1
8	-0.1	0.4	0.9	0.0	-0.5	-0.7	-0.9	-1.1	-1.1	-1.2	-1.4	-2.1	-2.3	-2.6	-2.8	-2.7	-2.5	-2.1	-1.8	-1.3	-1.4	-1.2	-1.3	-1.1
9	-0.7	-1.0	-1.1	-1.2	-1.1	-1.4	-1.2	-1.4	-1.5	-1.5	-1.6	-1.5	-1.5	-1.6	-1.6	-1.7	-1.5	-1.2	-1.0	-0.3	-0.0	0.4	0.5	1.0
10	0.5	1.2	1.5	0.8	0.4	1.0	2.6	2.6	2.4	0.2	-1.0	-1.2	-1.3	-1.3	-1.3	-1.2	-1.0	-0.6	0.4	1.6	3.8	2.8	-0.8	-0.4
11	-0.9	-1.2	-1.2	-1.3	-1.5	-1.7	-1.8	-1.6	-1.3	-1.3	-1.4	-1.8	-1.7	-1.9	-1.5	-1.3	-1.4	-1.3	-0.9	-0.1	0.5	-M-	-M-	-M-
12	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
13	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
14	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
15	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
18	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
19	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
20	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
21	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.7	-0.7	-0.5
22	0.4	1.2	1.2	0.3	0.3	0.4	0.1	0.2	-1.4	-1.6	-2.1	-2.2	-2.3	-2.2	-1.9	-1.8	-1.5	-1.2	-1.1	0.4	1.8	2.7	3.6	2.8
23	2.2	1.7	1.7	1.6	1.5	1.2	0.7	1.5	-0.3	-1.2	-1.2	-1.5	-1.9	-1.9	-1.8	-1.4	-1.3	-1.3	-0.8	0.2	0.1	0.1	0.3	-0.0
24	-0.1	-0.1	2.3	2.1	1.2	1.9	-0.3	-0.9	-0.8	-1.2	-1.6	-1.4	-1.5	-1.5	-1.5	-1.6	-1.4	-1.3	-1.4	-1.6	-1.8	-1.7	-1.5	-1.7
25	-1.7	-1.6	-1.7	-1.8	-1.6	-1.3	-1.1	-1.3	-1.8	-2.3	-2.4	-2.6	-2.7	-2.8	-2.6	-2.3	-2.0	-1.8	-1.5	-1.0	-0.9	-0.8	-0.7	-0.5
26	1.8	2.8	1.7	3.1	3.9	5.5	5.4	3.8	0.5	-1.0	-1.4	-1.5	-1.5	-1.6	-1.5	-1.4	-1.6	-1.4	-1.3	-0.5	0.1	0.3	-0.7	-0.8
27	-1.1	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.5	-1.6	-1.5	-1.4	-1.7	-1.8	-1.7	-1.7	-1.6	-1.6	-1.2	-0.2	0.7	0.8	0.5	0.7
28	1.0	0.6	0.3	0.2	0.3	0.2	-0.3	-0.7	-1.2	-1.4	-1.6	-1.7	-1.9	-2.0	-1.9	-1.6	-1.4	-1.3	-0.9	-0.0	-0.1	-0.1	-0.1	-0.3
29	-0.6	-0.5	-0.5	-0.6	-0.7	-0.7	-0.6	-0.8	-1.1	-1.3	-1.4	-1.5	-1.8	-1.4	-1.3	-1.3	-1.0	-0.8	-0.8	-0.8	-0.8	-0.9	-1.0	-0.9
30	-0.6	-0.6	-0.4	-0.3	-0.3	0.4	0.4	-0.3	-1.0	-1.4	-1.7	-1.9	-2.0	-2.1	-2.1	-1.9	-1.6	-1.3	-0.8	0.4	3.3	1.2	0.1	-0.7
31	-1.1	-1.0	-0.9	-0.7	-0.3	0.6	0.8	0.4	-1.1	-1.7	-1.7	-1.8	-2.1	-2.0	-2.0	-2.0	-1.9	-1.5	-1.6	0.9	4.5	5.7	6.7	4.6
HOURLY MEAN	0.0	0.3	0.3	0.3	0.2	0.5	0.4	0.2	-0.5	-1.2	-1.5	-1.7	-1.8	-1.8	-1.8	-1.7	-1.6	-1.4	-1.0	-0.4	0.2	0.1	0.0	-0.1

MAXIMUM = 7.6 MINIMUM = -2.8 MEAN = -0.6 487 VALID OBSERVATIONS (65.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	7.6	-1.1	-1.0	-1.4	1.0	4.9	0.0	0.9	1.0	3.8	0.5	-M-	-M-	-M-	-M-	-M-
MIN	-1.7	-1.6	-1.5	-2.3	-2.6	-2.6	-1.7	-2.8	-1.7	-1.3	-1.9	-M-	-M-	-M-	-M-	-M-
MEAN	2.6	-1.3	-1.3	-1.8	-1.4	0.0	-1.1	-1.3	-1.0	0.5	-1.3	-M-	-M-	-M-	-M-	-M-

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	-M-	-M-	-M-	-M-	-0.5	3.6	2.2	2.3	-0.5	5.5	0.8	1.0	-0.5	3.3	6.7
MIN	-M-	-M-	-M-	-M-	-0.7	-2.3	-1.9	-1.8	-2.8	-1.6	-1.8	-2.0	-1.8	-2.1	-2.1
MEAN	-M-	-M-	-M-	-M-	-0.6	-0.2	-0.1	-0.7	-1.7	0.5	-1.0	-0.7	-1.0	-0.6	0.1

MEAN MAXIMUM = 1.8 MEAN MINIMUM = -1.9

318 - 35 FT DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	4.0	5.3	5.9	6.6	6.0	4.7	3.6	3.5	1.4	-0.9	-1.8	-2.0	-2.1	-2.1	-2.1	-1.9	-1.8	-1.3	-0.7	-0.2	0.2	0.6	-0.2	-0.3
2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.7	-0.8	-1.2	-1.5	-1.7	-1.9	-2.0	-1.9	-2.0	-1.4	-1.4	-1.2	-1.8	-1.8	-1.7	-1.5	-1.5	-1.5
3	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.4	-1.8	-2.1	-2.1	-2.4	-2.5	-2.5	-2.6	-2.6	-2.3	-2.2	-1.7	-1.2	-1.1	-0.9	-0.9	-1.0
4	-0.8	-0.7	-0.8	-0.9	-1.0	-1.0	-1.0	-1.2	-1.6	-1.7	-1.7	-1.8	-1.9	-1.9	-1.9	-1.8	-1.7	-1.6	-1.4	-0.9	-1.0	-1.0	-0.9	-1.0
5	-1.1	-1.3	-1.2	-1.2	-1.5	-1.5	-1.6	-1.7	-1.7	-1.9	-2.0	-2.1	-2.0	-1.9	-2.2	-2.1	-2.0	-2.0	-1.9	-1.8	-1.8	-1.8	-1.6	-1.2
6	-1.2	-0.3	-0.2	-0.4	-0.0	0.1	-0.0	-0.1	-0.9	-1.4	-1.4	-1.7	-1.5	-1.7	-1.7	-1.7	-1.6	-1.5	-1.4	-1.2	-1.1	-1.1	-1.0	-1.2
7	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.5	-1.6	-1.7	-1.4	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.2
8	-1.1	-1.2	-1.1	-1.1	-1.1	-1.1	-1.1	-1.2	-1.2	-1.2	-1.3	-1.2	-1.3	-1.4	-1.3	-1.5	-1.5	-1.7	-1.6	-1.5	-1.4	-1.4	-1.4	-1.2
9	-1.3	-1.3	-1.4	-1.3	-1.2	-1.2	-1.0	-1.2	-1.2	-1.4	-1.7	-1.7	-2.0	-1.9	-2.0	-1.7	-1.7	-1.4	-1.1	-0.2	1.4	2.4	1.5	0.8
10	0.8	-0.1	-0.9	-1.0	-1.2	-0.9	-0.1	-0.6	-1.7	-2.1	-M-	-2.2	-2.2	-2.2	-2.3	-2.1	-1.9	-1.4	-1.1	0.1	-0.0	-0.0	-0.1	0.3
11	0.7	0.6	0.9	0.8	0.5	0.3	0.1	-0.5	-1.3	-1.2	-1.5	-1.6	-1.8	-1.8	-1.8	-1.8	-1.4	-1.2	0.7	-0.3	0.0	0.0	0.1	-0.2
12	-0.3	-0.2	0.0	0.2	0.2	0.7	0.7	-0.5	-1.1	-1.4	-1.6	-1.8	-1.8	-1.7	-2.1	-2.2	-2.1	-1.9	-1.4	-0.4	2.5	2.8	-0.0	-0.5
13	-0.6	-0.1	1.1	-0.7	-0.6	-0.7	-0.4	-1.3	-1.7	-1.8	-2.1	-0.2	1.1	0.6	1.1	-1.3	-1.4	-1.3	-1.0	0.1	2.2	2.9	3.3	2.6
14	3.5	3.9	3.6	4.1	2.8	3.0	1.4	0.6	-1.1	-1.3	-1.2	-1.3	-1.8	-1.8	-1.9	-1.8	-1.6	-1.3	-0.9	-0.4	-0.2	-0.2	-0.2	-0.2
15	-0.0	-0.2	-0.1	-0.3	-0.6	-0.5	-0.2	0.2	-0.8	-0.8	-0.8	-1.0	-1.4	-1.5	-1.3	-1.7	-1.3	-0.9	-0.6	-0.5	-0.5	-0.5	-0.2	0.6
16	-0.4	-0.1	0.9	0.7	1.0	0.6	0.3	-0.4	-1.5	-1.8	-1.7	-1.9	-1.9	-1.7	-1.5	-1.5	-1.4	-1.8	-1.6	-1.5	-1.4	-1.2	-1.0	-0.8
17	-0.5	-0.6	-0.7	-0.7	-0.9	-0.7	-0.6	-1.4	-1.8	-2.1	-2.2	-2.4	-2.7	-2.5	-2.5	-2.3	-2.1	-1.8	-1.4	-0.2	1.8	3.9	5.1	6.0
18	5.5	5.3	4.3	3.5	4.5	1.9	1.2	-0.3	-1.3	-1.6	-1.9	-2.1	-1.8	-1.9	-2.1	-2.0	-1.8	-1.5	-1.0	-0.0	0.7	0.1	0.1	0.1
19	-0.2	-0.3	-0.4	-0.1	-0.3	-0.4	-0.6	-0.8	-0.5	-1.0	-1.3	-1.9	-2.2	-2.8	-2.9	-2.7	-2.5	-2.1	-1.7	-1.0	-0.7	-0.7	-1.0	-0.6
20	-0.2	-0.4	0.6	0.8	-0.4	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
21	-M-	-M-	-M-	-M-	-M-	-M-	-M-	5.6	-0.4	-1.3	-1.5	-1.9	-1.7	-1.8	-1.8	-1.8	-1.6	-1.2	-1.2	-0.5	-1.3	-0.3	0.2	0.0
22	2.2	1.3	0.5	0.8	2.2	0.6	-0.1	-1.3	-2.0	-2.1	-1.8	-1.8	-1.9	-2.0	-1.4	-1.5	-1.5	-1.4	-1.3	-0.4	1.3	2.3	4.6	4.9
23	4.8	4.0	4.1	3.9	3.5	3.7	3.6	1.5	-1.3	-1.7	-1.8	-2.0	-2.0	-2.0	-2.0	-1.9	-1.8	-1.5	-1.1	0.2	1.2	2.1	3.1	2.4
24	1.9	2.5	1.9	0.8	0.9	1.0	0.5	-0.7	-1.2	-1.6	-1.9	-2.0	-2.0	-2.1	-2.1	-1.8	-1.5	-1.4	-0.9	-0.8	-0.8	-0.6	-0.7	-0.5
25	-0.3	-0.4	-0.5	-0.6	-0.6	-0.4	-0.6	-1.0	-1.3	-1.3	-1.4	-1.5	-1.6	-1.9	-1.7	-1.6	-1.5	-1.3	-1.2	-0.9	-0.3	0.1	-0.3	-0.7
26	-0.6	-1.0	-1.4	-1.4	-1.4	-1.4	-1.5	-1.9	-2.2	-2.6	-2.7	-3.0	-2.7	-2.5	-2.3	-2.4	-2.1	-1.9	-1.4	-1.0	-0.5	-0.5	-0.3	-0.2
27	-0.0	-0.3	-0.5	-0.5	-0.2	-0.2	-0.3	-0.9	-1.4	-1.7	-1.6	-1.4	-1.3	-1.2	-1.0	-1.0	-0.9	-0.8	-0.9	-0.6	-0.5	-0.5	-0.5	-0.4
28	-0.4	-0.5	-0.8	-0.8	-1.9	-1.7	-2.5	-2.4	-2.2	-2.2	-1.9	-1.9	-1.9	-1.8	-1.7	-1.5	-1.4	-1.5	-1.6	-1.3	-1.0	-1.0	-1.0	-1.0
29	-1.0	-0.9	-0.9	-0.9	-1.0	-1.0	-0.8	-0.9	-1.2	-1.3	-1.4	-1.3	-1.4	-1.3	-1.3	-1.2	-1.3	-1.1	-1.0	-0.6	-0.0	0.3	0.3	0.5
30	0.6	1.1	1.1	0.3	-0.1	0.5	0.6	0.4	-0.1	-1.0	-1.4	-1.8	-1.3	-1.1	-1.5	-1.6	-M-	-1.3	-1.1	-0.6	0.3	1.2	2.6	3.7
HOURLY MEAN	0.4	0.4	0.4	0.3	0.2	0.1	-0.1	-0.4	-1.2	-1.6	-1.7	-1.8	-1.8	-1.8	-1.8	-1.8	-1.6	-1.5	-1.2	-0.7	-0.2	0.2	0.2	0.3

MAXIMUM = 6.6 MINIMUM = -3.0 MEAN = -0.7 692 VALID OBSERVATIONS (96.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	6.6	-0.5	-0.9	-0.7	-1.1	0.1	-1.2	-1.1	2.4	0.8	0.9	2.8	3.3	4.1	0.6
MIN	-2.1	-2.0	-2.6	-1.9	-2.2	-1.7	-1.7	-1.7	-2.0	-2.3	-1.8	-2.2	-2.1	-1.9	-1.7
MEAN	1.0	-1.3	-1.7	-1.3	-1.7	-1.0	-1.3	-1.3	-0.9	-1.0	-0.5	-0.6	-0.0	0.2	-0.6

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	1.0	6.0	5.5	-0.1	0.8	5.6	4.9	4.8	2.5	0.1	-0.2	-0.0	-0.4	0.5	3.7
MIN	-1.9	-2.7	-2.1	-2.9	-0.4	-1.9	-2.1	-2.0	-2.1	-1.9	-3.0	-1.7	-2.5	-1.4	-1.8
MEAN	-0.9	-0.6	0.3	-1.2	0.1	-0.7	0.0	0.8	-0.6	-0.9	-1.6	-0.8	-1.5	-0.9	-0.0

MEAN MAXIMUM = 1.7 MEAN MINIMUM = -2.0

318 - 35 FT DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5.0	5.6	5.5	4.5	5.4	3.6	2.8	2.0	0.1	-1.5	-1.2	-1.4	-1.5	-1.4	-1.4	-1.4	-1.3	-1.1	-1.1	-0.6	0.3	0.3	1.5	2.1
2	2.4	3.3	3.1	4.6	4.2	4.4	3.3	2.2	0.9	-0.9	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.4	-1.1	-0.4	0.2	0.6	0.5	0.9
3	1.4	1.2	0.3	-0.0	0.1	0.4	0.7	-0.5	-1.2	-1.5	-1.7	-1.9	-1.8	-1.8	-1.6	-1.7	-1.5	-1.4	-1.1	-0.7	-0.5	-0.5	-0.5	-0.5
4	-0.4	-0.2	-0.1	-0.1	-0.2	-0.2	-0.4	-0.9	-1.3	-1.6	-1.8	-1.9	-2.0	-1.9	-1.6	-1.2	-1.3	-1.2	-0.9	-0.7	-0.5	-0.4	-0.5	-0.8
5	-0.1	-0.4	-0.3	-0.0	0.9	1.0	0.2	-0.7	-0.9	-1.8	-1.9	-2.0	-2.0	-2.1	-2.3	-2.2	-1.8	-1.8	-1.9	-1.6	-1.5	-1.6	-1.5	-1.5
6	-1.3	-1.4	-1.5	-1.3	-1.3	-1.5	-1.7	-1.8	-1.9	-1.8	-2.1	-1.8	-2.0	-1.6	-1.8	-2.3	-1.8	-1.3	-1.2	-0.2	1.2	2.8	2.8	1.6
7	1.6	0.8	0.5	0.0	1.3	2.4	2.5	0.4	-1.2	-1.3	-1.3	-1.5	-1.6	-1.6	-1.6	-1.6	-1.5	-1.3	-0.8	0.9	1.9	1.3	1.9	1.3
8	0.8	0.6	0.2	-0.0	-0.0	0.0	0.4	-0.8	-1.3	-1.6	-1.7	-1.7	-1.8	-1.8	-1.8	-1.7	-1.6	-1.4	-1.0	-0.5	-0.4	-0.3	-0.3	-0.2
9	-0.2	-0.3	-0.2	-0.3	-0.3	-0.2	-0.5	-0.8	-1.1	-1.6	-1.6	-1.9	-1.7	-2.1	-2.0	-1.8	-1.6	-1.1	-1.0	-0.6	-0.3	-0.3	-0.4	-0.2
10	-0.3	-0.3	-0.2	-0.3	-0.3	-M-	-M-	-M-	-1.4	-1.6	-1.8	-2.0	-2.1	-2.1	-2.0	-1.9	-1.5	-1.3	-1.0	-0.7	-0.5	-0.6	-0.4	-0.2
11	-0.5	-0.3	-0.4	-0.6	-0.8	-1.4	-1.5	-1.3	-1.0	-1.5	-1.5	-1.5	-1.5	-1.5	-1.7	-1.5	-1.5	-1.2	-0.9	-0.6	-0.6	-0.4	-1.1	-0.9
12	-0.6	-0.7	-0.9	-0.7	-0.9	-0.8	-1.0	-1.0	-1.0	-0.9	-0.8	-0.1	-0.3	-1.6	-1.3	-1.1	-1.1	-1.2	-0.8	-0.5	-0.5	-0.2	-0.5	-0.4
13	-0.5	0.2	0.0	-0.0	-0.3	-0.2	-0.5	-0.8	-1.2	-1.2	-1.3	-1.1	-0.9	-1.2	0.8	-1.0	-1.2	-1.3	-1.0	-0.7	-1.0	-1.0	-1.3	-0.7
14	-0.8	-0.8	-0.9	-0.9	-0.9	-1.0	-0.9	-0.8	-0.8	-1.0	-1.2	-1.3	-1.0	-1.1	-1.5	-1.1	-1.0	-1.3	-1.4	-0.8	-0.3	-0.9	-0.8	-0.6
15	-0.6	-0.8	-0.7	-0.4	-0.8	-0.8	-1.1	-1.1	-1.1	-1.2	-1.3	-1.4	-1.6	-1.6	-1.5	-1.4	-0.5	-0.6	0.7	0.1	2.0	4.0	3.5	2.8
16	3.0	2.7	1.5	0.8	0.5	0.4	0.1	0.1	-0.3	-0.5	-0.8	-0.9	-1.2	-1.4	-1.0	-0.8	-0.2	1.4	0.5	0.8	1.2	2.2	1.9	1.0
17	-0.1	-0.6	0.3	0.2	0.1	-0.4	-0.7	-0.9	-1.0	-1.0	-1.0	-0.8	-0.8	-0.5	-1.4	-1.8	-1.5	-1.4	-1.1	0.2	0.6	1.1	1.3	1.0
18	0.8	1.1	0.8	1.9	1.6	2.1	1.5	-0.2	-1.0	-1.3	-1.2	-1.3	-1.4	-1.3	-1.3	-1.2	-1.3	-1.1	-1.1	-0.5	0.1	0.3	0.2	-0.0
19	0.0	0.2	0.9	1.7	2.2	0.7	1.3	-0.6	-1.2	-1.3	-1.3	-1.2	-1.4	-1.4	-1.5	-1.5	-1.5	-1.4	-1.2	-0.7	-0.3	-0.3	-0.0	-0.3
20	0.2	0.8	-M-	-M-	0.3	0.2	0.2	-0.2	-0.4	-0.5	-1.7	-3.5	-1.0	-1.7	-1.6	-1.6	-1.1	-0.9	-0.9	-0.9	-1.1	-0.9	-1.0	-0.8
21	-1.0	-0.7	-0.8	-0.9	-1.2	-1.3	-1.1	-1.4	-1.4	-1.5	-1.6	-1.7	-1.9	-2.0	-2.0	-2.0	-1.8	-1.7	-1.6	-1.6	-1.4	-1.3	-1.3	-1.1
22	-0.8	-0.4	-0.7	-0.8	-0.9	-1.0	-1.1	-1.3	-1.4	-1.7	-1.9	-1.9	-1.8	-1.6	-1.5	-1.4	-1.3	-1.4	-1.3	-1.2	-1.0	-0.9	-0.9	-1.1
23	0.9	-0.7	-0.6	-0.3	0.4	0.3	0.2	-0.5	-1.2	-1.0	-1.1	-1.3	-1.4	-1.4	-1.7	-1.6	-1.6	-1.4	-1.1	-0.9	-0.7	-0.6	-0.5	-0.5
24	-0.7	-0.9	-0.9	-0.7	-0.5	-0.5	-0.8	-1.1	-1.1	-1.2	-1.2	-1.3	-1.3	-1.4	-1.2	-1.2	-1.1	-1.0	-1.0	-0.8	-0.8	-0.9	-0.9	-0.9
25	-0.9	-0.8	-0.8	-0.9	-0.9	-0.9	-0.8	-0.9	-0.9	-1.0	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-0.8	-0.6	-0.5	-0.5
26	-0.4	-0.8	-0.8	-0.4	-0.9	-1.1	-1.2	-1.2	-1.1	-1.0	-1.5	-1.5	-1.5	-1.4	-1.3	-0.9	-0.9	-1.1	-0.7	-0.7	0.2	1.0	1.2	1.5
27	2.0	2.3	1.4	1.8	2.3	0.4	-0.5	-1.0	-1.3	-1.6	-1.8	-1.8	-1.5	-2.0	-1.9	-1.7	-2.0	-1.5	-1.3	-0.6	0.5	1.9	2.2	1.8
28	1.9	1.9	2.0	1.1	1.0	0.7	0.0	-0.7	-0.7	-0.7	-0.9	-1.3	-1.7	-1.4	-1.1	-0.9	-1.1	-0.8	-0.8	-0.8	-0.7	-0.8	-1.0	-0.7
29	0.5	-0.6	-0.5	-0.7	-0.8	-0.4	0.2	-1.0	-1.6	-1.9	-1.9	-2.2	-2.3	-2.2	-2.1	-2.3	-2.3	-2.0	-M-	-M-	0.0	1.0	0.5	1.2
30	0.7	1.0	1.0	0.4	0.0	-0.1	-0.3	-0.9	-1.0	-0.9	-1.0	-0.9	-2.0	-1.8	-1.4	-1.6	-2.1	-1.2	-0.5	-1.4	-1.2	-1.3	-1.3	-1.2
31	-1.2	-1.2	-1.3	-1.2	-1.2	-1.1	-1.2	-1.2	-1.4	-1.5	-1.8	-2.4	-2.3	-2.2	-2.3	-2.5	-2.3	-2.0	-1.7	-1.3	-1.0	-0.9	-0.9	-0.3
HOURLY MEAN	0.3	0.3	0.2	0.2	0.3	0.1	-0.1	-0.6	-1.0	-1.3	-1.4	-1.5	-1.5	-1.6	-1.6	-1.5	-1.4	-1.2	-1.0	-0.6	-0.2	0.1	0.1	0.0

MAXIMUM = 5.6 MINIMUM = -3.5 MEAN = -0.6 737 VALID OBSERVATIONS (99.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	5.6	4.6	1.4	-0.1	1.0	2.8	2.5	0.8	-0.2	-0.2	-0.3	-0.1	0.2	-0.3	4.0	3.0
MIN	-1.5	-1.5	-1.9	-2.0	-2.3	-2.3	-1.6	-1.8	-2.1	-2.1	-1.7	-1.6	-1.3	-1.5	-1.6	-1.4
MEAN	1.0	0.7	-0.7	-0.9	-1.2	-1.0	0.1	-0.7	-0.9	-1.1	-1.1	-0.8	-0.8	-1.0	-0.3	0.5

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	1.3	2.1	2.2	0.8	-0.7	-0.4	0.4	-0.5	-0.5	1.5	2.3	2.0	1.2	1.0	-0.3
MIN	-1.8	-1.4	-1.5	-3.5	-2.0	-1.9	-1.7	-1.4	-1.0	-1.5	-2.0	-1.7	-2.3	-2.1	-2.5
MEAN	-0.4	-0.2	-0.4	-0.8	-1.4	-1.2	-0.8	-1.0	-0.9	-0.7	-0.2	-0.3	-1.0	-0.8	-1.5

MEAN MAXIMUM = 1.2 MEAN MINIMUM = -1.8

318 - 35 FT DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.3	0.1	0.3	0.3	0.2	0.7	0.7	-0.8	-1.1	-1.5	-1.3	-1.7	-1.8	-1.6	-1.4	-1.4	-1.4	-1.2	-1.3	-0.5	-0.3	0.0	0.8	1.2
2	0.4	1.1	0.4	0.7	0.2	-0.3	-0.1	-0.4	-1.0	-1.2	-1.0	-0.7	-1.0	-1.1	-1.1	-1.3	-1.3	-1.2	-1.1	-1.0	-0.7	-1.1	-1.0	-0.9
3	-0.7	-0.6	-0.1	-0.3	-0.5	-0.5	-1.0	-1.4	-1.3	-1.3	-1.4	-1.5	-1.4	-1.4	-1.4	-1.3	-1.4	-1.2	-1.2	-1.1	-0.9	-0.9	-0.7	-0.8
4	-0.9	-0.7	-0.3	0.0	0.2	0.3	-0.1	-1.2	-1.3	-1.6	-1.4	-1.5	-1.4	-1.4	-1.3	-1.6	-1.3	-1.3	-1.1	-0.8	-0.4	-0.2	0.0	0.2
5	0.2	0.9	0.6	0.3	0.9	1.0	1.0	-0.1	-0.7	-1.3	-1.5	-1.4	-1.6	-1.8	-1.6	-1.3	-1.4	-1.3	-1.0	-0.8	-0.8	-0.8	-0.8	-0.8
6	-0.8	-0.9	-0.9	-0.9	-0.9	-0.8	-0.9	-0.8	-0.9	-1.1	-1.3	-1.4	-1.5	-1.7	-1.4	-1.4	-1.6	-1.3	-1.0	-0.8	-0.7	-0.6	-0.5	0.1
7	0.7	1.7	1.2	0.2	-0.7	-0.9	-0.8	-1.4	-1.5	-1.9	-2.0	-2.3	-2.4	-2.3	-2.1	-2.2	-2.1	-1.9	-1.4	0.5	2.1	4.0	4.9	3.9
8	4.6	3.6	1.8	1.5	0.9	1.1	-0.5	-1.0	-1.1	-0.8	-0.4	-1.1	-1.3	-1.1	-1.0	-1.1	-M-	-0.9	-1.1	-1.0	-1.0	-0.9	-0.7	-0.7
9	-0.6	-0.8	-0.3	-0.3	-0.7	-0.6	-0.8	-0.9	-1.6	-1.7	-1.8	-2.3	-2.6	-2.7	-2.7	-2.6	-2.4	-2.1	-1.7	-1.0	-0.6	-0.3	0.3	2.4
10	3.9	4.0	3.9	5.0	5.0	5.2	0.2	-0.9	-1.0	-1.5	-1.6	-1.8	-1.7	-1.8	-1.8	-1.5	-1.5	-1.3	-1.1	-0.0	1.8	3.6	2.4	2.2
11	2.8	2.8	1.7	2.5	2.2	2.1	1.3	1.3	0.2	-1.0	-1.3	-1.5	-1.5	-1.7	-1.6	-1.6	-1.5	-1.3	-1.3	-0.9	-0.4	-0.2	-0.3	-0.3
12	0.0	0.4	0.5	1.8	1.1	1.5	0.9	-0.5	-1.0	-1.4	-1.4	-1.6	-1.7	-2.2	-1.9	-1.8	-1.8	-0.9	-0.6	0.3	1.1	2.2	3.3	2.8
13	3.2	3.5	2.9	1.4	3.4	4.6	3.4	0.8	-0.8	-1.3	-1.5	-1.5	-1.7	-1.6	-1.7	-1.7	-1.3	-1.1	-1.1	-0.5	0.7	0.8	1.7	2.5
14	0.2	0.2	0.0	-0.1	0.4	0.6	0.0	-0.9	-0.9	-0.7	-1.0	-1.2	-1.2	-1.3	-1.1	-1.2	-1.3	-1.2	-0.7	-0.6	-0.3	-0.4	-0.1	1.1
15	-0.7	0.3	1.2	0.9	-0.4	-0.1	-0.5	-0.6	-0.9	-1.4	-1.4	-1.3	-1.3	-1.3	-1.4	-1.8	-1.8	-1.9	-1.4	-1.2	-0.7	-0.4	-0.5	-0.5
16	-0.5	0.2	0.2	0.3	0.1	1.4	0.1	-1.4	-1.5	-1.5	-1.9	-2.0	-2.0	-2.0	-2.1	-1.9	-1.6	-1.4	-1.2	-0.4	1.9	3.1	2.4	3.2
17	2.9	1.7	1.6	2.3	2.1	1.0	1.3	-0.1	-0.5	-0.5	-0.6	-0.8	-1.3	-1.5	-1.4	-1.1	0.1	-0.7	-1.5	-1.0	-0.1	0.9	1.7	2.1
18	0.9	0.0	-0.5	0.3	-0.4	-0.9	-1.2	-1.5	-1.5	-1.5	-1.5	-1.8	-1.9	-1.6	-1.8	-1.9	-1.8	-1.8	-1.6	-1.2	-0.6	0.1	0.7	0.6
19	-0.2	-0.3	-0.4	-0.1	0.2	0.1	-0.6	-1.6	-1.5	-1.6	-2.0	-2.0	-2.1	-1.9	-M-	-M-	-2.2	-2.2	-1.7	-0.1	2.1	3.3	2.3	1.9
20	1.4	0.7	0.5	0.7	0.1	0.3	-0.4	-1.2	-1.4	-2.0	-2.1	-2.4	-2.2	-2.3	-2.6	-2.6	-2.4	-2.2	-1.7	0.6	2.6	1.7	2.6	4.8
21	5.0	5.5	6.5	6.7	6.6	5.8	4.7	1.5	-0.6	-1.5	-1.4	-1.6	-1.9	-1.9	-2.1	-1.7	-0.8	1.4	1.5	0.3	-0.9	-0.7	-0.7	-0.2
22	0.1	0.1	-0.0	0.2	0.2	-0.2	-0.4	-1.0	-1.3	-1.5	-1.6	-1.8	-2.0	-2.1	-2.4	-2.1	-2.1	-1.8	-0.7	0.1	0.9	1.5	2.0	1.8
23	1.6	1.5	1.6	1.4	1.2	1.0	0.3	-0.9	-1.0	-1.5	-1.7	-1.7	-2.2	-2.1	-2.1	-1.9	-1.7	-1.6	-1.4	-0.8	-0.3	-0.2	-0.1	-0.0
24	0.2	0.4	0.5	0.1	0.3	0.5	0.1	-0.7	-1.1	-1.4	-1.6	-1.7	-1.9	-1.9	-1.8	-1.6	-1.5	-1.4	-1.2	-0.8	-0.0	0.7	1.2	1.2
25	1.2	0.7	-0.1	-0.6	0.8	-1.1	-1.3	-1.4	-1.6	-1.6	-1.8	-2.1	-2.4	-2.1	-2.0	-2.9	-2.8	-1.8	-1.6	-1.1	-1.1	-1.0	-0.6	-0.9
26	-0.8	-0.6	-0.6	-0.8	-0.8	-0.7	-0.9	-1.5	-1.3	-1.7	-1.7	-1.7	-1.3	-1.3	-1.7	-1.6	-1.6	-1.6	-1.3	-0.7	-0.5	-0.6	-0.9	-0.8
27	-0.8	-0.9	-0.9	-0.8	-0.8	-1.0	-1.2	-1.3	-1.2	-1.2	-1.1	-1.1	-1.1	-1.0	-1.6	-1.4	-1.4	-0.6	-0.4	-0.8	-0.5	-0.4	-0.3	-0.6
28	0.3	1.1	2.0	2.1	2.4	1.7	1.4	-0.1	-0.4	-1.0	-1.5	-1.8	-2.1	-2.2	-2.3	-1.9	-1.9	-1.6	-1.4	-0.8	1.1	3.1	4.3	4.3
29	3.7	2.9	1.3	1.1	0.8	-M-	0.5	-0.7	-1.2	-1.4	-1.7	-1.9	-2.3	-2.7	-2.6	-1.8	-1.5	-1.1	-0.8	-0.5	-0.5	-1.0	-1.0	-0.8
30	-0.9	-0.9	-0.9	-1.0	-1.0	-0.9	-1.0	-1.3	-1.2	-1.0	-1.3	-1.6	-1.7	-1.8	-1.7	-1.4	-1.5	-1.3	-1.2	-1.1	-0.9	-1.0	-0.9	-1.0
HOURLY MEAN	0.9	1.0	0.9	0.8	0.7	0.7	0.1	-0.7	-1.1	-1.4	-1.5	-1.6	-1.7	-1.8	-1.8	-1.7	-1.6	-1.3	-1.1	-0.6	0.1	0.5	0.7	0.8

MAXIMUM = 6.7 MINIMUM = -2.9 MEAN = -0.4 716 VALID OBSERVATIONS (99.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	1.2	1.1	-0.1	0.3	1.0	0.1	4.9	4.6	2.4	6.0	2.8	3.3	4.6	0.6	1.2
MIN	-1.8	-1.3	-1.5	-1.6	-1.8	-1.7	-2.4	-1.3	-2.7	-1.8	-1.7	-2.2	-1.7	-1.3	-1.9
MEAN	-0.5	-0.6	-1.0	-0.8	-0.6	-1.0	-0.3	-0.1	-1.2	1.0	0.0	-0.0	0.5	-0.6	-0.8

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	3.2	2.9	0.9	3.3	4.8	6.7	2.0	1.6	1.2	1.2	-0.5	0.0	4.3	3.7	-0.9
MIN	-2.1	-1.5	-1.9	-2.2	-2.6	-2.1	-2.4	-2.2	-1.9	-2.9	-1.7	-1.6	-2.3	-2.7	-1.8
MEAN	-0.3	0.3	-0.9	-0.5	-0.4	1.2	-0.6	-0.5	-0.6	-1.3	-1.1	-0.9	0.2	-0.6	-1.2

MEAN MAXIMUM = 2.3 MEAN MINIMUM = -2.0

318 - 155 DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-1.4	-1.4	-0.7	0.2	-0.0	0.3	0.3	0.2	0.1	-0.2	-0.6	-0.8	-0.9	-1.0	-1.1	-1.0	-1.1	-1.1	-1.2	-1.0	-0.4	-0.5	-0.7	0.9
2	-0.9	-0.8	-0.7	-0.7	-0.8	-0.7	-0.6	-0.9	-0.9	-0.8	-0.5	-0.1	-0.2	-0.4	-1.2	-1.4	-1.6	-1.3	-1.3	-1.2	-1.1	-1.2	-1.4	-1.7
3	-1.5	-0.6	-0.7	-0.8	-1.3	-1.7	-1.9	-1.2	-1.1	-1.2	-1.2	-1.1	-1.1	-1.1	-1.0	-1.2	-1.1	-1.2	-1.5	-1.4	-1.5	-1.4	1.4	M
4	-1.1	-1.2	-1.1	-1.2	-0.9	-0.9	-0.9	-0.9	-0.4	-0.3	-0.8	-0.6	-0.6	-0.6	-0.6	-0.4	-0.5	0.4	1.6	2.5	5.4	4.8	3.7	2.8
5	3.7	3.6	3.5	2.4	2.2	1.9	1.5	2.8	3.2	2.0	0.6	-0.9	-1.6	-1.9	-1.8	-1.8	-1.4	-0.9	-1.0	-1.7	-1.2	-1.5	-1.2	-1.1
6	-1.1	-1.1	-1.1	-1.0	-1.0	-1.2	-1.1	-1.2	-1.3	-1.3	-1.5	-1.6	-1.5	-1.5	-1.7	-1.5	-1.3	-1.5	-1.7	-1.6	-2.0	-2.1	-1.7	-1.8
7	-1.4	-1.2	-1.3	-1.3	-1.1	-0.8	-1.1	-0.0	1.3	0.3	-0.2	-0.1	-0.6	-0.7	-0.7	-0.8	-0.6	-0.6	0.6	3.5	2.4	1.8	2.7	2.8
8	2.9	2.0	2.7	2.6	2.4	1.1	1.9	1.5	0.9	0.1	-0.6	-0.5	-0.9	-0.8	-0.9	-1.0	-1.5	-1.1	-0.6	-1.3	-1.2	-1.2	-1.6	-1.5
9	-1.4	-1.2	-1.4	-1.4	-1.5	-1.7	-1.8	-1.8	-1.5	-1.6	-2.1	-2.0	-1.7	-1.8	-1.7	-1.6	-1.6	-1.4	-1.2	-1.3	-1.5	-1.5	-1.6	-1.6
10	-1.6	-1.6	-1.7	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.7	-1.9	-2.1	-2.1	-1.9	-2.0	-1.8	-1.5	-1.2	-0.9	-0.9	-1.2	-1.3	-1.3
11	-1.4	-1.3	-1.4	-1.2	-1.2	-1.3	-1.1	-1.5	-1.4	-0.8	-1.7	-1.3	-1.1	-1.1	-1.1	-1.0	-1.1	-0.9	-0.8	-0.4	-0.2	0.7	0.3	0.1
12	0.1	-0.4	-0.2	-0.4	-0.8	-0.9	-0.9	-1.3	-1.5	-1.2	-1.6	-1.9	-2.0	-2.0	-2.1	-1.9	-1.8	-1.5	-1.6	-1.5	-1.5	-1.5	-1.3	-1.1
13	-0.6	-0.3	-0.5	-1.0	-0.7	-0.5	-0.6	0.3	-0.0	-0.7	-1.7	-1.1	-0.9	-1.5	-2.0	-1.6	-1.6	0.0	0.3	1.6	3.6	4.2	3.5	3.0
14	2.2	2.2	2.1	1.6	1.7	2.1	1.7	0.1	-0.7	-1.0	-0.9	-0.6	-0.9	-0.7	-0.8	-0.8	-1.0	1.1	-0.6	-0.6	-0.3	-0.1	0.3	-0.6
15	-0.6	0.0	0.6	-0.3	-0.5	-0.0	1.3	1.9	1.7	1.8	0.8	0.5	-1.4	-1.4	-1.4	-1.4	-1.5	-1.4	-1.3	-1.3	-1.2	-1.4	-1.3	-1.4
16	-1.3	-1.2	-1.3	-1.2	-1.2	-1.4	-0.5	0.3	-0.4	-1.1	-1.8	-1.9	-2.1	-1.9	-2.1	-1.8	-1.5	-1.3	-0.5	0.2	2.8	3.6	3.0	2.4
17	0.7	0.4	-0.3	-0.6	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.7	-0.6	0.3	-0.1	0.1	0.3	0.2	0.9
18	2.0	3.6	4.2	5.9	5.9	7.7	6.1	6.0	9.2	6.5	4.3	0.7	0.2	-0.8	-2.6	-2.7	-2.1	-0.7	1.4	1.1	1.3	1.8	1.5	2.6
19	2.3	2.2	2.4	2.0	1.8	2.7	3.6	2.6	3.4	3.8	2.7	0.2	-2.0	-2.3	-1.8	-1.5	-1.9	-1.9	-1.9	-1.8	-1.2	-1.1	-1.2	-0.8
20	-0.9	-0.8	-0.5	-0.5	-0.5	-0.4	-0.6	-0.6	-0.0	-0.5	-0.9	-0.9	-1.3	-1.4	-1.3	-1.3	-1.1	-1.5	-1.6	-1.5	-1.5	-1.3	-1.7	
21	-1.7	-1.6	-1.6	-2.0	-1.8	-1.6	-1.4	-1.4	-1.6	-1.3	-1.2	-1.2	-1.2	-1.2	-1.1	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-0.7	-0.5	-0.5
22	-0.5	-0.5	-0.7	-0.8	-0.8	-1.0	-1.0	-0.8	-0.8	-0.8	-1.0	-0.8	-0.6	-0.6	-0.2	-0.4	-0.4	-0.9	-1.2	-1.2	-1.1	-1.1	-1.1	-1.1
23	-1.1	-1.2	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-1.1	-1.4	-1.6	-1.7	-1.6	-1.5	-1.6	-1.5	-1.7	-1.5	-1.4	-1.1	-1.1	-1.3	-1.4	-1.2
24	-1.3	-1.2	-1.1	-1.2	-1.6	-1.2	-1.1	-0.7	-0.8	-1.1	-1.0	-0.9	-0.8	-0.9	-0.9	-1.0	-1.1	-1.1	-0.9	-0.6	-0.2	-0.6	0.6	0.5
25	-0.2	-0.1	-1.0	-1.1	-1.2	-1.4	-1.2	-1.3	-1.4	-1.7	-1.9	-2.1	-2.4	-2.5	-2.5	-2.4	-1.9	-1.7	-1.3	-1.7	-0.1	-0.1	-0.3	-0.4
26	-0.5	-0.1	0.5	0.5	1.7	1.9	1.6	2.1	1.0	-0.2	-0.7	-0.7	-0.4	-0.9	-0.9	-0.8	-0.7	-0.5	-0.2	-0.3	-0.4	-0.5	-0.5	-0.3
27	-0.4	-0.4	-0.4	-0.2	-0.3	-0.1	1.0	0.4	0.2	-0.1	-0.2	-0.2	-0.6	-1.6	-1.7	-0.9	-0.6	-0.2	0.2	0.3	0.7	1.0	1.1	2.4
28	2.0	0.5	0.2	0.1	-0.9	-0.9	-0.9	-0.9	-1.5	-2.0	-1.6	-1.5	-1.2	-0.8	-0.9	-1.0	-1.2	-0.8	-0.5	-0.3	-0.2	-0.1	-0.4	-0.4
29	-0.3	0.9	0.7	1.2	0.7	0.7	0.2	0.0	0.5	0.3	0.4	0.5	0.5	-0.2	-0.2	-0.5	-0.4	-0.6	-1.3	-1.4	-1.2	-0.7	-1.1	-1.4
30	-1.1	-1.3	-1.4	-1.6	-1.8	-1.4	-1.5	-1.4	-1.6	-1.1	-0.9	-1.0	-1.3	-1.6	-1.4	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3
31	-1.4	-1.3	-1.3	-1.2	-1.5	-1.4	-1.3	-1.3	-1.8	-1.9	-1.8	-2.4	-2.4	-2.2	-2.0	-1.9	-1.9	-1.6	-1.3	-0.8	-0.6	-0.8	-1.0	-1.1
HOURLY MEAN	-0.2	-0.2	-0.1	-0.2	-0.3	-0.2	-0.1	-0.1	-0.0	-0.3	-0.7	-0.9	-1.2	-1.3	-1.4	-1.3	-1.3	-1.0	-0.8	-0.6	-0.2	-0.2	-0.2	-0.2

MAXIMUM = 9.2 MINIMUM = -2.7 MEAN = -0.5 743 VALID OBSERVATIONS (99.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0.3	-0.1	-0.6	5.4	3.7	-1.0	3.5	2.9	-1.2	-0.9	0.7	0.1	4.2	2.2	1.9	3.6
MIN	-1.4	-1.7	-1.9	-1.2	-1.9	-2.1	-1.4	-1.6	-2.1	-2.1	-1.7	-2.1	-2.0	-1.1	-1.5	-2.1
MEAN	-0.6	-0.9	-1.2	0.3	0.4	-1.4	0.1	0.1	-1.6	-1.5	-0.9	-1.3	0.0	0.1	-0.4	-0.5

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0.9	9.2	3.8	-0.0	-0.5	-0.2	-0.9	0.6	-0.1	2.1	2.4	2.0	1.2	-0.9	-0.6
MIN	-0.9	-2.7	-2.3	-1.7	-2.0	-1.2	-1.7	-1.6	-2.5	-0.9	-1.7	-2.0	-1.4	-1.8	-2.4
MEAN	-0.4	2.6	0.4	-1.0	-1.2	-0.8	-1.3	-0.8	-1.3	0.0	-0.0	-0.6	-0.1	-1.3	-1.5

MEAN MAXIMUM = 1.4 MEAN MINIMUM = -1.8

318 - 155 DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-1.0	-1.1	-1.1	-1.1	-1.2	-0.9	-1.1	-1.2	-1.1	-1.2	-M-	-1.0	-1.0	-0.9	-0.9	-1.1	-1.1	-0.7	-0.6	-0.0	0.4	-0.2	-0.2	0.2
2	-0.2	-0.4	-0.4	-0.4	-0.5	-1.7	-1.9	-1.7	-1.8	-1.9	-1.8	-1.9	-1.7	-1.4	-1.6	-1.4	-1.3	-1.3	-1.1	-1.2	-1.1	-1.1	-1.1	-1.2
3	-1.4	-1.3	-1.3	-1.3	-1.4	-1.4	-1.3	-1.4	-1.3	-1.6	-1.8	-1.6	-1.4	-1.5	-1.5	-1.5	-1.4	-1.5	-1.8	-1.7	-1.9	-1.7	-1.4	-1.4
4	-1.6	-1.5	-1.4	-1.4	-1.5	-1.2	-1.5	-1.8	-1.6	-1.5	-1.3	-1.5	-1.6	-1.5	-1.4	-1.4	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.5	-1.6
5	-1.4	-1.3	-1.4	-1.3	-1.7	-1.5	-1.8	-1.7	-1.5	-1.8	-2.0	-2.1	-2.2	-2.3	-2.0	-2.0	-1.9	-1.8	-1.1	-0.7	-0.4	0.7	2.2	2.9
6	2.0	0.7	1.1	1.9	0.3	-0.1	-0.3	-0.1	-0.3	-0.6	-0.7	-0.7	-0.7	-0.8	-0.8	-0.8	-0.6	-0.4	-0.0	0.1	0.3	0.8	1.1	1.0
7	1.5	1.4	1.1	0.3	0.3	0.9	1.0	2.4	0.5	-0.3	-0.5	-0.5	-0.8	-0.8	-0.6	-0.6	-0.9	-1.0	-1.2	-0.3	0.7	1.8	2.6	2.7
8	2.6	2.6	0.9	-0.4	-0.5	-0.4	-0.3	-0.7	-0.9	-1.1	-1.2	-1.2	-1.2	-1.3	-1.4	-1.3	-1.2	-1.2	-1.1	-1.1	-1.3	-1.7	-1.8	-1.7
9	-1.6	-1.6	-1.4	-1.5	-1.2	-0.9	-0.6	-0.4	-1.0	-1.6	-2.0	-1.9	-2.2	-2.3	-2.2	-2.0	-1.9	-1.7	-0.7	-0.4	1.1	2.1	1.1	1.5
10	1.3	1.0	1.4	0.7	0.8	0.4	0.2	-0.4	0.1	-0.3	-0.8	-0.8	-0.9	-0.8	-0.8	-0.8	-0.8	-1.1	-0.5	0.4	1.0	1.7	3.1	3.8
11	4.8	2.3	1.5	1.1	2.6	4.8	3.4	2.7	2.8	1.1	0.9	-0.0	-0.4	-0.4	-0.7	-0.8	-0.8	-0.8	-0.8	-0.6	-0.6	-0.6	0.2	0.2
12	0.7	0.3	-0.1	-0.5	-0.4	-0.3	-0.5	-1.2	-1.3	-0.1	-0.1	-0.4	-0.4	-0.5	-0.6	-0.7	-0.7	-0.7	-0.3	0.5	0.5	0.0	0.1	0.3
13	0.3	0.4	1.5	3.0	2.6	1.8	1.4	0.8	1.0	0.8	0.2	-0.2	-0.9	-0.9	-0.6	-0.5	-0.4	-0.3	-0.1	0.3	0.1	-0.0	-0.0	-0.1
14	-0.0	0.4	1.8	1.6	1.0	-0.1	0.7	0.7	0.2	0.0	-0.2	-0.6	-0.5	-0.6	-0.6	-0.4	-0.3	-0.1	-0.3	-0.1	0.1	0.1	0.0	0.5
15	0.2	0.0	0.6	1.3	2.1	2.6	2.0	0.7	-0.3	-0.3	-0.6	-0.6	-0.6	-0.6	-0.3	-0.1	0.0	0.4	1.2	2.1	1.8	0.3	0.4	0.2
16	0.3	0.5	0.5	1.0	0.6	0.3	-0.2	-0.2	-0.2	-0.4	-0.5	-0.2	-0.3	-0.3	0.5	0.2	0.2	0.3	-0.2	-0.3	-0.6	0.3	0.4	-0.1
17	-0.1	-0.1	-0.2	-0.2	-0.1	0.0	-0.2	-0.1	-0.0	0.6	0.6	1.2	1.8	1.9	1.0	0.1	-0.9	-0.0	-0.2	-0.1	-0.8	-0.1	-0.1	-0.1
18	-0.6	-0.4	0.0	0.2	-0.1	0.0	-0.3	-0.4	-0.4	-0.6	-0.3	0.3	1.0	1.0	1.5	1.4	1.9	1.5	0.8	2.1	3.7	5.6	6.4	5.3
19	4.0	4.4	4.9	2.9	1.9	3.6	4.6	8.9	9.6	1.4	0.1	-0.1	-0.6	-0.6	-0.7	-0.2	0.0	0.6	1.2	1.0	1.0	0.6	0.3	0.3
20	0.6	1.4	0.9	1.7	-0.1	2.0	6.8	3.0	0.9	0.8	-1.8	-2.0	-2.0	-2.1	-2.1	-1.7	-1.7	-1.2	0.2	1.0	1.4	2.8	4.6	3.2
21	3.8	6.1	3.7	3.0	1.2	1.4	1.5	2.2	4.1	3.5	0.8	0.1	-0.7	-0.9	-0.5	-0.7	-0.6	-0.7	-0.3	0.7	2.1	2.8	2.3	2.8
22	2.1	2.1	2.6	3.5	3.7	4.7	5.4	5.6	4.3	3.6	1.7	-0.3	-0.9	-0.9	-0.9	-0.8	-0.7	-0.4	0.7	1.7	1.8	0.9	0.5	-0.8
23	-1.0	-1.0	-0.9	-0.9	-0.9	-1.0	-1.0	-0.9	-0.8	-0.9	-0.9	-1.0	-1.0	-1.0	-1.1	-1.4	-1.5	-1.6	-1.2	-1.2	-1.4	-1.0	-0.9	-0.9
24	-1.0	-1.0	-1.1	-1.1	-1.0	-1.1	-1.3	-1.6	-1.3	-1.7	-1.7	-1.8	-1.9	-2.0	-1.7	-1.5	-1.4	-1.2	-1.4	-1.5	-1.3	-1.5	-1.3	-1.2
25	-1.0	-1.0	-1.0	-1.0	-1.1	-1.3	-1.2	-1.0	-1.1	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.8	-0.9	-0.9	-0.6	-0.4	-0.1	-0.4	-0.5
26	-0.7	-0.4	-0.4	-0.4	-0.5	-0.4	-0.2	-0.5	-0.5	-0.8	-0.9	-0.9	-1.1	-1.0	-1.0	-1.0	-0.9	-0.9	-0.7	-0.1	0.2	0.8	0.6	0.7
27	0.5	0.4	0.5	1.0	0.9	1.1	1.7	1.0	0.1	-0.5	-0.6	-0.9	-1.0	-1.1	-1.0	-1.0	-0.9	-0.8	-0.5	0.1	1.3	2.1	1.7	2.2
28	1.7	0.4	0.0	0.3	0.7	0.8	0.5	0.1	-0.1	-0.5	-0.8	-0.9	-1.1	-0.9	-1.0	-0.9	-0.9	-0.7	-0.3	-0.1	1.7	1.4	2.1	2.1
HOURLY MEAN	0.5	0.5	0.4	0.4	0.2	0.4	0.6	0.5	0.3	-0.2	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9	-0.8	-0.7	-0.4	-0.0	0.3	0.6	0.7	0.7

MAXIMUM = 9.6 MINIMUM = -2.3 MEAN = -0.0 671 VALID OBSERVATIONS (99.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAX	0.4	-0.2	-1.3	-1.2	2.9	2.0	2.7	2.6	2.1	3.8	4.8	0.7	3.0	1.8
MIN	-1.2	-1.9	-1.9	-1.8	-2.3	-0.8	-1.2	-1.8	-2.3	-1.1	-0.8	-1.3	-0.9	-0.6
MEAN	-0.8	-1.3	-1.5	-1.4	-1.2	0.1	0.4	-0.7	-1.0	0.3	0.9	-0.3	0.4	0.1

DAY	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAX	2.6	1.0	1.9	6.4	9.6	6.8	6.1	5.6	-0.8	-1.0	-0.1	0.8	2.2	2.1
MIN	-0.6	-0.6	-0.9	-0.6	-0.7	-2.1	-0.9	-0.9	-1.6	-2.0	-1.3	-1.1	-1.1	-1.1
MEAN	0.5	0.1	0.2	1.2	2.0	0.7	1.6	1.6	-1.0	-1.4	-0.9	-0.5	0.3	0.2

MEAN MAXIMUM = 2.4 MEAN MINIMUM = -1.3

318 - 155 DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.3	3.8	3.0	2.4	2.1	3.7	3.2	3.4	5.3	4.2	1.0	-0.6	-1.1	-1.1	-1.1	-1.1	-1.0	-0.8	-0.1	1.1	0.6	0.3	-M-	-M-
2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.9	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
3	-1.0	-0.9	-1.0	-1.0	-0.9	-0.9	-1.1	-1.0	-1.1	-1.1	-1.1	-1.0	-1.1	-1.1	-0.9	-0.8	-0.8	-0.8	-1.0	-0.9	-1.0	-1.0	-1.0	-1.0
4	-0.9	-1.0	-1.0	-1.0	-1.3	-1.6	-1.6	-1.6	-1.7	-1.6	-1.7	-1.6	-1.9	-1.8	-1.9	-2.0	-M-	-1.6	-1.2	-1.1	-1.3	-1.3	-1.4	-1.3
5	-1.3	-1.2	-1.4	-1.4	-1.4	-1.6	-1.4	-1.3	-1.2	-M-	-M-	-M-	-M-	-M-	-M-	-2.2	-2.1	-2.1	-1.6	-1.2	-0.5	-0.4	0.2	0.6
6	0.5	1.5	2.6	2.5	2.7	4.7	2.8	3.1	1.4	-0.6	-0.8	-0.9	-1.3	-2.0	-2.1	-1.9	-1.4	-1.2	-1.3	-1.1	-1.0	-0.9	-1.0	-1.3
7	-1.5	-1.2	-0.9	-0.9	-0.6	-0.2	-0.5	-0.3	-0.9	-0.4	-0.6	-0.6	-0.8	-0.7	-1.0	-1.0	-1.1	-1.0	-0.9	-0.8	-0.1	0.2	1.0	0.9
8	0.8	1.7	1.3	0.3	-0.2	-0.5	-0.6	-0.7	-0.8	-0.8	-0.9	-1.5	-1.6	-2.1	-2.1	-1.9	-1.6	-1.4	-1.4	-1.3	-1.3	-1.2	-1.5	-0.9
9	-0.7	-0.8	-0.7	-0.8	-0.8	-0.9	-0.9	-1.0	-1.1	-1.1	-1.1	-1.0	-1.0	-1.0	-1.1	-1.0	-0.9	-0.8	-0.6	0.4	0.5	1.1	1.1	1.1
10	0.6	1.1	0.9	0.7	0.4	0.8	3.3	3.6	2.2	0.5	-0.5	-0.7	-0.7	-0.9	-0.9	-0.8	-0.7	-0.7	0.9	2.5	2.3	1.2	-0.1	-0.0
11	-0.7	-0.9	-0.8	-1.0	-1.2	-1.2	-1.4	-1.6	-1.4	-1.4	-1.2	-1.9	-1.7	-1.6	-1.1	-0.8	-0.8	-0.9	-0.6	0.2	0.6	-M-	-M-	-M-
12	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
13	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
14	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
15	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M
16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
18	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
19	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M
20	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
21	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.3	-0.2	-0.1
22	1.4	2.8	2.7	1.2	1.0	0.4	0.5	0.6	-1.1	-1.4	-1.7	-1.8	-1.6	-1.6	-1.1	-1.2	-0.9	-0.7	-0.8	-0.6	0.6	2.0	2.3	2.3
23	1.9	1.8	1.7	1.5	1.2	1.2	0.5	1.1	0.2	-0.7	-0.8	-0.9	-1.1	-1.1	-1.1	-0.9	-0.9	-0.9	-0.6	-0.2	-0.2	0.2	0.4	0.5
24	0.6	0.2	0.9	0.3	0.1	0.9	-0.2	-1.0	-0.4	-1.5	-1.4	-1.2	-1.0	-1.0	-1.0	-1.1	-1.0	-0.9	-1.1	-1.3	-1.4	-1.6	1.5	-1.6
25	-1.4	-1.0	-1.2	-1.7	-1.4	-1.0	-0.9	-1.1	-1.5	-2.0	-1.9	-1.9	-1.8	-1.8	-1.8	-1.6	-1.4	-1.3	-1.1	-0.8	-0.6	-0.6	-0.8	-0.7
26	0.1	1.9	1.2	3.1	3.0	3.6	3.6	2.6	1.3	-0.5	-0.8	-0.8	-0.8	-0.9	-0.8	-0.8	-0.8	-0.7	-0.8	-0.1	0.7	0.9	-0.4	-0.4
27	-0.6	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8	-1.1	-1.1	-1.1	-0.9	-0.9	-0.9	-0.7	0.3	1.5	1.5	1.1	1.8
28	1.9	1.4	1.0	0.9	1.0	0.7	-0.0	-0.5	-0.8	-0.9	-0.9	-0.9	-1.1	-1.2	-1.2	-1.1	-1.0	-0.9	-0.7	-0.3	-0.2	-0.1	-0.1	-0.1
29	-0.4	-0.3	-0.2	-0.4	-0.5	-0.5	-0.4	-0.5	-0.7	-0.9	-0.9	-1.0	-1.1	-1.0	-0.9	-0.9	-0.8	-0.7	-0.7	-0.7	-0.6	-0.8	-0.8	-0.7
30	1.8	0.4	-0.4	-0.3	-0.4	0.3	0.2	-0.3	-0.7	-1.0	-1.0	-1.2	-1.2	-1.2	-1.2	-1.1	-1.0	-0.8	-0.6	0.6	2.6	1.1	0.5	-0.4
31	-0.9	-0.8	-0.6	-0.3	0.2	1.5	1.3	1.1	-0.7	-1.4	-1.0	-1.0	-1.1	-1.0	-1.0	-1.1	-1.1	-0.9	-0.7	0.3	3.4	5.2	6.5	4.6
HOURLY MEAN	0.2	0.4	0.3	0.2	0.1	0.4	0.3	0.2	-0.3	-0.7	-1.0	-1.1	-1.2	-1.3	-1.2	-1.2	-1.1	-1.0	-0.8	-0.3	0.2	0.2	0.2	0.1

MAXIMUM = 6.5 MINIMUM = -2.2 MEAN = -0.4 487 VALID OBSERVATIONS (65.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	5.3	-0.9	-0.8	-0.9	0.6	4.7	1.0	1.7	1.1	3.6	0.6	-M-	-M-	-M-	-M-	-M-
MIN	-1.1	-1.1	-1.1	-2.0	-2.2	-2.1	-1.5	-2.1	-1.1	-0.9	-1.9	-M-	-M-	-M-	-M-	-M-
MEAN	1.4	-1.0	-1.0	-1.5	-1.2	0.1	-0.6	-0.8	-0.5	0.6	-1.0	-M-	-M-	-M-	-M-	-M-

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	-M-	-M-	-M-	-M-	-0.1	2.8	1.9	0.9	-0.6	3.6	1.8	1.9	-0.2	2.6	6.5
MIN	-M-	-M-	-M-	-M-	-0.3	-1.8	-1.1	-1.6	-2.0	-0.9	-1.1	-1.2	-1.1	-1.2	-1.4
MEAN	-M-	-M-	-M-	-M-	-0.2	0.1	0.1	-0.7	-1.3	0.6	-0.4	-0.2	-0.7	-0.2	0.4

MEAN MAXIMUM = 1.7 MEAN MINIMUM = -1.4

318 - 155 DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	4.9	4.0	3.8	2.9	4.5	4.9	3.0	3.3	2.3	-0.4	-1.1	-1.1	-1.3	-1.2	-1.3	-1.2	-1.1	-0.9	-0.6	-0.1	0.1	0.0	-0.3	-0.2
2	-0.5	-0.5	-0.5	-0.5	-0.4	-0.5	-0.6	-0.7	-0.9	-1.0	-1.1	-1.1	-1.2	-1.3	-1.3	-0.9	-1.0	-0.9	-1.5	-1.4	-1.3	-1.1	-1.2	-1.2
3	-1.1	-1.0	-0.9	-0.9	0.9	-1.0	-1.0	-1.2	-1.5	-1.8	-1.9	-2.0	-2.1	-2.1	-2.1	-2.1	-1.8	-1.6	-1.3	-1.0	-1.3	-1.0	-0.5	-0.5
4	-0.3	-0.1	-0.4	-0.4	-0.6	-0.5	-0.6	-0.8	-1.0	-1.1	-1.1	-1.1	-1.2	-1.2	-1.3	-1.2	-1.1	-1.0	-1.0	-0.6	-0.7	-0.6	-0.5	-0.6
5	-0.7	-0.8	-0.8	0.8	-1.0	-1.0	-1.0	-0.9	-1.0	-1.3	-1.5	-1.3	-1.3	-1.4	-1.5	-1.5	-1.4	-1.3	-1.3	-1.3	-1.4	-1.2	-1.2	-1.2
6	-1.2	-0.1	0.2	0.1	0.0	0.1	-0.2	0.0	-0.8	-1.1	-1.1	-1.0	-0.8	-0.9	-1.0	-0.9	-1.0	-0.9	-0.9	-0.7	-0.6	-0.5	-0.5	-0.7
7	-0.6	-0.6	-0.7	-0.7	-0.8	-0.8	-0.9	-1.0	-0.9	-1.0	-1.0	-1.1	-1.1	-0.9	-0.8	-0.7	-0.8	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
8	-0.7	-0.6	-0.7	-0.7	-0.6	-0.7	-0.7	-0.8	0.8	-0.7	-0.9	-1.0	-1.1	-1.0	-1.1	-1.3	-1.1	-1.0	-0.4	-0.4	-0.5	-0.9	-1.1	-1.0
9	-1.1	-1.0	-1.1	-1.0	-1.1	-1.2	-1.0	-1.0	-1.0	-1.1	-1.3	-1.1	-1.5	-1.6	-1.6	-1.3	-1.1	-0.8	-0.8	-0.1	1.4	2.0	1.8	1.0
10	1.6	0.6	-0.7	-0.7	-0.8	-0.7	0.4	-0.6	-1.6	-2.1	-M-	-1.6	-1.6	-1.4	-1.6	-1.6	-1.4	0.9	-1.1	-0.1	0.3	0.5	0.1	0.6
11	0.9	1.1	1.4	1.1	0.9	0.7	0.7	0.3	-0.6	-0.5	-0.8	-0.8	-1.0	-1.0	-1.1	-1.1	-0.9	-0.7	-0.6	-0.2	-0.2	-0.0	-0.0	-0.1
12	0.2	-0.1	0.1	0.1	0.1	0.1	0.1	-0.4	0.7	-0.8	0.9	-1.0	-1.0	-0.9	-1.2	-1.7	-1.6	-1.2	-1.0	0.2	2.1	2.0	-0.1	-0.5
13	-0.6	-0.2	0.1	-0.6	-0.2	-0.5	-0.3	-0.5	-1.4	-1.7	-2.4	2.3	4.1	3.7	3.7	-0.9	-0.8	-0.8	-0.7	-0.6	0.7	1.7	2.6	2.8
14	2.8	2.3	2.0	3.1	3.5	4.6	1.4	1.7	-0.6	-0.8	-1.0	-0.8	-1.1	-1.1	-1.2	-1.1	-1.0	-0.8	-0.7	-0.3	-0.1	-0.2	-0.1	-0.1
15	0.1	-0.0	-0.0	-0.1	-0.4	-0.3	-0.3	0.4	-0.6	-0.6	-0.5	-0.7	-1.0	-0.9	-0.9	-1.0	-0.9	-0.7	-0.5	-0.5	-0.4	-0.3	0.7	1.0
16	0.1	0.5	1.9	1.4	1.6	1.3	0.9	-0.2	-1.3	-1.5	-1.2	-1.4	-1.4	-1.1	-1.1	-1.0	-1.0	-1.1	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6
17	-0.1	-0.3	-0.4	-0.5	-0.7	-0.4	-0.3	-1.2	-1.6	-1.9	-2.0	-2.0	-2.2	-2.0	-1.9	-1.9	-1.6	-1.4	-1.2	-0.5	1.2	3.4	5.0	5.2
18	5.4	6.0	3.7	2.3	2.0	1.6	1.2	0.1	0.7	-0.9	-1.0	-1.1	-1.0	-1.2	-1.2	-1.1	-1.1	-0.9	0.6	-0.1	0.2	0.0	0.0	-0.0
19	-0.2	-0.3	-0.4	-0.2	-0.4	-0.2	-0.6	-0.4	-0.0	-0.9	-1.3	-1.6	-1.8	-2.2	-2.2	-2.1	-1.9	-1.7	-1.2	-0.6	-0.3	-0.2	-0.6	-0.3
20	0.1	-0.3	1.2	1.1	0.2	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
21	-M-	-M-	-M-	-M-	-M-	-M-	-M-	5.5	0.2	-0.6	-0.9	-1.2	-1.2	-1.2	-1.3	-1.5	-1.0	-1.0	-0.9	-0.5	-1.0	-0.4	-0.1	-0.2
22	1.0	2.4	1.2	0.7	1.2	1.1	-0.4	-1.5	-1.9	-1.5	-1.3	-1.3	-1.2	-1.5	0.8	-1.0	0.9	-0.9	-0.8	-0.6	-0.0	1.4	3.7	5.2
23	5.2	3.5	3.1	4.5	3.4	3.1	3.6	1.4	-0.8	-1.0	-1.1	-1.1	-1.3	-1.2	-1.3	-1.2	-1.1	-1.0	-0.8	-0.2	0.3	1.3	2.2	2.1
24	1.9	2.3	1.5	0.8	1.0	1.0	0.7	-0.2	-0.7	-1.0	-1.0	-1.2	-1.2	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5	-0.5	-0.5	-0.4
25	-0.4	-0.5	-0.5	-0.4	-0.4	-0.2	-0.3	-0.6	-0.7	-0.7	-0.8	-0.8	-0.9	-1.0	-1.0	-1.0	-0.9	-0.8	-0.8	-0.7	-0.5	-0.2	-0.3	-0.2
26	-0.6	-0.7	-0.8	-0.8	-0.9	-0.9	-1.2	-1.5	-1.5	-1.8	-1.8	-1.9	-1.4	-1.2	-1.1	-1.2	-1.2	-1.0	-0.8	-0.4	-0.0	0.1	0.4	0.6
27	0.8	0.3	-0.1	-0.0	0.3	0.3	0.4	-0.2	-0.8	-0.9	-0.9	-0.8	-0.8	-0.8	-0.6	-0.8	-0.6	-0.4	-0.5	-0.2	-0.1	-0.1	-0.0	0.2
28	0.1	-0.0	-0.3	-0.7	-2.6	-2.4	-2.8	-1.3	-1.3	-1.3	-1.2	-1.2	-1.3	-1.0	-0.9	-0.8	-0.8	-0.7	-1.0	-1.1	-0.5	-0.4	-0.6	-0.6
29	-0.6	-0.6	-0.6	-0.6	-0.6	-0.5	-0.4	-0.4	-0.7	-0.8	-0.8	-0.8	-0.9	-0.8	-0.8	-0.7	-0.7	-0.7	-0.5	-0.1	0.4	0.6	0.5	0.2
30	-0.0	0.6	0.6	0.6	-0.2	0.4	0.5	0.2	0.3	-1.3	-1.6	-1.9	-1.1	-0.9	-1.9	-2.0	-M-	-1.2	0.7	-0.5	-0.3	0.5	0.7	1.0
HOURLY MEAN	0.5	0.5	0.4	0.3	0.2	0.3	0.0	-0.1	-0.8	-1.1	-1.2	-1.1	-1.1	-1.1	-1.1	-1.2	-1.1	-1.0	-0.9	-0.5	-0.2	0.1	0.3	0.4

MAXIMUM = 6.0 MINIMUM = -2.8 MEAN = -0.4 692 VALID OBSERVATIONS (96.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	4.9	-0.4	-0.5	-0.1	-0.7	0.2	-0.6	-0.4	2.0	1.6	1.4	2.1	4.1	4.6	1.0
MIN	-1.3	-1.5	-2.1	-1.3	-1.5	-1.2	-1.1	-1.3	-1.6	-2.1	-1.1	-1.7	-2.4	-1.2	-1.0
MEAN	1.0	-0.9	-1.4	-0.8	-1.2	-0.6	-0.8	-0.8	-0.7	-0.6	-0.1	-0.4	0.4	0.4	-0.3

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	1.9	5.2	6.0	-0.0	1.2	5.5	5.2	5.2	2.3	-0.2	0.6	0.8	0.1	0.6	1.0
MIN	-1.5	-2.2	-1.2	-2.2	-0.3	-1.5	-1.9	-1.3	-1.2	-1.0	-1.9	-0.9	-2.8	-0.9	-2.0
MEAN	-0.4	-0.4	0.5	-0.9	0.4	-0.4	0.1	0.9	-0.2	-0.6	-0.9	-0.3	-1.0	-0.5	-0.4

MEAN MAXIMUM = 1.8 MEAN MINIMUM = -1.5

318 - 155 DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.9	3.0	4.3	3.1	3.3	2.4	3.7	2.7	0.3	-1.5	-0.9	-0.8	-0.8	-0.9	-0.8	-0.8	-0.7	-0.7	-0.8	-0.6	-0.2	-0.1	1.3	1.7
2	1.5	1.4	1.4	2.0	2.6	4.2	5.0	4.1	2.5	-0.4	-0.7	-0.8	-0.9	-0.9	-0.9	-1.0	-0.9	-0.8	-0.8	-0.4	0.1	0.4	0.4	0.8
3	1.4	1.0	0.3	0.2	0.4	0.5	0.7	-0.3	-0.8	-0.9	-1.0	-1.2	-1.1	-1.0	-1.0	-1.0	-0.9	-0.9	-0.8	-0.5	-0.5	-0.5	-0.4	-0.4
4	-0.3	-0.1	-0.1	0.0	-0.1	-0.1	-0.3	-0.6	-0.8	-0.9	-1.0	-1.0	-1.1	-1.1	-1.0	-0.8	-0.9	-0.8	-0.6	-0.5	-0.4	-0.3	-0.2	-0.5
5	0.4	0.3	0.1	0.8	1.8	0.7	0.2	-0.5	-0.5	-1.8	-2.0	-1.8	-1.6	-1.6	-1.8	-1.8	-1.2	-1.2	-1.4	-0.9	-0.9	-0.9	-0.9	-0.9
6	-0.8	-1.0	-0.9	-0.7	-0.8	-0.8	-1.0	-1.1	-0.7	-0.8	-0.8	-0.9	-1.3	-0.7	-1.6	-2.1	-1.5	-0.9	-0.8	-0.4	1.1	2.3	2.7	1.6
7	0.9	0.7	0.8	0.4	1.0	1.6	2.2	0.5	0.7	-0.8	-0.8	-0.9	0.9	-1.0	-0.9	-0.9	-0.7	-0.5	-0.0	1.3	1.0	1.9	1.3	
8	0.9	0.6	0.3	0.1	0.1	0.0	0.3	-0.4	-0.8	-0.9	-1.0	-1.0	-1.1	-1.1	-1.1	-1.1	-1.0	-0.9	-0.7	-0.5	-0.3	-0.3	-0.4	-0.2
9	-0.2	-0.2	-0.2	-0.3	-0.4	-0.2	-0.4	-0.6	-0.8	-1.0	-1.0	-1.1	-1.1	-1.2	-1.1	-1.1	-1.0	-0.8	-0.7	-0.5	-0.4	-0.2	-0.4	-0.2
10	-0.3	-0.3	-0.3	-0.3	-0.3	-M-	-M-	-M-	-0.9	-1.0	-1.2	-1.2	-1.2	-1.2	-1.1	-1.1	-1.0	-0.8	-0.7	-0.5	-0.5	-0.4	-0.2	-0.1
11	-0.4	-0.3	-0.3	-0.5	-0.6	-0.8	-1.1	-1.0	-0.6	-1.8	-1.6	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-0.9	-0.7	-0.5	-0.5	-0.3	-0.7	-0.6
12	-0.2	-0.3	-0.3	-0.2	-0.9	-0.5	-0.5	-0.7	-0.4	-0.0	0.2	1.2	0.5	-1.3	-0.8	-0.7	-0.7	-0.8	-0.6	-0.4	-0.1	0.5	-0.2	-0.3
13	0.2	1.0	0.7	0.6	0.5	0.5	-0.2	-0.3	0.8	-0.8	-0.8	-0.7	-0.1	-0.8	0.1	0.1	-0.4	-0.5	-0.9	-0.9	-1.5	-1.1	-1.5	-0.5
14	-0.6	-0.5	-0.6	-0.7	-0.5	-0.4	-0.3	-0.2	-0.2	-0.1	-0.4	-0.2	-0.1	-0.5	-1.2	-0.7	-1.4	-1.4	-1.2	0.1	0.9	-0.1	-0.4	-0.2
15	-0.2	-0.5	-0.3	-0.3	-0.4	-0.4	-0.7	-0.7	-0.8	-0.8	-0.8	-0.9	-0.8	-0.9	-0.9	-0.8	-0.3	-0.2	-0.1	1.3	3.6	4.0	3.2	2.5
16	2.3	2.6	1.1	0.8	0.0	0.1	0.2	0.0	-0.1	-0.3	-0.5	-0.6	-0.8	-0.8	-0.7	-0.6	0.1	1.7	0.8	0.3	1.4	2.3	1.5	1.0
17	-0.1	-0.4	0.7	0.4	0.2	-0.3	-0.6	-0.6	-0.6	-0.7	-0.3	0.0	-0.2	-0.2	-1.3	-1.4	-0.9	-0.8	-0.7	-0.1	0.7	0.5	0.7	0.2
18	0.3	0.6	1.3	0.9	0.6	1.6	0.8	0.2	-0.5	-0.6	-0.7	-0.8	-0.9	-0.8	-0.8	-0.7	-0.9	-0.7	-0.8	-0.5	0.2	0.5	0.3	-0.0
19	0.2	0.6	1.0	1.6	2.4	1.7	2.2	-0.2	-0.6	-0.8	-0.8	-0.8	-0.8	-0.9	-0.9	-1.0	-0.9	-0.9	-0.8	-0.6	-0.2	-0.3	-0.1	-0.1
20	0.5	0.6	-M-	-M-	0.4	0.8	0.3	0.2	-0.3	-0.3	-1.9	-3.2	-1.4	-3.7	-1.4	-1.0	-0.6	-0.5	-0.5	-0.3	-0.4	-0.3	-0.6	-0.3
21	-0.5	-0.3	-0.2	-0.8	-1.3	-0.7	-1.0	-1.3	-0.9	-1.1	-1.1	-1.3	-1.7	-1.7	-1.6	-1.5	-1.4	-1.4	-1.4	-1.4	-1.1	-1.1	-1.0	-0.8
22	-0.4	0.0	-0.3	-0.4	-0.5	-0.7	-0.8	-1.1	-1.1	-1.4	-1.5	-1.4	-1.4	-1.3	-1.2	-1.2	-1.1	-1.1	-1.1	-1.3	-0.7	-0.6	-0.7	-0.9
23	-0.7	-0.4	-0.5	-0.0	0.1	0.1	0.4	-0.2	-0.6	-0.6	-0.6	-0.6	-0.7	-0.8	-1.6	-1.5	-1.0	-0.7	-0.6	-0.6	-0.4	-0.2	-0.0	0.0
24	-0.3	-0.6	-0.5	-0.1	0.1	-0.1	-0.3	-0.6	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6	-0.8	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
25	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
26	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-0.6	-0.5	-0.7	-0.4	-0.4	0.3	0.3	1.0	0.9
27	1.9	2.8	1.5	2.3	1.5	0.5	-0.2	-0.8	-0.9	-1.2	-1.8	-1.5	-1.0	-1.4	-1.3	-1.4	-1.6	-1.1	-0.7	-0.5	-0.1	1.3	2.0	1.5
28	1.9	2.4	2.9	1.7	1.5	1.4	0.4	-0.3	-0.4	-0.5	-0.7	-1.1	-1.2	-0.9	-0.8	-0.7	-0.8	-0.6	-0.5	-0.5	-0.4	-0.5	-0.7	-0.5
29	-0.3	-0.4	-0.3	-0.5	-0.7	0.1	0.6	-0.8	-1.4	-1.4	-1.5	-1.8	-1.6	-1.1	-1.2	-1.5	-1.8	-1.4	-M-	-M-	0.4	0.7	1.1	1.3
30	0.9	1.2	1.0	1.0	0.4	0.3	0.3	-0.5	-0.7	-0.6	-1.1	-1.0	-2.5	-1.5	-0.9	-1.1	-1.7	-0.8	-0.5	-1.1	-1.0	-1.0	-1.0	-0.9
31	-1.0	-0.9	-1.1	-1.0	-1.0	-0.8	-0.9	-1.0	-1.1	-1.1	-1.2	-1.7	-1.6	-1.6	-1.6	-1.7	-1.8	-1.5	-1.2	-0.9	-0.5	-0.6	-0.5	0.3
HOURLY MEAN	0.3	0.4	0.4	0.4	0.3	0.4	0.3	-0.2	-0.5	-0.9	-1.0	-1.0	-1.0	-1.1	-1.1	-1.1	-1.0	-0.8	-0.7	-0.5	-0.0	0.2	0.2	0.2

MAXIMUM = 5.0 MINIMUM = -3.7 MEAN = -0.3 690 VALID OBSERVATIONS (92.7%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	4.3	5.0	1.4	0.0	1.8	2.7	2.2	0.9	-0.2	-0.1	-0.3	1.2	1.0	0.9	4.0	2.6
MIN	-1.5	-1.0	-1.2	-1.1	-2.0	-2.1	-1.0	-1.1	-1.2	-1.2	-1.8	-1.3	-1.5	-1.4	-0.9	-0.8
MEAN	0.8	0.7	-0.4	-0.6	-0.7	-0.5	0.2	-0.4	-0.6	-0.7	-0.8	-0.3	-0.3	-0.5	0.2	0.5

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0.7	1.6	2.4	0.8	-0.2	0.0	0.4	0.1	-M-	1.0	2.8	2.9	1.3	1.2	0.3
MIN	-1.4	-0.9	-1.0	-3.7	-1.7	-1.5	-1.6	-0.8	-M-	-0.7	-1.8	-1.2	-1.8	-2.5	-1.8
MEAN	-0.2	-0.1	-0.0	-0.6	-1.1	-0.9	-0.5	-0.5	-M-	-0.0	-0.0	0.0	-0.6	-0.5	-1.1

MEAN MAXIMUM = 1.4 MEAN MINIMUM = -1.4

318 - 155 DIFFERENTIAL TEMP (C/100 M)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.1	0.9	1.1	1.3	1.0	1.1	1.3	-0.4	0.7	-1.1	-0.9	-1.1	-1.0	-1.0	-0.9	-0.7	-0.8	-0.8	-0.7	-0.6	-0.3	0.3	1.2	1.5
2	0.6	1.1	0.8	1.7	0.9	0.2	0.3	0.3	-0.6	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.7	-0.8	-0.7	-0.7	-0.5	-0.3	-0.7	-0.6	-0.5
3	-0.4	-0.2	0.4	0.4	0.3	0.3	-0.6	-0.9	-0.8	-0.8	-0.8	-0.7	-0.8	-0.8	-0.8	-0.8	-0.9	-0.8	-0.8	-0.7	-0.6	-0.6	-0.3	-0.5
4	-0.5	-0.3	-0.1	0.3	0.8	1.3	0.8	-0.6	-0.6	-0.8	-0.7	-0.7	-0.8	-0.9	-0.7	-0.7	-0.7	-0.8	-0.8	-0.5	-0.3	0.0	0.4	0.3
5	0.6	1.3	0.6	1.0	2.0	2.0	2.1	0.6	0.4	-0.8	-0.9	-0.9	-0.9	-1.1	-1.1	-0.9	-1.0	-0.9	-0.7	-0.6	-0.5	-0.6	-0.6	-0.4
6	-0.5	-0.5	-0.6	-0.6	-0.7	-0.5	-0.6	-0.5	-0.6	-0.8	-0.9	-1.0	-1.0	-1.1	-0.9	-0.9	-1.0	-0.8	-0.7	-0.5	-0.5	-0.5	-0.4	0.0
7	0.5	0.5	2.3	0.4	-0.5	-1.0	-0.6	-1.3	-1.2	-1.1	-1.3	-1.5	-1.8	-1.8	-1.5	-1.7	-1.5	-1.0	-0.9	-0.6	0.3	1.2	2.9	2.1
8	2.1	2.7	3.0	2.1	1.7	1.5	-0.0	-0.5	-0.8	-0.6	-0.2	-0.5	-0.5	-0.6	-0.6	-0.4	-M-	-0.9	-1.3	-1.0	-0.2	-0.5	-0.2	-0.1
9	-0.3	-0.5	-0.0	0.0	-0.5	0.0	-0.4	-0.0	0.5	0.7	-1.3	-1.8	-2.0	-2.1	-2.1	-1.8	-1.6	-1.3	-1.1	-0.7	-0.3	-0.1	0.1	1.5
10	2.9	5.1	5.5	5.9	5.6	6.5	0.3	-0.4	-0.6	-1.1	-1.2	-1.3	-1.1	-1.2	-1.3	-1.0	-1.0	-0.9	-0.8	-0.5	0.4	2.9	2.7	2.1
11	3.6	3.4	1.5	1.9	1.8	3.2	2.1	1.5	1.3	-0.5	0.9	-1.0	-1.0	-1.1	-1.0	-1.0	-0.9	0.9	-0.8	-0.7	-0.4	-0.1	-0.1	-0.1
12	0.5	0.7	0.6	1.1	1.7	1.4	1.1	0.1	-0.6	-0.9	-0.8	-1.0	-1.1	-1.3	-1.0	-1.0	-1.0	-0.6	0.4	1.1	0.6	1.9	2.1	1.6
13	3.8	4.0	2.3	2.7	4.1	4.5	3.6	1.6	-0.3	-0.9	-0.9	-1.0	-1.1	-1.0	-1.1	-1.1	-0.9	-0.9	-0.8	-0.4	0.1	0.3	1.1	0.4
14	0.2	0.1	-0.1	0.0	0.7	1.1	0.3	-0.6	-0.6	-0.5	-0.7	-0.8	-0.8	-0.9	-0.7	-0.8	-1.0	-0.9	-0.6	-0.5	-0.3	-0.4	-0.5	-0.4
15	0.3	1.2	1.7	1.0	-0.1	0.1	-0.2	-0.2	-0.5	-1.0	-1.2	-1.0	-0.9	-0.8	-0.7	-0.9	-0.8	-1.3	-1.0	-0.9	-0.4	0.0	-0.2	-0.2
16	-0.3	1.0	0.8	0.5	0.3	0.6	-0.4	-1.1	-1.5	-1.6	-1.8	-1.7	-1.6	-1.7	-1.8	-1.3	-0.9	-1.0	-0.7	-0.5	0.6	0.7	1.1	3.5
17	2.5	1.5	1.7	2.2	2.0	0.8	1.1	0.3	-0.3	-0.2	-0.2	-0.3	-0.7	-0.9	-0.9	-0.8	-0.4	-0.6	-0.9	-0.8	-0.1	0.6	0.4	0.7
18	0.8	-0.0	-0.2	0.6	-0.2	-0.8	-0.8	-0.9	-1.1	-1.1	-1.1	-1.2	-1.2	-1.0	-1.0	-1.3	-1.2	-1.0	-1.0	-0.9	-0.2	0.4	1.4	1.3
19	-0.1	-0.3	-0.5	-0.1	0.7	0.8	-0.6	-1.5	-1.7	-2.0	-1.7	-1.6	-1.5	-1.3	-M-	-M-	-1.7	-1.8	-1.3	-0.7	0.3	1.8	1.8	2.0
20	1.1	0.4	0.4	0.6	0.5	0.6	-0.3	-0.9	-1.5	-2.1	-2.0	-1.7	-1.3	-1.6	-2.0	-1.8	-1.8	-1.5	-1.1	0.0	1.4	0.7	0.6	1.1
21	2.0	3.0	2.6	2.4	6.3	6.4	5.4	2.5	-0.4	-0.9	-0.9	-1.0	-1.3	-1.1	-1.1	-0.9	-0.3	0.0	0.3	-0.7	-0.4	-0.3	0.1	
22	0.6	-0.0	0.3	0.8	0.8	0.3	-0.0	-0.5	-0.9	-1.0	-0.9	-1.2	-1.3	-1.2	-1.7	-1.5	-1.5	-1.1	-0.7	-0.4	0.3	1.0	1.3	1.6
23	2.0	2.1	2.3	2.1	1.9	2.1	0.7	-0.5	-0.7	-1.0	-1.1	-1.1	-1.3	-1.2	-1.2	-1.2	-1.2	-1.0	-0.9	-0.6	-0.3	-0.2	-0.3	-0.2
24	0.0	0.3	0.0	-0.1	0.4	0.9	0.4	-0.3	-0.8	-0.9	-1.0	-1.1	-1.2	-1.2	-1.1	-1.1	-1.1	-1.1	-0.9	-0.6	-0.1	0.2	0.7	0.5
25	0.6	0.5	-0.0	-0.3	-0.7	-0.7	-1.0	-0.9	-1.0	-1.1	-1.2	-1.2	-1.4	-1.3	-1.4	-1.9	-1.6	-0.9	-0.8	-0.7	-0.6	-0.6	-0.3	-0.5
26	0.4	-0.2	-0.2	-0.4	-0.2	-0.1	-0.5	-0.9	-0.8	-1.2	-1.2	-1.6	-0.8	-0.7	-1.1	-0.9	-0.9	-0.8	-0.7	-0.4	-0.2	-0.4	-0.6	-0.5
27	-0.4	-0.5	-0.5	-0.5	-0.4	-0.6	-0.7	-0.8	-0.8	-0.8	-0.8	-0.6	-0.6	-0.3	-1.0	-0.8	-1.0	-0.4	-0.1	-1.1	-1.1	-0.6	-0.2	0.3
28	0.9	1.0	1.4	1.7	2.4	1.6	1.3	-0.2	-0.5	-0.8	-1.1	-1.5	-1.0	-1.3	-1.6	-1.3	-1.2	-1.0	-0.8	-0.5	0.5	2.0	3.1	3.6
29	4.0	3.2	1.4	1.4	1.2	-M-	0.8	-0.4	-0.9	-0.9	-1.1	-1.4	-1.9	-1.4	-1.3	-1.0	-0.7	-1.0	-0.6	-0.3	-0.3	-0.6	-0.5	-0.4
30	-0.5	-0.6	-0.6	-0.6	-0.6	-0.5	-0.6	-0.9	-0.7	-0.5	-0.9	-0.9	-1.0	-1.1	-1.0	-0.8	-0.9	-0.8	-0.7	-0.7	-0.6	-0.7	-0.6	-0.5
HOURLY MEAN	0.9	1.0	0.9	1.0	1.1	1.1	0.5	-0.3	-0.7	-0.9	-1.0	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-0.9	-0.7	-0.5	-0.1	0.2	0.5	0.7

MAXIMUM = 6.5 MINIMUM = -2.1 MEAN = -0.2 716 VALID OBSERVATIONS (99.4%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	1.5	1.7	0.4	1.3	2.1	0.0	2.9	3.0	1.5	6.5	3.6	2.1	4.5	1.1	1.7
MIN	-1.1	-0.8	-0.9	-0.9	-1.1	-1.1	-1.8	-1.3	-2.1	-1.3	-1.1	-1.3	-1.1	-1.0	-1.3
MEAN	-0.0	-0.2	-0.5	-0.3	-0.1	-0.7	-0.4	0.2	-0.7	1.1	0.4	0.2	0.8	-0.4	-0.4

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	3.5	2.5	1.4	2.0	1.4	6.4	1.6	2.3	0.9	0.6	-0.1	0.3	3.6	4.0	-0.5
MIN	-1.8	-0.9	-1.3	-2.0	-2.1	-1.3	-1.7	-1.3	-1.2	-1.9	-1.6	-1.1	-1.6	-1.9	-1.1
MEAN	-0.4	0.3	-0.5	-0.5	-0.5	0.9	-0.3	-0.0	-0.4	-0.8	-0.7	-0.6	0.3	-0.1	-0.7

MEAN MAXIMUM = 2.1 MEAN MINIMUM = -1.4

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JAN-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	2	2	2	1	2	3	2	0	0	0	1	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	1	2	0	6	0	0	1	19	11	0	0	0	0	0	0	0	1	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 19 MINIMUM = 0 TOTAL = 69.00 744 VALID OBSERVATIONS (100.0%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0	4	3	0	1	0	0	0	0	0	0	1	0	0	1	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	7	15	0	1	0	0	0	0	0	0	2	0	0	1	0

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0	0	0	0	0	19	0	0	0	0	0	0	1	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	0	41	0	0	0	0	0	0	2	0	0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

FEB-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	2	1
5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	3	0	1
18	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	-M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 3 MINIMUM = 0 TOTAL = 27.00 671 VALID OBSERVATIONS (99.9%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MAX	0	2	0	2	1	0	0	0	0	0	0	1	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	4	0	7	1	0	0	0	0	0	0	1	0	0

DAY	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAX	0	0	3	2	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	11	3	0	0	0	0	0	0	0	0	0	0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	9	2	1	0	0	1	0	0
4	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	3	10	8	3	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	5	0	0	0
16	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1
19	1	0	0	10	14	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	-M-	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0
25	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 14 MINIMUM = 0 TOTAL = 105.00 730 VALID OBSERVATIONS (98.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0	0	10	1	0	0	0	0	0	0	0	0	0	10	9	1
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	23	3	0	0	0	0	0	0	0	0	0	24	14	1

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	0	4	14	0	0	0	0	2	4	0	0	0	0	2	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	5	25	0	0	0	0	3	5	0	0	0	0	2	0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

APR-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	-M-	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	1	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-M-	-M-	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	5	7	1	11	9	3	3	7	4	2	3	1	2	7	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAXIMUM = 11 MINIMUM = 0 TOTAL = 96.00 717 VALID OBSERVATIONS (99.6%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	0	0	0	0	11	0	0	0	0	0	0	0	0	0	2
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	18	0	0	0	0	0	0	0	0	0	4

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	3	0	0	3	0	0	0	0	0	0	0	0	11	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	3	0	0	6	0	0	0	0	0	0	0	0	65	0	0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

MAY-1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	1	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	14	19	25	18
6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	7	1	3	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10
12	24	10	2	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	2	1	0	0	0	0	2	0	8	1	0	0	0	8	0	0	1	0	1
14	0	0	1	2	4	2	1	0	0	0	0	0	1	0	0	5	27	7	6	0	0	0	0	0
15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
17	0	0	0	1	4	4	0	1	0	12	3	0	1	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	-M-	-M-	-M-	-M-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	88	11	0	0	0	0	0	0	0	0	0	0	15	77	14	26	7	26
21	17	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8
25	5	21	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	12	1	4
29	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	47	15	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	2	1	0	0	1	0	3	1	0	2	1	0	0	0	0	0	1	0	1	3	1	2	1	2

MAXIMUM = 88 MINIMUM = 0 TOTAL = 696.00 740 VALID OBSERVATIONS (99.5%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MAX	0	0	0	0	25	4	1	0	0	0	10	24	8	27	1	3
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	81	7	1	0	0	0	31	40	24	56	1	3

DAY	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
MAX	12	0	0	88	17	0	0	8	21	3	0	12	1	47	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	26	0	0	264	34	0	0	9	29	4	0	23	1	62	0

PRECIPITATION (.01 INCH)
COOPER NUCLEAR STATION
BROWNVILLE, NEBRASKA

JUN 1982

DAY	HOUR 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	4	84	2	1	2	27	8	0	0	0	0	0	0	0	0
9	0	0	2	10	14	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24
15	7	0	0	0	0	0	0	2	0	0	0	6	11	3	2	0	0	0	0	0	0	0	0	0
16	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-
17	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	-M-	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	5	2	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOURLY MEAN	0	0	0	0	1	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	1

MAXIMUM = 84 MINIMUM = 0 TOTAL = 241.00 685 VALID OBSERVATIONS (95.1%)

DAILY STATISTICS

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MAX	0	0	0	0	0	0	8	84	14	0	0	0	0	24	11
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	0	0	0	0	0	0	13	126	33	0	0	0	0	25	31

DAY	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAX	-M-	0	0	0	0	0	0	0	0	0	0	5	0	0	0
MIN	-M-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUM	-M-	0	0	0	0	0	0	0	0	0	0	11	0	0	0

APPENDIX B

JOINT FREQUENCY TABLES

Wind speed, wind direction, and 318-35 ft differential temperature data presented in Section A are categorized as shown on Page B-3. Joint frequency of occurrence of each wind speed and wind direction category for each wind level is computed, and the number of joint occurrences and the percent frequency of occurrence are shown. Joint frequency of occurrence of wind speed versus wind direction is shown across all atmospheric stability categories and for each atmospheric stability category individually. The percent frequency of occurrence is normalized to 100 percent on each table, i.e., the total in the right hand corner of the table is 100 percent. Row totals and column totals are shown in the right column and bottom row, respectively, of each table. The number of calm hours and the percentage of calm hours are shown in the first wind speed category of each table. The number of valid data pairs collected are shown in the lower right hand corner of each table.

Several abbreviations are used on the tables:

WDC = Wind Direction Category
WSC = Wind Speed Category
DTC = Differential Temperature Category

The numerals 1 and 2 refer to the 35-ft and 318-ft wind levels, respectively.

The notation "." indicates missing values. The number of missing data pairs is given in the upper left hand corner of each table (see Page B-6 where 53 wind speed - wind direction data pairs are missing for the period January - March 1982). The number of missing pairs due to only one parameter being missing is given in the left hand column and top row of each table (see Page B-7 where 1 occurrence of south (S) wind direction did not have a corresponding wind speed value). The number of missing values are not used in the calculations and are only presented in the interest of completeness. Rows in which no observations occur are not shown in the tables.

CLASSIFICATION OF METEOROLOGICAL CATEGORIES USED IN JOINT FREQUENCY ANALYSES

WIND SPEED

Beaufort Wind Scale	Wind Speed (mph)
Calm	$V \leq *$
1	$* < V \leq 4$
2	$4 < V \leq 8$
3	$8 < V \leq 13$
4	$13 < V \leq 19$
5	$19 < V \leq 25$
6	$25 < V \leq 32$
7	$32 < V \leq 39$
8	$39 < V \leq 45$
9	$45 < V$

WIND DIRECTION

Wind Sector	Wind Direction (Degrees)
N	$348.75° < \theta \leq 11.25°$
NNE	$11.25° < \theta \leq 33.75°$
NE	$33.75° < \theta \leq 56.25°$
ENE	$56.25° < \theta \leq 78.75°$
E	$78.75° < \theta \leq 101.25°$
ESE	$101.25° < \theta \leq 123.75°$
SE	$123.75° < \theta \leq 146.25°$
SSE	$146.25° < \theta < 168.75°$
S	$168.75° < \theta < 191.25°$
SSW	$191.25° < \theta \leq 213.75°$
SW	$213.75° < \theta \leq 236.25°$
WSW	$236.25° < \theta \leq 258.75°$
W	$258.75° < \theta \leq 281.25°$
WNW	$281.25° < \theta \leq 303.75°$
NW	$303.75° < \theta \leq 326.25°$
NNW	$326.25° < \theta \leq 348.75°$

PASQUILL STABILITY

Category	Classification	ΔT (C/100 m)
A	Extremely unstable	$\Delta T \leq -1.9$
B	Moderately unstable	$-1.9 < \Delta T \leq -1.7$
C	Slightly unstable	$-1.7 < \Delta T \leq -1.5$
D	Neutral	$-1.5 < \Delta T \leq -0.5$
E	Slightly stable	$-0.5 < \Delta T \leq 1.5$
F	Moderately stable	$1.5 < \Delta T < 4.0$
G	Extremely stable	$4.0 < \Delta T$

Note: * means threshold speed of anemometer or wind vane, whichever is higher.

ARRANGEMENT OF JOINT FREQUENCY TABLES

ARRANGEMENT OF JOINT FREQUENCY TABLES (CONT.)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	53	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	6	23	57	101	42	13	4	246
	.	0.00	0.33	1.25	3.09	5.47	2.28	0.70	0.22	13.33
NNE	0	1	7	17	34	41	10	2	0	112
	.	0.05	0.38	0.92	1.84	2.22	0.54	0.11	0.00	6.07
NE	0	0	2	13	19	11	7	0	0	52
	.	0.00	0.11	0.70	1.03	0.60	0.38	0.00	0.00	2.82
ENE	0	0	4	19	9	8	0	0	0	40
	.	0.00	0.22	1.03	0.49	0.43	0.00	0.00	0.00	2.17
E	0	0	7	23	4	9	1	0	0	44
	.	0.00	0.38	1.25	0.22	0.49	0.05	0.00	0.00	2.38
ESE	0	3	10	19	32	30	0	0	0	94
	.	0.16	0.54	1.03	1.73	1.63	0.00	0.00	0.00	5.09
SE	0	0	13	41	53	37	7	1	0	152
	.	0.00	0.70	2.22	2.87	2.00	0.38	0.05	0.00	8.23
SSE	0	1	8	20	48	17	9	5	0	108
	.	0.05	0.43	1.08	2.60	0.92	0.49	0.27	0.00	5.85
TOTAL	.	16	133	325	529	547	190	80	26	1846
	.	0.87	7.20	17.61	28.66	29.63	10.29	4.33	1.41	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	1	0	10	8	36	33	7	17	8	119
	.	0.00	0.54	0.43	1.95	1.79	0.38	0.92	0.43	6.45
SSW	0	2	6	10	34	53	22	2	2	131
	.	0.11	0.33	0.54	1.84	2.87	1.19	0.11	0.11	7.10
SW	0	1	8	20	27	33	8	6	1	104
	.	0.05	0.43	1.08	1.46	1.79	0.43	0.33	0.05	5.63
WSW	0	3	12	32	23	8	2	3	0	83
	.	0.16	0.65	1.73	1.25	0.43	0.11	0.16	0.00	4.50
W	0	2	8	19	17	7	6	6	1	66
	.	0.11	0.43	1.03	0.92	0.38	0.33	0.33	0.05	3.58
WNW	0	1	4	22	21	29	17	10	6	110
	.	0.05	0.22	1.19	1.14	1.57	0.92	0.54	0.33	5.96
NW	0	2	17	16	50	47	11	2	0	145
	.	0.11	0.92	0.87	2.71	2.55	0.60	0.11	0.00	7.85
NNW	0	0	11	23	65	83	41	13	4	240
	.	0.00	0.60	1.25	3.52	4.50	2.22	0.70	0.22	13.00
TOTAL	.	16	133	325	529	547	190	80	26	1846
	.	0.87	7.20	17.61	28.66	29.63	10.29	4.33	1.41	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	1	1	4	26	11	6	0	49
	.	.	0.70	0.70	2.82	18.31	7.75	4.23	.	34.51
NNE	0	0	0	0	0	1	0	0	0	1
	.	.	0.00	0.00	0.00	0.70	0.00	0.00	.	0.70
NE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
TOTAL	.	.	1	7	29	59	32	14	.	142
	.	.	0.70	4.93	20.42	41.55	22.54	9.86	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2	WSC2								
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
SSW	0 .	0 .	0 0.00	0 0.00	0 0.00	0 0.00	2 1.41	0 0.00	0 .	2 1.41
SW	0 .	0 .	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.70	0 .	1 0.70
WSW	0 .	0 .	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2 1.41	0 .	2 1.41
W	0 .	0 .	0 0.00	0 0.00	2 1.41	2 1.41	0 0.00	2 1.41	0 .	6 4.23
WNW	0 .	0 .	0 0.00	1 0.70	3 2.11	3 2.11	0 0.00	0 0.00	0 .	7 4.93
NW	0 .	0 .	0 0.00	1 0.70	15 10.56	14 9.86	2 1.41	0 0.00	0 .	32 22.54
NNW	0 .	0 .	0 0.00	4 2.82	5 3.52	13 9.15	17 11.97	3 2.11	0 .	42 29.58
TOTAL	. .	. .	1 0.70	7 4.93	29 20.42	59 41.55	32 22.54	14 9.86	. .	142 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	2	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	0	1	11	49	16	3	2	82
	.	.	0.00	0.61	6.75	30.06	9.82	1.84	1.23	50.31
NNE	0	0	0	3	1	7	2	0	0	13
	.	.	0.00	1.84	0.61	4.29	1.23	0.00	0.00	7.98
NE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	2	0	0	0	0	0	2
	.	.	0.00	1.23	0.00	0.00	0.00	0.00	0.00	1.23
E	0	0	0	2	0	0	0	0	0	2
	.	.	0.00	1.23	0.00	0.00	0.00	0.00	0.00	1.23
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	2	0	0	0	0	2
	.	.	0.00	0.00	1.23	0.00	0.00	0.00	0.00	1.23
SSE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
TOTAL	.	.	2	10	31	81	25	11	3	163
	.	.	1.23	6.13	19.02	49.69	15.34	6.75	1.84	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	0	0	0	2	0	0	1	3
	.	.	0.00	0.00	0.00	1.23	0.00	0.00	0.61	1.84
SSW	0	0	0	0	0	1	0	0	0	1
	.	.	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.61
SW	0	0	0	0	0	0	0	2	0	2
	.	.	0.00	0.00	0.00	0.00	0.00	1.23	0.00	1.23
WSW	0	0	0	0	1	0	0	0	0	1
	.	.	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.61
W	0	0	0	0	1	1	0	1	0	3
	.	.	0.00	0.00	0.61	0.61	0.00	0.61	0.00	1.84
WNW	0	0	0	1	3	3	4	4	0	15
	.	.	0.00	0.61	1.84	1.84	2.45	2.45	0.00	9.20
NW	0	0	1	0	3	2	0	0	0	6
	.	.	0.61	0.00	1.84	1.23	0.00	0.00	0.00	3.68
NNW	0	0	1	1	9	16	3	1	0	31
	.	.	0.61	0.61	5.52	9.82	1.84	0.61	0.00	19.02
TOTAL	.	.	2	10	31	81	25	11	3	163
	.	.	1.23	6.13	19.02	49.69	15.34	6.75	1.84	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	4 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 .	0 0.00	7 3.45	18 8.87	16 7.88	14 6.90	3 1.48	2 0.99	60 29.56
NNE	0 .	0 .	0 0.00	2 0.99	6 2.96	13 6.40	5 2.46	0 0.00	0 0.00	26 12.81
NE	0 .	0 .	0 0.00	1 0.49	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.49
ENE	0 .	0 .	1 0.49	2 0.99	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 1.48
E	0 .	0 .	2 0.99	1 0.49	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	3 1.48
ESE	0 .	0 .	0 0.00	2 0.99	4 1.97	1 0.49	0 0.00	0 0.00	0 0.00	7 3.45
SE	0 .	0 .	1 0.49	8 3.94	8 3.94	2 0.99	0 0.00	0 0.00	0 0.00	19 9.36
SSE	0 .	0 .	0 0.00	0 0.00	5 2.46	0 0.00	0 0.00	0 0.00	0 0.00	5 2.46
TOTAL	. .	. .	7 3.45	26 12.81	65 32.02	60 29.56	29 14.29	11 5.42	5 2.46	203 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2	WSC2								
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	2	0	2	2	0	0	1	7
	.	.	0.99	0.00	0.99	0.99	0.00	0.00	0.49	3.45
SSW	0	0	1	0	0	1	1	0	0	3
	.	.	0.49	0.00	0.00	0.49	0.49	0.00	0.00	1.48
SW	0	0	0	1	1	2	0	0	0	4
	.	.	0.00	0.49	0.49	0.99	0.00	0.00	0.00	1.97
WSW	0	0	0	0	1	0	0	0	0	1
	.	.	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.49
W	0	0	0	0	1	0	0	1	1	3
	.	.	0.00	0.00	0.49	0.00	0.00	0.49	0.49	1.48
WNW	0	0	0	0	3	1	0	0	0	4
	.	.	0.00	0.00	1.48	0.49	0.00	0.00	0.00	1.97
NW	0	0	0	0	1	3	1	0	0	5
	.	.	0.00	0.00	0.49	1.48	0.49	0.00	0.00	2.46
NNW	0	0	0	2	15	19	8	7	1	52
	.	.	0.00	0.99	7.39	9.36	3.94	3.45	0.49	25.62
TOTAL	.	.	7	26	65	60	29	11	5	203
	.	.	3.45	12.81	32.02	29.56	14.29	5.42	2.46	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	26	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	2	11	14	7	1	1	0	36
	.	0.00	0.27	1.50	1.91	0.96	0.14	0.14	0.00	4.92
NNE	0	0	7	9	22	17	3	2	0	60
	.	0.00	0.96	1.23	3.01	2.32	0.41	0.27	0.00	8.20
NE	0	0	2	9	18	11	7	0	0	47
	.	0.00	0.27	1.23	2.46	1.50	0.96	0.00	0.00	6.42
ENE	0	0	3	10	9	8	0	0	0	30
	.	0.00	0.41	1.37	1.23	1.09	0.00	0.00	0.00	4.10
E	0	0	5	16	3	7	1	0	0	32
	.	0.00	0.68	2.19	0.41	0.96	0.14	0.00	0.00	4.37
ESE	0	1	8	11	23	25	0	0	0	68
	.	0.14	1.09	1.50	3.14	3.42	0.00	0.00	0.00	9.29
SE	0	0	7	23	25	13	4	1	0	73
	.	0.00	0.96	3.14	3.42	1.78	0.55	0.14	0.00	9.97
SSE	0	1	7	7	13	4	7	2	0	41
	.	0.14	0.96	0.96	1.78	0.55	0.96	0.27	0.00	5.60
TOTAL	.	6	70	154	208	181	69	29	15	732
	.	0.82	9.56	21.04	28.42	24.73	9.43	3.96	2.05	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	5	3	8	6	3	10	6	41
	.	0.00	0.68	0.41	1.09	0.82	0.41	1.37	0.82	5.60
SSW	0	1	0	1	11	10	11	2	0	36
	.	0.14	0.00	0.14	1.50	1.37	1.50	0.27	0.00	4.92
SW	0	0	3	11	7	5	7	0	0	33
	.	0.00	0.41	1.50	0.96	0.68	0.96	0.00	0.00	4.51
WSW	0	1	8	10	2	0	1	1	0	23
	.	0.14	1.09	1.37	0.27	0.00	0.14	0.14	0.00	3.14
W	0	1	4	8	3	0	3	2	0	21
	.	0.14	0.55	1.09	0.41	0.00	0.41	0.27	0.00	2.87
WNW	0	0	1	12	4	19	9	5	6	56
	.	0.00	0.14	1.64	0.55	2.60	1.23	0.68	0.82	7.65
NW	0	1	5	3	20	20	0	1	0	50
	.	0.14	0.68	0.41	2.73	2.73	0.00	0.14	0.00	6.83
NNW	0	0	3	10	26	29	12	2	3	85
	.	0.00	0.41	1.37	3.55	3.96	1.64	0.27	0.41	11.61
TOTAL	.	6	70	154	208	181	69	29	15	732
	.	0.82	9.56	21.04	28.42	24.73	9.43	3.96	2.05	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	12	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	1	2	8	3	0	0	0	14
	.	0.00	0.25	0.51	2.03	0.76	0.00	0.00	0.00	3.55
NNE	0	1	0	2	4	2	0	0	0	9
	.	0.25	0.00	0.51	1.02	0.51	0.00	0.00	0.00	2.28
NE	0	0	0	3	1	0	0	0	0	4
	.	0.00	0.00	0.76	0.25	0.00	0.00	0.00	0.00	1.02
ENE	0	0	0	5	0	0	0	0	0	5
	.	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	1.27
E	0	0	0	3	1	2	0	0	0	6
	.	0.00	0.00	0.76	0.25	0.51	0.00	0.00	0.00	1.52
ESE	0	1	2	5	5	4	0	0	0	17
	.	0.25	0.51	1.27	1.27	1.02	0.00	0.00	0.00	4.31
SE	0	0	5	9	13	18	3	0	0	48
	.	0.00	1.27	2.28	3.30	4.57	0.76	0.00	0.00	12.18
SSE	0	0	1	10	24	8	2	3	0	48
	.	0.00	0.25	2.54	6.09	2.03	0.51	0.76	0.00	12.18
TOTAL	.	7	29	75	124	110	31	15	3	394
	.	1.78	7.36	19.04	31.47	27.92	7.87	3.81	0.76	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	1	0	0	3	14	12	4	7	0	40
	.	0.00	0.00	0.76	3.55	3.05	1.02	1.78	0.00	10.15
SSW	0	1	3	3	14	28	8	0	2	59
	.	0.25	0.76	0.76	3.55	7.11	2.03	0.00	0.51	14.97
SW	0	1	2	2	10	17	0	3	1	36
	.	0.25	0.51	0.51	2.54	4.31	0.00	0.76	0.25	9.14
WSW	0	1	1	9	7	1	1	0	0	20
	.	0.25	0.25	2.28	1.78	0.25	0.25	0.00	0.00	5.08
W	0	1	4	6	4	4	1	0	0	20
	.	0.25	1.02	1.52	1.02	1.02	0.25	0.00	0.00	5.08
WNW	0	1	1	4	5	2	4	1	0	18
	.	0.25	0.25	1.02	1.27	0.51	1.02	0.25	0.00	4.57
NW	0	0	5	7	10	5	8	1	0	36
	.	0.00	1.27	1.78	2.54	1.27	2.03	0.25	0.00	9.14
NNW	0	0	4	2	4	4	0	0	0	14
	.	0.00	1.02	0.51	1.02	1.02	0.00	0.00	0.00	3.55
TOTAL	.	7	29	75	124	110	31	15	3	394
	.	1.78	7.36	19.04	31.47	27.92	7.87	3.81	0.76	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	9	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	0	1	1	0	0	0	0	2
	.	0.00	0.00	0.66	0.66	0.00	0.00	.	.	1.32
NNE	0	0	0	1	1	1	0	0	0	3
	.	0.00	0.00	0.66	0.66	0.66	0.00	.	.	1.99
NE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	1	0	0	0	0	0	1
	.	0.00	0.00	0.66	0.00	0.00	0.00	.	.	0.66
ESE	0	0	0	1	0	0	0	0	0	1
	.	0.00	0.00	0.66	0.00	0.00	0.00	.	.	0.66
SE	0	0	0	1	5	4	0	0	0	10
	.	0.00	0.00	0.66	3.31	2.65	0.00	.	.	6.62
SSE	0	0	0	3	6	4	0	0	0	13
	.	0.00	0.00	1.99	3.97	2.65	0.00	.	.	8.61
TOTAL	.	1	13	36	50	47	4	.	.	151
	.	0.66	8.61	23.84	33.11	31.13	2.65	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	2	2	8	11	0	0	0	23
	.	0.00	1.32	1.32	5.30	7.28	0.00	.	.	15.23
SSW	0	0	1	4	8	11	0	0	0	24
	.	0.00	0.66	2.65	5.30	7.28	0.00	.	.	15.89
SW	0	0	2	5	8	5	1	0	0	21
	.	0.00	1.32	3.31	5.30	3.31	0.66	.	.	13.91
WSW	0	0	3	11	7	7	0	0	0	28
	.	0.00	1.99	7.28	4.64	4.64	0.00	.	.	18.54
W	0	0	0	3	0	0	2	0	0	5
	.	0.00	0.00	1.99	0.00	0.00	1.32	.	.	3.31
WNW	0	0	1	1	1	0	0	0	0	3
	.	0.00	0.66	0.66	0.66	0.00	0.00	.	.	1.99
NW	0	1	2	1	0	2	0	0	0	6
	.	0.66	1.32	0.66	0.00	1.32	0.00	.	.	3.97
NNW	0	0	2	1	5	2	1	0	0	11
	.	0.00	1.32	0.66	3.31	1.32	0.66	.	.	7.28
TOTAL	.	1	13	36	50	47	4	.	.	151
	.	0.66	8.61	23.84	33.11	31.13	2.65	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	2	0	1	0	0	0	0	3
	.	0.00	3.28	0.00	1.64	0.00	.	.	.	4.92
NNE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ESE	0	1	0	0	0	0	0	0	0	1
	.	1.64	0.00	0.00	0.00	0.00	.	.	.	1.64
SE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	0	0	0	1	0	0	0	1
	.	0.00	0.00	0.00	0.00	1.64	.	.	.	1.64
TOTAL	.	2	11	17	22	9	.	.	.	61
	.	3.28	18.03	27.87	36.07	14.75	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	1	0	4	0	0	0	0	5
	.	0.00	1.64	0.00	6.56	0.00	.	.	.	8.20
SSW	0	0	1	2	1	2	0	0	0	6
	.	0.00	1.64	3.28	1.64	3.28	.	.	.	9.84
SW	0	0	1	1	1	4	0	0	0	7
	.	0.00	1.64	1.64	1.64	6.56	.	.	.	11.48
WSW	0	1	0	2	5	0	0	0	0	8
	.	1.64	0.00	3.28	8.20	0.00	.	.	.	13.11
W	0	0	0	2	6	0	0	0	0	8
	.	0.00	0.00	3.28	9.84	0.00	.	.	.	13.11
WNW	0	0	1	3	2	1	0	0	0	7
	.	0.00	1.64	4.92	3.28	1.64	.	.	.	11.48
NW	0	0	4	4	1	1	0	0	0	10
	.	0.00	6.56	6.56	1.64	1.64	.	.	.	16.39
NNW	0	0	1	3	1	0	0	0	0	5
	.	0.00	1.64	4.92	1.64	0.00	.	.	.	8.20
TOTAL	.	2	11	17	22	9	.	.	.	61
	.	3.28	18.03	27.87	36.07	14.75	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	2	1	4	3	1	1	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	1	26	19	53	47	29	2	1	0	178
	.	0.05	1.38	1.01	2.81	2.50	1.54	0.11	0.05	0.00	9.45
NNE	0	1	9	15	26	15	4	0	0	0	70
	.	0.05	0.48	0.80	1.38	0.80	0.21	0.00	0.00	0.00	3.72
NE	0	6	11	21	20	14	3	0	0	0	75
	.	0.32	0.58	1.12	1.06	0.74	0.16	0.00	0.00	0.00	3.98
ENE	1	4	9	19	20	11	4	0	0	0	67
	.	0.21	0.48	1.01	1.06	0.58	0.21	0.00	0.00	0.00	3.56
E	0	1	14	27	39	21	1	0	0	0	103
	.	0.05	0.74	1.43	2.07	1.12	0.05	0.00	0.00	0.00	5.47
ESE	1	0	16	29	66	28	12	1	0	0	152
	.	0.00	0.85	1.54	3.51	1.49	0.64	0.05	0.00	0.00	8.07
SE	0	2	17	30	57	21	6	0	0	0	133
	.	0.11	0.90	1.59	3.03	1.12	0.32	0.00	0.00	0.00	7.06
SSE	1	2	14	39	71	42	18	1	0	0	187
	.	0.11	0.74	2.07	3.77	2.23	0.96	0.05	0.00	0.00	9.93
TOTAL	.	23	220	356	565	412	219	59	18	11	1883
	.	1.22	11.68	18.91	30.01	21.88	11.63	3.13	0.96	0.58	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	13	19	63	50	63	20	10	0	238
	.	0.00	0.69	1.01	3.35	2.66	3.35	1.06	0.53	0.00	12.64
SSW	0	1	8	14	38	58	32	18	1	0	170
	.	0.05	0.42	0.74	2.02	3.08	1.70	0.96	0.05	0.00	9.03
SW	0	1	10	24	19	28	10	0	2	0	94
	.	0.05	0.53	1.27	1.01	1.49	0.53	0.00	0.11	0.00	4.99
WSW	0	1	15	28	27	4	1	0	0	0	76
	.	0.05	0.80	1.49	1.43	0.21	0.05	0.00	0.00	0.00	4.04
W	0	1	18	25	10	4	0	1	0	0	59
	.	0.05	0.96	1.33	0.53	0.21	0.00	0.05	0.00	0.00	3.13
WNW	0	1	13	20	8	11	3	4	0	0	60
	.	0.05	0.69	1.06	0.42	0.58	0.16	0.21	0.00	0.00	3.19
NW	1	0	13	12	22	26	11	8	2	11	105
	.	0.00	0.69	0.64	1.17	1.38	0.58	0.42	0.11	0.58	5.58
NNW	0	1	14	15	26	32	22	4	2	0	116
	.	0.05	0.74	0.80	1.38	1.70	1.17	0.21	0.11	0.00	6.16
TOTAL	.	23	220	356	565	412	219	59	18	11	1883
	.	1.22	11.68	18.91	30.01	21.88	11.63	3.13	0.96	0.58	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	1	0	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	5	7	19	14	10	1	0	0	56
	.	0.00	2.86	4.00	10.86	8.00	5.71	0.57	0.00	.	32.00
NNE	0	0	2	2	1	1	1	0	0	0	7
	.	0.00	1.14	1.14	0.57	0.57	0.57	0.00	0.00	.	4.00
NE	0	2	0	0	0	0	0	0	0	0	2
	.	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.	1.14
ENE	1	0	1	1	1	1	0	0	0	0	4
	.	0.00	0.57	0.57	0.57	0.57	0.00	0.00	0.00	.	2.29
E	0	0	0	1	1	2	1	0	0	0	5
	.	0.00	0.00	0.57	0.57	1.14	0.57	0.00	0.00	.	2.86
ESE	0	0	0	0	0	2	1	0	0	0	3
	.	0.00	0.00	0.00	0.00	1.14	0.57	0.00	0.00	.	1.71
SE	0	0	1	0	0	0	0	0	0	0	1
	.	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	.	0.57
SSE	0	0	0	1	0	2	1	0	0	0	4
	.	0.00	0.00	0.57	0.00	1.14	0.57	0.00	0.00	.	2.29
TOTAL	.	2	11	23	33	44	41	16	5	.	175
	.	1.14	6.29	13.14	18.86	25.14	23.43	9.14	2.86	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2	WSC2									
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	0	0	1	1	5	1	3	0	11
	.	0.00	0.00	0.00	0.57	0.57	2.86	0.57	1.71	.	6.29
SSW	0	0	0	0	0	2	3	8	1	0	14
	.	0.00	0.00	0.00	0.00	1.14	1.71	4.57	0.57	.	8.00
SW	0	0	0	2	0	2	0	0	1	0	5
	.	0.00	0.00	1.14	0.00	1.14	0.00	0.00	0.57	.	2.86
WSW	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	.	0.57
W	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
WNW	0	0	0	3	0	5	2	2	0	0	12
	.	0.00	0.00	1.71	0.00	2.86	1.14	1.14	0.00	.	6.86
NW	0	0	1	1	5	8	4	4	0	0	23
	.	0.00	0.57	0.57	2.86	4.57	2.29	2.29	0.00	.	13.14
NNW	0	0	1	4	5	4	13	0	0	0	27
	.	0.00	0.57	2.29	2.86	2.29	7.43	0.00	0.00	.	15.43
TOTAL	.	2	11	23	33	44	41	16	5	.	175
	.	1.14	6.29	13.14	18.86	25.14	23.43	9.14	2.86	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	0	0	1	1	0	1	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	4	0	4	8	3	1	0	0	20
	.	0.00	3.08	0.00	3.08	6.15	2.31	0.77	0.00	0.00	15.38
NNE	0	0	1	3	3	2	1	0	0	0	10
	.	0.00	0.77	2.31	2.31	1.54	0.77	0.00	0.00	0.00	7.69
NE	0	0	0	0	0	2	0	0	0	0	2
	.	0.00	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	1.54
ENE	0	1	1	0	1	0	1	0	0	0	4
	.	0.77	0.77	0.00	0.77	0.00	0.77	0.00	0.00	0.00	3.08
E	0	0	0	2	1	4	0	0	0	0	7
	.	0.00	0.00	1.54	0.77	3.08	0.00	0.00	0.00	0.00	5.38
ESE	0	0	0	1	1	1	0	0	0	0	3
	.	0.00	0.00	0.77	0.77	0.77	0.00	0.00	0.00	0.00	2.31
SE	0	0	2	0	1	0	0	0	0	0	3
	.	0.00	1.54	0.00	0.77	0.00	0.00	0.00	0.00	0.00	2.31
SSE	0	0	0	1	0	4	2	0	0	0	7
	.	0.00	0.00	0.77	0.00	3.08	1.54	0.00	0.00	0.00	5.38
TOTAL	.	1	12	16	24	41	20	11	3	2	130
	.	0.77	9.23	12.31	18.46	31.54	15.38	8.46	2.31	1.54	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	0	3	4	7	3	3	0	21
	.	0.00	0.77	0.00	2.31	3.08	5.38	2.31	2.31	0.00	16.15
SSW	0	0	0	0	1	7	3	4	0	0	15
	.	0.00	0.00	0.00	0.77	5.38	2.31	3.08	0.00	0.00	11.54
SW	0	0	0	0	0	3	1	0	0	0	4
	.	0.00	0.00	0.00	0.00	2.31	0.77	0.00	0.00	0.00	3.08
WSW	0	0	1	1	2	0	0	0	0	0	4
	.	0.00	0.77	0.77	1.54	0.00	0.00	0.00	0.00	0.00	3.08
W	0	0	0	6	0	0	0	0	0	0	6
	.	0.00	0.00	4.62	0.00	0.00	0.00	0.00	0.00	0.00	4.62
WNW	0	0	1	1	3	0	0	0	0	0	5
	.	0.00	0.77	0.77	2.31	0.00	0.00	0.00	0.00	0.00	3.85
NW	0	0	1	1	1	1	0	1	0	2	7
	.	0.00	0.77	0.77	0.77	0.77	0.00	0.77	0.00	1.54	5.38
NNW	0	0	0	0	3	5	2	2	0	0	12
	.	0.00	0.00	0.00	2.31	3.85	1.54	1.54	0.00	0.00	9.23
TOTAL	.	1	12	16	24	41	20	11	3	2	130
	.	0.77	9.23	12.31	18.46	31.54	15.38	8.46	2.31	1.54	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0 .	0 .	0 .	1 .	0 .	0 .	1 .	0 .	0 .	0 .	. .
N	0 .	0 0.00	1 0.68	4 2.70	4 2.70	3 2.03	2 1.35	0 0.00	1 0.68	0 0.00	15 10.14
NNE	0 .	0 0.00	2 1.35	0 0.00	4 2.70	6 4.05	1 0.68	0 0.00	0 0.00	0 0.00	13 8.78
NE	0 .	0 0.00	0 0.00	1 0.68	1 0.68	2 1.35	0 0.00	0 0.00	0 0.00	0 0.00	4 2.70
ENE	0 .	1 0.68	1 0.68	2 1.35	2 1.35	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	6 4.05
E	0 .	0 0.00	1 0.68	0 0.00	4 2.70	8 5.41	0 0.00	0 0.00	0 0.00	0 0.00	13 8.78
ESE	0 .	0 0.00	2 1.35	2 1.35	1 0.68	2 1.35	1 0.68	1 0.68	0 0.00	0 0.00	9 6.08
SE	0 .	0 0.00	1 0.68	1 0.68	2 1.35	3 2.03	1 0.68	0 0.00	0 0.00	0 0.00	8 5.41
SSE	0 .	0 0.00	0 0.00	2 1.35	4 2.70	3 2.03	1 0.68	0 0.00	0 0.00	0 0.00	10 6.76
TOTAL	. .	1 0.68	11 7.43	24 16.22	42 28.38	40 27.03	17 11.49	7 4.73	3 2.03	3 2.03	148 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	2	2	2	2	4	2	1	0	15
	.	0.00	1.35	1.35	1.35	1.35	2.70	1.35	0.68	0.00	10.14
SSW	0	0	0	0	4	4	2	3	0	0	13
	.	0.00	0.00	0.00	2.70	2.70	1.35	2.03	0.00	0.00	8.78
SW	0	0	0	1	1	5	2	0	0	0	9
	.	0.00	0.00	0.68	0.68	3.38	1.35	0.00	0.00	0.00	6.08
WSW	0	0	0	2	6	0	0	0	0	0	8
	.	0.00	0.00	1.35	4.05	0.00	0.00	0.00	0.00	0.00	5.41
W	0	0	1	2	1	0	0	0	0	0	4
	.	0.00	0.68	1.35	0.68	0.00	0.00	0.00	0.00	0.00	2.70
WNW	0	0	0	3	0	0	0	0	0	0	3
	.	0.00	0.00	2.03	0.00	0.00	0.00	0.00	0.00	0.00	2.03
NW	0	0	0	2	3	2	1	0	0	3	11
	.	0.00	0.00	1.35	2.03	1.35	0.68	0.00	0.00	2.03	7.43
NNW	0	0	0	0	3	0	2	1	1	0	7
	.	0.00	0.00	0.00	2.03	0.00	1.35	0.68	0.68	0.00	4.73
TOTAL	.	1	11	24	42	40	17	7	3	3	148
	.	0.68	7.43	16.22	28.38	27.03	11.49	4.73	2.03	2.03	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY] PERCENT]	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	0	0	0	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	12	1	14	16	14	0	0	0	57
	.	0.00	1.44	0.12	1.67	1.91	1.67	0.00	0.00	0.00	6.82
NNE	0	0	3	6	14	6	0	0	0	0	29
	.	0.00	0.36	0.72	1.67	0.72	0.00	0.00	0.00	0.00	3.47
NE	0	3	2	12	15	8	3	0	0	0	43
	.	0.36	0.24	1.44	1.79	0.96	0.36	0.00	0.00	0.00	5.14
ENE	0	0	4	11	13	9	3	0	0	0	40
	.	0.00	0.48	1.32	1.56	1.08	0.36	0.00	0.00	0.00	4.78
E	0	1	5	20	30	5	0	0	0	0	61
	.	0.12	0.60	2.39	3.59	0.60	0.00	0.00	0.00	0.00	7.30
ESE	0	0	7	20	42	20	9	0	0	0	98
	.	0.00	0.84	2.39	5.02	2.39	1.08	0.00	0.00	0.00	11.72
SE	0	1	6	20	27	14	5	0	0	0	73
	.	0.12	0.72	2.39	3.23	1.67	0.60	0.00	0.00	0.00	8.73
SSE	1	0	8	20	25	21	12	1	0	0	87
	.	0.00	0.96	2.39	2.99	2.51	1.44	0.12	0.00	0.00	10.41
TOTAL	.	8	101	173	259	167	93	22	7	6	836
	.	0.96	12.08	20.69	30.98	19.98	11.12	2.63	0.84	0.72	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	6	8	23	14	21	11	3	0	86
	.	0.00	0.72	0.96	2.75	1.67	2.51	1.32	0.36	0.00	10.29
SSW	0	0	4	6	14	12	8	3	0	0	47
	.	0.00	0.48	0.72	1.67	1.44	0.96	0.36	0.00	0.00	5.62
SW	0	1	6	10	5	6	6	0	1	0	35
	.	0.12	0.72	1.20	0.60	0.72	0.72	0.00	0.12	0.00	4.19
WSW	0	0	9	11	11	0	1	0	0	0	32
	.	0.00	1.08	1.32	1.32	0.00	0.12	0.00	0.00	0.00	3.83
W	0	1	10	7	6	3	0	1	0	0	28
	.	0.12	1.20	0.84	0.72	0.36	0.00	0.12	0.00	0.00	3.35
WNW	0	0	7	12	4	5	0	2	0	0	30
	.	0.00	0.84	1.44	0.48	0.60	0.00	0.24	0.00	0.00	3.59
NW	0	0	7	5	9	11	6	3	2	6	49
	.	0.00	0.84	0.60	1.08	1.32	0.72	0.36	0.24	0.72	5.86
NNW	0	1	5	4	7	17	5	1	1	0	41
	.	0.12	0.60	0.48	0.84	2.03	0.60	0.12	0.12	0.00	4.90
TOTAL	.	8	101	173	259	167	93	22	7	6	836
	.	0.96	12.08	20.69	30.98	19.98	11.12	2.63	0.84	0.72	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	1	0	1	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	1	7	12	6	0	0	0	0	26
	.	0.00	0.24	1.65	2.83	1.42	0.00	0.00	.	.	6.13
NNE	0	1	0	3	4	0	1	0	0	0	9
	.	0.24	0.00	0.71	0.94	0.00	0.24	0.00	.	.	2.12
NE	0	1	4	4	4	2	0	0	0	0	15
	.	0.24	0.94	0.94	0.94	0.47	0.00	0.00	.	.	3.54
ENE	0	1	0	4	3	1	0	0	0	0	9
	.	0.24	0.00	0.94	0.71	0.24	0.00	0.00	.	.	2.12
E	0	0	4	2	3	2	0	0	0	0	11
	.	0.00	0.94	0.47	0.71	0.47	0.00	0.00	.	.	2.59
ESE	0	0	5	4	18	3	1	0	0	0	31
	.	0.00	1.18	0.94	4.25	0.71	0.24	0.00	.	.	7.31
SE	0	1	7	7	23	2	0	0	0	0	40
	.	0.24	1.65	1.65	5.42	0.47	0.00	0.00	.	.	9.43
SSE	0	0	4	12	40	6	2	0	0	0	64
	.	0.00	0.94	2.83	9.43	1.42	0.47	0.00	.	.	15.09
TOTAL	.	6	50	79	163	76	47	3	.	.	424
	.	1.42	11.79	18.63	38.44	17.92	11.08	0.71	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY] PERCENT]	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	5	22	18	26	3	0	0	75
	.	0.00	0.24	1.18	5.19	4.25	6.13	0.71	.	.	17.69
SSW	0	0	3	5	7	17	16	0	0	0	48
	.	0.00	0.71	1.18	1.65	4.01	3.77	0.00	.	.	11.32
SW	0	0	3	5	8	5	0	0	0	0	21
	.	0.00	0.71	1.18	1.89	1.18	0.00	0.00	.	.	4.95
WSW	0	1	2	6	3	4	0	0	0	0	16
	.	0.24	0.47	1.42	0.71	0.94	0.00	0.00	.	.	3.77
W	0	0	4	7	3	1	0	0	0	0	15
	.	0.00	0.94	1.65	0.71	0.24	0.00	0.00	.	.	3.54
WNW	0	1	3	0	1	1	1	0	0	0	7
	.	0.24	0.71	0.00	0.24	0.24	0.24	0.00	.	.	1.65
NW	1	0	2	2	4	4	0	0	0	0	12
	.	0.00	0.47	0.47	0.94	0.94	0.00	0.00	.	.	2.83
NNW	0	0	7	6	8	4	0	0	0	0	25
	.	0.00	1.65	1.42	1.89	0.94	0.00	0.00	.	.	5.90
TOTAL	.	6	50	79	163	76	47	3	.	.	424
	.	1.42	11.79	18.63	38.44	17.92	11.08	0.71	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY] PERCENT]	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	1	3	0	0	0	0	0	0	0	4
	.	0.79	2.36	0.00	0.00	0.00	0.00	.	.	.	3.15
NNE	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	0.79	0.00	0.00	0.00	.	.	.	0.79
NE	0	0	4	2	0	0	0	0	0	0	6
	.	0.00	3.15	1.57	0.00	0.00	0.00	.	.	.	4.72
ENE	0	1	2	0	0	0	0	0	0	0	3
	.	0.79	1.57	0.00	0.00	0.00	0.00	.	.	.	2.36
E	0	0	3	0	0	0	0	0	0	0	3
	.	0.00	2.36	0.00	0.00	0.00	0.00	.	.	.	2.36
ESE	0	0	2	2	4	0	0	0	0	0	8
	.	0.00	1.57	1.57	3.15	0.00	0.00	.	.	.	6.30
SE	0	0	0	1	4	2	0	0	0	0	7
	.	0.00	0.00	0.79	3.15	1.57	0.00	.	.	.	5.51
SSE	0	1	1	3	2	5	0	0	0	0	12
	.	0.79	0.79	2.36	1.57	3.94	0.00	.	.	.	9.45
TOTAL	.	4	26	26	35	35	1	.	.	.	127
	.	3.15	20.47	20.47	27.56	27.56	0.79	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	3	4	9	7	0	0	0	0	23
	.	0.00	2.36	3.15	7.09	5.51	0.00	.	.	.	18.11
SSW	0	1	1	2	8	14	0	0	0	0	26
	.	0.79	0.79	1.57	6.30	11.02	0.00	.	.	.	20.47
SW	0	0	1	4	4	5	1	0	0	0	15
	.	0.00	0.79	3.15	3.15	3.94	0.79	.	.	.	11.81
WSW	0	0	2	5	4	0	0	0	0	0	11
	.	0.00	1.57	3.94	3.15	0.00	0.00	.	.	.	8.66
W	0	0	1	0	0	0	0	0	0	0	1
	.	0.00	0.79	0.00	0.00	0.00	0.00	.	.	.	0.79
WNW	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
NW	0	0	2	1	0	0	0	0	0	0	3
	.	0.00	1.57	0.79	0.00	0.00	0.00	.	.	.	2.36
NNW	0	0	1	1	0	2	0	0	0	0	4
	.	0.00	0.79	0.79	0.00	1.57	0.00	.	.	.	3.15
TOTAL	.	4	26	26	35	35	1	.	.	.	127
	.	3.15	20.47	20.47	27.56	27.56	0.79	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
NNE	0	0	1	0	0	0	0	0	0	0	1
	.	0.00	2.33	0.00	0.00	0.00	.	.	.	.	2.33
NE	0	0	1	2	0	0	0	0	0	0	3
	.	0.00	2.33	4.65	0.00	0.00	.	.	.	.	6.98
ENE	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	2.33	0.00	0.00	.	.	.	.	2.33
E	0	0	1	2	0	0	0	0	0	0	3
	.	0.00	2.33	4.65	0.00	0.00	.	.	.	.	6.98
ESE	1	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	2.33	0.00	0.00	.	.	.	.	2.33
SSE	0	1	1	0	0	1	0	0	0	0	3
	.	2.33	2.33	0.00	0.00	2.33	.	.	.	.	6.98
TOTAL	.	1	9	15	9	9	.	.	.	.	43
	.	2.33	20.93	34.88	20.93	20.93	.	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY] PERCENT]	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	0	0	3	4	0	0	0	0	7
	.	0.00	0.00	0.00	6.98	9.30	.	.	.	.	16.28
SSW	0	0	0	1	4	2	0	0	0	0	7
	.	0.00	0.00	2.33	9.30	4.65	.	.	.	.	16.28
SW	0	0	0	2	1	2	0	0	0	0	5
	.	0.00	0.00	4.65	2.33	4.65	.	.	.	.	11.63
WSW	0	0	1	2	1	0	0	0	0	0	4
	.	0.00	2.33	4.65	2.33	0.00	.	.	.	.	9.30
W	0	0	2	3	0	0	0	0	0	0	5
	.	0.00	4.65	6.98	0.00	0.00	.	.	.	.	11.63
WNW	0	0	2	1	0	0	0	0	0	0	3
	.	0.00	4.65	2.33	0.00	0.00	.	.	.	.	6.98
NW	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
NNW	0	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	.	0.00
TOTAL	.	1	9	15	9	9	.	.	.	.	43
	.	2.33	20.93	34.88	20.93	20.93	.	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	110	2	4	3	11	8	1	1	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	5	1	32	44	113	153	72	15	5	0	435
	.	0.03	0.83	1.14	2.92	3.95	1.86	0.39	0.13	0.00	11.23
NNE	5	2	16	33	61	57	14	2	0	0	185
	.	0.05	0.41	0.85	1.58	1.47	0.36	0.05	0.00	0.00	4.78
NE	0	6	15	34	40	26	10	0	0	0	131
	.	0.15	0.39	0.88	1.03	0.67	0.26	0.00	0.00	0.00	3.38
ENE	1	4	15	38	32	19	4	0	0	0	112
	.	0.10	0.39	0.98	0.83	0.49	0.10	0.00	0.00	0.00	2.89
E	0	1	26	53	49	30	2	0	0	0	161
	.	0.03	0.67	1.37	1.27	0.77	0.05	0.00	0.00	0.00	4.16
ESE	1	4	27	53	103	60	12	1	0	0	260
	.	0.10	0.70	1.37	2.66	1.55	0.31	0.03	0.00	0.00	6.71
SE	0	2	30	71	110	59	13	1	0	0	286
	.	0.05	0.77	1.83	2.84	1.52	0.34	0.03	0.00	0.00	7.39
SSE	2	4	22	61	123	60	32	6	0	0	308
	.	0.10	0.57	1.58	3.18	1.55	0.83	0.15	0.00	0.00	7.95
TOTAL	.	42	374	711	1131	990	425	143	45	11	3872
	.	1.08	9.66	18.36	29.21	25.57	10.98	3.69	1.16	0.28	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC2 BY WSC2

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	6	0	26	36	103	86	78	39	18	0	386
	.	0.00	0.67	0.93	2.66	2.22	2.01	1.01	0.46	0.00	9.97
SSW	6	3	14	25	73	112	55	22	3	0	307
	.	0.08	0.36	0.65	1.89	2.89	1.42	0.57	0.08	0.00	7.93
SW	2	2	20	44	47	64	18	6	3	0	204
	.	0.05	0.52	1.14	1.21	1.65	0.46	0.15	0.08	0.00	5.27
WSW	3	5	28	60	51	12	3	3	0	0	162
	.	0.13	0.72	1.55	1.32	0.31	0.08	0.08	0.00	0.00	4.18
W	0	3	28	45	29	11	6	7	1	0	130
	.	0.08	0.72	1.16	0.75	0.28	0.15	0.18	0.03	0.00	3.36
WNW	0	2	19	45	30	42	20	14	6	0	178
	.	0.05	0.49	1.16	0.77	1.08	0.52	0.36	0.15	0.00	4.60
NW	2	2	31	30	74	75	22	10	2	11	257
	.	0.05	0.80	0.77	1.91	1.94	0.57	0.26	0.05	0.28	6.64
NNW	0	1	25	39	93	124	64	17	7	0	370
	.	0.03	0.65	1.01	2.40	3.20	1.65	0.44	0.18	0.00	9.56
TOTAL	.	42	374	711	1131	990	425	143	45	11	3872
	.	1.08	9.66	18.36	29.21	25.57	10.98	3.69	1.16	0.28	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	1	1	2	1	2	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	1	0	6	9	23	40	21	7	0	0	106
	.	0.00	1.85	2.77	7.08	12.31	6.46	2.15	0.00	.	32.62
NNE	2	0	2	2	1	2	1	0	0	0	8
	.	0.00	0.62	0.62	0.31	0.62	0.31	0.00	0.00	.	2.46
NE	0	2	0	0	0	0	0	0	0	0	2
	.	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.	0.62
ENE	1	0	1	1	1	1	0	0	0	0	4
	.	0.00	0.31	0.31	0.31	0.31	0.00	0.00	0.00	.	1.23
E	0	0	2	1	1	2	1	0	0	0	7
	.	0.00	0.62	0.31	0.31	0.62	0.31	0.00	0.00	.	2.15
ESE	0	0	0	0	0	2	1	0	0	0	3
	.	0.00	0.00	0.00	0.00	0.62	0.31	0.00	0.00	.	0.92
SE	0	0	1	0	0	0	0	0	0	0	1
	.	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	.	0.31
SSE	0	0	0	1	0	2	1	0	0	0	4
	.	0.00	0.00	0.31	0.00	0.62	0.31	0.00	0.00	.	1.23
TOTAL	.	2	15	31	62	104	73	33	5	.	325
	.	0.62	4.62	9.54	19.08	32.00	22.46	10.15	1.54	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	0	1	1	5	2	3	0	13
	.	0.00	0.31	0.00	0.31	0.31	1.54	0.62	0.92	.	4.00
SSW	0	0	0	0	0	2	5	10	1	0	18
	.	0.00	0.00	0.00	0.00	0.62	1.54	3.08	0.31	.	5.54
SW	0	0	0	2	0	2	0	1	1	0	6
	.	0.00	0.00	0.62	0.00	0.62	0.00	0.31	0.31	.	1.85
WSW	0	0	0	1	0	0	0	2	0	0	3
	.	0.00	0.00	0.31	0.00	0.00	0.00	0.62	0.00	.	0.92
W	0	0	0	0	2	2	0	2	0	0	6
	.	0.00	0.00	0.00	0.62	0.62	0.00	0.62	0.00	.	1.85
WNW	0	0	0	4	3	8	2	2	0	0	19
	.	0.00	0.00	1.23	0.92	2.46	0.62	0.62	0.00	.	5.85
NW	0	0	1	2	20	23	6	4	0	0	56
	.	0.00	0.31	0.62	6.15	7.08	1.85	1.23	0.00	.	17.23
NNW	0	0	1	8	10	17	30	3	0	0	69
	.	0.00	0.31	2.46	3.08	5.23	9.23	0.92	0.00	.	21.23
TOTAL	.	2	15	31	62	104	73	33	5	.	325
	.	0.62	4.62	9.54	19.08	32.00	22.46	10.15	1.54	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	2	1	0	0	1	1	0	1	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	4	2	16	58	20	4	2	0	106
	.	0.00	1.32	0.66	5.26	19.08	6.58	1.32	0.66	0.00	34.87
NNE	1	0	1	6	4	9	3	0	0	0	23
	.	0.00	0.33	1.97	1.32	2.96	0.99	0.00	0.00	0.00	7.57
NE	0	0	0	0	0	2	0	0	0	0	2
	.	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.66
ENE	0	1	1	2	1	0	1	0	0	0	6
	.	0.33	0.33	0.66	0.33	0.00	0.33	0.00	0.00	0.00	1.97
E	0	0	0	4	1	4	0	0	0	0	9
	.	0.00	0.00	1.32	0.33	1.32	0.00	0.00	0.00	0.00	2.96
ESE	0	0	0	1	1	1	0	0	0	0	3
	.	0.00	0.00	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.99
SE	0	0	2	0	3	0	0	0	0	0	5
	.	0.00	0.66	0.00	0.99	0.00	0.00	0.00	0.00	0.00	1.64
SSE	0	0	0	1	2	4	2	0	0	0	9
	.	0.00	0.00	0.33	0.66	1.32	0.66	0.00	0.00	0.00	2.96
TOTAL	.	1	18	27	59	123	46	22	6	2	304
	.	0.33	5.92	8.88	19.41	40.46	15.13	7.24	1.97	0.66	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC2	WSC2										
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	0	3	6	7	3	4	0	24
	.	0.00	0.33	0.00	0.99	1.97	2.30	0.99	1.32	0.00	7.89
SSW	0	0	0	0	1	8	3	4	0	0	16
	.	0.00	0.00	0.00	0.33	2.63	0.99	1.32	0.00	0.00	5.26
SW	0	0	1	0	0	3	1	2	0	0	7
	.	0.00	0.33	0.00	0.00	0.99	0.33	0.66	0.00	0.00	2.30
WSW	0	0	2	1	3	0	0	0	0	0	6
	.	0.00	0.66	0.33	0.99	0.00	0.00	0.00	0.00	0.00	1.97
W	0	0	1	6	1	1	0	1	0	0	10
	.	0.00	0.33	1.97	0.33	0.33	0.00	0.33	0.00	0.00	3.29
WNW	0	0	2	2	6	3	4	4	0	0	21
	.	0.00	0.66	0.66	1.97	0.99	1.32	1.32	0.00	0.00	6.91
NW	0	0	2	1	5	3	0	1	0	2	14
	.	0.00	0.66	0.33	1.64	0.99	0.00	0.33	0.00	0.66	4.61
NNW	0	0	1	1	12	21	5	3	0	0	43
	.	0.00	0.33	0.33	3.95	6.91	1.64	0.99	0.00	0.00	14.14
TOTAL	.	1	18	27	59	123	46	22	6	2	304
	.	0.33	5.92	8.88	19.41	40.46	15.13	7.24	1.97	0.66	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	9	0	0	1	0	0	1	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	1	11	22	19	16	3	3	0	75
	.	0.00	0.28	3.06	6.11	5.28	4.44	0.83	0.83	0.00	20.83
NNE	2	0	2	2	10	19	6	0	0	0	39
	.	0.00	0.56	0.56	2.78	5.28	1.67	0.00	0.00	0.00	10.83
NE	0	0	0	2	1	2	0	0	0	0	5
	.	0.00	0.00	0.56	0.28	0.56	0.00	0.00	0.00	0.00	1.39
ENE	0	1	2	4	2	0	0	0	0	0	9
	.	0.28	0.56	1.11	0.56	0.00	0.00	0.00	0.00	0.00	2.50
E	0	0	3	1	4	8	0	0	0	0	16
	.	0.00	0.83	0.28	1.11	2.22	0.00	0.00	0.00	0.00	4.44
ESE	0	0	3	4	5	3	1	1	0	0	17
	.	0.00	0.83	1.11	1.39	0.83	0.28	0.28	0.00	0.00	4.72
SE	0	0	2	9	10	5	1	0	0	0	27
	.	0.00	0.56	2.50	2.78	1.39	0.28	0.00	0.00	0.00	7.50
SSE	0	0	0	4	10	3	1	0	0	0	18
	.	0.00	0.00	1.11	2.78	0.83	0.28	0.00	0.00	0.00	5.00
TOTAL	.	1	20	54	108	101	46	19	8	3	360
	.	0.28	5.56	15.00	30.00	28.06	12.78	5.28	2.22	0.83	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	1	0	4	3	4	4	4	3	2	0	24
	.	0.00	1.11	0.83	1.11	1.11	1.11	0.83	0.56	0.00	6.67
SSW	1	0	1	0	4	5	3	3	0	0	16
	.	0.00	0.28	0.00	1.11	1.39	0.83	0.83	0.00	0.00	4.44
SW	0	0	0	2	2	8	2	0	0	0	14
	.	0.00	0.00	0.56	0.56	2.22	0.56	0.00	0.00	0.00	3.89
WSW	0	0	0	2	7	0	0	0	0	0	9
	.	0.00	0.00	0.56	1.94	0.00	0.00	0.00	0.00	0.00	2.50
W	0	0	2	2	2	0	0	1	1	0	8
	.	0.00	0.56	0.56	0.56	0.00	0.00	0.28	0.28	0.00	2.22
WNW	0	0	0	4	3	1	0	0	0	0	8
	.	0.00	0.00	1.11	0.83	0.28	0.00	0.00	0.00	0.00	2.22
NW	0	0	0	2	4	5	2	0	0	3	16
	.	0.00	0.00	0.56	1.11	1.39	0.56	0.00	0.00	0.83	4.44
NNW	0	0	0	2	18	19	10	8	2	0	59
	.	0.00	0.00	0.56	5.00	5.28	2.78	2.22	0.56	0.00	16.39
TOTAL	.	1	20	54	108	101	46	19	8	3	360
	.	0.28	5.56	15.00	30.00	28.06	12.78	5.28	2.22	0.83	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	46	0	1	0	0	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	4	0	14	12	29	26	15	1	0	0	97
	.	0.00	0.85	0.73	1.77	1.58	0.91	0.06	0.00	0.00	5.91
NNE	0	0	10	16	37	24	3	2	0	0	92
	.	0.00	0.61	0.98	2.25	1.46	0.18	0.12	0.00	0.00	5.61
NE	0	3	6	21	33	19	10	0	0	0	92
	.	0.18	0.37	1.28	2.01	1.16	0.61	0.00	0.00	0.00	5.61
ENE	0	0	9	21	24	17	3	0	0	0	74
	.	0.00	0.55	1.28	1.46	1.04	0.18	0.00	0.00	0.00	4.51
E	0	1	12	39	37	12	1	0	0	0	102
	.	0.06	0.73	2.38	2.25	0.73	0.06	0.00	0.00	0.00	6.22
ESE	0	2	15	34	70	47	9	0	0	0	177
	.	0.12	0.91	2.07	4.27	2.86	0.55	0.00	0.00	0.00	10.79
SE	0	1	13	43	52	28	9	1	0	0	147
	.	0.06	0.79	2.62	3.17	1.71	0.55	0.06	0.00	0.00	8.96
SSE	2	2	15	27	39	25	20	3	0	0	131
	.	0.12	0.91	1.65	2.38	1.52	1.22	0.18	0.00	0.00	7.98
TOTAL	.	17	180	343	486	366	169	51	23	6	1641
	.	1.04	10.97	20.90	29.62	22.30	10.30	3.11	1.40	0.37	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=NEUTRAL

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	12	16	33	21	28	21	9	0	140
	.	0.00	0.73	0.98	2.01	1.28	1.71	1.28	0.55	0.00	8.53
SSW	4	1	4	8	25	22	20	5	0	0	85
	.	0.06	0.24	0.49	1.52	1.34	1.22	0.30	0.00	0.00	5.18
SW	0	1	10	21	12	11	13	0	1	0	69
	.	0.06	0.61	1.28	0.73	0.67	0.79	0.00	0.06	0.00	4.20
WSW	0	2	17	21	14	0	2	1	0	0	57
	.	0.12	1.04	1.28	0.85	0.00	0.12	0.06	0.00	0.00	3.47
W	0	2	14	15	11	3	3	3	0	0	51
	.	0.12	0.85	0.91	0.67	0.18	0.18	0.18	0.00	0.00	3.11
WNW	0	0	8	24	8	25	9	7	6	0	87
	.	0.00	0.49	1.46	0.49	1.52	0.55	0.43	0.37	0.00	5.30
NW	1	1	13	10	29	32	6	4	2	6	103
	.	0.06	0.79	0.61	1.77	1.95	0.37	0.24	0.12	0.37	6.28
NNW	0	1	8	15	33	54	18	3	5	0	137
	.	0.06	0.49	0.91	2.01	3.29	1.10	0.18	0.30	0.00	8.35
TOTAL	.	17	180	343	486	366	169	51	23	6	1641
	.	1.04	10.97	20.90	29.62	22.30	10.30	3.11	1.40	0.37	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	39	0	1	1	5	3	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	2	9	21	10	0	0	0	0	42
	.	0.00	0.23	1.05	2.45	1.17	0.00	0.00	0.00	.	4.90
NNE	0	2	0	5	8	2	1	0	0	0	18
	.	0.23	0.00	0.58	0.93	0.23	0.12	0.00	0.00	.	2.10
NE	0	1	4	7	6	3	0	0	0	0	21
	.	0.12	0.47	0.82	0.70	0.35	0.00	0.00	0.00	.	2.45
ENE	0	1	0	9	4	1	0	0	0	0	15
	.	0.12	0.00	1.05	0.47	0.12	0.00	0.00	0.00	.	1.75
E	0	0	5	5	6	4	0	0	0	0	20
	.	0.00	0.58	0.58	0.70	0.47	0.00	0.00	0.00	.	2.33
ESE	0	1	7	11	23	7	1	0	0	0	50
	.	0.12	0.82	1.28	2.68	0.82	0.12	0.00	0.00	.	5.83
SE	0	1	12	16	36	20	3	0	0	0	88
	.	0.12	1.40	1.87	4.20	2.33	0.35	0.00	0.00	.	10.27
SSE	0	0	5	22	64	15	8	3	0	0	117
	.	0.00	0.58	2.57	7.47	1.75	0.93	0.35	0.00	.	13.65
TOTAL	.	13	81	162	300	194	86	18	3	.	857
	.	1.52	9.45	18.90	35.01	22.64	10.04	2.10	0.35	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC2 WSC2

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	5	0	1	11	38	32	34	10	0	0	126
	.	0.00	0.12	1.28	4.43	3.73	3.97	1.17	0.00	.	14.70
SSW	1	1	6	8	22	45	24	0	2	0	108
	.	0.12	0.70	0.93	2.57	5.25	2.80	0.00	0.23	.	12.60
SW	2	1	5	7	19	23	0	3	1	0	59
	.	0.12	0.58	0.82	2.22	2.68	0.00	0.35	0.12	.	6.88
WSW	3	2	3	15	10	5	1	0	0	0	36
	.	0.23	0.35	1.75	1.17	0.58	0.12	0.00	0.00	.	4.20
W	0	1	8	14	7	5	1	0	0	0	36
	.	0.12	0.93	1.63	0.82	0.58	0.12	0.00	0.00	.	4.20
WNW	0	2	5	6	7	4	5	1	0	0	30
	.	0.23	0.58	0.70	0.82	0.47	0.58	0.12	0.00	.	3.50
NW	1	0	7	9	15	9	8	1	0	0	49
	.	0.00	0.82	1.05	1.75	1.05	0.93	0.12	0.00	.	5.72
NNW	0	0	11	8	14	9	0	0	0	0	42
	.	0.00	1.28	0.93	1.63	1.05	0.00	0.00	0.00	.	4.90
TOTAL	.	13	81	162	300	194	86	18	3	.	857
	.	1.52	9.45	18.90	35.01	22.64	10.04	2.10	0.35	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2 WSC2

FREQUENCY] PERCENT]	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	13	0	0	0	3	2	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	1	3	1	1	0	0	0	0	0	6
	.	0.36	1.08	0.36	0.36	0.00	0.00	.	.	.	2.15
NNE	0	0	0	2	1	1	0	0	0	0	4
	.	0.00	0.00	0.72	0.36	0.36	0.00	.	.	.	1.43
NE	0	0	4	2	0	0	0	0	0	0	6
	.	0.00	1.43	0.72	0.00	0.00	0.00	.	.	.	2.15
ENE	0	1	2	0	0	0	0	0	0	0	3
	.	0.36	0.72	0.00	0.00	0.00	0.00	.	.	.	1.08
E	0	0	3	1	0	0	0	0	0	0	4
	.	0.00	1.08	0.36	0.00	0.00	0.00	.	.	.	1.43
ESE	0	0	2	3	4	0	0	0	0	0	9
	.	0.00	0.72	1.08	1.43	0.00	0.00	.	.	.	3.23
SE	0	0	0	2	9	6	0	0	0	0	17
	.	0.00	0.00	0.72	3.23	2.15	0.00	.	.	.	6.09
SSE	0	1	1	6	8	9	0	0	0	0	25
	.	0.36	0.36	2.15	2.87	3.23	0.00	.	.	.	8.96
TOTAL	.	5	40	62	85	82	5	.	.	.	279
	.	1.79	14.34	22.22	30.47	29.39	1.79	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=MODERATELY STABL

WDC2	WSC2										
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	6	6	17	18	0	0	0	0	47
	.	0.00	2.15	2.15	6.09	6.45	0.00	.	.	.	16.85
SSW	0	1	2	6	16	25	0	0	0	0	50
	.	0.36	0.72	2.15	5.73	8.96	0.00	.	.	.	17.92
SW	0	0	3	9	12	10	2	0	0	0	36
	.	0.00	1.08	3.23	4.30	3.58	0.72	.	.	.	12.90
WSW	0	0	5	16	11	7	0	0	0	0	39
	.	0.00	1.79	5.73	3.94	2.51	0.00	.	.	.	13.98
W	0	0	1	3	0	0	2	0	0	0	6
	.	0.00	0.36	1.08	0.00	0.00	0.72	.	.	.	2.15
WNW	0	0	1	1	1	0	0	0	0	0	3
	.	0.00	0.36	0.36	0.36	0.00	0.00	.	.	.	1.08
NW	0	1	4	2	0	2	0	0	0	0	9
	.	0.36	1.43	0.72	0.00	0.72	0.00	.	.	.	3.23
NNW	0	0	3	2	5	4	1	0	0	0	15
	.	0.00	1.08	0.72	1.79	1.43	0.36	.	.	.	5.38
TOTAL	.	5	40	62	85	82	5	.	.	.	279
	.	1.79	14.34	22.22	30.47	29.39	1.79	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2 WSC2

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
.	0	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.	.
N	0	0	2	0	1	0	0	0	0	0	3
	.	0.00	1.89	0.00	0.94	0.00	.	.	.	.	2.83
NNE	0	0	1	0	0	0	0	0	0	0	1
	.	0.00	0.94	0.00	0.00	0.00	.	.	.	.	0.94
NE	0	0	1	2	0	0	0	0	0	0	3
	.	0.00	0.94	1.89	0.00	0.00	.	.	.	.	2.83
ENE	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	0.94	0.00	0.00	.	.	.	.	0.94
E	0	0	1	2	0	0	0	0	0	0	3
	.	0.00	0.94	1.89	0.00	0.00	.	.	.	.	2.83
ESE	1	1	0	0	0	0	0	0	0	0	1
	.	0.94	0.00	0.00	0.00	0.00	.	.	.	.	0.94
SE	0	0	0	1	0	0	0	0	0	0	1
	.	0.00	0.00	0.94	0.00	0.00	.	.	.	.	0.94
SSE	0	1	1	0	0	2	0	0	0	0	4
	.	0.94	0.94	0.00	0.00	1.89	.	.	.	.	3.77
TOTAL	.	3	20	32	31	20	.	.	.	.	106
	.	2.83	18.87	30.19	29.25	18.87	.	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
318 FOOT WIND SPEED VS. WIND DIRECTION ANALYSIS
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED BY STABILITY

TABLE OF WDC2 BY WSC2
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC2	WSC2									
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	39-45	TOTAL
S	0	0	1	0	7	4	0	0	0	0	12
	.	0.00	0.94	0.00	6.60	3.77	.	.	.	.	11.32
SSW	0	0	1	3	5	5	0	0	0	0	14
	.	0.00	0.94	2.83	4.72	4.72	.	.	.	.	13.21
SW	0	0	1	3	2	7	0	0	0	0	13
	.	0.00	0.94	2.83	1.89	6.60	.	.	.	.	12.26
WSW	0	1	1	4	6	0	0	0	0	0	12
	.	0.94	0.94	3.77	5.66	0.00	.	.	.	.	11.32
W	0	0	2	5	6	0	0	0	0	0	13
	.	0.00	1.89	4.72	5.66	0.00	.	.	.	.	12.26
WNW	0	0	3	4	2	1	0	0	0	0	10
	.	0.00	2.83	3.77	1.89	0.94	.	.	.	.	9.43
NW	0	0	4	4	1	1	0	0	0	0	10
	.	0.00	3.77	3.77	0.94	0.94	.	.	.	.	9.43
NNW	0	0	1	3	1	0	0	0	0	0	5
	.	0.00	0.94	2.83	0.94	0.00	.	.	.	.	4.72
TOTAL	.	3	20	32	31	20	.	.	.	.	106
	.	2.83	18.87	30.19	29.25	18.87	.	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1	WSC1								
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	22	0	0	0	4	7	4	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	17	0	12	60	94	65	19	8	0	258
	.	0.00	0.68	3.41	5.35	3.70	1.08	0.46	0.00	14.68
NNE	10	0	13	42	59	28	11	3	0	156
	.	0.00	0.74	2.39	3.36	1.59	0.63	0.17	0.00	8.88
NE	6	0	20	24	5	8	10	0	0	67
	.	0.00	1.14	1.37	0.28	0.46	0.57	0.00	0.00	3.81
ENE	2	1	21	18	7	4	5	0	0	56
	.	0.06	1.20	1.02	0.40	0.23	0.28	0.00	0.00	3.19
E	2	0	17	14	4	7	4	0	0	46
	.	0.00	0.97	0.80	0.23	0.40	0.23	0.00	0.00	2.62
ESE	2	1	22	28	15	0	0	0	0	66
	.	0.06	1.25	1.59	0.85	0.00	0.00	0.00	0.00	3.76
SE	9	0	39	48	45	0	0	0	0	132
	.	0.00	2.22	2.73	2.56	0.00	0.00	0.00	0.00	7.51
SSE	12	0	28	64	44	13	0	0	0	149
	.	0.00	1.59	3.64	2.50	0.74	0.00	0.00	0.00	8.48
TOTAL	.	3	271	526	481	297	131	46	2	1757
	.	0.17	15.42	29.94	27.38	16.90	7.46	2.62	0.11	100.00

(CONTINUED)

ECOLOGICAL ANALYSIS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1	WSC1								
FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	1	0	34	58	32	46	15	5	0	190
	.	0.00	1.94	3.30	1.82	2.62	0.85	0.28	0.00	10.81
SSW	6	1	23	35	20	29	20	7	0	135
	.	0.06	1.31	1.99	1.14	1.65	1.14	0.40	0.00	7.68
SW	3	0	6	18	15	13	11	3	0	66
	.	0.00	0.34	1.02	0.85	0.74	0.63	0.17	0.00	3.76
WSW	2	0	10	20	19	2	5	3	0	59
	.	0.00	0.57	1.14	1.08	0.11	0.28	0.17	0.00	3.36
W	6	0	5	10	9	6	4	4	2	40
	.	0.00	0.28	0.57	0.51	0.34	0.23	0.23	0.11	2.28
WNW	1	0	8	18	21	17	10	5	0	79
	.	0.00	0.46	1.02	1.20	0.97	0.57	0.28	0.00	4.50
NW	5	0	8	25	53	17	4	0	0	107
	.	0.00	0.46	1.42	3.02	0.97	0.23	0.00	0.00	6.09
NNW	22	0	5	44	39	42	13	8	0	151
	.	0.00	0.28	2.50	2.22	2.39	0.74	0.46	0.00	8.59
TOTAL	.	3	271	526	481	297	131	46	2	1757
	.	0.17	15.42	29.94	27.38	16.90	7.46	2.62	0.11	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 / WSC1	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	1	0	0	0	1	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	2	0	0	4	23	26	5	6	0	66
	.	.	.	2.92	18.25	18.98	3.65	4.38	0.00	48.18
NNE	0	0	0	0	2	2	0	0	0	4
	.	.	.	0.00	1.46	1.46	0.00	0.00	0.00	2.92
NE	0	0	0	1	0	0	0	0	0	1
	.	.	.	0.73	0.00	0.00	0.00	0.00	0.00	0.73
ENE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
E	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
TOTAL	.	.	.	7	51	50	15	13	1	137
	.	.	.	5.11	37.23	36.50	10.95	9.49	0.73	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSW	0	0	0	0	0	0	2	0	0	2
	.	.	.	0.00	0.00	0.00	1.46	0.00	0.00	1.46
SW	0	0	0	0	0	0	1	0	0	1
	.	.	.	0.00	0.00	0.00	0.73	0.00	0.00	0.73
WSW	0	0	0	0	0	0	0	2	0	2
	.	.	.	0.00	0.00	0.00	0.00	1.46	0.00	1.46
W	1	0	0	0	0	3	0	1	1	5
	.	.	.	0.00	0.00	2.19	0.00	0.73	0.73	3.65
WNW	0	0	0	0	1	0	0	0	0	1
	.	.	.	0.00	0.73	0.00	0.00	0.00	0.00	0.73
NW	0	0	0	1	19	9	0	0	0	29
	.	.	.	0.73	13.87	6.57	0.00	0.00	0.00	21.17
NNW	0	0	0	1	4	10	7	4	0	26
	.	.	.	0.73	2.92	7.30	5.11	2.92	0.00	18.98
TOTAL	.	.	.	7	51	50	15	13	1	137
	.	.	.	5.11	37.23	36.50	10.95	9.49	0.73	100.00

ECOLOGICAL ANALYSIS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1	WSC1								
FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	1	0	0	0	2	2	1	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	2	0	0	14	46	19	5	1	0	85
	.	.	.	9.21	30.26	12.50	3.29	0.66	0.00	55.92
NNE	4	0	0	3	12	9	0	0	0	24
	.	.	.	1.97	7.89	5.92	0.00	0.00	0.00	15.79
NE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
ENE	0	0	0	1	2	0	0	0	0	3
	.	.	.	0.66	1.32	0.00	0.00	0.00	0.00	1.97
E	0	0	0	1	0	0	0	0	0	1
	.	.	.	0.66	0.00	0.00	0.00	0.00	0.00	0.66
ESE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SE	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
SSE	0	0	0	0	2	0	0	0	0	2
	.	.	.	0.00	1.32	0.00	0.00	0.00	0.00	1.32
TOTAL	.	.	.	22	73	39	14	3	1	152
	.	.	.	14.47	48.03	25.66	9.21	1.97	0.66	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	0	0	0	0	1	1	0	2
	.	.	.	0.00	0.00	0.00	0.66	0.66	0.00	1.32
SSW	1	0	0	0	0	0	1	0	0	1
	.	.	.	0.00	0.00	0.00	0.66	0.00	0.00	0.66
SW	0	0	0	0	0	0	2	0	0	2
	.	.	.	0.00	0.00	0.00	1.32	0.00	0.00	1.32
WSW	0	0	0	0	1	0	0	0	0	1
	.	.	.	0.00	0.66	0.00	0.00	0.00	0.00	0.66
W	0	0	0	0	0	0	0	0	1	1
	.	.	.	0.00	0.00	0.00	0.00	0.00	0.66	0.66
WNW	0	0	0	2	1	2	5	0	0	10
	.	.	.	1.32	0.66	1.32	3.29	0.00	0.00	6.58
NW	0	0	0	1	3	2	0	0	0	6
	.	.	.	0.66	1.97	1.32	0.00	0.00	0.00	3.95
NNW	0	0	0	0	6	7	0	1	0	14
	.	.	.	0.00	3.95	4.61	0.00	0.66	0.00	9.21
TOTAL	.	.	.	22	73	39	14	3	1	152
	.	.	.	14.47	48.03	25.66	9.21	1.97	0.66	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	5	0	0	0	1	2	3	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	7	0	0	10	16	14	7	1	0	48
	.	.	0.00	5.68	9.09	7.95	3.98	0.57	.	27.27
NNE	3	0	1	5	24	10	5	0	0	45
	.	.	0.57	2.84	13.64	5.68	2.84	0.00	.	25.57
NE	0	0	1	2	1	0	0	0	0	4
	.	.	0.57	1.14	0.57	0.00	0.00	0.00	.	2.27
ENE	0	0	1	1	2	0	0	0	0	4
	.	.	0.57	0.57	1.14	0.00	0.00	0.00	.	2.27
E	0	0	1	0	0	0	0	0	0	1
	.	.	0.57	0.00	0.00	0.00	0.00	0.00	.	0.57
ESE	0	0	0	2	0	0	0	0	0	2
	.	.	0.00	1.14	0.00	0.00	0.00	0.00	.	1.14
SE	1	0	0	2	13	0	0	0	0	15
	.	.	0.00	1.14	7.39	0.00	0.00	0.00	.	8.52
SSE	0	0	0	1	9	0	0	0	0	10
	.	.	0.00	0.57	5.11	0.00	0.00	0.00	.	5.68
TOTAL	.	.	4	34	78	37	17	6	.	176
	.	.	2.27	19.32	44.32	21.02	9.66	3.41	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	0	1	1	5	1	0	0	8
	.	.	0.00	0.57	0.57	2.84	0.57	0.00	.	4.55
SSW	2	0	0	0	0	0	1	0	0	1
	.	.	0.00	0.00	0.00	0.00	0.57	0.00	.	0.57
SW	0	0	0	1	0	0	0	2	0	3
	.	.	0.00	0.57	0.00	0.00	0.00	1.14	.	1.70
WSW	0	0	0	1	1	0	1	1	0	4
	.	.	0.00	0.57	0.57	0.00	0.57	0.57	.	2.27
W	0	0	0	0	2	0	0	2	0	4
	.	.	0.00	0.00	1.14	0.00	0.00	1.14	.	2.27
WNW	0	0	0	0	0	1	0	0	0	1
	.	.	0.00	0.00	0.00	0.57	0.00	0.00	.	0.57
NW	0	0	0	1	3	0	0	0	0	4
	.	.	0.00	0.57	1.70	0.00	0.00	0.00	.	2.27
NNW	7	0	0	7	6	7	2	0	0	22
	.	.	0.00	3.98	3.41	3.98	1.14	0.00	.	12.50
TOTAL	.	.	4	34	78	37	17	6	.	176
	.	.	2.27	19.32	44.32	21.02	9.66	3.41	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	13	0	0	0	0	3	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	5	0	8	26	3	5	2	0	0	44
	.	0.00	1.15	3.75	0.43	0.72	0.29	0.00	.	6.35
NNE	2	0	7	21	16	6	6	3	0	59
	.	0.00	1.01	3.03	2.31	0.87	0.87	0.43	.	8.51
NE	6	0	11	19	4	8	10	0	0	52
	.	0.00	1.59	2.74	0.58	1.15	1.44	0.00	.	7.50
ENE	1	0	12	13	3	4	5	0	0	37
	.	0.00	1.73	1.88	0.43	0.58	0.72	0.00	.	5.34
E	1	0	5	13	3	7	4	0	0	32
	.	0.00	0.72	1.88	0.43	1.01	0.58	0.00	.	4.62
ESE	1	0	2	17	15	0	0	0	0	34
	.	0.00	0.29	2.45	2.16	0.00	0.00	0.00	.	4.91
SE	4	0	8	24	25	0	0	0	0	57
	.	0.00	1.15	3.46	3.61	0.00	0.00	0.00	.	8.23
SSE	0	0	4	25	15	10	0	0	0	54
	.	0.00	0.58	3.61	2.16	1.44	0.00	0.00	.	7.79
TOTAL	.	1	76	254	156	117	68	21	.	693
	.	0.14	10.97	36.65	22.51	16.88	9.81	3.03	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	1	10	11	18	11	4	0	55
	.	0.00	0.14	1.44	1.59	2.60	1.59	0.58	.	7.94
SSW	2	1	2	6	5	12	9	5	0	40
	.	0.14	0.29	0.87	0.72	1.73	1.30	0.72	.	5.77
SW	2	0	2	7	4	10	4	0	0	27
	.	0.00	0.29	1.01	0.58	1.44	0.58	0.00	.	3.90
WSW	2	0	5	14	3	1	3	0	0	26
	.	0.00	0.72	2.02	0.43	0.14	0.43	0.00	.	3.75
W	4	0	2	8	3	1	2	1	0	17
	.	0.00	0.29	1.15	0.43	0.14	0.29	0.14	.	2.45
WNW	0	0	2	10	11	12	5	5	0	45
	.	0.00	0.29	1.44	1.59	1.73	0.72	0.72	.	6.49
NW	4	0	1	17	16	6	4	0	0	44
	.	0.00	0.14	2.45	2.31	0.87	0.58	0.00	.	6.35
NNW	15	0	4	24	19	17	3	3	0	70
	.	0.00	0.58	3.46	2.74	2.45	0.43	0.43	.	10.10
TOTAL	.	1	76	254	156	117	68	21	.	693
	.	0.14	10.97	36.65	22.51	16.88	9.81	3.03	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	2	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	1	0	2	5	4	1	0	0	0	12
	.	0.00	0.50	1.26	1.01	0.25	0.00	0.00	.	3.02
NNE	0	0	4	10	5	1	0	0	0	20
	.	0.00	1.01	2.52	1.26	0.25	0.00	0.00	.	5.04
NE	0	0	6	2	0	0	0	0	0	8
	.	0.00	1.51	0.50	0.00	0.00	0.00	0.00	.	2.02
ENE	0	1	5	3	0	0	0	0	0	9
	.	0.25	1.26	0.76	0.00	0.00	0.00	0.00	.	2.27
E	0	0	7	0	1	0	0	0	0	8
	.	0.00	1.76	0.00	0.25	0.00	0.00	0.00	.	2.02
ESE	1	1	5	7	0	0	0	0	0	13
	.	0.25	1.26	1.76	0.00	0.00	0.00	0.00	.	3.27
SE	0	0	9	15	7	0	0	0	0	31
	.	0.00	2.27	3.78	1.76	0.00	0.00	0.00	.	7.81
SSE	0	0	12	29	14	3	0	0	0	58
	.	0.00	3.02	7.30	3.53	0.76	0.00	0.00	.	14.61
TOTAL	.	2	90	139	95	52	16	3	.	397
	.	0.50	22.67	35.01	23.93	13.10	4.03	0.76	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	1	0	15	27	15	21	2	0	0	80
	.	0.00	3.78	6.80	3.78	5.29	0.50	0.00	.	20.15
SSW	1	0	5	12	11	17	7	2	0	54
	.	0.00	1.26	3.02	2.77	4.28	1.76	0.50	.	13.60
SW	1	0	2	6	7	3	4	1	0	23
	.	0.00	0.50	1.51	1.76	0.76	1.01	0.25	.	5.79
WSW	0	0	4	3	7	1	1	0	0	16
	.	0.00	1.01	0.76	1.76	0.25	0.25	0.00	.	4.03
W	1	0	2	1	4	2	1	0	0	10
	.	0.00	0.50	0.25	1.01	0.50	0.25	0.00	.	2.52
WNW	1	0	4	5	8	2	0	0	0	19
	.	0.00	1.01	1.26	2.02	0.50	0.00	0.00	.	4.79
NW	1	0	7	4	10	0	0	0	0	21
	.	0.00	1.76	1.01	2.52	0.00	0.00	0.00	.	5.29
NNW	0	0	1	10	2	1	1	0	0	15
	.	0.00	0.25	2.52	0.50	0.25	0.25	0.00	.	3.78
TOTAL	.	2	90	139	95	52	16	3	.	397
	.	0.50	22.67	35.01	23.93	13.10	4.03	0.76	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 .	1 0.70	1 0.70	0 0.00	0 0.00	0 0.00	0 .	0 .	2 1.40
NNE	1 .	0 .	1 0.70	3 2.10	0 0.00	0 0.00	0 0.00	0 .	0 .	4 2.80
NE	0 .	0 .	1 0.70	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	1 0.70
ENE	1 .	0 .	2 1.40	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	2 1.40
E	1 .	0 .	2 1.40	0 0.00	0 0.00	0 0.00	0 0.00	0 .	0 .	2 1.40
ESE	0 .	0 .	7 4.90	1 0.70	0 0.00	0 0.00	0 0.00	0 .	0 .	8 5.59
SE	4 .	0 .	7 4.90	5 3.50	0 0.00	0 0.00	0 0.00	0 .	0 .	12 8.39
SSE	10 .	0 .	9 6.29	4 2.80	4 2.80	0 0.00	0 0.00	0 .	0 .	17 11.89
TOTAL	. .	. .	61 42.66	51 35.66	28 19.58	2 1.40	1 0.70	. .	. .	143 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	16	19	5	2	0	0	0	42
	.	.	11.19	13.29	3.50	1.40	0.00	.	.	29.37
SSW	0	0	10	11	4	0	0	0	0	25
		.	6.99	7.69	2.80	0.00	0.00	.	.	17.48
SW	0	0	1	3	4	0	0	0	0	8
	.	.	0.70	2.10	2.80	0.00	0.00	.	.	5.59
WSW	0	0	1	1	7	0	0	0	0	9
	.	.	0.70	0.70	4.90	0.00	0.00	.	.	6.29
W	0	0	1	0	0	0	1	0	0	2
	.	.	0.70	0.00	0.00	0.00	0.70	.	.	1.40
WNW	0	0	2	1	0	0	0	0	0	3
	.	.	1.40	0.70	0.00	0.00	0.00	.	.	2.10
NW	0	0	0	1	2	0	0	0	0	3
	.	.	0.00	0.70	1.40	0.00	0.00	.	.	2.10
NNW	0	0	0	1	2	0	0	0	0	3
	.	.	0.00	0.70	1.40	0.00	0.00	.	.	2.10
TOTAL	.	.	61	51	28	2	1	.	.	143
	.	.	42.66	35.66	19.58	1.40	0.70	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	. .
N	0 .	0 .	1 1.69	0 0.00	0 .	0 .	0 .	0 .	0 .	1 1.69
NNE	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NE	0 .	0 .	1 1.69	0 0.00	0 .	0 .	0 .	0 .	0 .	1 1.69
ENE	0 .	0 .	0 1.69	1 0.00	0 .	0 .	0 .	0 .	0 .	1 1.69
E	0 .	0 .	2 3.39	0 0.00	0 .	0 .	0 .	0 .	0 .	2 3.39
ESE	0 .	0 .	8 13.56	1 1.69	0 .	0 .	0 .	0 .	0 .	9 15.25
SE	0 .	0 .	15 25.42	2 3.39	0 .	0 .	0 .	0 .	0 .	17 28.81
SSE	2 .	0 .	3 5.08	5 8.47	0 .	0 .	0 .	0 .	0 .	8 13.56
TOTAL	.	.	40 67.80	19 32.20	.	.	.	.	.	59 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - MARCH 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	2	1	0	0	0	0	0	3
	.	.	3.39	1.69	.	.	.	.	.	5.08
SSW	0	0	6	6	0	0	0	0	0	12
	.	.	10.17	10.17	.	.	.	.	.	20.34
SW	0	0	1	1	0	0	0	0	0	2
	.	.	1.69	1.69	.	.	.	.	.	3.39
WSW	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	1.69	.	.	.	.	.	1.69
W	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	1.69	.	.	.	.	.	1.69
WNW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NNW	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	1.69	.	.	.	.	.	1.69
TOTAL	.	.	40	19	.	.	.	.	.	59
	.	.	67.80	32.20	.	.	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1	WSC1							
FREQUENCY PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	19	59	47	47	6	1	0	179
	1.00	3.11	2.47	2.47	0.32	0.05	0.00	9.43
NNE	40	60	31	11	0	0	0	142
	2.11	3.16	1.63	0.58	0.00	0.00	0.00	7.48
NE	35	33	18	2	0	0	0	88
	1.84	1.74	0.95	0.11	0.00	0.00	0.00	4.63
ENE	26	31	7	0	0	0	0	64
	1.37	1.63	0.37	0.00	0.00	0.00	0.00	3.37
E	27	38	20	4	0	0	0	89
	1.42	2.00	1.05	0.21	0.00	0.00	0.00	4.69
ESE	28	57	40	5	0	0	0	130
	1.47	3.00	2.11	0.26	0.00	0.00	0.00	6.85
SE	49	68	37	10	2	0	0	166
	2.58	3.58	1.95	0.53	0.11	0.00	0.00	8.74
SSE	43	66	40	19	1	0	0	169
	2.26	3.48	2.11	1.00	0.05	0.00	0.00	8.90
TOTAL	358	644	474	300	79	33	11	1899
	18.85	33.91	24.96	15.80	4.16	1.74	0.58	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	30 1.58	59 3.11	62 3.26	66 3.48	13 0.68	0 0.00	0 0.00	230 12.11
SSW	13 0.68	49 2.58	51 2.69	47 2.47	25 1.32	20 1.05	0 0.00	205 10.80
SW	6 0.32	21 1.11	25 1.32	32 1.69	6 0.32	0 0.00	2 0.11	92 4.84
WSW	5 0.26	23 1.21	19 1.00	3 0.16	1 0.05	0 0.00	0 0.00	51 2.69
W	8 0.42	22 1.16	11 0.58	1 0.05	0 0.00	1 0.05	0 0.00	43 2.26
WNW	12 0.63	19 1.00	12 0.63	5 0.26	2 0.11	1 0.05	0 0.00	51 2.69
NW	9 0.47	18 0.95	26 1.37	16 0.84	7 0.37	8 0.42	8 0.42	92 4.84
NNW	8 0.42	21 1.11	28 1.47	32 1.69	16 0.84	2 0.11	1 0.05	108 5.69
TOTAL	358 18.85	644 33.91	474 24.96	300 15.80	79 4.16	33 1.74	11 0.58	1899 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY] PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	0	15	16	23	3	0	0	57
	0.00	8.38	8.94	12.85	1.68	0.00	0.00	31.84
NNE	2	6	6	3	0	0	0	17
	1.12	3.35	3.35	1.68	0.00	0.00	0.00	9.50
NE	0	3	0	0	0	0	0	3
	0.00	1.68	0.00	0.00	0.00	0.00	0.00	1.68
ENE	1	1	0	0	0	0	0	2
	0.56	0.56	0.00	0.00	0.00	0.00	0.00	1.12
E	2	1	3	1	0	0	0	7
	1.12	0.56	1.68	0.56	0.00	0.00	0.00	3.91
ESE	0	0	1	1	0	0	0	2
	0.00	0.00	0.56	0.56	0.00	0.00	0.00	1.12
SE	0	1	0	0	0	0	0	1
	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.56
SSE	0	1	0	0	0	0	0	1
	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.56
TOTAL	6	38	39	54	28	13	1	179
	3.35	21.23	21.79	30.17	15.64	7.26	0.56	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0 0.00	1 0.56	1 0.56	3 1.68	3 1.68	0 0.00	0 0.00	8 4.47
SSW	0 0.00	0 0.00	1 0.56	0 0.00	6 3.35	11 6.15	0 0.00	18 10.06
SW	0 0.00	0 0.00	0 0.00	5 2.79	0 0.00	0 0.00	1 0.56	6 3.35
WSW	0 0.00	2 1.12	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	2 1.12
W	0 0.00	1 0.56	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.56
WNW	0 0.00	2 1.12	0 0.00	3 1.68	1 0.56	0 0.00	0 0.00	6 3.35
NW	0 0.00	1 0.56	7 3.91	6 3.35	7 3.91	2 1.12	0 0.00	23 12.85
NNW	1 0.56	3 1.68	4 2.23	9 5.03	8 4.47	0 0.00	0 0.00	25 13.97
TOTAL	6 3.35	38 21.23	39 21.79	54 30.17	28 15.64	13 7.26	1 0.56	179 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	0	4	8	5	2	0	0	19
	0.00	3.01	6.02	3.76	1.50	0.00	0.00	14.29
NNE	2	5	8	3	0	0	0	18
	1.50	3.76	6.02	2.26	0.00	0.00	0.00	13.53
NE	0	2	0	0	0	0	0	2
	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50
ENE	1	1	1	0	0	0	0	3
	0.75	0.75	0.75	0.00	0.00	0.00	0.00	2.26
E	2	1	1	3	0	0	0	7
	1.50	0.75	0.75	2.26	0.00	0.00	0.00	5.26
ESE	0	1	1	2	0	0	0	4
	0.00	0.75	0.75	1.50	0.00	0.00	0.00	3.01
SE	0	2	0	0	0	0	0	2
	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50
SSE	0	1	1	3	0	0	0	5
	0.00	0.75	0.75	2.26	0.00	0.00	0.00	3.76
TOTAL	6	22	38	41	17	7	2	133
	4.51	16.54	28.57	30.83	12.78	5.26	1.50	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1	WSC1							
FREQUENCY PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0 0.00	0 0.00	1 0.75	4 3.01	3 2.26	0 0.00	0 0.00	8 6.02
SSW	1 0.75	0 0.00	5 3.76	7 5.26	6 4.51	6 4.51	0 0.00	25 18.80
SW	0 0.00	1 0.75	1 0.75	7 5.26	2 1.50	0 0.00	0 0.00	11 8.27
WSW	0 0.00	1 0.75	1 0.75	1 0.75	0 0.00	0 0.00	0 0.00	3 2.26
W	0 0.00	2 1.50	0 0.00	1 0.75	0 0.00	0 0.00	0 0.00	3 2.26
WNW	0 0.00	1 0.75	5 3.76	0 0.00	0 0.00	0 0.00	0 0.00	6 4.51
NW	0 0.00	0 0.00	2 1.50	0 0.00	0 0.00	1 0.75	1 0.75	4 3.01
NNW	0 0.00	0 0.00	3 2.26	5 3.76	4 3.01	0 0.00	1 0.75	13 9.77
TOTAL	6 4.51	22 16.54	38 28.57	41 30.83	17 12.78	7 5.26	2 1.50	133 100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1	WSC1							
FREQUENCY PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	0 0.00	4 2.67	5 3.33	3 2.00	1 0.67	1 0.67	0 0.00	14 9.33
NNE	1 0.67	7 4.67	5 3.33	4 2.67	0 0.00	0 0.00	0 0.00	17 11.33
NE	0 0.00	3 2.00	3 2.00	0 0.00	0 0.00	0 0.00	0 0.00	6 4.00
ENE	1 0.67	3 2.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	4 2.67
E	0 0.00	2 1.33	3 2.00	0 0.00	0 0.00	0 0.00	0 0.00	5 3.33
ESE	0 0.00	2 1.33	8 5.33	2 1.33	0 0.00	0 0.00	0 0.00	12 8.00
SE	2 1.33	2 1.33	0 0.00	1 0.67	2 1.33	0 0.00	0 0.00	7 4.67
SSE	0 0.00	1 0.67	4 2.67	3 2.00	0 0.00	0 0.00	0 0.00	8 5.33
TOTAL	4 2.67	39 26.00	55 36.67	34 22.67	12 8.00	3 2.00	3 2.00	150 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY] PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	1	5	4	1	0	0	11
	0.00	0.67	3.33	2.67	0.67	0.00	0.00	7.33
SSW	0	2	6	8	6	1	0	23
	0.00	1.33	4.00	5.33	4.00	0.67	0.00	15.33
SW	0	2	2	6	1	0	0	11
	0.00	1.33	1.33	4.00	0.67	0.00	0.00	7.33
WSW	0	2	5	0	0	0	0	7
	0.00	1.33	3.33	0.00	0.00	0.00	0.00	4.67
W	0	4	2	0	0	0	0	6
	0.00	2.67	1.33	0.00	0.00	0.00	0.00	4.00
WNW	0	2	0	0	0	0	0	2
	0.00	1.33	0.00	0.00	0.00	0.00	0.00	1.33
NW	0	2	3	1	0	0	3	9
	0.00	1.33	2.00	0.67	0.00	0.00	2.00	6.00
NNW	0	0	4	2	1	1	0	8
	0.00	0.00	2.67	1.33	0.67	0.67	0.00	5.33
TOTAL	4	39	55	34	12	3	3	150
	2.67	26.00	36.67	22.67	8.00	2.00	2.00	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY] PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	3	24	18	16	0	0	0	61
	0.36	2.86	2.15	1.91	0.00	0.00	0.00	7.27
NNE	6	27	10	1	0	0	0	44
	0.72	3.22	1.19	0.12	0.00	0.00	0.00	5.24
NE	10	19	12	2	0	0	0	43
	1.19	2.26	1.43	0.24	0.00	0.00	0.00	5.13
ENE	7	20	5	0	0	0	0	32
	0.83	2.38	0.60	0.00	0.00	0.00	0.00	3.81
E	8	28	11	0	0	0	0	47
	0.95	3.34	1.31	0.00	0.00	0.00	0.00	5.60
ESE	5	47	28	0	0	0	0	80
	0.60	5.60	3.34	0.00	0.00	0.00	0.00	9.54
SE	6	46	35	9	0	0	0	96
	0.72	5.48	4.17	1.07	0.00	0.00	0.00	11.44
SSE	5	27	30	12	1	0	0	75
	0.60	3.22	3.58	1.43	0.12	0.00	0.00	8.94
TOTAL	70	335	262	135	22	10	5	839
	8.34	39.93	31.23	16.09	2.62	1.19	0.60	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	3	14	37	34	6	0	0	94
	0.36	1.67	4.41	4.05	0.72	0.00	0.00	11.20
SSW	4	9	20	23	7	2	0	65
	0.48	1.07	2.38	2.74	0.83	0.24	0.00	7.75
SW	2	10	12	10	3	0	1	38
	0.24	1.19	1.43	1.19	0.36	0.00	0.12	4.53
WSW	1	17	9	1	1	0	0	29
	0.12	2.03	1.07	0.12	0.12	0.00	0.00	3.46
W	2	12	6	0	0	1	0	21
	0.24	1.43	0.72	0.00	0.00	0.12	0.00	2.50
WNW	5	12	5	2	1	1	0	26
	0.60	1.43	0.60	0.24	0.12	0.12	0.00	3.10
NW	1	14	8	9	0	5	4	41
	0.12	1.67	0.95	1.07	0.00	0.60	0.48	4.89
NNW	2	9	16	16	3	1	0	47
	0.24	1.07	1.91	1.91	0.36	0.12	0.00	5.60
TOTAL	70	335	262	135	22	10	5	839
	8.34	39.93	31.23	16.09	2.62	1.19	0.60	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	13	12	0	0	0	0	0	25
	3.04	2.81	0.00	0.00	.	.	.	5.85
NNE	15	15	2	0	0	0	0	32
	3.51	3.51	0.47	0.00	.	.	.	7.49
NE	13	6	3	0	0	0	0	22
	3.04	1.41	0.70	0.00	.	.	.	5.15
ENE	7	6	1	0	0	0	0	14
	1.64	1.41	0.23	0.00	.	.	.	3.28
E	8	6	2	0	0	0	0	16
	1.87	1.41	0.47	0.00	.	.	.	3.75
ESE	12	7	2	0	0	0	0	21
	2.81	1.64	0.47	0.00	.	.	.	4.92
SE	19	17	2	0	0	0	0	38
	4.45	3.98	0.47	0.00	.	.	.	8.90
SSE	23	31	4	1	0	0	0	59
	5.39	7.26	0.94	0.23	.	.	.	13.82
TOTAL	151	166	74	36	.	.	.	427
	35.36	38.88	17.33	8.43	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	10	32	18	21	0	0	0	81
	2.34	7.49	4.22	4.92	.	.	.	18.97
SSW	5	17	17	9	0	0	0	48
	1.17	3.98	3.98	2.11	.	.	.	11.24
SW	4	4	8	4	0	0	0	20
	0.94	0.94	1.87	0.94	.	.	.	4.68
WSW	3	0	4	1	0	0	0	8
	0.70	0.00	0.94	0.23	.	.	.	1.87
W	4	2	3	0	0	0	0	9
	0.94	0.47	0.70	0.00	.	.	.	2.11
WNW	5	2	2	0	0	0	0	9
	1.17	0.47	0.47	0.00	.	.	.	2.11
NW	5	0	5	0	0	0	0	10
	1.17	0.00	1.17	0.00	.	.	.	2.34
NNW	5	9	1	0	0	0	0	15
	1.17	2.11	0.23	0.00	.	.	.	3.51
TOTAL	151	166	74	36	.	.	.	427
	35.36	38.88	17.33	8.43	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	3	0	0	0	0	0	0	3
	2.36	0.00	0.00	.	.	.	.	2.36
NNE	12	0	0	0	0	0	0	12
	9.45	0.00	0.00	.	.	.	.	9.45
NE	9	0	0	0	0	0	0	9
	7.09	0.00	0.00	.	.	.	.	7.09
ENE	6	0	0	0	0	0	0	6
	4.72	0.00	0.00	.	.	.	.	4.72
E	3	0	0	0	0	0	0	3
	2.36	0.00	0.00	.	.	.	.	2.36
ESE	5	0	0	0	0	0	0	5
	3.94	0.00	0.00	.	.	.	.	3.94
SE	15	0	0	0	0	0	0	15
	11.81	0.00	0.00	.	.	.	.	11.81
SSE	10	4	1	0	0	0	0	15
	7.87	3.15	0.79	.	.	.	.	11.81
TOTAL	86	35	6	.	.	.	.	127
	67.72	27.56	4.72	.	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	14	9	0	0	0	0	0	23
	11.02	7.09	0.00	.	.	.	.	18.11
SSW	2	16	2	0	0	0	0	20
	1.57	12.60	1.57	.	.	.	.	15.75
SW	0	4	2	0	0	0	0	6
	0.00	3.15	1.57	.	.	.	.	4.72
WSW	1	1	0	0	0	0	0	2
	0.79	0.79	0.00	.	.	.	.	1.57
W	1	0	0	0	0	0	0	1
	0.79	0.00	0.00	.	.	.	.	0.79
WNW	2	0	0	0	0	0	0	2
	1.57	0.00	0.00	.	.	.	.	1.57
NW	3	1	1	0	0	0	0	5
	2.36	0.79	0.79	.	.	.	.	3.94
NNW	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
TOTAL	86	35	6	.	.	.	.	127
	67.72	27.56	4.72	.	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY PERCENT	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
N	0 .	0 .	0 .	0 .	0 .	0 .	0 .	0 0.00
NNE	2 4.55	0 0.00	0 .	0 .	0 .	0 .	0 .	2 4.55
NE	3 6.82	0 0.00	0 .	0 .	0 .	0 .	0 .	3 6.82
ENE	3 6.82	0 0.00	0 .	0 .	0 .	0 .	0 .	3 6.82
E	4 9.09	0 0.00	0 .	0 .	0 .	0 .	0 .	4 9.09
ESE	6 13.64	0 0.00	0 .	0 .	0 .	0 .	0 .	6 13.64
SE	7 15.91	0 0.00	0 .	0 .	0 .	0 .	0 .	7 15.91
SSE	5 11.36	1 2.27	0 .	0 .	0 .	0 .	0 .	6 13.64
TOTAL	35 79.55	9 20.45	.	.	.	.	.	44 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
APRIL - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY] PERCENT]	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	3	2	0	0	0	0	0	5
	6.82	4.55	.	.	.	.	.	11.36
SSW	1	5	0	0	0	0	0	6
	2.27	11.36	.	.	.	.	.	13.64
SW	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
WSW	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
W	1	1	0	0	0	0	0	2
	2.27	2.27	.	.	.	.	.	4.55
WNW	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
NW	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
NNW	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	0.00
TOTAL	35	9	.	.	.	.	.	44
	79.55	20.45	.	.	.	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	46 .	0 .	1 .	11 .	15 .	9 .	4 .	1 .	0 .	. .
N	23 .	0 0.00	31 0.83	122 3.25	143 3.81	112 2.99	25 0.67	9 0.24	0 0.00	442 11.78
NNE	20 .	0 0.00	56 1.49	106 2.83	95 2.53	39 1.04	11 0.29	3 0.08	0 0.00	310 8.26
NE	9 .	0 0.00	60 1.60	58 1.55	23 0.61	10 0.27	10 0.27	0 0.00	0 0.00	161 4.29
ENE	7 .	1 0.03	53 1.41	50 1.33	14 0.37	4 0.11	5 0.13	0 0.00	0 0.00	127 3.38
E	5 .	0 0.00	45 1.20	57 1.52	24 0.64	11 0.29	4 0.11	0 0.00	0 0.00	141 3.76
ESE	6 .	1 0.03	53 1.41	90 2.40	55 1.47	5 0.13	0 0.00	0 0.00	0 0.00	204 5.44
SE	10 .	0 0.00	91 2.43	120 3.20	82 2.19	10 0.27	2 0.05	0 0.00	0 0.00	305 8.13
SSE	18 .	0 0.00	76 2.03	135 3.60	84 2.24	35 0.93	1 0.03	0 0.00	0 0.00	331 8.82
TOTAL	. .	3 0.08	662 17.64	1211 32.28	970 25.85	604 16.10	210 5.60	79 2.11	13 0.35	3752 100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	37	0	68	122	96	114	28	5	0	433
	.	0.00	1.81	3.25	2.56	3.04	0.75	0.13	0.00	11.54
SSW	15	1	37	85	75	78	45	27	0	348
	.	0.03	0.99	2.27	2.00	2.08	1.20	0.72	0.00	9.28
SW	5	0	12	42	40	45	17	3	2	161
	.	0.00	0.32	1.12	1.07	1.20	0.45	0.08	0.05	4.29
WSW	4	0	15	45	38	5	6	3	0	112
	.	0.00	0.40	1.20	1.01	0.13	0.16	0.08	0.00	2.99
W	9	0	14	32	21	7	4	5	2	85
	.	0.00	0.37	0.85	0.56	0.19	0.11	0.13	0.05	2.27
WNW	4	0	21	37	33	22	12	6	0	131
	.	0.00	0.56	0.99	0.88	0.59	0.32	0.16	0.00	3.49
NW	9	0	17	44	79	33	11	8	8	200
	.	0.00	0.45	1.17	2.11	0.88	0.29	0.21	0.21	5.33
NNW	25	0	13	66	68	74	29	10	1	261
	.	0.00	0.35	1.76	1.81	1.97	0.77	0.27	0.03	6.96
TOTAL	.	3	662	1211	970	604	210	79	13	3752
	.	0.08	17.64	32.28	25.85	16.10	5.60	2.11	0.35	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	1	0	0	0	1	1	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	2	0	0	19	42	49	8	6	0	124
	.	.	0.00	5.88	13.00	15.17	2.48	1.86	0.00	38.39
NNE	2	0	3	7	9	5	0	0	0	24
	.	.	0.93	2.17	2.79	1.55	0.00	0.00	0.00	7.43
NE	1	0	1	5	0	0	0	0	0	6
	.	.	0.31	1.55	0.00	0.00	0.00	0.00	0.00	1.86
ENE	0	0	1	1	0	0	0	0	0	2
	.	.	0.31	0.31	0.00	0.00	0.00	0.00	0.00	0.62
E	0	0	2	1	3	1	0	0	0	7
	.	.	0.62	0.31	0.93	0.31	0.00	0.00	0.00	2.17
ESE	1	0	0	0	1	1	0	0	0	2
	.	.	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.62
SE	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.31
SSE	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.31
TOTAL	.	.	8	47	93	104	43	26	2	323
	.	.	2.48	14.55	28.79	32.20	13.31	8.05	0.62	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY UNSTAB

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	1	0	0	1	1	3	3	0	0	8
	.	.	0.00	0.31	0.31	0.93	0.93	0.00	0.00	2.48
SSW	2	0	0	0	1	0	8	11	0	20
	.	.	0.00	0.00	0.31	0.00	2.48	3.41	0.00	6.19
SW	0	0	0	0	0	5	1	0	1	7
	.	.	0.00	0.00	0.00	1.55	0.31	0.00	0.31	2.17
WSW	0	0	0	2	0	0	0	2	0	4
	.	.	0.00	0.62	0.00	0.00	0.00	0.62	0.00	1.24
W	1	0	0	1	0	3	0	1	1	6
	.	.	0.00	0.31	0.00	0.93	0.00	0.31	0.31	1.86
WNW	0	0	0	2	1	3	1	0	0	7
	.	.	0.00	0.62	0.31	0.93	0.31	0.00	0.00	2.17
NW	0	0	0	2	26	15	7	2	0	52
	.	.	0.00	0.62	8.05	4.64	2.17	0.62	0.00	16.10
NNW	0	0	1	4	9	19	15	4	0	52
	.	.	0.31	1.24	2.79	5.88	4.64	1.24	0.00	16.10
TOTAL	.	.	8	47	93	104	43	26	2	323
	.	.	2.48	14.55	28.79	32.20	13.31	8.05	0.62	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY] PERCENT]	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	2	0	0	3	4	2	1	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	2	0	0	18	54	24	7	1	0	104
	.	.	0.00	6.27	18.82	8.36	2.44	0.35	0.00	36.24
NNE	6	0	2	8	21	12	0	0	0	43
	.	.	0.70	2.79	7.32	4.18	0.00	0.00	0.00	14.98
NE	0	0	0	2	0	0	0	0	0	2
	.	.	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.70
ENE	0	0	2	2	3	0	0	0	0	7
	.	.	0.70	0.70	1.05	0.00	0.00	0.00	0.00	2.44
E	0	0	2	2	1	3	0	0	0	8
	.	.	0.70	0.70	0.35	1.05	0.00	0.00	0.00	2.79
ESE	0	0	0	1	1	2	0	0	0	4
	.	.	0.00	0.35	0.35	0.70	0.00	0.00	0.00	1.39
SE	0	0	0	2	0	0	0	0	0	2
	.	.	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.70
SSE	0	0	0	1	3	3	0	0	0	7
	.	.	0.00	0.35	1.05	1.05	0.00	0.00	0.00	2.44
TOTAL	.	.	7	44	112	80	31	10	3	287
	.	.	2.44	15.33	39.02	27.87	10.80	3.48	1.05	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY UNSTA

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	2	0	0	0	1	4	4	1	0	10
	.	.	0.00	0.00	0.35	1.39	1.39	0.35	0.00	3.48
SSW	1	0	1	0	5	7	7	6	0	26
	.	.	0.35	0.00	1.74	2.44	2.44	2.09	0.00	9.06
SW	0	0	0	1	1	7	4	0	0	13
	.	.	0.00	0.35	0.35	2.44	1.39	0.00	0.00	4.53
WSW	0	0	0	1	2	1	0	0	0	4
	.	.	0.00	0.35	0.70	0.35	0.00	0.00	0.00	1.39
W	0	0	0	2	0	1	0	0	1	4
	.	.	0.00	0.70	0.00	0.35	0.00	0.00	0.35	1.39
WNW	0	0	0	3	6	2	5	0	0	16
	.	.	0.00	1.05	2.09	0.70	1.74	0.00	0.00	5.57
NW	1	0	0	1	5	2	0	1	1	10
	.	.	0.00	0.35	1.74	0.70	0.00	0.35	0.35	3.48
NNW	0	0	0	0	9	12	4	1	1	27
	.	.	0.00	0.00	3.14	4.18	1.39	0.35	0.35	9.41
TOTAL	.	.	7	44	112	80	31	10	3	287
	.	.	2.44	15.33	39.02	27.87	10.80	3.48	1.05	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	5	0	0	2	1	2	3	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	7	0	0	14	21	17	8	2	0	62
	.	.	0.00	4.18	6.27	5.07	2.39	0.60	0.00	18.51
NNE	3	0	2	12	31	14	5	0	0	64
	.	.	0.60	3.58	9.25	4.18	1.49	0.00	0.00	19.10
NE	0	0	1	5	4	0	0	0	0	10
	.	.	0.30	1.49	1.19	0.00	0.00	0.00	0.00	2.99
ENE	0	0	2	5	2	0	0	0	0	9
	.	.	0.60	1.49	0.60	0.00	0.00	0.00	0.00	2.69
E	0	0	1	3	3	0	0	0	0	7
	.	.	0.30	0.90	0.90	0.00	0.00	0.00	0.00	2.09
ESE	1	0	0	5	8	2	0	0	0	15
	.	.	0.00	1.49	2.39	0.60	0.00	0.00	0.00	4.48
SE	1	0	2	4	13	1	2	0	0	22
	.	.	0.60	1.19	3.88	0.30	0.60	0.00	0.00	6.57
SSE	0	0	0	2	13	3	0	0	0	18
	.	.	0.00	0.60	3.88	0.90	0.00	0.00	0.00	5.37
TOTAL	.	.	8	77	138	71	29	9	3	335
	.	.	2.39	22.99	41.19	21.19	8.66	2.69	0.90	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY UNSTABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	5	0	0	2	7	9	2	0	0	20
	.	.	0.00	0.60	2.09	2.69	0.60	0.00	0.00	5.97
SSW	2	0	0	2	8	8	7	1	0	26
	.	.	0.00	0.60	2.39	2.39	2.09	0.30	0.00	7.76
SW	1	0	0	3	2	6	1	2	0	14
	.	.	0.00	0.90	0.60	1.79	0.30	0.60	0.00	4.18
WSW	0	0	0	3	6	0	1	1	0	11
	.	.	0.00	0.90	1.79	0.00	0.30	0.30	0.00	3.28
W	0	0	0	4	4	0	0	2	0	10
	.	.	0.00	1.19	1.19	0.00	0.00	0.60	0.00	2.99
WNW	0	0	0	2	0	1	0	0	0	3
	.	.	0.00	0.60	0.00	0.30	0.00	0.00	0.00	0.90
NW	0	0	0	3	6	1	0	0	3	13
	.	.	0.00	0.90	1.79	0.30	0.00	0.00	0.90	3.88
NNW	7	0	0	8	10	9	3	1	0	31
	.	.	0.00	2.39	2.99	2.69	0.90	0.30	0.00	9.25
TOTAL	.	.	8	77	138	71	29	9	3	335
	.	.	2.39	22.99	41.19	21.19	8.66	2.69	0.90	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	35	0	1	6	8	4	0	1	0	.
	.	.	.	.	.	.	.	.	.	.
N	9	0	11	51	22	21	2	0	0	107
	.	0.00	0.70	3.27	1.41	1.34	0.13	0.00	0.00	6.85
NNE	4	0	13	50	27	7	6	3	0	106
	.	0.00	0.83	3.20	1.73	0.45	0.38	0.19	0.00	6.79
NE	8	0	23	38	16	10	10	0	0	97
	.	0.00	1.47	2.43	1.02	0.64	0.64	0.00	0.00	6.21
ENE	4	0	23	33	8	4	5	0	0	73
	.	0.00	1.47	2.11	0.51	0.26	0.32	0.00	0.00	4.67
E	1	0	13	45	14	7	4	0	0	83
	.	0.00	0.83	2.88	0.90	0.45	0.26	0.00	0.00	5.31
ESE	1	0	9	68	43	0	0	0	0	120
	.	0.00	0.58	4.35	2.75	0.00	0.00	0.00	0.00	7.68
SE	4	0	14	70	60	9	0	0	0	153
	.	0.00	0.90	4.48	3.84	0.58	0.00	0.00	0.00	9.80
SSE	2	0	9	53	45	22	1	0	0	130
	.	0.00	0.58	3.39	2.88	1.41	0.06	0.00	0.00	8.32
TOTAL	.	1	154	605	423	253	90	31	5	1562
	.	0.06	9.86	38.73	27.08	16.20	5.76	1.98	0.32	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=NEUTRAL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	12	0	4	27	48	53	17	4	0	153
	.	0.00	0.26	1.73	3.07	3.39	1.09	0.26	0.00	9.80
SSW	6	1	6	15	27	35	16	7	0	107
	.	0.06	0.38	0.96	1.73	2.24	1.02	0.45	0.00	6.85
SW	2	0	4	18	16	20	7	0	1	66
	.	0.00	0.26	1.15	1.02	1.28	0.45	0.00	0.06	4.23
WSW	3	0	6	31	12	2	4	0	0	55
	.	0.00	0.38	1.98	0.77	0.13	0.26	0.00	0.00	3.52
W	6	0	4	20	10	1	2	2	0	39
	.	0.00	0.26	1.28	0.64	0.06	0.13	0.13	0.00	2.50
WNW	0	0	7	22	16	14	6	6	0	71
	.	0.00	0.45	1.41	1.02	0.90	0.38	0.38	0.00	4.55
NW	6	0	2	31	24	15	4	5	4	85
	.	0.00	0.13	1.98	1.54	0.96	0.26	0.32	0.26	5.44
NNW	16	0	6	33	35	33	6	4	0	117
	.	0.00	0.38	2.11	2.24	2.11	0.38	0.26	0.00	7.49
TOTAL	.	1	154	605	423	253	90	31	5	1562
	.	0.06	9.86	38.73	27.08	16.20	5.76	1.98	0.32	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	3	0	0	0	1	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	3	0	15	19	4	1	0	0	0	39
	.	0.00	1.74	2.20	0.46	0.12	0.00	0.00	.	4.52
NNE	4	0	19	26	7	1	0	0	0	53
	.	0.00	2.20	3.01	0.81	0.12	0.00	0.00	.	6.14
NE	0	0	21	8	3	0	0	0	0	32
	.	0.00	2.43	0.93	0.35	0.00	0.00	0.00	.	3.71
ENE	2	1	13	9	1	0	0	0	0	24
	.	0.12	1.51	1.04	0.12	0.00	0.00	0.00	.	2.78
E	3	0	15	6	3	0	0	0	0	24
	.	0.00	1.74	0.70	0.35	0.00	0.00	0.00	.	2.78
ESE	2	1	18	14	2	0	0	0	0	35
	.	0.12	2.09	1.62	0.23	0.00	0.00	0.00	.	4.06
SE	1	0	31	35	9	0	0	0	0	75
	.	0.00	3.59	4.06	1.04	0.00	0.00	0.00	.	8.69
SSE	4	0	38	63	18	7	0	0	0	126
	.	0.00	4.40	7.30	2.09	0.81	0.00	0.00	.	14.60
TOTAL	.	2	256	322	170	94	16	3	.	863
	.	0.23	29.66	37.31	19.70	10.89	1.85	0.35	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=SLIGHTLY STABLE

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	16	0	27	61	34	43	2	0	0	167
	.	0.00	3.13	7.07	3.94	4.98	0.23	0.00	.	19.35
SSW	3	0	11	30	28	28	7	2	0	106
	.	0.00	1.27	3.48	3.24	3.24	0.81	0.23	.	12.28
SW	2	0	6	12	15	7	4	1	0	45
	.	0.00	0.70	1.39	1.74	0.81	0.46	0.12	.	5.21
WSW	1	0	7	5	11	2	1	0	0	26
	.	0.00	0.81	0.58	1.27	0.23	0.12	0.00	.	3.01
W	2	0	7	3	7	2	1	0	0	20
	.	0.00	0.81	0.35	0.81	0.23	0.12	0.00	.	2.32
WNW	4	0	10	7	10	2	0	0	0	29
	.	0.00	1.16	0.81	1.16	0.23	0.00	0.00	.	3.36
NW	2	0	12	5	15	0	0	0	0	32
	.	0.00	1.39	0.58	1.74	0.00	0.00	0.00	.	3.71
NNW	2	0	6	19	3	1	1	0	0	30
	.	0.00	0.70	2.20	0.35	0.12	0.12	0.00	.	3.48
TOTAL	.	2	256	322	170	94	16	3	.	863
	.	0.23	29.66	37.31	19.70	10.89	1.85	0.35	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	4	1	0	0	0	0	0	5
	.	.	1.43	0.36	0.00	0.00	0.00	.	.	1.79
NNE	1	0	15	3	0	0	0	0	0	18
	.	.	5.38	1.08	0.00	0.00	0.00	.	.	6.45
NE	0	0	10	0	0	0	0	0	0	10
	.	.	3.58	0.00	0.00	0.00	0.00	.	.	3.58
ENE	1	0	8	0	0	0	0	0	0	8
	.	.	2.87	0.00	0.00	0.00	0.00	.	.	2.87
E	1	0	6	0	0	0	0	0	0	6
	.	.	2.15	0.00	0.00	0.00	0.00	.	.	2.15
ESE	1	0	12	1	0	0	0	0	0	13
	.	.	4.30	0.36	0.00	0.00	0.00	.	.	4.66
SE	4	0	22	6	0	0	0	0	0	28
	.	.	7.89	2.15	0.00	0.00	0.00	.	.	10.04
SSE	10	0	21	9	5	0	0	0	0	35
	.	.	7.53	3.23	1.79	0.00	0.00	.	.	12.54
TOTAL	.	.	154	88	34	2	1	.	.	279
	.	.	55.20	31.54	12.19	0.72	0.36	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=MODERATELY STABL

WDC1 WSC1

FREQUENCY PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	0	0	32	28	5	2	0	0	0	67
	.	.	11.47	10.04	1.79	0.72	0.00	.	.	24.01
SSW	0	0	12	27	6	0	0	0	0	45
	.	.	4.30	9.68	2.15	0.00	0.00	.	.	16.13
SW	0	0	1	7	6	0	0	0	0	14
	.	.	0.36	2.51	2.15	0.00	0.00	.	.	5.02
WSW	0	0	2	2	7	0	0	0	0	11
	.	.	0.72	0.72	2.51	0.00	0.00	.	.	3.94
W	0	0	2	0	0	0	1	0	0	3
	.	.	0.72	0.00	0.00	0.00	0.36	.	.	1.08
WNW	0	0	4	1	0	0	0	0	0	5
	.	.	1.43	0.36	0.00	0.00	0.00	.	.	1.79
NW	0	0	3	2	3	0	0	0	0	8
	.	.	1.08	0.72	1.08	0.00	0.00	.	.	2.87
NNW	0	0	0	1	2	0	0	0	0	3
	.	.	0.00	0.36	0.72	0.00	0.00	.	.	1.08
TOTAL	.	.	154	88	34	2	1	.	.	279
	.	.	55.20	31.54	12.19	0.72	0.36	.	.	100.00

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
.	0	0	0	0	0	0	0	0	0	.
	.	.	.	.	.	.	.	.	.	.
N	0	0	1	0	0	0	0	0	0	1
	.	.	0.97	0.00	.	.	.	.	.	0.97
NNE	0	0	2	0	0	0	0	0	0	2
	.	.	1.94	0.00	.	.	.	.	.	1.94
NE	0	0	4	0	0	0	0	0	0	4
	.	.	3.88	0.00	.	.	.	.	.	3.88
ENE	0	0	4	0	0	0	0	0	0	4
	.	.	3.88	0.00	.	.	.	.	.	3.88
E	0	0	6	0	0	0	0	0	0	6
	.	.	5.83	0.00	.	.	.	.	.	5.83
ESE	0	0	14	1	0	0	0	0	0	15
	.	.	13.59	0.97	.	.	.	.	.	14.56
SE	0	0	22	2	0	0	0	0	0	24
	.	.	21.36	1.94	.	.	.	.	.	23.30
SSE	2	0	8	6	0	0	0	0	0	14
	.	.	7.77	5.83	.	.	.	.	.	13.59
TOTAL	.	.	75	28	.	.	.	.	.	103
	.	.	72.82	27.18	.	.	.	.	.	100.00

(CONTINUED)

ECOLOGICAL ANALYSTS, INC.
COOPER NUCLEAR STATION DATA ANALYSIS
JOINT FREQUENCY OF OCCURRENCE
35 FOOT WIND SPEED VERSUS WIND DIRECTION
JANUARY - JUNE 1982
STABILITY BY WIND DIRECTION BY WIND SPEED

TABLE OF WDC1 BY WSC1
CONTROLLING FOR DTC=EXTREMELY STABLE

WDC1 WSC1

FREQUENCY / PERCENT	.	CALM	1-4	4-8	8-13	13-19	19-25	25-32	32-39	TOTAL
S	1	0	5	3	0	0	0	0	0	8
	.	.	4.85	2.91	.	.	.	.	.	7.77
SSW	1	0	7	11	0	0	0	0	0	18
	.	.	6.80	10.68	.	.	.	.	.	17.48
SW	0	0	1	1	0	0	0	0	0	2
	.	.	0.97	0.97	.	.	.	.	.	1.94
WSW	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	0.97	.	.	.	.	.	0.97
W	0	0	1	2	0	0	0	0	0	3
	.	.	0.97	1.94	.	.	.	.	.	2.91
WNW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NW	0	0	0	0	0	0	0	0	0	0
	.	.	.	.	.	.	.	.	.	0.00
NNW	0	0	0	1	0	0	0	0	0	1
	.	.	0.00	0.97	.	.	.	.	.	0.97
TOTAL	.	.	75	28	.	.	.	.	.	103
	.	.	72.82	27.18	.	.	.	.	.	100.00

APPENDIX C

RADIOLOGICAL DOSE CALCULATION FROM AIRBORNE SOURCES

Five types of tables are presented: estimated concentration to emission ratios, estimated gamma radiation dose, individual radiation doses for selected sites, radiation doses for the ALARA population, and radiation doses for the NEPA population.

The tables of estimated concentration to emission ratios were generated using the computer model XOQDOQ discussed in Appendix D. Tables are presented for the vent stack and elevated release options separately, and the following time periods: January - March, April - June, and January - June.

The tables of estimated gamma radiation dose were generated using the GASPAR computer model. The tables are for a combined vent stack and elevated release. The time periods are the same as the concentration to emission ratio tables.

The individual radiation doses at selected points were generated using the GASPAR computer model discussed in Appendix D. Two sites were selected for each of the periods based on the predicted gamma radiation dose table; two locations for each quarter are given, one in the north quadrant and one in the south quadrant. Radiation dose is given for total body, gastrointestinal tract, bone, liver, kidney, thyroid, lung, and skin by seven pathways and four age groups.

Tables of radiation dose to the ALARA (As Low As Reasonably Achievable) population within 50 miles of the plant, and the NEPA (National Environmental Policy Act) population of the continental United States were generated using the GASPAR computer model. Tables are presented for each of the periods covered by this report and are combined vent stack and elevated releases. Radiation doses to the eight body components listed above are given for seven pathways, for individual isotopes by pathway, and a total for each isotope.

CONTENTS

CONTENTS (cont.)

CONTENTS (cont.)

COOPER NUCLEAR STATION - VENT RELEASE POINT - FIRST QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.224E-05	7.328E-06	3.801E-06	1.851E-06	6.999E-07	3.634E-07	2.232E-07	1.520E-07	1.109E-07	8.499E-08	6.761E-08
SSW	2.030E-05	7.482E-06	4.001E-06	1.968E-06	7.476E-07	3.893E-07	2.395E-07	1.632E-07	1.191E-07	9.129E-08	7.260E-08
SW	1.184E-05	5.226E-06	3.002E-06	1.535E-06	6.075E-07	3.235E-07	2.020E-07	1.392E-07	1.025E-07	7.909E-08	6.326E-08
WSW	1.048E-05	5.340E-06	3.283E-06	1.732E-06	7.055E-07	3.812E-07	2.403E-07	1.667E-07	1.234E-07	9.565E-08	7.680E-08
W	8.595E-06	3.986E-06	2.399E-06	1.260E-06	5.146E-07	2.794E-07	1.769E-07	1.233E-07	9.160E-08	7.129E-08	5.743E-08
WNW	1.436E-05	6.728E-06	4.467E-06	2.487E-06	1.079E-06	6.057E-07	3.926E-07	2.783E-07	2.097E-07	1.651E-07	1.344E-07
NW	2.741E-05	1.146E-05	7.211E-06	3.937E-06	1.685E-06	9.415E-07	6.087E-07	4.310E-07	3.245E-07	2.554E-07	2.077E-07
NNW	3.118E-05	1.284E-05	7.499E-06	3.890E-06	1.577E-06	8.555E-07	5.426E-07	3.788E-07	2.820E-07	2.200E-07	1.776E-07
N	3.492E-05	1.516E-05	9.037E-06	4.714E-06	1.920E-06	1.045E-06	6.642E-07	4.645E-07	3.464E-07	2.705E-07	2.186E-07
NNE	2.449E-05	1.001E-05	6.119E-06	3.281E-06	1.388E-06	7.753E-07	5.020E-07	3.561E-07	2.685E-07	2.116E-07	1.723E-07
NE	1.064E-05	4.072E-06	2.299E-06	1.176E-06	4.704E-07	2.537E-07	1.603E-07	1.116E-07	8.291E-08	6.454E-08	5.203E-08
ENE	1.103E-05	4.479E-06	2.515E-06	1.272E-06	5.005E-07	2.666E-07	1.668E-07	1.152E-07	8.501E-08	6.579E-08	5.276E-08
E	5.763E-06	2.295E-06	1.289E-06	6.538E-07	2.579E-07	1.376E-07	8.617E-08	5.955E-08	4.398E-08	3.405E-08	2.732E-08
ESE	1.068E-05	4.274E-06	2.385E-06	1.201E-06	4.696E-07	2.491E-07	1.554E-07	1.070E-07	7.883E-08	6.090E-08	4.876E-08
SE	1.356E-05	5.106E-06	2.759E-06	1.369E-06	5.294E-07	2.793E-07	1.736E-07	1.193E-07	8.766E-08	6.761E-08	5.406E-08
SSE	1.820E-05	6.255E-06	3.262E-06	1.592E-06	6.029E-07	3.138E-07	1.931E-07	1.316E-07	9.608E-08	7.368E-08	5.861E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	5.554E-08	2.805E-08	1.799E-08	1.025E-08	6.977E-09	5.192E-09	4.088E-09	3.344E-09	2.813E-09	2.417E-09	2.112E-09
SSW	5.946E-08	2.941E-08	1.857E-08	1.031E-08	6.881E-09	5.039E-09	3.913E-09	3.163E-09	2.632E-09	2.240E-09	1.940E-09
SW	5.202E-08	2.604E-08	1.655E-08	9.240E-09	6.143E-09	4.484E-09	3.472E-09	2.800E-09	2.325E-09	1.974E-09	1.707E-09
WSW	6.336E-08	3.211E-08	2.058E-08	1.162E-08	7.776E-09	5.706E-09	4.436E-09	3.588E-09	2.988E-09	2.544E-09	2.203E-09
W	4.753E-08	2.440E-08	1.580E-08	9.045E-09	6.118E-09	4.528E-09	3.545E-09	2.886E-09	2.416E-09	2.067E-09	1.798E-09
WNW	1.122E-07	5.945E-08	3.932E-08	2.318E-08	1.598E-08	1.200E-08	9.509E-09	7.816E-09	6.600E-09	5.687E-09	4.980E-09
NW	1.754E-07	9.188E-08	6.080E-08	3.590E-08	2.481E-08	1.866E-08	1.481E-08	1.219E-08	1.030E-08	8.890E-09	7.792E-09
NNW	1.472E-07	7.617E-08	4.959E-08	2.864E-08	1.948E-08	1.448E-08	1.138E-08	9.286E-09	7.793E-09	6.680E-09	5.822E-09
N	1.814E-07	9.418E-08	6.145E-08	3.537E-08	2.422E-08	1.802E-08	1.416E-08	1.156E-08	9.702E-09	8.317E-09	7.248E-09
NNE	1.439E-07	7.631E-08	5.046E-08	2.970E-08	2.045E-08	1.533E-08	1.213E-08	9.957E-09	8.397E-09	7.228E-09	6.324E-09
NE	4.308E-08	2.219E-08	1.441E-08	8.286E-09	5.623E-09	4.171E-09	3.272E-09	2.668E-09	2.237E-09	1.916E-09	1.668E-09
ENE	4.349E-08	2.199E-08	1.409E-08	7.958E-09	5.330E-09	3.913E-09	3.044E-09	2.464E-09	2.053E-09	1.749E-09	1.515E-09
E	2.253E-08	1.141E-08	7.318E-09	4.140E-09	2.778E-09	2.043E-09	1.591E-09	1.290E-09	1.076E-09	9.170E-10	7.954E-10
ESE	4.015E-08	2.024E-08	1.294E-08	7.273E-09	4.851E-09	3.550E-09	2.754E-09	2.224E-09	1.849E-09	1.572E-09	1.360E-09
SE	4.443E-08	2.231E-08	1.422E-08	7.970E-09	5.312E-09	3.886E-09	3.014E-09	2.434E-09	2.023E-09	1.720E-09	1.488E-09
SSE	4.800E-08	2.372E-08	1.496E-08	8.285E-09	5.501E-09	4.014E-09	3.108E-09	2.506E-09	2.081E-09	1.768E-09	1.529E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - FIRST QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.594E-05	4.746E-06	2.328E-06	1.101E-06	4.052E-07	2.084E-07	1.275E-07	8.665E-08	6.319E-08	4.845E-08	3.855E-08
SSW	1.097E-05	3.584E-06	1.827E-06	8.851E-07	3.388E-07	1.811E-07	1.148E-07	8.054E-08	6.033E-08	4.732E-08	3.840E-08
SW	6.512E-06	2.203E-06	1.137E-06	5.535E-07	2.104E-07	1.104E-07	6.842E-08	4.689E-08	3.437E-08	2.643E-08	2.106E-08
WSW	5.860E-06	1.975E-06	1.023E-06	5.003E-07	1.919E-07	1.015E-07	6.330E-08	4.360E-08	3.208E-08	2.475E-08	1.978E-08
W	6.631E-06	2.243E-06	1.175E-06	5.804E-07	2.264E-07	1.213E-07	7.636E-08	5.298E-08	3.920E-08	3.037E-08	2.436E-08
WNW	1.135E-05	3.864E-06	2.003E-06	9.804E-07	3.812E-07	2.067E-07	1.328E-07	9.441E-08	7.163E-08	5.685E-08	4.663E-08
NW	2.020E-05	6.932E-06	3.622E-06	1.773E-06	6.823E-07	3.628E-07	2.278E-07	1.582E-07	1.173E-07	9.119E-08	7.340E-08
NNW	1.489E-05	5.266E-06	2.801E-06	1.387E-06	5.433E-07	2.928E-07	1.860E-07	1.304E-07	9.761E-08	7.651E-08	6.205E-08
N	1.386E-05	4.798E-06	2.586E-06	1.297E-06	5.143E-07	2.779E-07	1.763E-07	1.232E-07	9.184E-08	7.171E-08	5.795E-08
NNE	1.610E-05	5.611E-06	3.025E-06	1.513E-06	5.964E-07	3.223E-07	2.058E-07	1.453E-07	1.097E-07	8.670E-08	7.093E-08
NE	1.469E-05	5.044E-06	2.702E-06	1.350E-06	5.334E-07	2.893E-07	1.850E-07	1.305E-07	9.834E-08	7.755E-08	6.327E-08
ENE	1.601E-05	5.493E-06	2.977E-06	1.504E-06	6.064E-07	3.344E-07	2.167E-07	1.547E-07	1.176E-07	9.351E-08	7.681E-08
E	1.021E-05	3.376E-06	1.799E-06	9.056E-07	3.648E-07	2.024E-07	1.325E-07	9.567E-08	7.357E-08	5.909E-08	4.898E-08
ESE	1.217E-05	3.948E-06	2.061E-06	1.020E-06	3.974E-07	2.133E-07	1.354E-07	9.510E-08	7.139E-08	5.616E-08	4.573E-08
SE	1.580E-05	5.146E-06	2.704E-06	1.347E-06	5.346E-07	2.911E-07	1.868E-07	1.324E-07	1.001E-07	7.930E-08	6.497E-08
SSE	1.976E-05	6.215E-06	3.171E-06	1.542E-06	5.883E-07	3.104E-07	1.939E-07	1.342E-07	9.932E-08	7.714E-08	6.210E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.169E-08	1.605E-08	1.032E-08	5.922E-09	4.076E-09	3.062E-09	2.429E-09	2.000E-09	1.693E-09	1.462E-09	1.284E-09
SSW	3.200E-08	1.684E-08	1.102E-08	6.372E-09	4.330E-09	3.205E-09	2.505E-09	2.033E-09	1.697E-09	1.446E-09	1.254E-09
SW	1.726E-08	8.490E-09	5.314E-09	2.888E-09	1.877E-09	1.344E-09	1.024E-09	8.134E-10	6.666E-10	5.594E-10	4.783E-10
WSW	1.625E-08	8.079E-09	5.090E-09	2.796E-09	1.838E-09	1.328E-09	1.019E-09	8.151E-10	6.719E-10	5.668E-10	4.870E-10
W	2.007E-08	1.006E-08	6.366E-09	3.514E-09	2.317E-09	1.678E-09	1.289E-09	1.032E-09	8.518E-10	7.192E-10	6.184E-10
WNW	3.921E-08	2.127E-08	1.418E-08	8.344E-09	5.706E-09	4.241E-09	3.327E-09	2.709E-09	2.268E-09	1.939E-09	1.686E-09
NW	6.069E-08	3.099E-08	1.992E-08	1.127E-08	7.559E-09	5.548E-09	4.311E-09	3.484E-09	2.897E-09	2.463E-09	2.131E-09
NNW	5.156E-08	2.705E-08	1.768E-08	1.017E-08	6.866E-09	5.058E-09	3.939E-09	3.189E-09	2.655E-09	2.260E-09	1.956E-09
N	4.810E-08	2.498E-08	1.631E-08	9.464E-09	6.472E-09	4.830E-09	3.807E-09	3.116E-09	2.622E-09	2.252E-09	1.967E-09
NNE	5.954E-08	3.232E-08	2.171E-08	1.299E-08	9.014E-09	6.781E-09	5.371E-09	4.409E-09	3.716E-09	3.196E-09	2.793E-09
NE	5.297E-08	2.845E-08	1.899E-08	1.131E-08	7.836E-09	5.897E-09	4.675E-09	3.842E-09	3.242E-09	2.791E-09	2.441E-09
ENE	6.469E-08	3.545E-08	2.392E-08	1.441E-08	1.004E-08	7.584E-09	6.032E-09	4.971E-09	4.205E-09	3.630E-09	3.182E-09
E	4.159E-08	2.341E-08	1.601E-08	9.749E-09	6.812E-09	5.143E-09	4.081E-09	3.354E-09	2.828E-09	2.433E-09	2.126E-09
ESE	3.825E-08	2.053E-08	1.370E-08	8.160E-09	5.656E-09	4.258E-09	3.377E-09	2.777E-09	2.344E-09	2.019E-09	1.767E-09
SE	5.465E-08	2.998E-08	2.036E-08	1.244E-08	8.786E-09	6.712E-09	5.388E-09	4.476E-09	3.812E-09	3.310E-09	2.917E-09
SSE	5.144E-08	2.665E-08	1.739E-08	1.012E-08	6.962E-09	5.219E-09	4.130E-09	3.391E-09	2.860E-09	2.463E-09	2.155E-09

COOPER NUCLEAR STATION - VENT RELEASE POINT - SECOND QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) SECTOR	DISTANCE IN MILES 0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.936E-05	7.590E-06	4.202E-06	2.110E-06	8.256E-07	4.381E-07	2.733E-07	1.883E-07	1.388E-07	1.072E-07	8.589E-08
SSW	2.251E-05	9.971E-06	5.942E-06	3.095E-06	1.254E-06	6.788E-07	4.293E-07	2.989E-07	2.220E-07	1.728E-07	1.392E-07
SW	1.618E-05	7.820E-06	4.810E-06	2.546E-06	1.047E-06	5.708E-07	3.626E-07	2.533E-07	1.886E-07	1.470E-07	1.186E-07
WSW	1.256E-05	5.721E-06	3.488E-06	1.846E-06	7.602E-07	4.150E-07	2.639E-07	1.845E-07	1.374E-07	1.072E-07	8.657E-08
W	1.559E-05	6.531E-06	3.845E-06	2.008E-06	8.184E-07	4.444E-07	2.816E-07	1.963E-07	1.460E-07	1.137E-07	9.166E-08
WNW	2.259E-05	9.311E-06	5.492E-06	2.875E-06	1.174E-06	6.384E-07	4.050E-07	2.827E-07	2.104E-07	1.639E-07	1.322E-07
NW	3.042E-05	1.361E-05	8.278E-06	4.378E-06	1.803E-06	9.853E-07	6.272E-07	4.388E-07	3.272E-07	2.554E-07	2.063E-07
NNW	3.109E-05	1.372E-05	8.171E-06	4.268E-06	1.738E-06	9.449E-07	5.996E-07	4.186E-07	3.117E-07	2.430E-07	1.961E-07
N	3.418E-05	1.408E-05	8.235E-06	4.268E-06	1.728E-06	9.366E-07	5.936E-07	4.141E-07	3.082E-07	2.403E-07	1.939E-07
NNE	2.733E-05	1.002E-05	5.520E-06	2.784E-06	1.098E-06	5.876E-07	3.694E-07	2.563E-07	1.899E-07	1.476E-07	1.188E-07
NE	1.136E-05	4.253E-06	2.297E-06	1.133E-06	4.380E-07	2.304E-07	1.430E-07	9.812E-08	7.205E-08	5.553E-08	4.437E-08
ENE	7.685E-06	2.909E-06	1.586E-06	7.897E-07	3.048E-07	1.603E-07	9.935E-08	6.808E-08	4.992E-08	3.842E-08	3.066E-08
E	7.468E-06	2.972E-06	1.691E-06	8.660E-07	3.453E-07	1.853E-07	1.165E-07	8.078E-08	5.980E-08	4.641E-08	3.730E-08
ESE	7.562E-06	3.323E-06	1.909E-06	9.730E-07	3.841E-07	2.044E-07	1.277E-07	8.800E-08	6.482E-08	5.007E-08	4.008E-08
SE	9.260E-06	3.718E-06	2.106E-06	1.070E-06	4.232E-07	2.259E-07	1.415E-07	9.776E-08	7.219E-08	5.589E-08	4.484E-08
SSE	1.066E-05	3.967E-06	2.125E-06	1.049E-06	4.032E-07	2.117E-07	1.311E-07	8.979E-08	6.582E-08	5.065E-08	4.042E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) BEARING	DISTANCE IN MILES 5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	7.076E-08	3.577E-08	2.293E-08	1.296E-08	8.698E-09	6.399E-09	4.986E-09	4.042E-09	3.372E-09	2.876E-09	2.495E-09
SSW	1.153E-07	5.944E-08	3.860E-08	2.222E-08	1.510E-08	1.121E-08	8.804E-09	7.182E-09	6.025E-09	5.162E-09	4.498E-09
SW	9.832E-08	5.074E-08	3.296E-08	1.896E-08	1.286E-08	9.539E-09	7.482E-09	6.098E-09	5.111E-09	4.376E-09	3.810E-09
WSW	7.179E-08	3.715E-08	2.419E-08	1.397E-08	9.505E-09	7.067E-09	5.555E-09	4.535E-09	3.808E-09	3.265E-09	2.847E-09
W	7.593E-08	3.916E-08	2.543E-08	1.464E-08	9.941E-09	7.379E-09	5.793E-09	4.726E-09	3.965E-09	3.398E-09	2.961E-09
WNW	1.096E-07	5.650E-08	3.670E-08	2.112E-08	1.435E-08	1.065E-08	8.361E-09	6.821E-09	5.722E-09	4.903E-09	4.273E-09
NW	1.712E-07	8.868E-08	5.777E-08	3.337E-08	2.271E-08	1.688E-08	1.327E-08	1.083E-08	9.090E-09	7.793E-09	6.793E-09
NNW	1.626E-07	8.400E-08	5.462E-08	3.147E-08	2.136E-08	1.585E-08	1.244E-08	1.014E-08	8.499E-09	7.278E-09	6.338E-09
N	1.607E-07	8.303E-08	5.401E-08	3.113E-08	2.115E-08	1.570E-08	1.232E-08	1.005E-08	8.429E-09	7.220E-09	6.288E-09
NNE	9.825E-08	5.049E-08	3.275E-08	1.884E-08	1.280E-08	9.502E-09	7.461E-09	6.088E-09	5.108E-09	4.377E-09	3.814E-09
NE	3.648E-08	1.829E-08	1.165E-08	6.536E-09	4.365E-09	3.198E-09	2.483E-09	2.007E-09	1.670E-09	1.421E-09	1.230E-09
ENE	2.516E-08	1.253E-08	7.941E-09	4.420E-09	2.937E-09	2.144E-09	1.660E-09	1.338E-09	1.111E-09	9.431E-10	8.150E-10
E	3.082E-08	1.574E-08	1.015E-08	5.800E-09	3.925E-09	2.906E-09	2.277E-09	1.854E-09	1.553E-09	1.329E-09	1.157E-09
ESE	3.299E-08	1.661E-08	1.060E-08	5.952E-09	3.970E-09	2.903E-09	2.254E-09	1.820E-09	1.513E-09	1.286E-09	1.113E-09
SE	3.697E-08	1.874E-08	1.202E-08	6.809E-09	4.576E-09	3.369E-09	2.627E-09	2.130E-09	1.778E-09	1.517E-09	1.316E-09
SSE	3.319E-08	1.656E-08	1.051E-08	5.861E-09	3.894E-09	2.842E-09	2.200E-09	1.774E-09	1.473E-09	1.251E-09	1.081E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - SECOND QUARTER 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.300E-05	4.200E-06	2.138E-06	1.042E-06	4.093E-07	2.223E-07	1.421E-07	1.000E-07	7.507E-08	5.897E-08	4.792E-08
SSW	7.173E-06	2.342E-06	1.207E-06	5.903E-07	2.281E-07	1.223E-07	7.778E-08	5.478E-08	4.123E-08	3.251E-08	2.651E-08
SW	1.048E-05	3.679E-06	1.908E-06	9.386E-07	3.698E-07	2.024E-07	1.321E-07	9.576E-08	7.427E-08	6.027E-08	5.050E-08
WSW	8.072E-06	2.722E-06	1.457E-06	7.364E-07	2.971E-07	1.625E-07	1.040E-07	7.334E-08	5.518E-08	4.348E-08	3.547E-08
W	1.313E-05	4.306E-06	2.231E-06	1.096E-06	4.244E-07	2.272E-07	1.439E-07	1.009E-07	7.566E-08	5.946E-08	4.837E-08
WNW	1.879E-05	6.438E-06	3.373E-06	1.658E-06	6.404E-07	3.411E-07	2.144E-07	1.490E-07	1.106E-07	8.602E-08	6.929E-08
NW	1.768E-05	6.133E-06	3.225E-06	1.587E-06	6.162E-07	3.316E-07	2.115E-07	1.493E-07	1.126E-07	8.895E-08	7.267E-08
NNW	2.360E-05	8.189E-06	4.303E-06	2.115E-06	8.184E-07	4.366E-07	2.748E-07	1.911E-07	1.420E-07	1.106E-07	8.925E-08
N	2.350E-05	8.065E-06	4.282E-06	2.123E-06	8.278E-07	4.423E-07	2.783E-07	1.933E-07	1.434E-07	1.115E-07	8.984E-08
NNE	1.744E-05	5.908E-06	3.137E-06	1.560E-06	6.122E-07	3.294E-07	2.088E-07	1.460E-07	1.091E-07	8.542E-08	6.925E-08
NE	1.278E-05	4.304E-06	2.287E-06	1.141E-06	4.529E-07	2.468E-07	1.584E-07	1.121E-07	8.463E-08	6.686E-08	5.461E-08
ENE	1.238E-05	4.167E-06	2.210E-06	1.102E-06	4.399E-07	2.421E-07	1.568E-07	1.118E-07	8.488E-08	6.735E-08	5.520E-08
E	9.296E-06	3.043E-06	1.600E-06	8.012E-07	3.238E-07	1.803E-07	1.180E-07	8.485E-08	6.489E-08	5.179E-08	4.266E-08
ESE	6.715E-06	2.137E-06	1.099E-06	5.424E-07	2.171E-07	1.214E-07	8.013E-08	5.816E-08	4.485E-08	3.605E-08	2.987E-08
SE	8.080E-06	2.652E-06	1.360E-06	6.642E-07	2.598E-07	1.409E-07	9.003E-08	6.338E-08	4.756E-08	3.732E-08	3.029E-08
SSE	9.671E-06	3.218E-06	1.661E-06	8.119E-07	3.176E-07	1.730E-07	1.117E-07	7.972E-08	6.071E-08	4.835E-08	3.979E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	4.004E-08	2.147E-08	1.437E-08	8.672E-09	6.108E-09	4.661E-09	3.740E-09	3.107E-09	2.646E-09	2.297E-09	2.024E-09
SSW	2.223E-08	1.200E-08	8.012E-09	4.764E-09	3.306E-09	2.487E-09	1.970E-09	1.618E-09	1.364E-09	1.173E-09	1.025E-09
SW	4.332E-08	2.541E-08	1.783E-08	1.116E-08	7.916E-09	6.031E-09	4.816E-09	3.975E-09	3.364E-09	2.902E-09	2.541E-09
WSW	2.978E-08	1.636E-08	1.117E-08	6.935E-09	4.995E-09	3.870E-09	3.140E-09	2.630E-09	2.254E-09	1.967E-09	1.741E-09
W	4.042E-08	2.155E-08	1.429E-08	8.416E-09	5.785E-09	4.322E-09	3.405E-09	2.783E-09	2.337E-09	2.004E-09	1.746E-09
WNW	5.734E-08	2.940E-08	1.898E-08	1.081E-08	7.271E-09	5.352E-09	4.168E-09	3.375E-09	2.812E-09	2.395E-09	2.074E-09
NW	6.094E-08	3.283E-08	2.185E-08	1.286E-08	8.804E-09	6.547E-09	5.134E-09	4.178E-09	3.493E-09	2.983E-09	2.589E-09
NNW	7.400E-08	3.835E-08	2.505E-08	1.457E-08	9.987E-09	7.470E-09	5.903E-09	4.843E-09	4.084E-09	3.516E-09	3.077E-09
N	7.438E-08	3.833E-08	2.490E-08	1.435E-08	9.761E-09	7.254E-09	5.698E-09	4.650E-09	3.901E-09	3.343E-09	2.913E-09
NNE	5.768E-08	3.093E-08	2.027E-08	1.208E-08	8.416E-09	6.370E-09	5.079E-09	4.196E-09	3.557E-09	3.076E-09	2.701E-09
NE	4.576E-08	2.459E-08	1.636E-08	9.654E-09	6.632E-09	4.952E-09	3.900E-09	3.186E-09	2.674E-09	2.292E-09	1.997E-09
ENE	4.640E-08	2.520E-08	1.689E-08	1.008E-08	6.994E-09	5.262E-09	4.170E-09	3.425E-09	2.888E-09	2.485E-09	2.173E-09
E	3.601E-08	1.981E-08	1.333E-08	7.954E-09	5.496E-09	4.119E-09	3.252E-09	2.663E-09	2.240E-09	1.923E-09	1.678E-09
ESE	2.535E-08	1.419E-08	9.651E-09	5.831E-09	4.061E-09	3.061E-09	2.427E-09	1.994E-09	1.681E-09	1.447E-09	1.265E-09
SE	2.524E-08	1.328E-08	8.712E-09	5.067E-09	3.462E-09	2.578E-09	2.027E-09	1.654E-09	1.388E-09	1.189E-09	1.036E-09
SSE	3.358E-08	1.850E-08	1.248E-08	7.458E-09	5.148E-09	3.851E-09	3.033E-09	2.477E-09	2.077E-09	1.778E-09	1.547E-09

COOPER NUCLEAR STATION - VENT RELEASE POINT - FIRST SEMI-ANNUAL 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.071E-05	7.449E-06	4.001E-06	1.982E-06	7.641E-07	4.018E-07	2.491E-07	1.708E-07	1.253E-07	9.655E-08	7.713E-08
SSW	2.162E-05	8.865E-06	5.074E-06	2.590E-06	1.027E-06	5.485E-07	3.438E-07	2.377E-07	1.756E-07	1.361E-07	1.092E-07
SW	1.428E-05	6.712E-06	4.026E-06	2.104E-06	8.535E-07	4.616E-07	2.915E-07	2.026E-07	1.503E-07	1.168E-07	9.394E-08
WSW	1.199E-05	5.792E-06	3.538E-06	1.866E-06	7.630E-07	4.139E-07	2.619E-07	1.822E-07	1.353E-07	1.052E-07	8.464E-08
W	1.249E-05	5.418E-06	3.218E-06	1.685E-06	6.871E-07	3.731E-07	2.363E-07	1.647E-07	1.224E-07	9.532E-08	7.683E-08
WNW	1.900E-05	8.255E-06	5.093E-06	2.731E-06	1.142E-06	6.290E-07	4.025E-07	2.827E-07	2.114E-07	1.655E-07	1.339E-07
NW	2.917E-05	1.271E-05	7.839E-06	4.201E-06	1.759E-06	9.707E-07	6.222E-07	4.377E-07	3.278E-07	2.569E-07	2.082E-07
NNW	3.176E-05	1.366E-05	8.078E-06	4.208E-06	1.710E-06	9.291E-07	5.895E-07	4.115E-07	3.065E-07	2.390E-07	1.929E-07
N	3.484E-05	1.480E-05	8.748E-06	4.549E-06	1.847E-06	1.003E-06	6.366E-07	4.446E-07	3.312E-07	2.584E-07	2.086E-07
NNE	2.588E-05	9.998E-06	5.794E-06	3.014E-06	1.233E-06	6.755E-07	4.316E-07	3.031E-07	2.268E-07	1.776E-07	1.439E-07
NE	1.116E-05	4.223E-06	2.329E-06	1.172E-06	4.600E-07	2.451E-07	1.535E-07	1.062E-07	7.844E-08	6.078E-08	4.879E-08
ENE	9.290E-06	3.656E-06	2.025E-06	1.017E-06	3.969E-07	2.103E-07	1.310E-07	9.022E-08	6.641E-08	5.128E-08	4.105E-08
E	6.670E-06	2.690E-06	1.528E-06	7.810E-07	3.106E-07	1.664E-07	1.046E-07	7.243E-08	5.358E-08	4.155E-08	3.338E-08
ESE	9.054E-06	3.817E-06	2.166E-06	1.098E-06	4.318E-07	2.295E-07	1.433E-07	9.880E-08	7.279E-08	5.624E-08	4.503E-08
SE	1.112E-05	4.304E-06	2.374E-06	1.190E-06	4.650E-07	2.466E-07	1.538E-07	1.060E-07	7.805E-08	6.031E-08	4.830E-08
SSE	1.407E-05	4.977E-06	2.622E-06	1.285E-06	4.897E-07	2.558E-07	1.578E-07	1.078E-07	7.884E-08	6.055E-08	4.823E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	6.347E-08	3.209E-08	2.058E-08	1.167E-08	7.860E-09	5.825E-09	4.559E-09	3.710E-09	3.106E-09	2.658E-09	2.313E-09
SSW	9.012E-08	4.588E-08	2.955E-08	1.684E-08	1.138E-08	8.421E-09	6.592E-09	5.364E-09	4.490E-09	3.840E-09	3.341E-09
SW	7.765E-08	3.966E-08	2.558E-08	1.457E-08	9.823E-09	7.249E-09	5.662E-09	4.599E-09	3.844E-09	3.283E-09	2.852E-09
WSW	6.999E-08	3.582E-08	2.313E-08	1.320E-08	8.908E-09	6.579E-09	5.143E-09	4.180E-09	3.495E-09	2.986E-09	2.595E-09
W	6.362E-08	3.274E-08	2.124E-08	1.220E-08	8.269E-09	6.131E-09	4.808E-09	3.919E-09	3.285E-09	2.813E-09	2.450E-09
WNW	1.113E-07	5.807E-08	3.799E-08	2.208E-08	1.509E-08	1.126E-08	8.870E-09	7.259E-09	6.106E-09	5.244E-09	4.579E-09
NW	1.732E-07	9.068E-08	5.952E-08	3.474E-08	2.382E-08	1.781E-08	1.406E-08	1.152E-08	9.705E-09	8.345E-09	7.294E-09
NNW	1.599E-07	8.268E-08	5.380E-08	3.103E-08	2.108E-08	1.565E-08	1.229E-08	1.002E-08	8.407E-09	7.202E-09	6.273E-09
N	1.730E-07	8.958E-08	5.835E-08	3.369E-08	2.291E-08	1.702E-08	1.337E-08	1.091E-08	9.149E-09	7.838E-09	6.828E-09
NNE	1.197E-07	6.263E-08	4.107E-08	2.394E-08	1.639E-08	1.224E-08	9.650E-09	7.901E-09	6.649E-09	5.713E-09	4.989E-09
NE	4.027E-08	2.049E-08	1.319E-08	7.500E-09	5.052E-09	3.727E-09	2.911E-09	2.364E-09	1.975E-09	1.687E-09	1.465E-09
ENE	3.378E-08	1.698E-08	1.083E-08	6.084E-09	4.063E-09	2.976E-09	2.311E-09	1.867E-09	1.554E-09	1.322E-09	1.144E-09
E	2.756E-08	1.404E-08	9.040E-09	5.146E-09	3.472E-09	2.564E-09	2.004E-09	1.629E-09	1.362E-09	1.164E-09	1.012E-09
ESE	3.708E-08	1.869E-08	1.195E-08	6.714E-09	4.479E-09	3.279E-09	2.544E-09	2.054E-09	1.708E-09	1.452E-09	1.256E-09
SE	3.977E-08	2.005E-08	1.282E-08	7.221E-09	4.832E-09	3.545E-09	2.757E-09	2.231E-09	1.858E-09	1.582E-09	1.371E-09
SSE	3.954E-08	1.963E-08	1.242E-08	6.900E-09	4.586E-09	3.348E-09	2.593E-09	2.092E-09	1.738E-09	1.476E-09	1.277E-09

COOPER NUCLEAR STATION - ELEVATED RELEASE POINT - FIRST SEMI-ANNUAL 1982
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.440E-05	4.457E-06	2.228E-06	1.070E-06	4.067E-07	2.150E-07	1.345E-07	9.314E-08	6.898E-08	5.360E-08	4.315E-08
SSW	8.976E-06	2.937E-06	1.506E-06	7.324E-07	2.815E-07	1.507E-07	9.564E-08	6.719E-08	5.043E-08	3.964E-08	3.224E-08
SW	8.332E-06	2.881E-06	1.493E-06	7.323E-07	2.857E-07	1.547E-07	9.960E-08	7.112E-08	5.433E-08	4.346E-08	3.594E-08
WSW	7.050E-06	2.378E-06	1.260E-06	6.311E-07	2.519E-07	1.370E-07	8.733E-08	6.133E-08	4.594E-08	3.604E-08	2.926E-08
W	1.049E-05	3.481E-06	1.807E-06	8.892E-07	3.460E-07	1.858E-07	1.178E-07	8.249E-08	6.171E-08	4.836E-08	3.922E-08
WNW	1.547E-05	5.288E-06	2.761E-06	1.356E-06	5.248E-07	2.813E-07	1.785E-07	1.253E-07	9.404E-08	7.392E-08	6.012E-08
NW	1.833E-05	6.315E-06	3.309E-06	1.625E-06	6.282E-07	3.363E-07	2.131E-07	1.493E-07	1.119E-07	8.777E-08	7.127E-08
NNW	1.913E-05	6.669E-06	3.517E-06	1.732E-06	6.727E-07	3.603E-07	2.278E-07	1.592E-07	1.189E-07	9.303E-08	7.539E-08
N	1.966E-05	6.774E-06	3.608E-06	1.793E-06	7.024E-07	3.766E-07	2.375E-07	1.653E-07	1.228E-07	9.562E-08	7.710E-08
NNE	1.656E-05	5.672E-06	3.034E-06	1.513E-06	5.953E-07	3.212E-07	2.045E-07	1.439E-07	1.082E-07	8.522E-08	6.949E-08
NE	1.357E-05	4.620E-06	2.467E-06	1.233E-06	4.886E-07	2.660E-07	1.707E-07	1.209E-07	9.133E-08	7.221E-08	5.903E-08
ENE	1.367E-05	4.658E-06	2.500E-06	1.256E-06	5.037E-07	2.776E-07	1.801E-07	1.288E-07	9.815E-08	7.818E-08	6.433E-08
E	9.667E-06	3.199E-06	1.698E-06	8.527E-07	3.434E-07	1.905E-07	1.246E-07	8.975E-08	6.883E-08	5.513E-08	4.557E-08
ESE	9.684E-06	3.146E-06	1.638E-06	8.095E-07	3.180E-07	1.731E-07	1.114E-07	7.923E-08	6.009E-08	4.768E-08	3.909E-08
SE	1.185E-05	3.870E-06	2.015E-06	9.968E-07	3.936E-07	2.142E-07	1.373E-07	9.717E-08	7.336E-08	5.798E-08	4.739E-08
SSE	1.489E-05	4.785E-06	2.454E-06	1.196E-06	4.605E-07	2.456E-07	1.552E-07	1.086E-07	8.123E-08	6.370E-08	5.172E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.581E-08	1.877E-08	1.238E-08	7.346E-09	5.141E-09	3.907E-09	3.127E-09	2.592E-09	2.205E-09	1.912E-09	1.684E-09
SSW	2.694E-08	1.433E-08	9.467E-09	5.542E-09	3.801E-09	2.834E-09	2.228E-09	1.818E-09	1.524E-09	1.305E-09	1.136E-09
SW	3.047E-08	1.713E-08	1.172E-08	7.126E-09	4.968E-09	3.742E-09	2.963E-09	2.429E-09	2.044E-09	1.755E-09	1.531E-09
WSW	2.444E-08	1.310E-08	8.764E-09	5.284E-09	3.727E-09	2.844E-09	2.280E-09	1.892E-09	1.609E-09	1.395E-09	1.228E-09
W	3.266E-08	1.716E-08	1.124E-08	6.509E-09	4.424E-09	3.277E-09	2.564E-09	2.084E-09	1.742E-09	1.487E-09	1.292E-09
WNW	5.019E-08	2.659E-08	1.750E-08	1.017E-08	6.911E-09	5.117E-09	4.002E-09	3.251E-09	2.715E-09	2.317E-09	2.011E-09
NW	5.942E-08	3.133E-08	2.057E-08	1.193E-08	8.105E-09	5.998E-09	4.688E-09	3.806E-09	3.176E-09	2.708E-09	2.348E-09
NNW	6.274E-08	3.296E-08	2.167E-08	1.265E-08	8.656E-09	6.456E-09	5.085E-09	4.158E-09	3.494E-09	2.998E-09	2.616E-09
N	6.389E-08	3.300E-08	2.147E-08	1.240E-08	8.447E-09	6.285E-09	4.942E-09	4.037E-09	3.390E-09	2.907E-09	2.535E-09
NNE	5.819E-08	3.136E-08	2.102E-08	1.262E-08	8.799E-09	6.654E-09	5.297E-09	4.368E-09	3.696E-09	3.190E-09	2.796E-09
NE	4.952E-08	2.675E-08	1.789E-08	1.065E-08	7.362E-09	5.527E-09	4.372E-09	3.585E-09	3.019E-09	2.595E-09	2.266E-09
ENE	5.427E-08	2.990E-08	2.023E-08	1.220E-08	8.499E-09	6.416E-09	5.097E-09	4.196E-09	3.545E-09	3.056E-09	2.677E-09
E	3.861E-08	2.155E-08	1.465E-08	8.854E-09	6.165E-09	4.644E-09	3.679E-09	3.021E-09	2.545E-09	2.188E-09	1.911E-09
ESE	3.289E-08	1.798E-08	1.210E-08	7.258E-09	5.046E-09	3.802E-09	3.017E-09	2.480E-09	2.094E-09	1.803E-09	1.577E-09
SE	3.977E-08	2.160E-08	1.454E-08	8.777E-09	6.148E-09	4.667E-09	3.727E-09	3.082E-09	2.615E-09	2.263E-09	1.988E-09
SSE	4.315E-08	2.292E-08	1.517E-08	8.921E-09	6.142E-09	4.598E-09	3.629E-09	2.972E-09	2.500E-09	2.147E-09	1.874E-09

COOPER NUCLEAR STATION - COMBINED RELEASE - FIRST QUARTER 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

SECTOR	DISTANCE IN MILES 0.500	1.000	2.000	3.000	4.000	5.000	10.000	20.000	30.000	40.000	50.000
S	1.07E+00	2.42E-01	4.01E-02	1.47E-02	7.55E-03	4.55E-03	1.08E-03	2.50E-04	9.47E-05	4.49E-05	2.45E-05
SSW	1.06E+00	2.47E-01	4.24E-02	1.57E-02	8.07E-03	4.83E-03	1.07E-03	2.30E-04	8.32E-05	3.80E-05	2.02E-05
SW	7.03E-01	1.82E-01	3.19E-02	1.19E-02	6.15E-03	3.71E-03	7.94E-04	1.51E-04	4.92E-05	2.10E-05	1.07E-05
WSW	6.39E-01	1.63E-01	2.75E-02	9.82E-03	4.70E-03	2.62E-03	4.21E-04	6.29E-05	2.08E-05	9.56E-06	5.29E-06
W	5.44E-01	1.51E-01	2.71E-02	1.04E-02	5.45E-03	3.31E-03	7.17E-04	1.37E-04	4.41E-05	1.87E-05	9.54E-06
WNW	8.58E-01	2.52E-01	4.83E-02	1.88E-02	9.69E-03	5.64E-03	1.08E-03	1.78E-04	5.85E-05	2.70E-05	1.51E-05
NW	1.60E+00	4.74E-01	9.24E-02	3.69E-02	1.97E-02	1.22E-02	2.83E-03	5.75E-04	1.94E-04	8.53E-05	4.42E-05
NNW	1.77E+00	4.74E-01	8.76E-02	3.41E-02	1.80E-02	1.12E-02	2.60E-03	5.49E-04	1.90E-04	8.41E-05	4.37E-05
N	2.00E+00	5.66E-01	1.07E-01	4.14E-02	2.19E-02	1.35E-02	3.23E-03	7.00E-04	2.48E-04	1.11E-04	5.80E-05
NNE	1.41E+00	4.06E-01	7.69E-02	3.03E-02	1.60E-02	9.77E-03	2.18E-03	4.32E-04	1.50E-04	6.80E-05	3.67E-05
NE	6.37E-01	1.60E-01	3.10E-02	1.20E-02	6.42E-03	3.96E-03	9.47E-04	2.10E-04	7.62E-05	3.48E-05	1.84E-05
ENE	6.84E-01	1.76E-01	3.20E-02	1.24E-02	6.52E-03	3.97E-03	9.17E-04	1.91E-04	6.81E-05	3.09E-05	1.64E-05
E	3.66E-01	9.23E-02	1.69E-02	6.59E-03	3.43E-03	2.07E-03	4.63E-04	9.36E-05	3.29E-05	1.48E-05	7.92E-06
ESE	6.36E-01	1.57E-01	2.87E-02	1.09E-02	5.66E-03	3.43E-03	7.73E-04	1.60E-04	5.53E-05	2.45E-05	1.26E-05
SE	7.79E-01	1.87E-01	3.29E-02	1.26E-02	6.67E-03	4.07E-03	9.41E-04	1.98E-04	7.04E-05	3.20E-05	1.70E-05
SSE	9.58E-01	2.21E-01	3.94E-02	1.50E-02	7.78E-03	4.74E-03	1.16E-03	2.88E-04	1.14E-04	5.53E-05	3.03E-05

COOPER NUCLEAR STATION - COMBINED RELEASE - SECOND QUARTER 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

SECTOR	DISTANCE IN MILES 0.500	1.000	2.000	3.000	4.000	5.000	10.000	20.000	30.000	40.000	50.000
S	1.14E+00	2.68E-01	4.62E-02	1.75E-02	9.04E-03	5.34E-03	1.18E-03	2.28E-04	7.36E-05	3.08E-05	1.52E-05
SSW	1.43E+00	3.75E-01	6.61E-02	2.50E-02	1.29E-02	7.79E-03	1.65E-03	3.02E-04	9.35E-05	3.80E-05	1.86E-05
SW	1.12E+00	3.03E-01	5.52E-02	2.10E-02	1.09E-02	6.54E-03	1.37E-03	2.41E-04	7.31E-05	2.94E-05	1.44E-05
WSW	8.18E-01	2.25E-01	4.04E-02	1.54E-02	8.04E-03	4.80E-03	1.02E-03	1.80E-04	5.51E-05	2.23E-05	1.09E-05
W	9.65E-01	2.53E-01	4.50E-02	1.71E-02	8.92E-03	5.34E-03	1.15E-03	2.10E-04	6.44E-05	2.59E-05	1.26E-05
WNW	1.39E+00	3.66E-01	6.60E-02	2.50E-02	1.30E-02	7.84E-03	1.74E-03	3.25E-04	1.03E-04	4.16E-05	2.02E-05
NW	1.93E+00	5.40E-01	9.78E-02	3.74E-02	1.95E-02	1.18E-02	2.53E-03	4.54E-04	1.40E-04	5.66E-05	2.75E-05
NNW	2.09E+00	5.43E-01	9.67E-02	3.72E-02	1.93E-02	1.17E-02	2.60E-03	4.93E-04	1.54E-04	6.25E-05	3.04E-05
N	2.14E+00	5.70E-01	1.01E-01	3.90E-02	2.01E-02	1.24E-02	2.88E-03	6.04E-04	2.07E-04	8.81E-05	4.42E-05
NNE	1.59E+00	3.88E-01	6.87E-02	2.62E-02	1.37E-02	8.48E-03	2.07E-03	4.80E-04	1.78E-04	8.11E-05	4.23E-05
NE	6.79E-01	1.62E-01	2.80E-02	1.06E-02	5.44E-03	3.29E-03	7.84E-04	1.74E-04	6.36E-05	2.90E-05	1.51E-05
ENE	4.68E-01	1.12E-01	1.91E-02	7.18E-03	3.66E-03	2.21E-03	4.81E-04	9.39E-05	3.06E-05	1.29E-05	6.40E-06
E	4.55E-01	1.15E-01	2.00E-02	7.68E-03	3.95E-03	2.40E-03	5.30E-04	1.00E-04	3.18E-05	1.31E-05	6.45E-06
ESE	4.92E-01	1.22E-01	2.12E-02	7.81E-03	3.97E-03	2.38E-03	4.92E-04	8.80E-05	2.70E-05	1.10E-05	5.34E-06
SE	5.75E-01	1.46E-01	2.43E-02	9.20E-03	4.73E-03	2.87E-03	6.46E-04	1.27E-04	4.14E-05	1.73E-05	8.50E-06
SSE	6.22E-01	1.44E-01	2.47E-02	9.13E-03	4.67E-03	2.80E-03	6.39E-04	1.32E-04	4.58E-05	1.98E-05	1.00E-05

COOPER NUCLEAR STATION - COMBINED RELEASE - FIRST SEMIANNUAL 1982
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

SECTOR	DISTANCE IN MILES 0.500	1.000	2.000	3.000	4.000	5.000	10.000	20.000	30.000	40.000	50.000
S	2.21E+00	5.10E-01	8.63E-02	3.22E-02	1.66E-02	9.90E-03	2.26E-03	4.77E-04	1.68E-04	7.57E-05	3.97E-05
SSW	2.48E+00	6.22E-01	1.09E-01	4.07E-02	2.10E-02	1.26E-02	2.73E-03	5.33E-04	1.77E-04	7.60E-05	3.88E-05
SW	1.83E+00	4.84E-01	8.71E-02	3.29E-02	1.70E-02	1.02E-02	2.16E-03	3.92E-04	1.22E-04	5.04E-05	2.51E-05
WSW	1.46E+00	3.88E-01	6.79E-02	2.53E-02	1.27E-02	7.42E-03	1.44E-03	2.43E-04	7.58E-05	3.18E-05	1.62E-05
W	1.51E+00	4.03E-01	7.21E-02	2.75E-02	1.44E-02	8.66E-03	1.87E-03	3.46E-04	1.09E-04	4.47E-05	2.21E-05
WNW	2.25E+00	6.18E-01	1.14E-01	4.38E-02	2.27E-02	1.35E-02	2.81E-03	5.03E-04	1.61E-04	6.86E-05	3.52E-05
NW	3.53E+00	1.01E+00	1.90E-01	7.42E-02	3.92E-02	2.39E-02	5.37E-03	1.03E-03	3.35E-04	1.42E-04	7.17E-05
NNW	3.86E+00	1.02E+00	1.84E-01	7.14E-02	3.73E-02	2.29E-02	5.19E-03	1.04E-03	3.44E-04	1.47E-04	7.41E-05
N	4.15E+00	1.14E+00	2.08E-01	8.04E-02	4.20E-02	2.59E-02	6.11E-03	1.30E-03	4.54E-04	1.99E-04	1.02E-04
NNE	3.00E+00	7.94E-01	1.46E-01	5.65E-02	2.97E-02	1.82E-02	4.25E-03	9.13E-04	3.28E-04	1.49E-04	7.90E-05
NE	1.32E+00	3.21E-01	5.90E-02	2.26E-02	1.19E-02	7.25E-03	1.73E-03	3.85E-04	1.40E-04	6.38E-05	3.35E-05
ENE	1.15E+00	2.87E-01	5.11E-02	1.96E-02	1.02E-02	6.13E-03	1.40E-03	2.85E-04	9.87E-05	4.38E-05	2.28E-05
E	8.21E-01	2.07E-01	3.69E-02	1.43E-02	7.39E-03	4.47E-03	9.93E-04	1.94E-04	6.47E-05	2.80E-05	1.44E-05
ESE	1.13E+00	2.79E-01	4.99E-02	1.87E-02	9.63E-03	5.81E-03	1.27E-03	2.48E-04	8.23E-05	3.55E-05	1.80E-05
SE	1.35E+00	3.33E-01	5.71E-02	2.18E-02	1.14E-02	6.94E-03	1.59E-03	3.25E-04	1.12E-04	4.93E-05	2.55E-05
SSE	1.58E+00	3.66E-01	6.41E-02	2.41E-02	1.25E-02	7.54E-03	1.80E-03	4.20E-04	1.59E-04	7.52E-05	4.03E-05

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.18E-02 96.10%	3.18E-02 98.83%	3.18E-02 85.82%	3.18E-02 98.75%	3.18E-02 98.94%	3.18E-02 52.42%	3.22E-02 99.37%	7.10E-02 99.78%
GROUND	1.31E-04 0.40%	1.31E-04 0.41%	1.31E-04 0.35%	1.31E-04 0.41%	1.31E-04 0.41%	1.31E-04 0.22%	1.31E-04 0.40%	1.53E-04 0.22%
INHAL	1.05E-05 0.03%	7.10E-06 0.02%	1.29E-04 0.35%	5.65E-06 0.02%	7.32E-06 0.02%	9.91E-04 1.64%	5.41E-05 0.17%	0.0 0.0 %
VEGET	9.73E-04 2.94%	2.04E-04 0.64%	4.41E-03 11.91%	1.04E-04 0.32%	7.98E-05 0.25%	1.10E-02 18.06%	7.95E-06 0.02%	0.0 0.0 %
COW MILK	1.60E-04 0.48%	2.74E-05 0.09%	5.21E-04 1.41%	1.53E-04 0.48%	1.19E-04 0.37%	1.64E-02 27.11%	1.17E-05 0.04%	0.0 0.0 %
MEAT	1.64E-05 0.05%	7.53E-06 0.02%	5.82E-05 0.16%	7.13E-06 0.02%	3.69E-06 0.01%	3.37E-04 0.56%	6.59E-07 0.00%	0.0 0.0 %
TOTAL	3.31E-02	3.22E-02	3.70E-02	3.22E-02	3.21E-02	6.06E-02	3.25E-02	7.11E-02

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	4.07E-06 0.01%	2.05E-04 0.29%
KR 85M	1.01E-03 3.18%	1.01E-03 3.18%	1.01E-03 3.18%	1.01E-03 3.18%	1.01E-03 3.18%	1.01E-03 3.18%	1.04E-03 3.24%	3.70E-03 5.22%
KR 87	2.89E-03 9.10%	2.89E-03 9.10%	2.89E-03 9.10%	2.89E-03 9.10%	2.89E-03 9.10%	2.89E-03 9.10%	2.99E-03 9.28%	1.29E-02 18.11%
KR 88	2.00E-02 62.89%	2.00E-02 62.89%	2.00E-02 62.89%	2.00E-02 62.89%	2.00E-02 62.89%	2.00E-02 62.89%	2.01E-02 62.26%	2.94E-02 41.41%
XE133	8.12E-04 2.56%	8.12E-04 2.56%	8.12E-04 2.56%	8.12E-04 2.56%	8.12E-04 2.56%	8.12E-04 2.56%	8.70E-04 2.70%	2.77E-03 3.91%
XE135	6.21E-03 19.54%	6.21E-03 19.54%	6.21E-03 19.54%	6.21E-03 19.54%	6.21E-03 19.54%	6.21E-03 19.54%	6.38E-03 19.78%	2.01E-02 28.29%
XE135M	6.05E-05 0.19%	6.05E-05 0.19%	6.05E-05 0.19%	6.05E-05 0.19%	6.05E-05 0.19%	6.05E-05 0.19%	6.09E-05 0.19%	9.99E-05 0.14%
XE138	7.85E-04 2.47%	7.85E-04 2.47%	7.85E-04 2.47%	7.85E-04 2.47%	7.85E-04 2.47%	7.85E-04 2.47%	7.93E-04 2.46%	1.64E-03 2.31%
KR 89	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.50E-07 0.0 %	1.52E-06 0.0 %
KR 88M	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	8.59E-07 0.0 %	3.12E-06 0.0 %
XE137	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.66E-07 0.0 %	5.73E-06 0.0 %
XE133M	2.13E-05 0.07%	2.13E-05 0.07%	2.13E-05 0.07%	2.13E-05 0.07%	2.13E-05 0.07%	2.13E-05 0.07%	2.38E-05 0.07%	2.00E-04 0.28%
XE131M	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.72E-06 0.0 %	1.71E-05 0.02%
TOTAL	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.18E-02	3.22E-02	7.10E-02

COOPER NUCLEAR STATION ; FIRST QUARTERLY PERIOD 1982 ; COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.86E-06 1.21%
I 133	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	5.29E-07 0.34%
SR 89	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	6.64E-10 0.0 %
CS134	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.89E-05 12.34%
CS137	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	3.36E-05 21.89%
BA140	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	9.57E-07 0.62%
I 131	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	3.12E-08 0.02%
CO 58	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	7.37E-08 0.05%
CO 60	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	9.68E-05 63.11%
MN 54	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	6.37E-07 0.41%
I 131	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
TOTAL	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.53E-04

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.20E-06 11.40%	3.05E-07 4.30%	1.64E-06 1.27%	2.12E-06 37.50%	3.60E-06 49.12%	6.98E-04 70.46%	0.0 0.0 %	0.0 0.0 %
I 133	5.65E-07 5.36%	9.01E-07 12.69%	1.12E-06 0.87%	1.76E-06 31.07%	3.04E-06 41.45%	2.72E-04 27.43%	0.0 0.0 %	0.0 0.0 %
SR 89	6.64E-08 0.63%	1.99E-06 27.97%	2.31E-06 1.79%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.03E-05 18.97%	0.0 0.0 %
SR 90	7.57E-06 71.86%	8.01E-07 11.28%	1.22E-04 94.70%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.37E-05 25.40%	0.0 0.0 %
CS134	6.14E-07 5.83%	9.09E-09 0.13%	4.34E-07 0.34%	9.03E-07 15.98%	3.03E-07 4.13%	0.0 0.0 %	1.07E-07 0.20%	0.0 0.0 %
CS137	4.15E-07 3.94%	8.67E-09 0.12%	6.62E-07 0.51%	7.84E-07 13.87%	2.78E-07 3.80%	0.0 0.0 %	9.81E-08 0.18%	0.0 0.0 %
BA140	4.03E-08 0.38%	2.68E-06 37.66%	6.34E-07 0.49%	7.26E-10 0.01%	2.45E-10 0.0 %	0.0 0.0 %	1.94E-05 35.88%	0.0 0.0 %
I 131	3.43E-08 0.33%	8.72E-09 0.12%	4.67E-08 0.04%	6.05E-08 1.07%	1.03E-07 1.40%	1.99E-05 2.01%	0.0 0.0 %	0.0 0.0 %
CO 58	1.65E-10 0.0 %	6.49E-09 0.09%	0.0 0.0 %	1.18E-10 0.0 %	0.0 0.0 %	0.0 0.0 %	7.08E-08 0.13%	0.0 0.0 %
CO 60	2.64E-08 0.25%	3.91E-07 5.50%	0.0 0.0 %	1.92E-08 0.34%	0.0 0.0 %	0.0 0.0 %	1.02E-05 18.83%	0.0 0.0 %
MN 54	1.06E-09 0.01%	9.92E-09 0.14%	0.0 0.0 %	6.20E-09 0.11%	1.52E-09 0.02%	0.0 0.0 %	2.24E-07 0.41%	0.0 0.0 %
I 131	1.71E-09 0.02%	4.34E-10 0.0 %	2.33E-09 0.0 %	3.01E-09 0.05%	5.11E-09 0.07%	9.93E-07 0.10%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.05E-05	7.10E-06	1.29E-04	5.65E-06	7.32E-06	9.91E-04	5.41E-05	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.88E-05 1.93%	6.27E-06 3.07%	2.70E-05 0.61%	3.32E-05 31.77%	5.60E-05 70.21%	1.08E-02 98.27%	0.0 0.0 %	0.0 0.0 %
I 133	7.08E-11 0.0 %	1.47E-10 0.0 %	1.42E-10 0.0 %	2.13E-10 0.0 %	3.65E-10 0.0 %	3.42E-08 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.01E-05 2.07%	6.89E-05 33.73%	7.02E-04 15.92%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	8.96E-04 92.09%	8.56E-05 41.86%	3.61E-04 81.85%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.94E-05 1.99%	4.37E-07 0.21%	1.70E-05 0.39%	3.49E-05 33.36%	1.11E-05 13.89%	0.0 0.0 %	3.86E-06 48.52%	0.0 0.0 %
CS137	1.47E-05 1.52%	4.79E-07 0.23%	2.97E-05 0.67%	3.48E-05 33.32%	1.16E-05 14.59%	0.0 0.0 %	4.08E-06 51.29%	0.0 0.0 %
BA140	1.50E-06 0.15%	3.09E-05 15.12%	2.41E-05 0.55%	2.59E-08 0.02%	8.68E-09 0.01%	0.0 0.0 %	1.54E-08 0.19%	0.0 0.0 %
I 131	3.03E-07 0.03%	1.01E-07 0.05%	4.35E-07 0.0 %	5.35E-07 0.51%	9.03E-07 1.13%	1.73E-04 1.58%	0.0 0.0 %	0.0 0.0 %
CO 58	2.26E-08 0.0 %	1.30E-07 0.06%	0.0 0.0 %	8.95E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	2.05E-06 0.21%	1.12E-05 5.48%	0.0 0.0 %	8.32E-07 0.80%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	3.62E-08 0.0 %	3.65E-07 0.18%	0.0 0.0 %	1.67E-07 0.16%	4.87E-08 0.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.79E-08 0.0 %	9.30E-09 0.0 %	4.00E-08 0.0 %	4.92E-08 0.05%	8.31E-08 0.10%	1.60E-05 0.15%	0.0 0.0 %	0.0 0.0 %
TOTAL	9.73E-04	2.04E-04	4.41E-03	1.04E-04	7.98E-05	1.10E-02	7.95E-06	0.0

COOPER NUCLEAR STATION ; FIRST QUARTERLY PERIOD 1982 ; COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.81E-05 17.54%	8.70E-06 31.71%	4.15E-05 7.96%	4.97E-05 32.49%	8.37E-05 70.32%	1.61E-02 97.87%	0.0 0.0 %	0.0 0.0 %
I 133	1.42E-07 0.09%	2.73E-07 1.00%	2.87E-07 0.05%	4.19E-07 0.27%	7.17E-07 0.60%	6.86E-05 0.42%	0.0 0.0 %	0.0 0.0 %
SR 89	1.98E-06 1.24%	6.14E-06 22.38%	6.92E-05 13.27%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	8.41E-05 52.47%	7.63E-06 27.83%	3.38E-04 64.81%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.58E-05 16.08%	5.91E-07 2.15%	2.56E-05 4.92%	5.11E-05 33.41%	1.62E-05 13.62%	0.0 0.0 %	5.68E-06 48.73%	0.0 0.0 %
CS137	1.93E-05 12.05%	6.45E-07 2.35%	4.44E-05 8.52%	5.08E-05 33.18%	1.69E-05 14.23%	0.0 0.0 %	5.98E-06 51.26%	0.0 0.0 %
BA140	1.07E-07 0.07%	2.02E-06 7.36%	1.74E-06 0.33%	1.82E-09 0.0 %	6.08E-10 0.0 %	0.0 0.0 %	1.09E-09 0.0 %	0.0 0.0 %
I 131	4.49E-07 0.28%	1.39E-07 0.51%	6.63E-07 0.13%	7.94E-07 0.52%	1.34E-06 1.12%	2.57E-04 1.56%	0.0 0.0 %	0.0 0.0 %
CO 58	2.69E-09 0.0 %	1.39E-08 0.05%	0.0 0.0 %	1.04E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	2.35E-07 0.16%	1.25E-06 4.57%	0.0 0.0 %	1.01E-07 0.07%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.11E-09 0.0 %	9.98E-09 0.04%	0.0 0.0 %	4.97E-09 0.0 %	1.45E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	4.17E-08 0.03%	1.29E-08 0.05%	6.15E-08 0.01%	7.37E-08 0.05%	1.24E-07 0.10%	2.39E-03 0.15%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.60E-04	2.74E-05	5.21E-04	1.53E-04	1.19E-04	1.64E-02	1.17E-05	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALASKA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.80E-07 3.54%	2.27E-07 3.01%	7.75E-07 1.33%	1.02E-06 14.28%	1.73E-06 46.96%	3.31E-04 98.27%	0.0 0.0 %	0.0 0.0 %
I 133	2.86E-14 0.0 %	7.00E-14 0.0 %	5.58E-14 0.0 %	8.93E-14 0.0 %	1.55E-13 0.0 %	1.38E-11 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	1.82E-07 1.11%	7.87E-07 10.45%	6.36E-06 10.93%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.15E-05 70.10%	1.22E-06 16.19%	4.65E-05 79.87%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.99E-06 12.16%	4.37E-08 0.58%	1.35E-06 2.32%	2.96E-06 41.46%	9.48E-07 25.70%	0.0 0.0 %	3.24E-07 49.09%	0.0 0.0 %
CS137	1.52E-06 9.30%	4.71E-08 0.63%	2.31E-06 3.97%	2.90E-06 40.65%	9.77E-07 26.48%	0.0 0.0 %	3.35E-07 50.82%	0.0 0.0 %
BA140	5.75E-08 0.35%	1.45E-06 19.30%	9.05E-07 1.56%	1.04E-09 0.01%	3.52E-10 0.0 %	0.0 0.0 %	6.13E-10 0.09%	0.0 0.0 %
I 131	9.34E-09 0.06%	3.65E-09 0.05%	1.25E-08 0.02%	1.64E-08 0.23%	2.79E-08 0.76%	5.33E-06 1.58%	0.0 0.0 %	0.0 0.0 %
CO 58	4.96E-09 0.03%	3.55E-08 0.47%	0.0 0.0 %	2.07E-09 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	5.46E-07 3.34%	3.71E-06 49.22%	0.0 0.0 %	2.33E-07 3.27%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	5.67E-10 0.0 %	7.18E-09 0.10%	0.0 0.0 %	2.77E-09 0.04%	8.17E-10 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.59E-10 0.0 %	3.36E-10 0.0 %	1.15E-09 0.0 %	1.51E-09 0.02%	2.57E-09 0.07%	4.91E-07 0.15%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.64E-05	7.53E-06	5.82E-05	7.13E-06	3.69E-06	3.37E-04	6.59E-07	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	1.23E-06 0.0 %	4.07E-06 0.01%	2.05E-04 0.29%
KR 85M	1.01E-03 3.06%	1.01E-03 3.14%	1.01E-03 2.73%	1.01E-03 3.14%	1.01E-03 3.15%	1.01E-03 1.67%	1.04E-03 3.22%	3.70E-03 5.20%
KR 87	2.89E-03 8.74%	2.89E-03 8.99%	2.89E-03 7.81%	2.89E-03 8.99%	2.89E-03 9.00%	2.89E-03 4.77%	2.99E-03 9.22%	1.29E-02 18.07%
KR 88	2.00E-02 60.43%	2.00E-02 62.15%	2.00E-02 53.97%	2.00E-02 62.11%	2.00E-02 62.22%	2.00E-02 32.97%	2.01E-02 61.87%	2.94E-02 41.32%
XE133	8.12E-04 2.46%	8.12E-04 2.53%	8.12E-04 2.19%	8.12E-04 2.52%	8.12E-04 2.53%	8.12E-04 1.34%	8.70E-04 2.68%	2.77E-03 3.90%
XE135	6.21E-03 18.78%	6.21E-03 19.31%	6.21E-03 16.77%	6.21E-03 19.29%	6.21E-03 19.33%	6.21E-03 10.24%	6.38E-03 19.65%	2.01E-02 28.23%
XE135M	6.05E-05 0.18%	6.05E-05 0.19%	6.05E-05 0.16%	6.05E-05 0.19%	6.05E-05 0.19%	6.05E-05 0.10%	6.09E-05 0.19%	9.99E-05 0.14%
XE138	7.85E-04 2.37%	7.85E-04 2.44%	7.85E-04 2.12%	7.85E-04 2.44%	7.85E-04 2.44%	7.85E-04 1.29%	7.93E-04 2.44%	1.64E-03 2.31%
KR 89	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.41E-07 0.0 %	6.50E-07 0.0 %	1.52E-06 0.0 %
KR 83M	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	1.10E-08 0.0 %	8.59E-07 0.0 %	3.12E-06 0.0 %
XE137	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.12E-07 0.0 %	3.66E-07 0.0 %	5.73E-06 0.0 %
XE133M	2.13E-05 0.06%	2.13E-05 0.07%	2.13E-05 0.06%	2.13E-05 0.07%	2.13E-05 0.07%	2.13E-05 0.04%	2.38E-05 0.07%	2.00E-04 0.28%
XE131M	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.39E-06 0.0 %	1.72E-06 0.0 %	1.71E-05 0.02%
I 131	5.02E-05 0.15%	1.70E-05 0.05%	7.24E-05 0.20%	8.76E-05 0.27%	1.47E-04 0.46%	2.79E-02 45.98%	1.53E-06 0.0 %	1.86E-06 0.0 %
TOTAL	3.31E-02	3.22E-02	3.70E-02	3.22E-02	3.21E-02	6.06E-02	3.25E-02	7.11E-02

(CONTINUED)

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	1.14E-06 0.0 %	1.61E-06 0.0 %	1.84E-06 0.0 %	2.61E-06 0.0 %	4.19E-06 0.01%	3.41E-04 0.56%	4.35E-07 0.0 %	5.29E-07 0.0 %
SR 89	2.23E-05 0.07%	7.78E-05 0.24%	7.80E-04 2.11%	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	1.03E-05 0.03%	6.64E-10 0.0 %
SR 90	9.99E-04 3.02%	9.52E-05 0.30%	4.12E-03 11.12%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.37E-05 0.04%	0.0 0.0 %
CS134	6.40E-05 0.19%	1.73E-05 0.05%	6.06E-05 0.16%	1.06E-04 0.33%	4.48E-05 0.14%	1.62E-05 0.03%	2.62E-05 0.08%	1.89E-05 0.03%
CS137	6.48E-05 0.20%	3.00E-05 0.09%	1.06E-04 0.29%	1.18E-04 0.37%	5.86E-05 0.18%	2.88E-05 0.05%	3.93E-05 0.12%	3.36E-05 0.05%
BA140	2.54E-06 0.0 %	3.79E-05 0.12%	2.82E-05 0.08%	8.67E-07 0.0 %	8.48E-07 0.0 %	8.38E-07 0.0 %	2.03E-05 0.06%	9.57E-07 0.0 %
I 131	8.21E-07 0.0 %	2.78E-07 0.0 %	1.18E-06 0.0 %	1.43E-06 0.0 %	2.40E-06 0.0 %	4.56E-04 0.75%	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	9.34E-08 0.0 %	2.49E-07 0.0 %	6.29E-08 0.0 %	7.51E-08 0.0 %	6.29E-08 0.0 %	6.29E-08 0.0 %	1.34E-07 0.0 %	7.37E-08 0.0 %
CO 60	8.52E-05 0.26%	9.89E-05 0.31%	8.23E-05 0.22%	8.35E-05 0.26%	8.23E-05 0.26%	8.23E-05 0.14%	9.25E-05 0.29%	9.68E-05 0.14%
MN 54	5.82E-07 0.0 %	9.35E-07 0.0 %	5.43E-07 0.0 %	7.24E-07 0.0 %	5.96E-07 0.0 %	5.43E-07 0.0 %	7.67E-07 0.0 %	6.37E-07 0.0 %
I 131	7.44E-08 0.0 %	2.52E-08 0.0 %	1.07E-07 0.0 %	1.30E-07 0.0 %	2.17E-07 0.0 %	4.13E-05 0.07%	2.26E-09 0.0 %	2.75E-09 0.0 %
TOTAL	3.31E-02	3.22E-02	3.70E-02	3.22E-02	3.21E-02	6.06E-02	3.25E-02	7.11E-02

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.31E-02 91.92%	3.31E-02 92.79%	3.31E-02 88.33%	3.31E-02 91.91%	3.31E-02 92.82%	3.31E-02 38.06%	3.35E-02 93.25%	7.26E-02 96.75%
GROUND	2.07E-03 5.76%	2.07E-03 5.81%	2.07E-03 5.53%	2.07E-03 5.76%	2.07E-03 5.82%	2.07E-03 2.38%	2.07E-03 5.77%	2.44E-03 3.25%
INHAL	1.26E-05 0.04%	1.44E-05 0.04%	8.42E-05 0.22%	1.41E-05 0.04%	1.42E-05 0.04%	2.04E-03 2.35%	2.80E-04 0.78%	0.0 0.0 %
VEGET	5.46E-04 1.52%	3.41E-04 0.96%	1.70E-03 4.54%	3.36E-04 0.93%	1.87E-04 0.53%	1.97E-02 22.72%	2.85E-05 0.08%	0.0 0.0 %
COW MILK	2.47E-04 0.69%	5.62E-05 0.16%	4.79E-04 1.28%	4.60E-04 1.28%	2.75E-04 0.77%	2.94E-02 33.79%	4.16E-05 0.12%	0.0 0.0 %
MEAT	3.01E-05 0.08%	8.52E-05 0.24%	3.45E-05 0.09%	2.87E-05 0.08%	1.06E-05 0.03%	6.07E-04 0.70%	2.36E-06 0.01%	0.0 0.0 %
TOTAL	3.60E-02	3.57E-02	3.75E-02	3.60E-02	3.56E-02	8.69E-02	3.60E-02	7.50E-02

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	5.25E-07 0.0 %	2.65E-05 0.04%
KR 85M	9.63E-04 2.91%	9.63E-04 2.91%	9.63E-04 2.91%	9.63E-04 2.91%	9.63E-04 2.91%	9.63E-04 2.91%	9.96E-04 2.97%	3.53E-03 4.86%
KR 87	3.67E-03 11.09%	3.67E-03 11.09%	3.67E-03 11.09%	3.67E-03 11.09%	3.67E-03 11.09%	3.67E-03 11.09%	3.80E-03 11.32%	1.63E-02 22.47%
KR 88	2.15E-02 64.97%	2.15E-02 64.97%	2.15E-02 64.97%	2.15E-02 64.97%	2.15E-02 64.97%	2.15E-02 64.97%	2.16E-02 64.40%	3.16E-02 43.53%
XE133	3.95E-04 1.20%	3.95E-04 1.20%	3.95E-04 1.20%	3.95E-04 1.20%	3.95E-04 1.20%	3.95E-04 1.20%	4.24E-04 1.26%	1.35E-03 1.86%
XE135	5.25E-03 15.88%	5.25E-03 15.88%	5.25E-03 15.88%	5.25E-03 15.88%	5.25E-03 15.88%	5.25E-03 15.88%	5.40E-03 16.09%	1.70E-02 23.39%
XE135M	9.23E-05 0.28%	9.23E-05 0.28%	9.23E-05 0.28%	9.23E-05 0.28%	9.23E-05 0.28%	9.23E-05 0.28%	9.28E-05 0.28%	1.52E-04 0.21%
XE138	1.20E-03 3.63%	1.20E-03 3.63%	1.20E-03 3.63%	1.20E-03 3.63%	1.20E-03 3.63%	1.20E-03 3.63%	1.21E-03 3.62%	2.51E-03 3.46%
KR 89	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.44E-06 0.0 %	3.37E-06 0.0 %
KR 83M	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.01E-06 0.0 %	3.68E-06 0.0 %
XE137	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	7.10E-07 0.0 %	1.11E-05 0.02%
XE133M	1.24E-05 0.04%	1.24E-05 0.04%	1.24E-05 0.04%	1.24E-05 0.04%	1.24E-05 0.04%	1.24E-05 0.04%	1.38E-05 0.04%	1.16E-04 0.16%
XE131M	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	7.08E-07 0.0 %	7.01E-06 0.0 %
TOTAL	3.31E-02	3.31E-02	3.31E-02	3.31E-02	3.31E-02	3.31E-02	3.35E-02	7.26E-02

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	3.55E-06 0.15%
I 133	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.76E-07 0.02%
SR 89	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	7.28E-11 0.0 %
CS134	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	5.27E-05 2.16%
CS137	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.53E-04 6.29%
BA140	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	6.42E-07 0.03%
I 131	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.98E-08 0.0 %
CO 58	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.54E-06 0.06%
CO 60	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	2.20E-03 90.13%
MN 54	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.74E-05 1.12%
ZN 65	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.92E-07 0.03%
I 131	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	3.46E-07 0.01%
TOTAL	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E 03	2.44E-03

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.05E-06 24.14%	7.76E-07 5.39%	4.16E-06 4.94%	5.39E-06 38.15%	9.14E-06 64.38%	1.77E-03 86.98%	0.0 0.0 %	0.0 0.0 %
I 133	4.80E-07 3.80%	7.67E-07 5.33%	9.52E-07 1.13%	1.49E-06 10.58%	2.58E-06 18.19%	2.31E-04 11.34%	0.0 0.0 %	0.0 0.0 %
SR 89	8.40E-09 0.07%	2.51E-07 1.75%	2.93E-07 0.35%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.30E-06 0.46%	0.0 0.0 %
SR 90	4.57E-06 36.12%	4.83E-07 3.36%	7.38E-05 87.64%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.28E-06 2.96%	0.0 0.0 %
CS134	1.76E-06 13.91%	2.61E-08 0.18%	1.25E-06 1.48%	2.59E-06 18.33%	8.68E-07 6.11%	0.0 0.0 %	3.05E-07 0.11%	0.0 0.0 %
CS137	1.98E-06 15.69%	4.14E-08 0.29%	3.17E-06 3.76%	3.75E-06 26.55%	1.33E-06 9.37%	0.0 0.0 %	4.69E-07 0.17%	0.0 0.0 %
BA140	3.13E-08 0.25%	2.08E-06 14.43%	4.92E-07 0.59%	5.63E-10 0.0 %	1.90E-10 0.0 %	0.0 0.0 %	1.51E-05 5.38%	0.0 0.0 %
I 131	5.52E-08 0.44%	1.40E-08 0.10%	7.52E-08 0.09%	9.74E-08 0.69%	1.65E-07 1.16%	3.21E-05 1.57%	0.0 0.0 %	0.0 0.0 %
CO 58	3.46E-09 0.03%	1.36E-07 0.95%	0.0 0.0 %	2.47E-09 0.02%	0.0 0.0 %	0.0 0.0 %	1.49E-06 0.53%	0.0 0.0 %
CO 60	6.27E-07 4.96%	9.28E-06 64.44%	0.0 0.0 %	4.56E-07 3.23%	0.0 0.0 %	0.0 0.0 %	2.42E-04 86.32%	0.0 0.0 %
MN 54	5.16E-08 0.41%	4.82E-07 3.35%	0.0 0.0 %	3.01E-07 2.13%	7.40E-08 0.52%	0.0 0.0 %	1.09E-05 3.88%	0.0 0.0 %
ZN 65	1.83E-08 0.15%	1.60E-08 0.11%	1.22E-08 0.01%	3.78E-08 0.27%	2.49E-08 0.18%	0.0 0.0 %	3.24E-07 0.12%	0.0 0.0 %
I 131	3.75E-09 0.03%	9.53E-10 0.0 %	5.11E-09 0.0 %	6.62E-09 0.05%	1.12E-08 0.08%	2.18E-06 0.11%	0.0 0.0 %	0.0 0.0 %
CR 51	1.81E-09 0.01%	4.60E-08 0.32%	0.0 0.0 %	0.0 0.0 %	3.82E-10 0.0 %	1.05E-09 0.0 %	2.49E-07 0.09%	0.0 0.0 %
TOTAL	1.26E-05	1.44E-05	8.42E-05	1.41E-05	1.42E-05	2.04E-03	2.80E-04	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.40E-05 6.22%	1.13E-05 3.33%	4.88E-05 2.87%	6.00E-05 17.86%	1.01E-04 54.09%	1.94E-02 98.48%	0.0 0.0 %	0.0 0.0 %
I 133	4.80E-11 0.0 %	9.94E-11 0.0 %	9.60E-11 0.0 %	1.44E-10 0.0 %	2.47E-10 0.0 %	2.32E-08 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.09E-06 0.38%	7.17E-06 2.11%	7.30E-05 4.30%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.43E-04 62.86%	3.28E-05 9.63%	1.38E-03 81.42%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	5.23E-05 9.58%	1.18E-06 0.35%	4.60E-05 2.71%	9.42E-05 28.05%	3.00E-05 16.00%	0.0 0.0 %	1.04E-05 36.61%	0.0 0.0 %
CS137	6.52E-05 11.94%	2.12E-06 0.62%	1.31E-04 7.72%	1.54E-04 45.84%	5.15E-05 27.50%	0.0 0.0 %	1.80E-05 63.32%	0.0 0.0 %
BA140	9.60E-07 0.18%	1.98E-05 5.82%	1.55E-05 0.91%	1.66E-08 0.0 %	5.57E-09 0.0 %	0.0 0.0 %	9.90E-09 0.03%	0.0 0.0 %
I 131	4.71E-07 0.09%	1.57E-07 0.05%	6.76E-07 0.04%	8.31E-07 0.25%	1.40E-06 0.75%	2.69E-04 1.36%	0.0 0.0 %	0.0 0.0 %
CO 58	4.59E-07 0.08%	2.63E-06 0.77%	0.0 0.0 %	1.82E-07 0.05%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	4.51E-05 8.26%	2.46E-04 72.28%	0.0 0.0 %	1.83E-05 5.45%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.50E-06 0.27%	1.51E-05 4.44%	0.0 0.0 %	6.91E-06 2.06%	2.02E-06 1.08%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
ZN 65	7.18E-07 0.13%	6.32E-07 0.19%	4.66E-07 0.03%	1.41E-06 0.42%	9.17E-07 0.49%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.48E-08 0.01%	1.83E-08 0.0 %	7.86E-08 0.0 %	9.67E-08 0.03%	1.63E-07 0.09%	3.13E-05 0.16%	0.0 0.0 %	0.0 0.0 %
CR 51	8.91E-09 0.0 %	1.42E-06 0.42%	0.0 0.0 %	0.0 0.0 %	1.71E-09 0.0 %	5.12E-09 0.0 %	1.08E-08 0.04%	0.0 0.0 %
TOTAL	5.46E-04	3.41E-04	1.70E-03	3.36E-04	1.87E-04	1.97E-02	2.85E-05	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.05E-05 20.46%	1.56E-05 27.78%	7.45E-05 15.56%	8.93E-05 19.40%	1.50E-04 54.62%	2.89E-02 98.33%	0.0 0.0 %	0.0 0.0 %
I 133	9.62E-08 0.04%	1.85E-07 0.33%	1.94E-07 0.04%	2.84E-07 0.06%	4.86E-07 0.18%	4.65E-05 0.16%	0.0 0.0 %	0.0 0.0 %
SR 89	2.05E-07 0.08%	6.36E-07 1.13%	7.17E-06 1.50%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.19E-05 12.93%	2.90E-06 5.15%	1.28E-04 26.78%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	6.94E-05 28.12%	1.59E-06 2.83%	6.90E-05 14.41%	1.38E-04 29.89%	4.36E-05 15.85%	0.0 0.0 %	1.53E-05 36.75%	0.0 0.0 %
CS137	8.51E-05 34.47%	2.84E-06 5.05%	1.96E-04 40.83%	2.24E-04 48.55%	7.45E-05 27.10%	0.0 0.0 %	2.63E-05 63.24%	0.0 0.0 %
BA140	6.82E-08 0.03%	1.29E-06 2.29%	1.11E-06 0.23%	1.16E-09 0.0 %	3.88E-10 0.0 %	0.0 0.0 %	6.96E-10 0.0 %	0.0 0.0 %
I 131	6.95E-07 0.28%	2.15E-07 0.38%	1.03E-06 0.21%	1.23E-06 0.27%	2.07E-06 0.75%	3.98E-04 1.35%	0.0 0.0 %	0.0 0.0 %
CO 58	5.44E-08 0.02%	2.80E-07 0.50%	0.0 0.0 %	2.10E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	5.58E-06 2.26%	2.74E-05 48.80%	0.0 0.0 %	2.22E-06 0.48%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.56E-08 0.02%	4.11E-07 0.73%	0.0 0.0 %	2.05E-07 0.04%	5.96E-08 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
ZN 65	3.09E-06 1.25%	2.44E-06 4.33%	1.98E-06 0.41%	5.90E-06 1.28%	3.83E-06 1.39%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.18E-08 0.03%	2.53E-08 0.04%	1.21E-07 0.03%	1.45E-07 0.03%	2.43E-07 0.09%	4.68E-05 0.16%	0.0 0.0 %	0.0 0.0 %
CR 51	2.56E-09 0.0 %	3.66E-07 0.65%	0.0 0.0 %	0.0 0.0 %	4.77E-10 0.0 %	1.46E-09 0.0 %	3.04E-09 0.0 %	0.0 0.0 %
TOTAL	2.47E-04	5.62E-05	4.79E-04	4.60E-04	2.75E-04	2.94E-02	4.16E-05	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.05E-06 3.47%	4.09E-07 0.18%	1.40E-06 4.05%	1.84E-06 6.40%	3.13E-06 29.49%	5.98E-04 98.48%	0.0 0.0 %	0.0 0.0 %
I 133	1.93E-14 0.0 %	4.73E-14 0.0 %	3.77E-14 0.0 %	6.03E-14 0.0 %	1.04E-13 0.0 %	9.31E-12 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	1.90E-08 0.06%	8.19E-08 0.10%	6.61E-07 1.91%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.39E-06 14.58%	4.67E-07 0.55%	1.78E-05 51.50%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	5.37E-06 17.84%	1.18E-07 0.14%	3.64E-06 10.54%	7.99E-06 27.80%	2.56E-06 24.15%	0.0 0.0 %	8.74E-07 37.11%	0.0 0.0 %
CS137	6.73E-06 22.33%	2.08E-07 0.24%	1.02E-05 29.52%	1.28E-05 44.59%	4.32E-06 40.70%	0.0 0.0 %	1.48E-06 62.86%	0.0 0.0 %
BA140	3.69E-08 0.12%	9.32E-07 1.09%	5.80E-07 1.68%	6.69E-10 0.0 %	2.26E-10 0.0 %	0.0 0.0 %	3.93E-10 0.02%	0.0 0.0 %
I 131	1.45E-08 0.05%	5.66E-09 0.0 %	1.91E-08 0.06%	2.55E-08 0.09%	4.33E-08 0.41%	8.28E-06 1.36%	0.0 0.0 %	0.0 0.0 %
CO 58	1.01E-07 0.33%	7.21E-07 0.85%	0.0 0.0 %	4.20E-08 0.15%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.20E-05 39.86%	8.15E-05 95.63%	0.0 0.0 %	5.13E-06 17.83%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	2.35E-08 0.08%	2.98E-07 0.35%	0.0 0.0 %	1.15E-07 0.40%	3.39E-08 0.32%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
ZN 65	3.79E-07 1.26%	4.18E-07 0.49%	2.53E-07 0.73%	7.84E-07 2.73%	5.17E-07 4.88%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.69E-09 0.0 %	6.59E-10 0.0 %	2.25E-09 0.0 %	2.96E-09 0.01%	5.04E-09 0.05%	9.63E-07 0.16%	0.0 0.0 %	0.0 0.0 %
CR 51	3.06E-10 0.0 %	6.09E-08 0.07%	0.0 0.0 %	0.0 0.0 %	6.26E-11 0.0 %	1.79E-10 0.0 %	3.87E-10 0.02%	0.0 0.0 %
TOTAL	3.01E-05	8.52E-05	3.45E-05	2.87E-05	1.06E-05	6.07E-04	2.36E-06	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	1.58E-07 0.0 %	5.25E-07 0.0 %	2.65E-05 0.04%
KR 85M	9.63E-04 2.68%	9.63E-04 2.70%	9.63E-04 2.57%	9.63E-04 2.68%	9.63E-04 2.70%	9.63E-04 1.11%	9.96E-04 2.77%	3.53E-03 4.70%
KR 87	3.67E-03 10.20%	3.67E-03 10.29%	3.67E-03 9.80%	3.67E-03 10.20%	3.67E-03 10.30%	3.67E-03 4.22%	3.80E-03 10.56%	1.63E-02 21.74%
KR 88	2.15E-02 59.72%	2.15E-02 60.29%	2.15E-02 57.39%	2.15E-02 59.71%	2.15E-02 60.30%	2.15E-02 24.73%	2.16E-02 60.06%	3.16E-02 42.11%
XE133	3.95E-04 1.10%	3.95E-04 1.11%	3.95E-04 1.06%	3.95E-04 1.10%	3.95E-04 1.11%	3.95E-04 0.45%	4.24E-04 1.18%	1.35E-03 1.80%
XE135	5.25E-03 14.59%	5.25E-03 14.73%	5.25E-03 14.02%	5.25E-03 14.59%	5.25E-03 14.74%	5.25E-03 6.04%	5.40E-03 15.01%	1.70E-02 22.63%
XE135M	9.23E-05 0.26%	9.23E-05 0.26%	9.23E-05 0.25%	9.23E-05 0.26%	9.23E-05 0.26%	9.23E-05 0.11%	9.28E-05 0.26%	1.52E-04 0.20%
XE138	1.20E-03 3.33%	1.20E-03 3.37%	1.20E-03 3.20%	1.20E-03 3.33%	1.20E-03 3.37%	1.20E-03 1.38%	1.21E-03 3.37%	2.51E-03 3.35%
KR 89	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.42E-06 0.0 %	1.44E-06 0.0 %	3.37E-06 0.0 %
KR 83M	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.30E-08 0.0 %	1.01E-06 0.0 %	3.68E-06 0.0 %
XE137	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	6.05E-07 0.0 %	7.10E-07 0.0 %	1.11E-05 0.01%
XE133M	1.24E-05 0.03%	1.24E-05 0.03%	1.24E-05 0.03%	1.24E-05 0.03%	1.24E-05 0.03%	1.24E-05 0.01%	1.38E-05 0.04%	1.16E-04 0.15%
XE131M	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	5.70E-07 0.0 %	7.08E-07 0.0 %	7.01E-06 0.0 %
I 131	9.15E-05 0.25%	3.11E-05 0.09%	1.32E-04 0.35%	1.59E-04 0.44%	2.67E-04 0.75%	5.07E-02 58.33%	2.93E-06 0.0 %	3.55E-06 0.0 %
TOTAL	3.60E-02	3.57E-02	3.75E-02	3.60E-02	3.56E-02	8.69E-02	3.60E-02	7.50E-02

(CONTINUED)

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = #TOTAL#

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	8.86E-07 0.0 %	1.26E-06 0.0 %	1.46E-06 0.0 %	2.09E-06 0.0 %	3.38E-06 0.0 %	2.78E-04 0.32%	3.09E-07 0.0 %	3.76E-07 0.0 %
SR 89	2.32E-06 0.0 %	8.14E-06 0.02%	8.12E-05 0.22%	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	1.30E-06 0.0 %	7.28E-11 0.0 %
SR 90	3.84E-04 1.07%	3.66E-05 0.10%	1.60E-03 4.28%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.28E-06 0.02%	0.0 0.0 %
CS134	1.74E-04 0.48%	4.81E-05 0.13%	1.65E-04 0.44%	2.88E-04 0.80%	1.22E-04 0.34%	4.52E-05 0.05%	7.21E-05 0.20%	5.27E-05 0.07%
CS137	2.90E-04 0.81%	1.37E-04 0.38%	4.71E-04 1.26%	5.25E-04 1.46%	2.63E-04 0.74%	1.31E-04 0.15%	1.78E-04 0.49%	1.53E-04 0.20%
BA140	1.66E-06 0.0 %	2.47E-05 0.07%	1.82E-05 0.05%	5.80E-07 0.0 %	5.68E-07 0.0 %	5.61E-07 0.0 %	1.56E-05 0.04%	6.42E-07 0.0 %
I 131	1.28E-06 0.0 %	4.33E-07 0.0 %	1.84E-06 0.0 %	2.22E-06 0.0 %	3.72E-06 0.01%	7.07E-04 0.81%	4.10E-08 0.0 %	4.98E-08 0.0 %
CO 58	1.93E-06 0.0 %	5.08E-06 0.01%	1.31E-06 0.0 %	1.56E-06 0.0 %	1.31E-06 0.0 %	1.31E-06 0.0 %	2.80E-06 0.0 %	1.54E-06 0.0 %
CO 60	1.93E-03 5.36%	2.23E-03 6.26%	1.87E-03 4.98%	1.89E-03 5.26%	1.87E-03 5.24%	1.87E-03 2.15%	2.11E-03 5.87%	2.20E-03 2.93%
MN 54	2.50E-05 0.07%	3.97E-05 0.11%	2.34E-05 0.06%	3.09E-05 0.09%	2.56E-05 0.07%	2.34E-05 0.03%	3.42E-05 0.10%	2.74E-05 0.04%
ZN 65	4.80E-06 0.01%	4.10E-06 0.01%	3.31E-06 0.0 %	8.73E-06 0.02%	5.89E-06 0.02%	6.01E-07 0.0 %	9.25E-07 0.0 %	6.92E-07 0.0 %
I 131	1.47E-07 0.0 %	4.98E-08 0.0 %	2.11E-07 0.0 %	2.56E-07 0.0 %	4.28E-07 0.0 %	8.13E-05 0.09%	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	3.06E-07 0.0 %	2.18E-06 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.95E-07 0.0 %	3.01E-07 0.0 %	5.56E-07 0.0 %	3.46E-07 0.0 %
#TOTAL#	3.60E-02	3.57E-02	3.75E-02	3.60E-02	3.56E-02	8.69E-02	3.60E-02	7.50E-02

COOPER NUCLEAR STATION ; FIRST SEMIANNUAL PERIOD 1982 ; COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.49E-02 93.92%	6.49E-02 95.66%	6.49E-02 87.09%	6.49E-02 95.14%	6.49E-02 95.72%	6.49E-02 43.96%	6.58E-02 96.16%	1.44E-01 98.23%
GROUND	2.20E-03 3.19%	2.20E-03 3.25%	2.20E-03 2.96%	2.20E-03 3.23%	2.20E-03 3.25%	2.20E-03 1.49%	2.20E-03 3.22%	2.59E-03 1.77%
INHAL	2.32E-05 0.03%	2.15E-05 0.03%	2.13E-04 0.29%	1.98E-05 0.03%	2.15E-05 0.03%	3.03E-03 2.05%	3.34E-04 0.49%	0.0 0.0 %
VEGET	1.52E-03 2.20%	5.45E-04 0.80%	6.11E-03 8.20%	4.40E-04 0.65%	2.67E-04 0.39%	3.07E-02 20.81%	3.64E-05 0.05%	0.0 0.0 %
COW MILK	4.07E-04 0.59%	8.36E-05 0.12%	1.00E-03 1.34%	6.13E-04 0.90%	3.94E-04 0.58%	4.58E-02 31.05%	5.33E-05 0.08%	0.0 0.0 %
MEAT	4.65E-05 0.07%	9.27E-05 0.14%	9.27E-05 0.12%	3.59E-05 0.05%	1.43E-05 0.02%	9.44E-04 0.64%	3.01E-06 0.00%	0.0 0.0 %
TOTAL	6.91E-02	6.78E-02	7.45E-02	6.82E-02	6.78E-02	1.48E-01	6.84E-02	1.46E-01

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	4.60E-06 0.0 %	2.32E-04 0.16%
KR 85M	1.97E-03 3.04%	1.97E-03 3.04%	1.97E-03 3.04%	1.97E-03 3.04%	1.97E-03 3.04%	1.97E-03 3.04%	2.04E-03 3.10%	7.23E-03 5.04%
KR 87	6.56E-03 10.12%	6.56E-03 10.12%	6.56E-03 10.12%	6.56E-03 10.12%	6.56E-03 10.12%	6.56E-03 10.12%	6.79E-03 10.32%	2.92E-02 20.31%
KR 88	4.15E-02 63.95%	4.15E-02 63.95%	4.15E-02 63.95%	4.15E-02 63.95%	4.15E-02 63.95%	4.15E-02 63.95%	4.17E-02 63.35%	6.10E-02 42.48%
XE133	1.21E-03 1.86%	1.21E-03 1.86%	1.21E-03 1.86%	1.21E-03 1.86%	1.21E-03 1.86%	1.21E-03 1.86%	1.29E-03 1.97%	4.12E-03 2.87%
XE135	1.15E-02 17.67%	1.15E-02 17.67%	1.15E-02 17.67%	1.15E-02 17.67%	1.15E-02 17.67%	1.15E-02 17.67%	1.18E-02 17.90%	3.71E-02 25.81%
XE135M	1.53E-04 0.24%	1.53E-04 0.24%	1.53E-04 0.24%	1.53E-04 0.24%	1.53E-04 0.24%	1.53E-04 0.24%	1.54E-04 0.23%	2.52E-04 0.18%
XE138	1.98E-03 3.06%	1.98E-03 3.06%	1.98E-03 3.06%	1.98E-03 3.06%	1.98E-03 3.06%	1.98E-03 3.06%	2.01E-03 3.05%	4.15E-03 2.89%
KR 89	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.09E-06 0.0 %	4.89E-06 0.0 %
KR 83M	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	1.87E-06 0.0 %	6.80E-06 0.0 %
XE137	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	1.08E-06 0.0 %	1.69E-05 0.01%
XE133M	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.77E-05 0.06%	3.16E-04 0.22%
XE131M	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	2.43E-06 0.0 %	2.41E-05 0.02%
TOTAL	6.49E-02	6.49E-02	6.49E-02	6.49E-02	6.49E-02	6.49E-02	6.58E-02	1.44E-01

COOPER NUCLEAR STATION ; FIRST SEMIANNUAL PERIOD 1982 ; COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	5.41E-06 0.21%
I 133	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	9.05E-07 0.03%
SR 89	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	7.37E-10 0.0 %
CS134	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	7.16E-05 2.77%
CS137	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.87E-04 7.21%
BA140	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.60E-06 0.06%
I 131	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.61E-06 0.06%
CO 60	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	2.29E-03 88.53%
MN 54	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.81E-05 1.08%
I 131	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.92E-07 0.03%
I 131	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	3.46E-07 0.01%
TOTAL	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.59E-03

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.25E-06 18.35%	1.08E-06 5.03%	5.79E-06 2.72%	7.51E-06 37.97%	1.27E-05 59.19%	2.47E-03 81.58%	0.0 0.0 %	0.0 0.0 %
I 133	1.05E-06 4.51%	1.67E-06 7.76%	2.07E-06 0.97%	3.25E-06 16.44%	5.62E-06 26.11%	5.03E-04 16.60%	0.0 0.0 %	0.0 0.0 %
SR 89	7.48E-08 0.32%	2.24E-06 10.41%	2.61E-06 1.22%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.16E-05 3.46%	0.0 0.0 %
SR 90	1.21E-05 52.37%	1.28E-06 5.97%	1.96E-04 91.92%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	2.20E-05 6.59%	0.0 0.0 %
CS134	2.37E-06 10.24%	3.52E-08 0.16%	1.68E-06 0.79%	3.49E-06 17.66%	1.17E-06 5.44%	0.0 0.0 %	4.12E-07 0.12%	0.0 0.0 %
CS137	2.40E-06 10.35%	5.01E-08 0.23%	3.83E-06 1.79%	4.53E-06 22.92%	1.61E-06 7.47%	0.0 0.0 %	5.67E-07 0.17%	0.0 0.0 %
BA140	7.16E-08 0.31%	4.75E-06 22.11%	1.13E-06 0.53%	1.29E-09 0.0 %	4.35E-10 0.0 %	0.0 0.0 %	3.45E-05 10.31%	0.0 0.0 %
I 131	3.43E-08 0.15%	8.72E-09 0.04%	4.67E-08 0.02%	6.05E-08 0.31%	1.03E-07 0.48%	1.99E-05 0.66%	0.0 0.0 %	0.0 0.0 %
CO 58	3.63E-09 0.02%	1.43E-07 0.66%	0.0 0.0 %	2.59E-09 0.01%	0.0 0.0 %	0.0 0.0 %	1.56E-06 0.47%	0.0 0.0 %
CO 60	6.53E-07 2.82%	9.67E-06 44.96%	0.0 0.0 %	4.76E-07 2.41%	0.0 0.0 %	0.0 0.0 %	2.52E-04 75.40%	0.0 0.0 %
MN 54	5.26E-08 0.23%	4.92E-07 2.29%	0.0 0.0 %	3.07E-07 1.55%	7.55E-08 0.35%	0.0 0.0 %	1.11E-05 3.32%	0.0 0.0 %
I 131	1.71E-09 0.0 %	4.34E-10 0.0 %	2.33E-09 0.0 %	3.01E-09 0.02%	5.11E-09 0.02%	9.93E-07 0.03%	0.0 0.0 %	0.0 0.0 %
I 131	5.52E-08 0.24%	1.40E-08 0.07%	7.52E-08 0.04%	9.74E-08 0.49%	1.65E-07 0.77%	3.21E-05 1.06%	0.0 0.0 %	0.0 0.0 %
ZN 65	1.83E-08 0.08%	1.60E-08 0.07%	1.22E-08 0.0 %	3.78E-08 0.19%	2.49E-08 0.12%	0.0 0.0 %	3.24E-07 0.10%	0.0 0.0 %
I 131	3.75E-09 0.02%	9.53E-10 0.0 %	5.11E-09 0.0 %	6.62E-09 0.03%	1.12E-08 0.05%	2.18E-06 0.07%	0.0 0.0 %	0.0 0.0 %
CR 51	1.81E-09 0.0 %	4.60E-08 0.21%	0.0 0.0 %	0.0 0.0 %	3.82E-10 0.0 %	1.05E-09 0.0 %	2.49E-07 0.07%	0.0 0.0 %
TOTAL	2.32E-05	2.15E-05	2.13E-04	1.98E-05	2.15E-05	3.03E-03	3.34E-04	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	5.28E-05 3.48%	1.76E-05 3.23%	7.58E-05 1.24%	9.32E-05 21.16%	1.57E-04 58.91%	3.02E-02 98.40%	0.0 0.0 %	0.0 0.0 %
I 133	1.19E-10 0.0 %	2.46E-10 0.0 %	2.38E-10 0.0 %	3.57E-10 0.0 %	6.12E-10 0.0 %	5.74E-08 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.22E-05 1.46%	7.61E-05 13.97%	7.75E-04 12.69%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.24E-03 81.58%	1.18E-04 21.72%	4.99E-03 81.73%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	7.17E-05 4.72%	1.62E-06 0.30%	6.30E-05 1.03%	1.29E-04 29.31%	4.10E-05 15.37%	0.0 0.0 %	1.43E-05 39.21%	0.0 0.0 %
CS137	8.00E-05 5.26%	2.60E-06 0.48%	1.61E-04 2.63%	1.89E-04 42.87%	6.31E-05 23.65%	0.0 0.0 %	2.21E-05 60.69%	0.0 0.0 %
BA140	2.46E-06 0.16%	5.07E-05 9.31%	3.95E-05 0.65%	4.26E-08 0.0 %	1.42E-08 0.0 %	0.0 0.0 %	2.53E-08 0.07%	0.0 0.0 %
I 131	3.03E-07 0.02%	1.01E-07 0.02%	4.35E-07 0.0 %	5.35E-07 0.12%	9.03E-07 0.34%	1.73E-04 0.56%	0.0 0.0 %	0.0 0.0 %
CO 58	4.82E-07 0.03%	2.76E-06 0.51%	0.0 0.0 %	1.91E-07 0.04%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	4.72E-05 3.11%	2.57E-04 47.23%	0.0 0.0 %	1.91E-05 4.34%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.54E-06 0.10%	1.55E-05 2.84%	0.0 0.0 %	7.08E-06 1.61%	2.07E-06 0.77%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.79E-08 0.0 %	9.30E-09 0.0 %	4.00E-08 0.0 %	4.92E-08 0.01%	8.31E-08 0.03%	1.60E-05 0.05%	0.0 0.0 %	0.0 0.0 %
I 131	4.71E-07 0.03%	1.57E-07 0.03%	6.76E-07 0.01%	8.31E-07 0.19%	1.40E-06 0.53%	2.69E-04 0.88%	0.0 0.0 %	0.0 0.0 %
ZN 65	7.18E-07 0.05%	6.32E-07 0.12%	4.66E-07 0.0 %	1.41E-06 0.32%	9.17E-07 0.34%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	5.48E-08 0.0 %	1.83E-08 0.0 %	7.86E-08 0.0 %	9.67E-08 0.02%	1.63E-07 0.06%	3.13E-05 0.10%	0.0 0.0 %	0.0 0.0 %
CR 51	8.91E-09 0.0 %	1.42E-06 0.26%	0.0 0.0 %	0.0 0.0 %	1.71E-09 0.0 %	5.12E-09 0.0 %	1.08E-08 0.03%	0.0 0.0 %
*TOTALS	1.52E-03	5.45E-04	6.11E-03	4.40E-04	2.67E-04	3.07E-02	3.64E-05	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	7.86E-05 19.31%	2.43E-05 29.07%	1.16E-04 11.60%	1.39E-04 22.66%	2.34E-04 59.36%	4.50E-02 98.17%	0.0 0.0 %	0.0 0.0 %
I 133	2.38E-07 0.06%	4.58E-07 0.55%	4.81E-07 0.05%	7.04E-07 0.11%	1.20E-06 0.31%	1.15E-04 0.25%	0.0 0.0 %	0.0 0.0 %
SR 89	2.19E-06 0.54%	6.77E-06 8.10%	7.64E-05 7.63%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.16E-04 28.50%	1.05E-05 12.58%	4.66E-04 46.60%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	9.52E-05 23.38%	2.18E-06 2.61%	9.46E-05 9.46%	1.89E-04 30.76%	5.98E-05 15.18%	0.0 0.0 %	2.10E-05 39.37%	0.0 0.0 %
CS137	1.04E-04 25.64%	3.48E-06 4.16%	2.40E-04 23.99%	2.74E-04 44.72%	9.15E-05 23.21%	0.0 0.0 %	3.23E-05 60.62%	0.0 0.0 %
BA140	1.75E-07 0.04%	3.30E-06 3.95%	2.85E-06 0.28%	2.99E-09 0.0 %	9.95E-10 0.0 %	0.0 0.0 %	1.79E-09 0.0 %	0.0 0.0 %
I 131	4.49E-07 0.11%	1.39E-07 0.17%	6.63E-07 0.07%	7.94E-07 0.13%	1.34E-06 0.34%	2.57E-04 0.56%	0.0 0.0 %	0.0 0.0 %
CO 58	5.71E-08 0.01%	2.94E-07 0.35%	0.0 0.0 %	2.21E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	5.84E-06 1.43%	2.87E-05 34.31%	0.0 0.0 %	2.32E-06 0.38%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.67E-08 0.01%	4.21E-07 0.50%	0.0 0.0 %	2.10E-07 0.03%	6.10E-08 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	4.17E-08 0.01%	1.29E-08 0.02%	6.15E-08 0.0 %	7.37E-08 0.01%	1.24E-07 0.03%	2.39E-05 0.05%	0.0 0.0 %	0.0 0.0 %
I 131	6.95E-07 0.17%	2.15E-07 0.26%	1.03E-06 0.10%	1.23E-06 0.20%	2.07E-06 0.52%	3.98E-04 0.87%	0.0 0.0 %	0.0 0.0 %
ZN 65	3.09E-06 0.76%	2.44E-04 2.91%	1.98E-06 0.20%	5.90E-06 0.96%	3.83E-06 0.97%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.18E-08 0.02%	2.53E-08 0.03%	1.21E-07 0.01%	1.45E-07 0.02%	2.43E-07 0.06%	4.68E-05 0.10%	0.0 0.0 %	0.0 0.0 %
CR 51	2.56E-09 0.0 %	3.66E-07 0.44%	0.0 0.0 %	0.0 0.0 %	4.77E-10 0.0 %	1.46E-09 0.0 %	3.04E-09 0.0 %	0.0 0.0 %
TOTAL	4.07E-04	8.36E-05	1.00E-03	6.13E-04	3.94E-04	4.58E-02	5.33E-05	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.63E-06 3.50%	6.36E-07 0.69%	2.17E-06 2.34%	2.86E-06 7.97%	4.86E-06 34.00%	9.29E-04 98.40%	0.0 0.0 %	0.0 0.0 %
I 133	4.79E-14 0.0 %	1.17E-13 0.0 %	9.34E-14 0.0 %	1.50E-13 0.0 %	2.59E-13 0.0 %	2.31E-11 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.01E-07 0.43%	8.69E-07 0.94%	7.02E-06 7.57%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.59E-05 34.13%	1.69E-06 1.82%	6.43E-05 69.30%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	7.36E-06 15.84%	1.62E-07 0.17%	4.99E-06 5.38%	1.09E-05 30.52%	3.51E-06 24.55%	0.0 0.0 %	1.20E-06 39.73%	0.0 0.0 %
CS137	8.25E-06 17.74%	2.55E-07 0.28%	1.25E-05 13.49%	1.57E-05 43.81%	5.29E-06 37.03%	0.0 0.0 %	1.82E-06 60.22%	0.0 0.0 %
BA140	9.44E-08 0.20%	2.39E-06 2.57%	1.49E-06 1.60%	1.71E-09 0.0 %	5.78E-10 0.0 %	0.0 0.0 %	1.01E-09 0.03%	0.0 0.0 %
I 131	9.34E-09 0.02%	3.65E-09 0.0 %	1.25E-08 0.01%	1.64E-08 0.05%	2.79E-08 0.20%	5.33E-06 0.57%	0.0 0.0 %	0.0 0.0 %
CO 58	1.05E-07 0.23%	7.57E-07 0.82%	0.0 0.0 %	4.41E-08 0.12%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.26E-05 27.00%	8.52E-05 91.86%	0.0 0.0 %	5.36E-06 14.94%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	2.40E-08 0.05%	3.05E-07 0.33%	0.0 0.0 %	1.18E-07 0.33%	3.47E-08 0.24%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.59E-10 0.0 %	3.36E-10 0.0 %	1.15E-09 0.0 %	1.51E-09 0.0 %	2.57E-09 0.02%	4.91E-07 0.05%	0.0 0.0 %	0.0 0.0 %
I 131	1.45E-08 0.03%	5.66E-09 0.0 %	1.94E-08 0.02%	2.55E-08 0.07%	4.33E-08 0.30%	8.28E-06 0.88%	0.0 0.0 %	0.0 0.0 %
ZN 65	3.79E-07 0.81%	4.18E-07 0.45%	2.53E-07 0.27%	7.84E-07 2.19%	5.17E-07 3.62%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.69E-09 0.0 %	6.59E-10 0.0 %	2.25E-09 0.0 %	2.96E-09 0.0 %	5.04E-09 0.04%	9.63E-07 0.10%	0.0 0.0 %	0.0 0.0 %
CR 51	3.06E-10 0.0 %	6.09E-08 0.07%	0.0 0.0 %	0.0 0.0 %	6.26E-11 0.0 %	1.79E-10 0.0 %	3.87E-10 0.01%	0.0 0.0 %
TOTAL	4.65E-05	9.27E-05	9.27E-05	3.59E-05	1.43E-05	9.44E-04	3.01E-06	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY - *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	4.60E-06 0.0 %	2.32E-04 0.16%
KR 85M	1.97E-03 2.86%	1.97E-03 2.91%	1.97E-03 2.65%	1.97E-03 2.90%	1.97E-03 2.91%	1.97E-03 1.34%	2.04E-03 2.98%	7.23E-03 4.95%
KR 87	6.56E-03 9.50%	6.56E-03 9.68%	6.56E-03 8.81%	6.56E-03 9.63%	6.56E-03 9.68%	6.56E-03 4.45%	6.79E-03 9.92%	2.92E-02 19.95%
KR 88	4.15E-02 60.06%	4.15E-02 61.17%	4.15E-02 55.69%	4.15E-02 60.84%	4.15E-02 61.21%	4.15E-02 28.11%	4.17E-02 60.92%	6.10E-02 41.73%
XE133	1.21E-03 1.75%	1.21E-03 1.78%	1.21E-03 1.62%	1.21E-03 1.77%	1.21E-03 1.78%	1.21E-03 0.82%	1.29E-03 1.89%	4.12E-03 2.82%
XE135	1.15E-02 16.60%	1.15E-02 16.90%	1.15E-02 15.39%	1.15E-02 16.81%	1.15E-02 16.91%	1.15E-02 7.77%	1.18E-02 17.21%	3.71E-02 25.35%
XE135M	1.53E-04 0.22%	1.53E-04 0.23%	1.53E-04 0.21%	1.53E-04 0.22%	1.53E-04 0.23%	1.53E-04 0.10%	1.54E-04 0.22%	2.52E-04 0.17%
XE138	1.98E-03 2.87%	1.98E-03 2.93%	1.98E-03 2.66%	1.98E-03 2.91%	1.98E-03 2.93%	1.98E-03 1.34%	2.01E-03 2.93%	4.15E-03 2.84%
KR 89	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.06E-06 0.0 %	2.09E-06 0.0 %	4.89E-06 0.0 %
KR 83M	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	2.40E-08 0.0 %	1.87E-06 0.0 %	6.80E-06 0.0 %
XE137	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	9.18E-07 0.0 %	1.08E-06 0.0 %	1.69E-05 0.01%
XE133M	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.05%	3.37E-05 0.02%	3.77E-05 0.06%	3.16E-04 0.22%
XE131M	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	1.96E-06 0.0 %	2.43E-06 0.0 %	2.41E-05 0.02%
I 131	1.42E-04 0.21%	4.81E-05 0.07%	2.04E-04 0.27%	2.47E-04 0.36%	4.13E-04 0.61%	7.86E-02 53.26%	4.46E-06 0.0 %	5.41E-06 0.0 %
TOTAL	6.91E-02	6.78E-02	7.45E-02	6.82E-02	6.78E-02	1.48E-01	6.84E-02	1.46E-01

(CONTINUED)

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	2.03E-06 0.0 %	2.87E-06 0.0 %	3.30E-06 0.0 %	4.70E-06 0.0 %	7.57E-06 0.01%	6.19E-04 0.42%	7.44E-07 0.0 %	9.05E-07 0.0 %
SR 89	2.46E-05 0.04%	8.60E-05 0.13%	8.61E-04 1.16%	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	1.16E-05 0.02%	7.37E-10 0.0 %
SR 90	1.38E-03 2.00%	1.32E-04 0.19%	5.72E-03 7.68%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	2.20E-05 0.03%	0.0 0.0 %
CS134	2.38E-04 0.34%	6.54E-05 0.10%	2.26E-04 0.30%	3.94E-04 0.58%	1.67E-04 0.25%	6.14E-05 0.04%	9.83E-05 0.14%	7.16E-05 0.05%
CS137	3.55E-04 0.51%	1.67E-04 0.25%	5.77E-04 0.78%	6.44E-04 0.94%	3.22E-04 0.47%	1.60E-04 0.11%	2.17E-04 0.32%	1.87E-04 0.13%
BA140	4.20E-06 0.0 %	6.26E-05 0.09%	4.64E-05 0.06%	1.45E-06 0.0 %	1.42E-06 0.0 %	1.40E-06 0.0 %	3.59E-05 0.05%	1.60E-06 0.0 %
I 131	8.21E-07 0.0 %	2.78E-07 0.0 %	1.18E-06 0.0 %	1.43E-06 0.0 %	2.40E-06 0.0 %	4.56E-04 0.31%	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	2.02E-06 0.0 %	5.33E-06 0.0 %	1.38E-06 0.0 %	1.64E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	2.93E-06 0.0 %	1.61E-06 0.0 %
CO 60	2.02E-03 2.92%	2.33E-03 3.44%	1.95E-03 2.62%	1.98E-03 2.90%	1.95E-03 2.88%	1.95E-03 1.32%	2.20E-03 3.22%	2.29E-03 1.57%
MN 54	2.56E-05 0.04%	4.06E-05 0.06%	2.39E-05 0.03%	3.16E-05 0.05%	2.62E-05 0.04%	2.39E-05 0.02%	3.50E-05 0.05%	2.81E-05 0.02%
I 131	7.44E-08 0.0 %	2.52E-08 0.0 %	1.07E-07 0.0 %	1.30E-07 0.0 %	2.17E-07 0.0 %	4.13E-05 0.03%	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	1.28E-06 0.0 %	4.33E-07 0.0 %	1.84E-06 0.0 %	2.22E-06 0.0 %	3.72E-06 0.0 %	7.07E-04 0.48%	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	4.80E-06 0.0 %	4.10E-06 0.0 %	3.31E-06 0.0 %	8.73E-06 0.01%	5.89E-06 0.0 %	6.01E-07 0.0 %	9.25E-07 0.0 %	6.92E-07 0.0 %
I 131	1.47E-07 0.0 %	4.98E-08 0.0 %	2.11E-07 0.0 %	2.56E-07 0.0 %	4.28E-07 0.0 %	8.13E-05 0.06%	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	3.06E-07 0.0 %	2.18E-06 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	2.95E-07 0.0 %	3.01E-07 0.0 %	5.56E-07 0.0 %	3.46E-07 0.0 %
TOTAL	6.91E-02	6.78E-02	7.45E-02	6.82E-02	6.78E-02	1.48E-01	6.84E-02	1.46E-01

COOPER NUCLEAR STATION ; FIRST QUARTERLY PERIOD 1982 ; COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.15E-01 96.56%	1.15E-01 99.15%	1.15E-01 87.02%	1.15E-01 98.99%	1.15E-01 99.21%	1.15E-01 52.00%	1.18E-01 99.78%	3.14E-01 99.95%
GROUND	1.31E-04 0.11%	1.31E-04 0.11%	1.31E-04 0.10%	1.31E-04 0.11%	1.31E-04 0.11%	1.31E-04 0.06%	1.31E-04 0.11%	1.53E-04 0.05%
INHAL	1.05E-05 0.01%	7.10E-06 0.01%	1.29E-04 0.10%	5.65E-06 0.00%	7.32E-06 0.01%	9.91E-04 0.45%	5.41E-05 0.05%	0.0 0.0 %
VEGET	3.11E-03 2.61%	6.54E-04 0.56%	1.41E-02 10.68%	3.34E-04 0.29%	2.55E-04 0.22%	3.50E-02 15.84%	2.54E-05 0.02%	0.0 0.0 %
COW MILK	6.43E-04 0.54%	1.10E-04 0.09%	2.09E-03 1.58%	6.14E-04 0.53%	4.77E-04 0.41%	6.60E-02 29.84%	4.68E-05 0.04%	0.0 0.0 %
MEAT	1.94E-04 0.16%	8.95E-05 0.08%	6.91E-04 0.52%	8.47E-05 0.07%	4.38E-05 0.04%	4.00E-03 1.81%	7.83E-06 0.01%	0.0 0.0 %
TOTAL	1.19E-01	1.16E-01	1.32E-01	1.16E-01	1.16E-01	2.21E-01	1.19E-01	3.14E-01

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.61E-04 0.14%	1.61E-04 0.14%	1.61E-04 0.14%	1.61E-04 0.14%	1.61E-04 0.14%	1.61E-04 0.14%	5.34E-04 0.45%	2.69E-02 8.58%
KR 85M	3.57E-03 3.10%	3.57E-03 3.10%	3.57E-03 3.10%	3.57E-03 3.10%	3.57E-03 3.10%	3.57E-03 3.10%	3.69E-03 3.12%	1.31E-02 4.16%
KR 87	6.93E-03 6.03%	6.93E-03 6.03%	6.93E-03 6.03%	6.93E-03 6.03%	6.93E-03 6.03%	6.93E-03 6.03%	7.17E-03 6.06%	3.08E-02 9.82%
KR 88	5.55E-02 48.27%	5.55E-02 48.27%	5.55E-02 48.27%	5.55E-02 48.27%	5.55E-02 48.27%	5.55E-02 48.27%	5.57E-02 47.14%	8.16E-02 26.01%
XE133	2.18E-02 18.99%	2.18E-02 18.99%	2.18E-02 18.99%	2.18E-02 18.99%	2.18E-02 18.99%	2.18E-02 18.99%	2.34E-02 19.78%	7.46E-02 23.76%
XE135	2.41E-02 20.94%	2.41E-02 20.94%	2.41E-02 20.94%	2.41E-02 20.94%	2.41E-02 20.94%	2.41E-02 20.94%	2.47E-02 20.92%	7.78E-02 24.81%
XE135M	1.72E-04 0.15%	1.72E-04 0.15%	1.72E-04 0.15%	1.72E-04 0.15%	1.72E-04 0.15%	1.72E-04 0.15%	1.73E-04 0.15%	2.85E-04 0.09%
XE138	2.35E-03 2.04%	2.35E-03 2.04%	2.35E-03 2.04%	2.35E-03 2.04%	2.35E-03 2.04%	2.35E-03 2.04%	2.37E-03 2.01%	4.91E-03 1.56%
KR 89	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.23E-05 0.02%	5.22E-05 0.02%
KR 83M	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.16E-06 0.0 %	7.85E-06 0.0 %
XE137	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	6.93E-06 0.0 %	1.08E-04 0.03%
XE133M	2.74E-04 0.24%	2.74E-04 0.24%	2.74E-04 0.24%	2.74E-04 0.24%	2.74E-04 0.24%	2.74E-04 0.24%	3.06E-04 0.26%	2.57E-03 0.82%
XE131M	8.27E-05 0.07%	8.27E-05 0.07%	8.27E-05 0.07%	8.27E-05 0.07%	8.27E-05 0.07%	8.27E-05 0.07%	1.03E-04 0.09%	1.02E-03 0.32%
TOTAL	1.15E-01	1.15E-01	1.15E-01	1.15E-01	1.15E-01	1.15E-01	1.18E-01	3.14E-01

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NFPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.53E-06 1.17%	1.86E-06 1.21%
I 133	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	4.35E-07 0.33%	5.29E-07 0.34%
SR 89	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	6.64E-10 0.0 %
CS134	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.62E-05 12.41%	1.89E-05 12.34%
CS137	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	2.88E-05 22.02%	3.36E-05 21.89%
BA140	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	8.38E-07 0.64%	9.57E-07 0.62%
I 131	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	2.57E-08 0.02%	3.12E-08 0.02%
CO 58	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	6.29E-08 0.05%	7.37E-08 0.05%
CO 60	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	8.23E-05 62.95%	9.68E-05 63.11%
MN 54	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	5.43E-07 0.42%	6.37E-07 0.41%
I 131	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
TOTAL	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.31E-04	1.53E-04

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.20E-06 11.40%	3.05E-07 4.30%	1.64E-06 1.27%	2.12E-06 37.50%	3.60E-06 49.17%	6.98E-04 70.46%	0.0 0.0 %	0.0 0.0 %
I 133	5.65E-07 5.36%	9.01E-07 12.69%	1.12E-06 0.87%	1.76E-06 31.07%	3.04E-06 41.45%	2.72E-04 27.43%	0.0 0.0 %	0.0 0.0 %
SR 89	6.64E-08 0.63%	1.99E-06 27.97%	2.31E-06 1.79%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.93E-05 18.97%	0.0 0.0 %
SR 90	7.57E-06 71.86%	8.01E-07 11.28%	1.22E-04 94.70%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.37E-05 25.46%	0.0 0.0 %
CS134	6.14E-07 5.83%	9.09E-09 0.13%	4.31E-07 0.34%	9.03E-07 15.98%	3.03E-07 4.13%	0.0 0.0 %	1.07E-07 0.20%	0.0 0.0 %
CS137	4.15E-07 3.94%	8.67E-09 0.12%	6.62E-07 0.51%	7.84E-07 13.87%	2.78E-07 3.80%	0.0 0.0 %	9.81E-08 0.18%	0.0 0.0 %
BA140	4.03E-08 0.38%	2.68E-06 37.66%	6.34E-07 0.49%	7.26E-10 0.01%	2.45E-10 0.0 %	0.0 0.0 %	1.94E-05 35.88%	0.0 0.0 %
I 131	3.43E-08 0.33%	8.72E-09 0.12%	4.67E-08 0.04%	6.05E-08 1.07%	1.03E-07 1.40%	1.99E-05 2.01%	0.0 0.0 %	0.0 0.0 %
CO 58	1.65E-10 0.0 %	6.49E-09 0.09%	0.0 0.0 %	1.18E-10 0.0 %	0.0 0.0 %	0.0 0.0 %	7.08E-08 0.13%	0.0 0.0 %
CO 60	2.64E-08 0.25%	3.91E-07 5.50%	0.0 0.0 %	1.92E-08 0.34%	0.0 0.0 %	0.0 0.0 %	1.02E-05 18.83%	0.0 0.0 %
MN 54	1.06E-09 0.01%	9.92E-09 0.14%	0.0 0.0 %	6.20E-09 0.11%	1.52E-09 0.02%	0.0 0.0 %	2.21E-07 0.41%	0.0 0.0 %
I 131	1.71E-09 0.02%	4.34E-10 0.0 %	2.33E-09 0.0 %	3.01E-09 0.05%	5.11E-09 0.07%	9.93E-07 0.10%	0.0 0.0 %	0.0 0.0 %
TOTAL	1.05E-05	7.10E-06	1.29E-04	5.65E-06	7.32E-06	9.91E-04	5.41E-05	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	6.02E-05 1.93%	2.01E-05 3.07%	8.64E-05 0.61%	1.06E-04 31.77%	1.79E-04 70.21%	3.44E-02 98.27%	0.0 0.0 %	0.0 0.0 %
I 133	2.26E-10 0.0 %	4.69E-10 0.0 %	4.53E-10 0.0 %	6.80E-10 0.0 %	1.17E-09 0.0 %	1.09E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	6.43E-05 2.07%	2.20E-04 33.73%	2.25E-03 15.92%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	2.87E-03 92.09%	2.74E-04 41.86%	1.15E-02 81.85%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	6.19E-05 1.99%	1.40E-06 0.21%	5.44E-05 0.39%	1.11E-04 33.36%	3.55E-05 13.89%	0.0 0.0 %	1.23E-05 48.52%	0.0 0.0 %
CS137	4.72E-05 1.52%	1.53E-06 0.23%	9.49E-05 0.67%	1.11E-04 33.32%	3.72E-05 14.59%	0.0 0.0 %	1.30E-05 51.29%	0.0 0.0 %
BA140	4.78E-06 0.15%	9.88E-05 15.12%	7.71E-05 0.55%	8.30E-08 0.02%	2.78E-08 0.01%	0.0 0.0 %	4.94E-08 0.19%	0.0 0.0 %
I 131	9.70E-07 0.03%	3.23E-07 0.05%	1.39E-06 0.0 %	1.71E-06 0.51%	2.89E-06 1.13%	5.55E-04 1.58%	0.0 0.0 %	0.0 0.0 %
CO 58	7.24E-08 0.0 %	4.15E-07 0.06%	0.0 0.0 %	2.86E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	6.57E-06 0.21%	3.58E-05 5.48%	0.0 0.0 %	2.66E-06 0.80%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.16E-07 0.0 %	1.17E-06 0.18%	0.0 0.0 %	5.33E-07 0.16%	1.56E-07 0.06%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.92E-08 0.0 %	2.97E-08 0.0 %	1.28E-07 0.0 %	1.57E-07 0.05%	2.66E-07 0.10%	5.10E-05 0.15%	0.0 0.0 %	0.0 0.0 %
TOTAL	3.11E-03	6.54E-04	1.41E-02	3.34E-04	2.55E-04	3.50E-02	2.54E-05	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.13E-04 17.54%	3.49E-05 31.71%	1.67E-04 7.96%	2.00E-04 32.49%	3.36E-04 70.32%	6.46E-02 97.87%	0.0 0.0 %	0.0 0.0 %
I 133	5.69E-07 0.09%	1.10E-06 1.00%	1.15E-06 0.05%	1.68E-06 0.27%	2.88E-06 0.60%	2.75E-04 0.42%	0.0 0.0 %	0.0 0.0 %
SR 89	7.95E-06 1.24%	2.46E-05 22.38%	2.78E-04 13.27%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.38E-04 52.47%	3.06E-05 27.83%	1.36E-03 64.81%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.03E-04 16.08%	2.37E-06 2.15%	1.03E-04 4.92%	2.05E-04 33.41%	6.50E-05 13.62%	0.0 0.0 %	2.28E-05 48.73%	0.0 0.0 %
CS137	7.75E-05 12.05%	2.59E-06 2.35%	1.78E-04 8.52%	2.04E-04 33.18%	6.80E-05 14.23%	0.0 0.0 %	2.40E-05 51.26%	0.0 0.0 %
BA140	4.29E-07 0.07%	8.09E-06 7.36%	6.97E-06 0.33%	7.31E-09 0.0 %	2.44E-09 0.0 %	0.0 0.0 %	4.38E-09 0.0 %	0.0 0.0 %
I 131	1.80E-06 0.28%	5.58E-07 0.51%	2.66E-06 0.13%	3.19E-06 0.52%	5.36E-06 1.12%	1.03E-03 1.56%	0.0 0.0 %	0.0 0.0 %
CO 58	1.08E-08 0.0 %	5.56E-08 0.05%	0.0 0.0 %	4.17E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.02E-06 0.16%	5.03E-06 4.57%	0.0 0.0 %	4.06E-07 0.07%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.44E-09 0.0 %	4.01E-08 0.04%	0.0 0.0 %	2.00E-08 0.0 %	5.80E-09 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.67E-07 0.03%	5.18E-08 0.05%	2.47E-07 0.01%	2.96E-07 0.05%	4.98E-07 0.10%	9.58E-05 0.15%	0.0 0.0 %	0.0 0.0 %
TOTAL	6.43E-04	1.10E-04	2.09E-03	6.14E-04	4.77E-04	6.60E-02	4.68E-05	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY - MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	6.88E-06 3.54%	2.69E-06 3.01%	9.20E-06 1.33%	1.21E-05 14.28%	2.06E-05 46.96%	3.93E-03 98.27%	0.0 0.0 %	0.0 0.0 %
I 133	3.39E-13 0.0 %	8.31E-13 0.0 %	6.62E-13 0.0 %	1.06E-12 0.0 %	1.83E-12 0.0 %	1.64E-10 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.16E-06 1.11%	9.35E-06 10.45%	7.55E-05 10.93%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.36E-04 70.10%	1.45E-05 16.19%	5.52E-04 79.87%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.36E-05 12.15%	5.19E-07 0.58%	1.60E-05 2.32%	3.51E-05 41.46%	1.13E-05 25.70%	0.0 0.0 %	3.84E-06 49.09%	0.0 0.0 %
CS137	1.81E-05 9.30%	5.60E-07 0.63%	2.74E-05 3.97%	3.44E-05 40.65%	1.16E-05 26.48%	0.0 0.0 %	3.98E-06 50.82%	0.0 0.0 %
BA140	6.83E-07 0.35%	1.73E-05 19.30%	1.07E-05 1.56%	1.24E-08 0.01%	4.18E-09 0.0 %	0.0 0.0 %	7.27E-09 0.09%	0.0 0.0 %
I 131	1.11E-07 0.06%	4.34E-08 0.05%	1.48E-07 0.02%	1.95E-07 0.23%	3.31E-07 0.76%	6.33E-05 1.58%	0.0 0.0 %	0.0 0.0 %
CO 58	5.88E-08 0.03%	4.22E-07 0.47%	0.0 0.0 %	2.46E-08 0.03%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	6.49E-06 3.34%	4.40E-05 49.22%	0.0 0.0 %	2.77E-06 3.27%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	6.73E-09 0.0 %	8.53E-08 0.10%	0.0 0.0 %	3.29E-08 0.04%	9.70E-09 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.02E-08 0.0 %	3.99E-09 0.0 %	1.36E-08 0.0 %	1.79E-08 0.02%	3.05E-08 0.07%	5.83E-06 0.15%	0.0 0.0 %	0.0 0.0 %
&TOTAL&	1.94E-04	8.95E-05	6.91E-04	8.47E-05	4.38E-05	4.00E-03	7.83E-06	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
NRPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = $TOTAL$

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.61E-04 0.13%	1.61E-04 0.14%	1.61E-04 0.12%	1.61E-04 0.14%	1.61E-04 0.14%	1.61E-04 0.07%	5.34E-04 0.45%	2.69E-02 8.58%
KR 85M	3.57E-03 3.00%	3.57E-03 3.08%	3.57E-03 2.70%	3.57E-03 3.07%	3.57E-03 3.08%	3.57E-03 1.61%	3.69E-03 3.11%	1.31E-02 4.16%
KR 87	6.93E-03 5.82%	6.93E-03 5.98%	6.93E-03 5.25%	6.93E-03 5.97%	6.93E-03 5.98%	6.93E-03 3.14%	7.17E-03 6.05%	3.08E-02 9.81%
KR 88	5.55E-02 46.61%	5.55E-02 47.86%	5.55E-02 42.00%	5.55E-02 47.78%	5.55E-02 47.89%	5.55E-02 25.10%	5.57E-02 47.04%	8.16E-02 25.99%
XE133	2.18E-02 18.34%	2.18E-02 18.83%	2.18E-02 16.53%	2.18E-02 18.80%	2.18E-02 18.84%	2.18E-02 9.88%	2.34E-02 19.74%	7.46E-02 23.75%
XE135	2.41E-02 20.23%	2.41E-02 20.77%	2.41E-02 18.23%	2.41E-02 20.73%	2.41E-02 20.78%	2.41E-02 10.89%	2.47E-02 20.87%	7.78E-02 24.80%
XE135M	1.72E-04 0.14%	1.72E-04 0.15%	1.72E-04 0.13%	1.72E-04 0.15%	1.72E-04 0.15%	1.72E-04 0.08%	1.73E-04 0.15%	2.85E-04 0.09%
XE138	2.35E-03 1.97%	2.35E-03 2.02%	2.35E-03 1.78%	2.35E-03 2.02%	2.35E-03 2.02%	2.35E-03 1.06%	2.37E-03 2.00%	4.91E-03 1.56%
KR 89	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.02%	2.20E-05 0.0 %	2.23E-05 0.02%	5.22E-05 0.02%
KR 89M	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.77E-08 0.0 %	2.16E-06 0.0 %	7.85E-06 0.0 %
XE137	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	5.91E-06 0.0 %	6.93E-06 0.0 %	1.08E-04 0.03%
XE138M	2.74E-04 0.23%	2.74E-04 0.24%	2.74E-04 0.21%	2.74E-04 0.24%	2.74E-04 0.24%	2.74E-04 0.12%	3.06E-04 0.26%	2.57E-03 0.82%
XE131M	8.27E-05 0.07%	8.27E-05 0.07%	8.27E-05 0.06%	8.27E-05 0.07%	8.27E-05 0.07%	8.27E-05 0.04%	1.03E-04 0.09%	1.02E-03 0.32%
I 131	1.83E-04 0.15%	5.95E-05 0.05%	2.65E-04 0.20%	3.21E-04 0.28%	5.41E-04 0.47%	1.04E-01 46.87%	1.53E-06 0.0 %	1.86E-06 0.0 %
TOTAL	1.19E-01	1.16E-01	1.32E-01	1.16E-01	1.16E-01	2.21E-01	1.19E-01	3.14E-01

(CONTINUED)

COOPER NUCLEAR STATION ; FIRST QUARTERLY PERIOD 1982 ; COMBINED RELEASE
NEFA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	1.57E-06 0.0 %	2.43E-06 0.0 %	2.70E-06 0.0 %	3.87E-06 0.0 %	6.35E-06 0.0 %	5.48E-04 0.25%	4.35E-07 0.0 %	5.29E-07 0.0 %
SR 89	7.45E-05 0.06%	2.56E-04 0.22%	2.60E-03 1.97%	5.72E-10 0.0 %	5.72E-10 0.0 %	5.72E-10 0.0 %	1.03E-05 0.0 %	6.64E-10 0.0 %
SR 90	3.35E-03 2.81%	3.20E-04 0.28%	1.36E-02 10.28%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.37E-05 0.01%	0.0 0.0 %
CS134	2.06E-04 0.17%	2.05E-05 0.02%	1.90E-04 0.14%	3.69E-04 0.32%	1.28E-04 0.11%	1.62E-05 0.0 %	5.53E-05 0.05%	1.89E-05 0.0 %
CS137	1.72E-04 0.14%	3.35E-05 0.03%	3.30E-04 0.25%	3.79E-04 0.33%	1.46E-04 0.13%	2.88E-05 0.01%	6.99E-05 0.06%	3.36E-05 0.01%
BA140	6.78E-06 0.0 %	1.28E-04 0.11%	9.63E-05 0.07%	9.41E-07 0.0 %	8.72E-07 0.0 %	8.39E-07 0.0 %	2.03E-05 0.02%	9.57E-07 0.0 %
I 132	2.94E-06 0.0 %	9.58E-07 0.0 %	4.27E-06 0.0 %	5.18E-06 0.0 %	8.71E-06 0.0 %	1.67E-03 0.76%	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	2.05E-07 0.0 %	9.62E-07 0.0 %	6.29E-08 0.0 %	1.20E-07 0.0 %	6.29E-08 0.0 %	6.29E-08 0.0 %	1.34E-07 0.0 %	7.37E-08 0.0 %
CO 60	9.64E-05 0.08%	1.68E-04 0.14%	8.23E-05 0.06%	8.82E-05 0.08%	8.23E-05 0.07%	8.23E-05 0.04%	9.25E-05 0.08%	9.68E-05 0.03%
MN 54	6.71E-07 0.0 %	1.84E-06 0.0 %	5.43E-07 0.0 %	1.14E-06 0.0 %	7.16E-07 0.0 %	5.43E-07 0.0 %	7.67E-07 0.0 %	6.37E-07 0.0 %
I 131	2.71E-07 0.0 %	8.82E-08 0.0 %	3.93E-07 0.0 %	4.77E-07 0.0 %	8.02E-07 0.0 %	1.54E-04 0.07%	2.26E-09 0.0 %	2.75E-09 0.0 %
TOTAL	1.19E-01	1.16E-01	1.32E-01	1.16E-01	1.16E-01	2.21E-01	1.19E-01	3.14E-01

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.00E-01 95.09%	1.00E-01 95.79%	1.00E-01 91.00%	1.00E-01 94.94%	1.00E-01 96.24%	1.00E-01 34.26%	1.02E-01 97.49%	2.39E-01 98.99%
GROUND	2.07E-03 1.97%	2.07E-03 1.98%	2.07E-03 1.88%	2.07E-03 1.96%	2.07E-03 1.99%	2.07E-03 0.71%	2.07E-03 1.98%	2.44E-03 1.01%
INHAL	1.26E-05 0.01%	1.44E-05 0.01%	8.42E-05 0.08%	1.41E-05 0.01%	1.42E-05 0.01%	2.04E-03 0.70%	2.80E-04 0.27%	0.0 0.0 %
VEGET	1.75E-03 1.66%	1.09E-03 1.04%	5.44E-03 4.93%	1.07E-03 1.02%	5.99E-04 0.57%	6.32E-02 21.58%	9.11E-05 0.09%	0.0 0.0 %
COW MILK	9.90E-04 0.94%	2.26E-04 0.22%	1.92E-03 1.74%	1.85E-03 1.75%	1.10E-03 1.06%	1.18E-01 40.29%	1.67E-04 0.16%	0.0 0.0 %
MEAT	3.58E-04 0.34%	1.01E-03 0.97%	4.10E-04 0.37%	3.41E-04 0.32%	1.26E-04 0.12%	7.21E-03 2.46%	2.80E-05 0.03%	0.0 0.0 %
%TOTAL%	1.05E-01	1.05E-01	1.10E-01	1.06E-01	1.04E-01	2.93E-01	1.05E-01	2.42E-01

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	6.36E-05 0.06%	3.21E-03 1.34%
KR 85M	3.22E-03 3.21%	3.22E-03 3.21%	3.22E-03 3.21%	3.22E-03 3.21%	3.22E-03 3.21%	3.22E-03 3.21%	3.33E-03 3.26%	1.18E-02 4.94%
KR 87	8.16E-03 8.14%	8.16E-03 8.14%	8.16E-03 8.14%	8.16E-03 8.14%	8.16E-03 8.14%	8.16E-03 8.14%	8.45E-03 8.26%	3.63E-02 15.17%
KR 88	5.59E-02 55.74%	5.59E-02 55.74%	5.59E-02 55.74%	5.59E-02 55.74%	5.59E-02 55.74%	5.59E-02 55.74%	5.62E-02 54.90%	8.22E-02 34.36%
XE133	1.01E-02 10.03%	1.01E-02 10.03%	1.01E-02 10.03%	1.01E-02 10.03%	1.01E-02 10.03%	1.01E-02 10.03%	1.08E-02 10.54%	3.43E-02 14.36%
XE135	1.92E-02 19.16%	1.92E-02 19.16%	1.92E-02 19.16%	1.92E-02 19.16%	1.92E-02 19.16%	1.92E-02 19.16%	1.97E-02 19.30%	6.21E-02 25.97%
XE135M	2.38E-04 0.24%	2.38E-04 0.24%	2.38E-04 0.24%	2.38E-04 0.24%	2.38E-04 0.24%	2.38E-04 0.24%	2.40E-04 0.23%	3.93E-04 0.16%
XE138	3.25E-03 3.24%	3.25E-03 3.24%	3.25E-03 3.24%	3.25E-03 3.24%	3.25E-03 3.24%	3.25E-03 3.24%	3.28E-03 3.21%	6.80E-03 2.84%
KR 89	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.31E-05 0.03%	7.76E-05 0.03%
KR 83M	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	2.37E-06 0.0 %	8.61E-06 0.0 %
XE137	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	1.01E-05 0.0 %	1.58E-04 0.07%
XE133M	1.51E-04 0.15%	1.51E-04 0.15%	1.51E-04 0.15%	1.51E-04 0.15%	1.51E-04 0.15%	1.51E-04 0.15%	1.69E-04 0.16%	1.42E-03 0.59%
XE131M	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.92E-05 0.04%	3.89E-04 0.16%
TOTAL	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.02E-01	2.39E-01

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	2.93E-06 0.14%	3.55E-06 0.15%
I 133	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.09E-07 0.01%	3.76E-07 0.02%
SR 89	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	7.28E-11 0.0 %
CS134	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	4.52E-05 2.18%	5.27E-05 2.16%
CS137	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.31E-04 6.34%	1.53E-04 6.29%
BA140	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	5.61E-07 0.03%	6.42E-07 0.03%
I 131	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.98E-08 0.0 %
CO 58	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.31E-06 0.06%	1.54E-06 0.06%
CO 60	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	1.87E-03 90.06%	2.20E-03 90.13%
MN 54	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.34E-05 1.13%	2.74E-05 1.12%
ZN 65	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.92E-07 0.03%
I 131	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	3.46E-07 0.01%
TOTAL	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.44E-03

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.05E-06 24.14%	7.76E-07 5.39%	4.16E-06 4.94%	5.39E-06 38.15%	9.14E-06 64.38%	1.77E-03 86.98%	0.0 0.0 %	0.0 0.0 %
I 133	4.80E-07 3.80%	7.67E-07 5.33%	9.52E-07 1.13%	1.49E-06 10.58%	2.58E-06 18.19%	2.31E-04 11.34%	0.0 0.0 %	0.0 0.0 %
SR 89	8.40E-09 0.07%	2.51E-07 1.75%	2.93E-07 0.35%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.30E-06 0.46%	0.0 0.0 %
SR 90	4.57E-06 36.12%	4.83E-07 3.36%	7.38E-05 87.64%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.28E-06 2.96%	0.0 0.0 %
CS134	1.76E-06 13.91%	2.61E-08 0.18%	1.25E-06 1.48%	2.59E-06 18.33%	8.68E-07 4.11%	0.0 0.0 %	3.05E-07 0.11%	0.0 0.0 %
CS137	1.98E-06 15.69%	4.14E-08 0.29%	3.17E-06 3.76%	3.75E-06 26.55%	1.33E-06 9.37%	0.0 0.0 %	4.69E-07 0.17%	0.0 0.0 %
BA140	3.13E-08 0.25%	2.08E-06 14.43%	4.92E-07 0.59%	5.63E-10 0.0 %	1.90E-10 0.0 %	0.0 0.0 %	1.51E-05 5.38%	0.0 0.0 %
I 131	5.52E-08 0.44%	1.40E-08 0.10%	7.52E-08 0.09%	9.74E-08 0.69%	1.65E-07 1.16%	3.21E-05 1.57%	0.0 0.0 %	0.0 0.0 %
CO 58	3.46E-09 0.03%	1.36E-07 0.95%	0.0 0.0 %	2.47E-09 0.02%	0.0 0.0 %	0.0 0.0 %	1.49E-06 0.53%	0.0 0.0 %
CO 60	6.27E-07 4.96%	9.28E-06 64.44%	0.0 0.0 %	4.56E-07 3.23%	0.0 0.0 %	0.0 0.0 %	2.42E-04 86.32%	0.0 0.0 %
MN 54	5.16E-08 0.41%	4.82E-07 3.35%	0.0 0.0 %	3.01E-07 2.13%	7.40E-08 0.52%	0.0 0.0 %	1.09E-05 3.88%	0.0 0.0 %
ZN 65	1.83E-08 0.15%	1.60E-08 0.11%	1.22E-08 0.01%	3.78E-08 0.27%	2.49E-08 0.18%	0.0 0.0 %	3.24E-07 0.12%	0.0 0.0 %
I 131	3.75E-09 0.03%	9.53E-10 0.0 %	5.11E-09 0.0 %	6.62E-09 0.05%	1.12E-08 0.08%	2.18E-06 0.11%	0.0 0.0 %	0.0 0.0 %
CR 51	1.81E-09 0.01%	4.60E-08 0.32%	0.0 0.0 %	0.0 0.0 %	3.82E-10 0.0 %	1.05E-09 0.0 %	2.49E-07 0.09%	0.0 0.0 %
TOTAL	1.26E-05	1.44E-05	8.42E-05	1.41E-05	1.42E-05	2.04E-03	2.80E-04	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.09E-04 6.22%	3.62E-05 3.33%	1.56E-04 2.87%	1.92E-04 17.86%	3.24E-04 54.09%	6.22E-02 98.43%	0.0 0.0 %	0.0 0.0 %
I 133	1.53E-10 0.0 %	3.18E-10 0.0 %	3.07E-10 0.0 %	4.61E-10 0.0 %	7.91E-10 0.0 %	7.41E-08 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	6.69E-06 0.38%	2.29E-05 2.11%	2.34E-04 4.30%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.10E-03 62.86%	1.05E-04 9.63%	4.43E-03 81.42%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	1.67E-04 9.58%	3.78E-06 0.35%	1.47E-04 2.71%	3.01E-04 28.05%	9.58E-05 16.00%	0.0 0.0 %	3.33E-05 36.61%	0.0 0.0 %
CS137	2.09E-04 11.94%	6.77E-06 0.62%	4.20E-04 7.72%	4.93E-04 45.84%	1.65E-04 27.50%	0.0 0.0 %	5.77E-05 63.32%	0.0 0.0 %
BA140	3.07E-06 0.18%	6.34E-05 5.82%	4.94E-05 0.91%	5.33E-08 0.0 %	1.78E-08 0.0 %	0.0 0.0 %	3.17E-08 0.03%	0.0 0.0 %
I 131	1.51E-06 0.09%	5.02E-07 0.05%	2.16E-06 0.04%	2.66E-06 0.25%	4.49E-06 0.75%	8.62E-04 1.36%	0.0 0.0 %	0.0 0.0 %
CO 58	1.47E-06 0.08%	8.42E-06 0.77%	0.0 0.0 %	5.81E-07 0.05%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.44E-04 8.26%	7.87E-04 72.28%	0.0 0.0 %	5.85E-05 5.45%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.80E-06 0.27%	4.83E-05 4.44%	0.0 0.0 %	2.21E-05 2.06%	6.45E-06 1.08%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
ZN 65	2.30E-06 0.13%	2.02E-06 0.19%	1.49E-06 0.03%	4.50E-06 0.42%	2.93E-06 0.49%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.75E-07 0.01%	5.84E-08 0.0 %	2.52E-07 0.0 %	3.09E-07 0.03%	5.22E-07 0.09%	1.00E-04 0.16%	0.0 0.0 %	0.0 0.0 %
CR 51	2.85E-08 0.0 %	4.54E-06 0.42%	0.0 0.0 %	0.0 0.0 %	5.47E-09 0.0 %	1.64E-08 0.0 %	3.45E-08 0.04%	0.0 0.0 %
TOTAL	1.75E-03	1.09E-03	5.44E-03	1.07E-03	5.99E-04	6.32E-02	9.11E-05	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	2.03E-04 20.46%	6.27E-05 27.78%	2.99E-04 15.56%	3.58E-04 19.40%	6.03E-04 54.62%	1.16E-01 98.33%	0.0 0.0 %	0.0 0.0 %
I 133	3.86E-07 0.04%	7.43E-07 0.33%	7.80E-07 0.04%	1.14E-06 0.06%	1.95E-06 0.18%	1.87E-04 0.16%	0.0 0.0 %	0.0 0.0 %
SR 89	8.24E-07 0.08%	2.55E-06 1.13%	2.88E-05 1.50%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.28E-04 12.93%	1.16E-05 5.15%	5.15E-04 26.78%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.78E-04 28.12%	6.38E-06 2.83%	2.77E-04 14.41%	5.52E-04 29.89%	1.75E-04 15.85%	0.0 0.0 %	6.14E-05 36.75%	0.0 0.0 %
CS137	3.41E-04 34.47%	1.14E-05 5.05%	7.85E-04 40.83%	8.97E-04 48.55%	2.99E-04 27.10%	0.0 0.0 %	1.06E-04 63.24%	0.0 0.0 %
BA140	2.74E-07 0.03%	5.16E-06 2.29%	4.45E-06 0.23%	4.67E-09 0.0 %	1.56E-09 0.0 %	0.0 0.0 %	2.79E-09 0.0 %	0.0 0.0 %
I 131	2.79E-06 0.28%	8.63E-07 0.38%	4.12E-06 0.21%	4.93E-06 0.27%	8.30E-06 0.75%	1.60E-03 1.35%	0.0 0.0 %	0.0 0.0 %
CO 58	2.18E-07 0.02%	1.13E-06 0.50%	0.0 0.0 %	8.44E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	2.24E-05 2.26%	1.10E-04 48.80%	0.0 0.0 %	8.89E-06 0.48%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.83E-07 0.02%	1.65E-06 0.73%	0.0 0.0 %	8.23E-07 0.04%	2.39E-07 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
ZN 65	1.24E-05 1.25%	9.78E-06 4.33%	7.93E-06 0.41%	2.37E-05 1.28%	1.54E-05 1.39%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	3.28E-07 0.03%	1.02E-07 0.04%	4.84E-07 0.03%	5.80E-07 0.03%	9.77E-07 0.09%	1.88E-04 0.16%	0.0 0.0 %	0.0 0.0 %
CR 51	1.03E-08 0.0 %	1.47E-06 0.65%	0.0 0.0 %	0.0 0.0 %	1.92E-09 0.0 %	5.86E-09 0.0 %	1.22E-08 0.0 %	0.0 0.0 %
TOTAL	9.90E-04	2.26E-04	1.92E-03	1.85E-03	1.10E-03	1.18E-01	1.67E-04	0.0

COOPER NUCLEAR STATION ; SECOND QUARTERLY PERIOD 1982 ; COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.24E-05 3.47%	4.86E-06 0.48%	1.66E-05 4.05%	2.18E-05 6.40%	3.71E-05 29.49%	7.10E-03 98.48%	0.0 0.0 %	0.0 0.0 %
I 133	2.29E-13 0.0 %	5.62E-13 0.0 %	4.47E-13 0.0 %	7.16E-13 0.0 %	1.24E-12 0.0 %	1.11E-10 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.25E-07 0.06%	9.72E-07 0.10%	7.85E-06 1.91%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	5.22E-05 14.58%	5.55E-06 0.55%	2.11E-04 51.50%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	6.38E-05 17.84%	1.40E-06 0.14%	4.32E-05 10.54%	9.49E-05 27.80%	3.04E-05 24.15%	0.0 0.0 %	1.04E-05 37.11%	0.0 0.0 %
CS137	7.99E-05 22.33%	2.47E-06 0.24%	1.21E-04 29.52%	1.52E-04 44.59%	5.13E-05 40.70%	0.0 0.0 %	1.76E-05 62.86%	0.0 0.0 %
BA140	4.38E-07 0.12%	1.11E-05 1.09%	6.89E-06 1.68%	7.95E-09 0.0 %	2.68E-09 0.0 %	0.0 0.0 %	4.66E-09 0.02%	0.0 0.0 %
I 131	1.72E-07 0.05%	6.72E-08 0.0 %	2.30E-07 0.06%	3.02E-07 0.09%	5.14E-07 0.41%	9.83E-05 1.36%	0.0 0.0 %	0.0 0.0 %
CO 58	1.19E-06 0.33%	8.56E-06 0.85%	0.0 0.0 %	4.99E-07 0.15%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.43E-04 39.86%	9.67E-04 95.63%	0.0 0.0 %	6.09E-05 17.83%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	2.79E-07 0.08%	3.53E-06 0.35%	0.0 0.0 %	1.36E-06 0.40%	4.02E-07 0.32%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
ZN 65	4.49E-06 1.26%	4.96E-06 0.49%	3.00E-06 0.73%	9.31E-06 2.73%	6.14E-06 4.86%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.00E-08 0.0 %	7.83E-09 0.0 %	2.68E-08 0.0 %	3.52E-08 0.01%	5.99E-08 0.05%	1.14E-05 0.16%	0.0 0.0 %	0.0 0.0 %
CR 51	3.63E-09 0.0 %	7.23E-07 0.07%	0.0 0.0 %	0.0 0.0 %	7.43E-10 0.0 %	2.12E-09 0.0 %	4.60E-09 0.02%	0.0 0.0 %
TOTAL	3.58E-04	1.01E-03	4.10E-04	3.41E-04	1.26E-04	7.21E-03	2.80E-05	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.02%	1.91E-05 0.0 %	6.36E-05 0.06%	3.21E-03 1.33%
KR 85M	3.22E-03 3.06%	3.22E-03 3.08%	3.22E-03 2.93%	3.22E-03 3.05%	3.22E-03 3.09%	3.22E-03 1.10%	3.33E-03 3.17%	1.18E-02 4.89%
KR 87	8.16E-03 7.74%	8.16E-03 7.80%	8.16E-03 7.41%	8.16E-03 7.73%	8.16E-03 7.83%	8.16E-03 2.79%	8.45E-03 8.05%	3.63E-02 15.02%
KR 88	5.59E-02 53.00%	5.59E-02 53.39%	5.59E-02 50.72%	5.59E-02 52.91%	5.59E-02 53.64%	5.59E-02 19.10%	5.62E-02 53.52%	8.22E-02 34.01%
XE133	1.01E-02 9.54%	1.01E-02 9.61%	1.01E-02 9.13%	1.01E-02 9.52%	1.01E-02 9.65%	1.01E-02 3.44%	1.08E-02 10.27%	3.43E-02 14.21%
XE135	1.92E-02 18.22%	1.92E-02 18.35%	1.92E-02 17.44%	1.92E-02 18.19%	1.92E-02 18.44%	1.92E-02 6.57%	1.97E-02 18.81%	6.21E-02 25.71%
XE135M	2.38E-04 0.23%	2.38E-04 0.23%	2.38E-04 0.22%	2.38E-04 0.23%	2.38E-04 0.23%	2.38E-04 0.08%	2.40E-04 0.23%	3.93E-04 0.16%
XE138	3.25E-03 3.08%	3.25E-03 3.10%	3.25E-03 2.95%	3.25E-03 3.07%	3.25E-03 3.12%	3.25E-03 1.11%	3.28E-03 3.13%	6.80E-03 2.81%
KR 89	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.03%	3.27E-05 0.01%	3.31E-05 0.03%	7.76E-05 0.03%
KR 83M	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	3.04E-08 0.0 %	2.37E-06 0.0 %	8.61E-06 0.0 %
XE137	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	8.59E-06 0.0 %	1.01E-05 0.0 %	1.58E-04 0.07%
XE133M	1.51E-04 0.14%	1.51E-04 0.14%	1.51E-04 0.14%	1.51E-04 0.14%	1.51E-04 0.15%	1.51E-04 0.05%	1.69E-04 0.16%	1.42E-03 0.59%
XE131M	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.03%	3.16E-05 0.01%	3.92E-05 0.04%	3.89E-04 0.16%
I 131	3.30E-04 0.31%	1.07E-04 0.10%	4.79E-04 0.43%	5.81E-04 0.55%	9.76E-04 0.94%	1.87E-01 63.90%	2.93E-06 0.0 %	3.55E-06 0.0 %
TOTAL	1.05E-01	1.05E-01	1.10E-01	1.06E-01	1.04E-01	2.93E-01	1.05E-01	2.42E-01

(CONTINUED)

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	1.18E-06 0.0 %	1.82E-06 0.0 %	2.04E-06 0.0 %	2.95E-06 0.0 %	4.85E-06 0.0 %	4.18E-04 0.14%	3.09E-07 0.0 %	3.76E-07 0.0 %
SR 89	7.75E-06 0.0 %	2.67E-05 0.03%	2.71E-04 0.25%	6.27E-11 0.0 %	6.27E-11 0.0 %	6.27E-11 0.0 %	1.30E-06 0.0 %	7.28E-11 0.0 %
SR 90	1.28E-03 1.22%	1.23E-04 0.12%	5.23E-03 4.74%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	8.28E-06 0.0 %	0.0 0.0 %
CS134	5.57E-04 0.53%	5.68E-05 0.05%	5.14E-04 0.47%	9.96E-04 0.94%	3.47E-04 0.33%	4.52E-05 0.02%	1.51E-04 0.14%	5.27E-05 0.02%
CS137	7.63E-04 0.72%	1.52E-04 0.15%	1.46E-03 1.32%	1.68E-03 1.59%	6.48E-04 0.62%	1.31E-04 0.04%	3.13E-04 0.30%	1.53E-04 0.06%
BA140	4.37E-06 0.0 %	8.23E-05 0.08%	6.18E-05 0.06%	6.28E-07 0.0 %	5.84E-07 0.0 %	5.61E-07 0.0 %	1.57E-05 0.01%	6.42E-07 0.0 %
I 131	4.56E-06 0.0 %	1.49E-06 0.0 %	6.62E-06 0.0 %	8.03E-06 0.0 %	1.35E-05 0.01%	2.59E-03 0.88%	4.10E-08 0.0 %	4.98E-08 0.0 %
CO 58	4.20E-06 0.0 %	1.96E-05 0.02%	1.31E-06 0.0 %	2.48E-06 0.0 %	1.31E-06 0.0 %	1.31E-06 0.0 %	2.80E-06 0.0 %	1.54E-06 0.0 %
CO 60	2.18E-03 2.06%	3.74E-03 3.57%	1.87E-03 1.69%	2.00E-03 1.89%	1.87E-03 1.79%	1.87E-03 0.64%	2.11E-03 2.01%	2.20E-03 0.91%
MN 54	2.87E-05 0.03%	7.74E-05 0.07%	2.34E-05 0.02%	4.80E-05 0.05%	3.06E-05 0.03%	2.34E-05 0.0 %	3.42E-05 0.03%	2.74E-05 0.01%
ZN 65	1.98E-05 0.02%	1.74E-05 0.02%	1.30E-05 0.01%	3.81E-05 0.04%	2.51E-05 0.02%	6.01E-07 0.0 %	9.25E-07 0.0 %	6.92E-07 0.0 %
I 131	5.32E-07 0.0 %	1.73E-07 0.0 %	7.73E-07 0.0 %	9.36E-07 0.0 %	1.57E-06 0.0 %	3.02E-04 0.10%	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	3.37E-07 0.0 %	7.07E-06 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	3.01E-07 0.0 %	3.18E-07 0.0 %	5.93E-07 0.0 %	3.46E-07 0.0 %
TOTAL	1.05E-01	1.05E-01	1.10E-01	1.06E-01	1.04E-01	2.93E-01	1.05E-01	2.42E-01

COOPER NUCLEAR STATION ; FIRST SEMIANNUAL PERIOD 1982 ; COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.15E-01 95.87%	2.15E-01 97.55%	2.15E-01 88.83%	2.15E-01 97.06%	2.15E-01 97.81%	2.15E-01 41.90%	2.21E-01 98.70%	5.53E-01 99.53%
GROUND	2.20E-03 0.98%	2.20E-03 1.00%	2.20E-03 0.91%	2.20E-03 0.99%	2.20E-03 1.00%	2.20E-03 0.43%	2.20E-03 0.99%	2.59E-03 0.47%
INHAL	2.32E-05 0.01%	2.15E-05 0.01%	2.13E-04 0.09%	1.98E-05 0.01%	2.15E-05 0.01%	3.03E-03 0.59%	3.34E-04 0.15%	0.0 0.0 %
VEGET	4.86E-03 2.16%	1.74E-03 0.79%	1.95E-02 8.06%	1.41E-03 0.64%	8.54E-04 0.39%	9.82E-02 19.11%	1.16E-04 0.05%	0.0 0.0 %
COW MILK	1.63E-03 0.73%	3.36E-04 0.15%	4.01E-03 1.66%	2.46E-03 1.11%	1.58E-03 0.72%	1.84E-01 35.79%	2.14E-04 0.10%	0.0 0.0 %
MEAT	5.52E-04 0.25%	1.10E-03 0.50%	1.10E-03 0.45%	4.26E-04 0.19%	1.70E-04 0.08%	1.12E-02 2.18%	3.58E-05 0.02%	0.0 0.0 %
TOTAL	2.25E-01	2.21E-01	2.42E-01	2.22E-01	2.20E-01	5.14E-01	2.23E-01	5.56E-01

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = PLUME

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.80E-04 0.08%	1.80E-04 0.08%	1.80E-04 0.08%	1.80E-04 0.08%	1.80E-04 0.08%	1.80E-04 0.08%	5.97E-04 0.27%	3.01E-02 5.45%
KR 85M	6.79E-03 3.15%	6.79E-03 3.15%	6.79E-03 3.15%	6.79E-03 3.15%	6.79E-03 3.15%	6.79E-03 3.15%	7.02E-03 3.18%	2.49E-02 4.50%
KR 87	1.51E-02 7.01%	1.51E-02 7.01%	1.51E-02 7.01%	1.51E-02 7.01%	1.51E-02 7.01%	1.51E-02 7.01%	1.56E-02 7.08%	6.71E-02 12.13%
KR 88	1.11E-01 51.75%	1.11E-01 51.75%	1.11E-01 51.75%	1.11E-01 51.75%	1.11E-01 51.75%	1.11E-01 51.75%	1.12E-01 50.74%	1.64E-01 29.62%
XE133	3.19E-02 14.82%	3.19E-02 14.82%	3.19E-02 14.82%	3.19E-02 14.82%	3.19E-02 14.82%	3.19E-02 14.82%	3.42E-02 15.49%	1.09E-01 19.69%
XE135	4.33E-02 20.11%	4.33E-02 20.11%	4.33E-02 20.11%	4.33E-02 20.11%	4.33E-02 20.11%	4.33E-02 20.11%	4.45E-02 20.17%	1.40E-01 25.32%
XE135M	4.11E-04 0.19%	4.11E-04 0.19%	4.11E-04 0.19%	4.11E-04 0.19%	4.11E-04 0.19%	4.11E-04 0.19%	4.13E-04 0.19%	6.78E-04 0.12%
XE138	5.59E-03 2.60%	5.59E-03 2.60%	5.59E-03 2.60%	5.59E-03 2.60%	5.59E-03 2.60%	5.59E-03 2.60%	5.66E-03 2.56%	1.17E-02 2.12%
KR 89	5.47E-05 0.03%	5.47E-05 0.03%	5.47E-05 0.03%	5.47E-05 0.03%	5.47E-05 0.03%	5.47E-05 0.03%	5.54E-05 0.03%	1.30E-04 0.02%
KR 83M	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	4.53E-06 0.0 %	1.65E-05 0.0 %
XE137	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.70E-05 0.0 %	2.66E-04 0.05%
XE133M	4.25E-04 0.20%	4.25E-04 0.20%	4.25E-04 0.20%	4.25E-04 0.20%	4.25E-04 0.20%	4.25E-04 0.20%	4.75E-04 0.22%	3.98E-03 0.72%
XE131M	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.42E-04 0.06%	1.41E-03 0.25%
TOTAL	2.15E-01	2.15E-01	2.15E-01	2.15E-01	2.15E-01	2.15E-01	2.21E-01	5.53E-01

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = GROUND

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	4.46E-06 0.20%	5.41E-06 0.21%
I 133	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	7.44E-07 0.03%	9.05E-07 0.03%
SR 89	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	7.37E-10 0.0 %
CS134	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	6.14E-05 2.79%	7.16E-05 2.77%
CS137	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.60E-04 7.27%	1.87E-04 7.21%
BA140	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.40E-06 0.06%	1.60E-06 0.06%
I 131	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.38E-06 0.06%	1.61E-06 0.06%
CO 60	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	1.95E-03 88.45%	2.29E-03 88.53%
MN 54	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.39E-05 1.09%	2.81E-05 1.08%
I 131	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.01E-07 0.03%	6.92E-07 0.03%
I 131	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	2.93E-07 0.01%	3.46E-07 0.01%
TOTAL	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.20E-03	2.59E-03

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = INHAL

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	4.25E-06 18.35%	1.08E-06 5.03%	5.79E-06 2.72%	7.51E-06 37.97%	1.27E-05 59.19%	2.47E-03 81.58%	0.0 0.0 %	0.0 0.0 %
I 133	1.05E-06 4.51%	1.67E-06 7.76%	2.07E-06 0.97%	3.25E-06 16.44%	5.62E-06 26.11%	5.03E-04 16.60%	0.0 0.0 %	0.0 0.0 %
SR 89	7.48E-08 0.32%	2.24E-06 10.41%	2.61E-06 1.22%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	1.16E-05 3.46%	0.0 0.0 %
SR 90	1.21E-05 52.37%	1.28E-06 5.97%	1.96E-04 91.92%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	2.20E-05 6.59%	0.0 0.0 %
CS134	2.37E-06 10.24%	3.52E-08 0.16%	1.68E-06 0.79%	3.49E-06 17.66%	1.17E-06 5.44%	0.0 0.0 %	4.12E-07 0.12%	0.0 0.0 %
CS137	2.40E-06 10.35%	5.01E-08 0.23%	3.83E-06 1.79%	4.53E-06 22.92%	1.61E-06 7.47%	0.0 0.0 %	5.67E-07 0.17%	0.0 0.0 %
BA140	7.16E-08 0.31%	4.75E-06 22.11%	1.13E-06 0.53%	1.29E-09 0.0 %	4.35E-10 0.0 %	0.0 0.0 %	3.45E-05 10.31%	0.0 0.0 %
I 131	3.43E-08 0.15%	8.72E-09 0.04%	4.67E-08 0.02%	6.05E-08 0.31%	1.03E-07 0.48%	1.99E-05 0.66%	0.0 0.0 %	0.0 0.0 %
CO 58	3.63E-09 0.02%	1.43E-07 0.66%	0.0 0.0 %	2.59E-09 0.01%	0.0 0.0 %	0.0 0.0 %	1.56E-06 0.47%	0.0 0.0 %
CO 60	6.53E-07 2.82%	9.67E-06 44.96%	0.0 0.0 %	4.76E-07 2.41%	0.0 0.0 %	0.0 0.0 %	2.52E-04 75.40%	0.0 0.0 %
MN 54	5.26E-08 0.23%	4.92E-07 2.29%	0.0 0.0 %	3.07E-07 1.55%	7.55E-08 0.35%	0.0 0.0 %	1.11E-05 3.32%	0.0 0.0 %
I 131	1.71E-09 0.0 %	4.34E-10 0.0 %	2.33E-09 0.0 %	3.01E-09 0.02%	5.11E-09 0.02%	9.93E-07 0.03%	0.0 0.0 %	0.0 0.0 %
I 131	5.52E-08 0.24%	1.40E-08 0.07%	7.52E-08 0.04%	9.74E-08 0.49%	1.65E-07 0.77%	3.21E-05 1.06%	0.0 0.0 %	0.0 0.0 %
ZN 65	1.83E-08 0.08%	1.60E-08 0.07%	1.22E-08 0.0 %	3.78E-08 0.19%	2.49E-08 0.12%	0.0 0.0 %	3.24E-07 0.10%	0.0 0.0 %
I 131	3.75E-09 0.02%	9.53E-10 0.0 %	5.11E-09 0.0 %	6.62E-09 0.03%	1.12E-08 0.05%	2.18E-06 0.07%	0.0 0.0 %	0.0 0.0 %
CR 51	1.81E-09 0.0 %	4.60E-08 0.21%	0.0 0.0 %	0.0 0.0 %	3.82E-10 0.0 %	1.05E-09 0.0 %	2.49E-07 0.07%	0.0 0.0 %
TOTAL	2.32E-05	2.15E-05	2.13E-04	1.98E-05	2.15E-05	3.03E-03	3.34E-04	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = VEGET

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.69E-04 3.48%	5.63E-05 3.23%	2.42E-04 1.24%	2.98E-04 21.16%	5.03E-04 58.91%	9.66E-02 98.40%	0.0 0.0 %	0.0 0.0 %
I 133	3.80E-10 0.0 %	7.87E-10 0.0 %	7.60E-10 0.0 %	1.14E-09 0.0 %	1.96E-09 0.0 %	1.84E-07 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	7.10E-05 1.46%	2.43E-04 13.97%	2.48E-03 12.69%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	3.96E-03 81.58%	3.79E-04 21.72%	1.60E-02 81.73%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	2.29E-04 4.72%	5.17E-06 0.30%	2.01E-04 1.03%	4.13E-04 29.31%	1.31E-04 15.37%	0.0 0.0 %	4.57E-05 39.21%	0.0 0.0 %
CS137	2.56E-04 5.26%	8.30E-06 0.48%	5.15E-04 2.63%	6.04E-04 42.87%	2.02E-04 23.65%	0.0 0.0 %	7.07E-05 60.69%	0.0 0.0 %
BA140	7.85E-06 0.16%	1.62E-04 9.31%	1.27E-04 0.65%	1.36E-07 0.0 %	4.56E-08 0.0 %	0.0 0.0 %	8.10E-08 0.07%	0.0 0.0 %
I 131	9.70E-07 0.02%	3.23E-07 0.02%	1.39E-06 0.0 %	1.71E-06 0.12%	2.89E-06 0.34%	5.55E-04 0.56%	0.0 0.0 %	0.0 0.0 %
CO 58	1.54E-06 0.03%	8.84E-06 0.51%	0.0 0.0 %	6.10E-07 0.04%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.51E-04 3.11%	8.23E-04 47.23%	0.0 0.0 %	6.12E-05 4.34%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	4.91E-06 0.10%	4.95E-05 2.84%	0.0 0.0 %	2.26E-05 1.61%	6.61E-06 0.77%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	8.92E-08 0.0 %	2.97E-08 0.0 %	1.28E-07 0.0 %	1.57E-07 0.01%	2.66E-07 0.03%	5.10E-05 0.05%	0.0 0.0 %	0.0 0.0 %
I 131	1.51E-06 0.03%	5.02E-07 0.03%	2.16E-06 0.01%	2.66E-06 0.19%	4.49E-06 0.53%	8.62E-04 0.88%	0.0 0.0 %	0.0 0.0 %
ZN 65	2.30E-06 0.05%	2.02E-06 0.12%	1.49E-06 0.0 %	4.50E-06 0.32%	2.93E-06 0.34%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.75E-07 0.0 %	5.84E-08 0.0 %	2.52E-07 0.0 %	3.09E-07 0.02%	5.22E-07 0.06%	1.00E-04 0.10%	0.0 0.0 %	0.0 0.0 %
CR 51	2.85E-08 0.0 %	4.54E-06 0.26%	0.0 0.0 %	0.0 0.0 %	5.47E-09 0.0 %	1.64E-08 0.0 %	3.45E-08 0.03%	0.0 0.0 %
TOTAL	4.86E-03	1.74E-03	1.95E-02	1.41E-03	8.54E-04	9.82E-02	1.16E-04	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = COW MILK

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	3.15E-04 19.31%	9.76E-05 29.07%	4.66E-04 11.60%	5.58E-04 22.66%	9.39E-04 59.36%	1.81E-01 98.17%	0.0 0.0 %	0.0 0.0 %
I 133	9.56E-07 0.06%	1.84E-06 0.55%	1.93E-06 0.05%	2.82E-06 0.11%	4.83E-06 0.31%	4.62E-04 0.25%	0.0 0.0 %	0.0 0.0 %
SR 89	8.77E-06 0.54%	2.72E-05 8.10%	3.06E-04 7.63%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	4.66E-04 28.50%	4.22E-05 12.58%	1.87E-03 46.60%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	3.82E-04 23.38%	8.75E-06 2.61%	3.80E-04 9.46%	7.57E-04 30.76%	2.40E-04 15.18%	0.0 0.0 %	8.42E-05 39.37%	0.0 0.0 %
CS137	4.19E-04 25.64%	1.40E-05 4.16%	9.63E-04 23.99%	1.10E-03 44.72%	3.67E-04 23.21%	0.0 0.0 %	1.30E-04 60.62%	0.0 0.0 %
BA140	7.03E-07 0.04%	1.33E-05 3.95%	1.14E-05 0.28%	1.20E-08 0.0 %	3.99E-09 0.0 %	0.0 0.0 %	7.17E-09 0.0 %	0.0 0.0 %
I 131	1.80E-06 0.11%	5.58E-07 0.17%	2.66E-06 0.07%	3.19E-06 0.13%	5.36E-06 0.34%	1.03E-03 0.56%	0.0 0.0 %	0.0 0.0 %
CO 58	2.29E-07 0.01%	1.18E-06 0.35%	0.0 0.0 %	8.85E-08 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	2.34E-05 1.43%	1.15E-04 34.31%	0.0 0.0 %	9.30E-06 0.38%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	1.87E-07 0.01%	1.69E-06 0.50%	0.0 0.0 %	8.43E-07 0.03%	2.45E-07 0.02%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.67E-07 0.01%	5.18E-08 0.02%	2.47E-07 0.0 %	2.96E-07 0.01%	4.98E-07 0.03%	9.58E-05 0.05%	0.0 0.0 %	0.0 0.0 %
I 131	2.79E-06 0.17%	8.63E-07 0.26%	4.12E-06 0.10%	4.93E-06 0.20%	8.30E-06 0.52%	1.60E-03 0.87%	0.0 0.0 %	0.0 0.0 %
ZN 65	1.24E-05 0.76%	9.78E-06 2.91%	7.93E-06 0.20%	2.37E-05 0.96%	1.54E-05 0.97%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	3.28E-07 0.02%	1.02E-07 0.03%	4.84E-07 0.01%	5.80E-07 0.02%	9.77E-07 0.06%	1.88E-04 0.10%	0.0 0.0 %	0.0 0.0 %
CR 51	1.03E-08 0.0 %	1.47E-06 0.44%	0.0 0.0 %	0.0 0.0 %	1.92E-09 0.0 %	5.86E-09 0.0 %	1.22E-08 0.0 %	0.0 0.0 %
TOTAL	1.63E-03	3.36E-04	4.01E-03	2.46E-03	1.58E-03	1.84E-01	2.14E-04	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = MEAT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 131	1.93E-05 3.50%	7.55E-06 0.69%	2.58E-05 2.34%	3.39E-05 7.97%	5.77E-05 34.00%	1.10E-02 98.40%	0.0 0.0 %	0.0 0.0 %
I 133	5.69E-14 0.0 %	1.39E-12 0.0 %	1.11E-12 0.0 %	1.78E-12 0.0 %	3.07E-12 0.0 %	2.74E-10 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 89	2.39E-06 0.43%	1.03E-05 0.94%	8.34E-05 7.57%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
SR 90	1.88E-04 34.13%	2.00E-05 1.82%	7.63E-04 69.30%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CS134	8.74E-05 15.84%	1.92E-06 0.17%	5.92E-05 5.38%	1.30E-04 30.52%	4.17E-05 24.55%	0.0 0.0 %	1.42E-05 39.73%	0.0 0.0 %
CS137	9.79E-05 17.74%	3.03E-06 0.28%	1.49E-04 13.49%	1.87E-04 43.81%	6.28E-05 37.03%	0.0 0.0 %	2.16E-05 60.22%	0.0 0.0 %
BA140	1.12E-06 0.20%	2.83E-05 2.57%	1.76E-05 1.60%	2.03E-08 0.0 %	6.86E-09 0.0 %	0.0 0.0 %	1.19E-08 0.03%	0.0 0.0 %
I 131	1.11E-07 0.02%	4.33E-08 0.0 %	1.48E-07 0.01%	1.95E-07 0.05%	3.31E-07 0.20%	6.33E-05 0.57%	0.0 0.0 %	0.0 0.0 %
CO 58	1.25E-06 0.23%	8.98E-06 0.82%	0.0 0.0 %	5.24E-07 0.12%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
CO 60	1.49E-04 27.00%	1.01E-03 91.86%	0.0 0.0 %	6.36E-05 14.94%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
MN 54	2.85E-07 0.05%	3.62E-06 0.33%	0.0 0.0 %	1.40E-06 0.33%	4.12E-07 0.24%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	1.02E-08 0.0 %	3.99E-09 0.0 %	1.36E-08 0.0 %	1.79E-08 0.0 %	3.05E-08 0.02%	5.83E-06 0.05%	0.0 0.0 %	0.0 0.0 %
I 131	1.72E-07 0.03%	6.72E-08 0.0 %	2.30E-07 0.02%	3.02E-07 0.07%	5.14E-07 0.30%	9.83E-05 0.88%	0.0 0.0 %	0.0 0.0 %
ZR 65	4.49E-06 0.81%	4.96E-06 0.45%	3.00E-06 0.27%	9.31E-06 2.19%	6.14E-06 3.62%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %
I 131	2.00E-08 0.0 %	7.83E-09 0.0 %	2.68E-08 0.0 %	3.52E-08 0.0 %	5.99E-08 0.04%	1.14E-05 0.10%	0.0 0.0 %	0.0 0.0 %
CR 51	3.63E-09 0.0 %	7.23E-07 0.07%	0.0 0.0 %	0.0 0.0 %	7.43E-10 0.0 %	2.12E-09 0.0 %	4.60E-09 0.01%	0.0 0.0 %
TOTAL	5.52E-04	1.10E-03	1.10E-03	4.26E-04	1.70E-04	1.12E-02	3.58E-05	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY - *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
KR 85	1.80E-04 0.08%	1.80E-04 0.08%	1.80E-04 0.07%	1.80E-04 0.08%	1.80E-04 0.08%	1.80E-04 0.03%	5.97E-04 0.27%	3.01E-02 5.42%
KR 85M	6.79E-03 3.02%	6.79E-03 3.08%	6.79E-03 2.80%	6.79E-03 3.06%	6.79E-03 3.09%	6.79E-03 1.32%	7.02E-03 3.14%	2.49E-02 4.48%
KR 87	1.51E-02 6.72%	1.51E-02 6.84%	1.51E-02 6.23%	1.51E-02 6.81%	1.51E-02 6.86%	1.51E-02 2.94%	1.56E-02 6.99%	6.71E-02 12.08%
KR 88	1.11E-01 49.61%	1.11E-01 50.48%	1.11E-01 45.97%	1.11E-01 50.23%	1.11E-01 50.61%	1.11E-01 21.68%	1.12E-01 50.08%	1.64E-01 29.48%
XE133	3.19E-02 14.20%	3.19E-02 14.45%	3.19E-02 13.16%	3.19E-02 14.38%	3.19E-02 14.49%	3.19E-02 6.21%	3.42E-02 15.29%	1.09E-01 19.60%
XE135	4.33E-02 19.28%	4.33E-02 19.62%	4.33E-02 17.87%	4.33E-02 19.52%	4.33E-02 19.67%	4.33E-02 8.43%	4.45E-02 19.90%	1.40E-01 25.20%
XE135M	4.11E-04 0.18%	4.11E-04 0.19%	4.11E-04 0.17%	4.11E-04 0.19%	4.11E-04 0.19%	4.11E-04 0.08%	4.13E-04 0.18%	6.78E-04 0.12%
XE138	5.59E-03 2.49%	5.59E-03 2.53%	5.59E-03 2.31%	5.59E-03 2.52%	5.59E-03 2.54%	5.59E-03 1.09%	5.66E-03 2.53%	1.17E-02 2.11%
KR 89	5.47E-05 0.02%	5.47E-05 0.02%	5.47E-05 0.02%	5.47E-05 0.02%	5.47E-05 0.02%	5.47E-05 0.01%	5.54E-05 0.02%	1.30E-04 0.02%
KR 83M	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	5.81E-08 0.0 %	4.53E-06 0.0 %	1.65E-05 0.0 %
XE137	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.45E-05 0.0 %	1.70E-05 0.0 %	2.66E-04 0.05%
XE133M	4.25E-04 0.19%	4.25E-04 0.19%	4.25E-04 0.18%	4.25E-04 0.19%	4.25E-04 0.19%	4.25E-04 0.08%	4.75E-04 0.21%	3.98E-03 0.72%
XE131M	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.05%	1.14E-04 0.02%	1.42E-04 0.06%	1.41E-03 0.25%
I 131	5.12E-04 0.23%	1.67E-04 0.08%	7.44E-04 0.31%	9.02E-04 0.41%	1.52E-03 0.69%	2.91E-01 56.57%	4.46E-06 0.0 %	5.41E-06 0.0 %
TOTAL	2.25E-01	2.21E-01	2.42E-01	2.22E-01	2.20E-01	5.14E-01	2.23E-01	5.56E-01

(CONTINUED)

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
NEPA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)
PATHWAY = *TOTAL*

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
I 133	2.75E-06 0.0 %	4.25E-06 0.0 %	4.75E-06 0.0 %	6.82E-06 0.0 %	1.12E-05 0.0 %	9.66E-04 0.19%	7.44E-07 0.0 %	9.05E-07 0.0 %
SR 89	8.22E-05 0.04%	2.83E-04 0.13%	2.87E-03 1.18%	6.35E-10 0.0 %	6.35E-10 0.0 %	6.35E-10 0.0 %	1.16E-05 0.0 %	7.37E-10 0.0 %
SR 90	4.63E-03 2.06%	4.42E-04 0.20%	1.88E-02 7.76%	0.0 0.0 %	0.0 0.0 %	0.0 0.0 %	2.20E-05 0.0 %	0.0 0.0 %
CS134	7.62E-04 0.34%	7.73E-05 0.04%	7.04E-04 0.29%	1.37E-03 0.62%	4.76E-04 0.22%	6.14E-05 0.01%	2.06E-04 0.09%	7.16E-05 0.01%
CS137	9.35E-04 0.42%	1.86E-04 0.08%	1.79E-03 0.74%	2.06E-03 0.93%	7.94E-04 0.36%	1.60E-04 0.03%	3.83E-04 0.17%	1.87E-04 0.03%
BA140	1.11E-05 0.0 %	2.10E-04 0.10%	1.58E-04 0.07%	1.57E-06 0.0 %	1.46E-06 0.0 %	1.40E-06 0.0 %	3.60E-05 0.02%	1.60E-06 0.0 %
I 131	2.94E-06 0.0 %	9.58E-07 0.0 %	4.27E-06 0.0 %	5.18E-06 0.0 %	8.71E-06 0.0 %	1.67E-03 0.32%	2.57E-08 0.0 %	3.12E-08 0.0 %
CO 58	1.40E-06 0.0 %	2.05E-05 0.0 %	1.38E-06 0.0 %	2.60E-06 0.0 %	1.38E-06 0.0 %	1.38E-06 0.0 %	2.93E-06 0.0 %	1.61E-06 0.0 %
CO 60	2.27E-03 1.01%	3.91E-03 1.77%	1.95E-03 0.80%	2.08E-03 0.94%	1.95E-03 0.89%	1.95E-03 0.38%	2.20E-03 0.99%	2.29E-03 0.41%
MN 54	2.94E-05 0.01%	7.92E-05 0.04%	2.39E-05 0.0 %	4.91E-05 0.02%	3.13E-05 0.01%	2.39E-05 0.0 %	3.50E-05 0.02%	2.81E-05 0.0 %
I 131	2.71E-07 0.0 %	8.82E-08 0.0 %	3.93E-07 0.0 %	4.77E-07 0.0 %	8.02E-07 0.0 %	1.54E-04 0.03%	2.26E-09 0.0 %	2.75E-09 0.0 %
I 131	4.56E-06 0.0 %	1.49E-06 0.0 %	6.62E-06 0.0 %	8.03E-06 0.0 %	1.35E-05 0.0 %	2.59E-03 0.50%	4.10E-08 0.0 %	4.98E-08 0.0 %
ZN 65	1.98E-05 0.0 %	1.74E-05 0.0 %	1.30E-05 0.0 %	3.81E-05 0.02%	2.51E-05 0.01%	6.01E-07 0.0 %	9.25E-07 0.0 %	6.92E-07 0.0 %
I 131	5.32E-07 0.0 %	1.73E-07 0.0 %	7.73E-07 0.0 %	9.36E-07 0.0 %	1.57E-06 0.0 %	3.02E-04 0.06%	4.67E-09 0.0 %	5.67E-09 0.0 %
CR 51	3.37E-07 0.0 %	7.07E-06 0.0 %	2.93E-07 0.0 %	2.93E-07 0.0 %	3.01E-07 0.0 %	3.18E-07 0.0 %	5.93E-07 0.0 %	3.46E-07 0.0 %
TOTAL	2.25E-01	2.21E-01	2.42E-01	2.22E-01	2.20E-01	5.14E-01	2.23E-01	5.56E-01

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 3.53E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 5.66E-01 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.81E-01	3.84E-01	7.33E-01
GROUND	8.36E-04	8.36E-04	8.36E-04	8.36E-04	8.36E-04	8.36E-04	8.36E-04	9.81E-04
VEGET								
ADULT	3.60E-03	6.79E-04	1.48E-02	3.38E-04	1.49E-04	8.71E-03	3.37E-05	0.0
TEEN	4.55E-03	8.05E-04	1.93E-02	5.15E-04	2.04E-04	7.43E-03	6.11E-05	0.0
CHILD	7.65E-03	6.26E-04	3.37E-02	8.43E-04	3.13E-04	1.15E-02	9.12E-05	0.0
MEAT								
ADULT	6.13E-05	3.34E-05	1.92E-04	2.87E-05	1.34E-05	9.95E-04	2.71E-06	0.0
TEEN	3.67E-05	1.92E-05	1.31E-04	2.29E-05	1.07E-05	7.20E-04	2.49E-06	0.0
CHILD	4.34E-05	1.06E-05	1.86E-04	2.92E-05	1.34E-05	1.09E-03	2.86E-06	0.0
COW MILK								
ADULT	3.52E-04	6.82E-05	8.52E-04	2.97E-04	2.18E-04	2.79E-02	2.31E-05	0.0
TEEN	4.42E-04	9.16E-05	1.31E-03	5.20E-04	3.86E-04	4.42E-02	4.62E-05	0.0
CHILD	6.30E-04	7.27E-05	2.55E-03	8.79E-04	6.36E-04	8.75E-02	6.97E-05	0.0
INFANT	7.98E-04	7.21E-05	3.60E-03	1.81E-03	1.07E-03	2.13E-01	1.24E-04	0.0
GOATMILK								
ADULT	8.33E-04	1.05E-04	1.84E-03	7.34E-04	3.87E-04	3.35E-02	6.93E-05	0.0
TEEN	9.86E-04	1.42E-04	2.83E-03	1.28E-03	6.79E-04	5.30E-02	1.39E-04	0.0
CHILD	1.28E-03	1.13E-04	5.55E-03	2.15E-03	1.11E-03	1.05E-01	2.09E-04	0.0
INFANT	1.50E-03	1.13E-04	7.75E-03	4.25E-03	1.83E-03	2.55E-01	3.71E-04	0.0
INHAL								
ADULT	2.75E-05	2.04E-05	3.29E-04	1.34E-05	1.50E-05	1.78E-03	1.37E-04	0.0
TEEN	2.93E-05	2.15E-05	3.63E-04	1.82E-05	2.06E-05	2.25E-03	2.20E-04	0.0
CHILD	2.72E-05	9.71E-06	3.47E-04	1.75E-05	1.93E-05	2.66E-03	1.89E-04	0.0
INFANT	1.25E-05	3.67E-06	1.48E-04	1.48E-05	1.26E-05	2.44E-03	1.55E-04	0.0

COOPER NUCLEAR STATION : FIRST QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SSW

ANNUAL BETA AIR DOSE = 1.54E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 2.47E-01 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.66E-01	1.66E-01	1.66E-01	1.66E-01	1.66E-01	1.66E-01	1.66E-01	3.20E-01
GROUND	7.73E-04	7.73E-04	7.73E-04	7.73E-04	7.73E-04	7.73E-04	7.73E-04	9.07E-04
VEGET								
ADULT	3.36E-03	6.35E-04	1.38E-02	3.13E-04	1.38E-04	8.19E-03	3.11E-05	0.0
TEEN	4.25E-03	7.53E-04	1.81E-02	4.77E-04	1.90E-04	6.98E-03	5.65E-05	0.0
CHILD	7.16E-03	5.86E-04	3.15E-02	7.80E-04	2.90E-04	1.08E-02	8.43E-05	0.0
MEAT								
ADULT	5.71E-05	3.10E-05	1.80E-04	2.65E-05	1.24E-05	9.34E-04	2.51E-06	0.0
TEEN	3.42E-05	1.78E-05	1.22E-04	2.12E-05	9.96E-06	6.77E-04	2.30E-06	0.0
CHILD	4.05E-05	9.88E-06	1.74E-04	2.71E-05	1.24E-05	1.02E-03	2.65E-06	0.0
COW MILK								
ADULT	3.28E-04	6.38E-05	7.96E-04	2.76E-04	2.04E-04	2.62E-02	2.14E-05	0.0
TEEN	4.12E-04	8.58E-05	1.22E-03	4.83E-04	3.61E-04	4.15E-02	4.28E-05	0.0
CHILD	5.89E-04	6.81E-05	2.38E-03	8.17E-04	5.94E-04	8.22E-02	6.44E-05	0.0
INFANT	7.47E-04	6.76E-05	3.37E-03	1.69E-03	1.00E-03	2.00E-01	1.14E-04	0.0
GOATMILK								
ADULT	7.75E-04	9.82E-05	1.72E-03	6.80E-04	3.61E-04	3.14E-02	6.41E-05	0.0
TEEN	9.18E-04	1.33E-04	2.64E-03	1.19E-03	6.32E-04	4.98E-02	1.28E-04	0.0
CHILD	1.20E-03	1.06E-04	5.18E-03	1.99E-03	1.04E-03	9.86E-02	1.93E-04	0.0
INFANT	1.40E-03	1.06E-04	7.23E-03	3.94E-03	1.71E-03	2.40E-01	3.43E-04	0.0
INHAL								
ADULT	1.43E-05	1.08E-05	1.74E-04	6.97E-06	8.70E-06	1.09E-03	6.75E-05	0.0
TEEN	1.55E-05	1.15E-05	1.92E-04	9.52E-06	1.20E-05	1.38E-03	1.09E-04	0.0
CHILD	1.46E-05	5.20E-06	1.84E-04	9.21E-06	1.12E-05	1.63E-03	9.44E-05	0.0
INFANT	6.83E-06	1.97E-06	7.90E-05	7.94E-06	7.33E-06	1.49E-03	7.81E-05	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 3.47E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 5.70E-01 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.83E-01	3.83E-01	3.83E-01	3.83E-01	3.83E-01	3.83E-01	3.87E-01	7.39E-01
GROUND	1.57E-02	1.57E-02	1.57E-02	1.57E-02	1.57E-02	1.57E-02	1.57E-02	1.85E-02
VEGET								
ADULT	3.28E-03	2.41E-03	9.41E-03	1.56E-03	6.09E-04	2.88E-02	1.46E-04	0.0
TEEN	3.87E-03	2.59E-03	1.24E-02	2.40E-03	8.64E-04	2.46E-02	2.66E-04	0.0
CHILD	5.94E-03	1.74E-03	2.19E-02	3.95E-03	1.34E-03	3.80E-02	4.02E-04	0.0
MEAT								
ADULT	1.67E-04	5.25E-04	1.76E-04	1.48E-04	5.58E-05	3.35E-03	1.17E-05	0.0
TEEN	1.02E-04	2.83E-04	1.27E-04	1.17E-04	4.46E-05	2.43E-03	1.08E-05	0.0
CHILD	1.21E-04	1.44E-04	1.99E-04	1.49E-04	5.56E-05	3.67E-03	1.26E-05	0.0
COW MILK								
ADULT	9.21E-04	2.37E-04	1.14E-03	1.21E-03	8.02E-04	9.31E-02	9.98E-05	0.0
TEEN	1.05E-03	2.96E-04	1.90E-03	2.12E-03	1.41E-03	1.47E-01	2.01E-04	0.0
CHILD	1.25E-03	2.14E-04	4.19E-03	3.59E-03	2.33E-03	2.91E-01	3.05E-04	0.0
INFANT	1.71E-03	2.53E-04	6.71E-03	7.33E-03	3.90E-03	7.08E-01	5.44E-04	0.0
GOATMILK								
ADULT	2.33E-03	1.87E-04	2.68E-03	3.05E-03	1.49E-03	1.12E-01	2.99E-04	0.0
TEEN	2.45E-03	2.45E-04	4.53E-03	5.34E-03	2.62E-03	1.77E-01	6.04E-04	0.0
CHILD	2.44E-03	1.89E-04	1.01E-02	9.03E-03	4.29E-03	3.49E-01	9.15E-04	0.0
INFANT	2.90E-03	1.91E-04	1.57E-02	1.78E-02	7.06E-03	8.49E-01	1.63E-03	0.0
INHAL								
ADULT	4.02E-05	5.24E-05	2.62E-04	3.94E-05	3.78E-05	5.15E-03	8.38E-04	0.0
TEEN	4.13E-05	4.99E-05	2.94E-04	5.35E-05	5.18E-05	6.41E-03	1.24E-03	0.0
CHILD	3.56E-05	1.99E-05	2.90E-04	5.12E-05	4.83E-05	7.29E-03	1.01E-03	0.0
INFANT	1.85E-05	7.01E-06	1.32E-04	4.16E-05	3.13E-05	6.67E-03	6.66E-04	0.0

COOPER NUCLEAR STATION : SECOND QUARTERLY PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SSW

ANNUAL BETA AIR DOSE = 2.29E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 3.75E-01 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.52E-01	2.52E-01	2.52E-01	2.52E-01	2.52E-01	2.52E-01	2.54E-01	4.86E-01
GROUND	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	8.82E-03	1.04E-02
VEGET								
ADULT	1.80E-03	1.33E-03	5.07E-03	8.57E-04	3.16E-04	1.15E-02	8.20E-05	0.0
TEEN	2.12E-03	1.43E-03	6.67E-03	1.33E-03	4.60E-04	9.77E-03	1.50E-04	0.0
CHILD	3.24E-03	9.59E-04	1.18E-02	2.19E-03	7.20E-04	1.51E-02	2.25E-04	0.0
MEAT								
ADULT	9.23E-05	2.93E-04	9.46E-05	8.11E-05	2.84E-05	1.33E-03	6.57E-06	0.0
TEEN	5.61E-05	1.58E-04	6.85E-05	6.45E-05	2.26E-05	9.66E-04	6.07E-06	0.0
CHILD	6.66E-05	8.01E-05	1.07E-04	8.17E-05	2.82E-05	1.46E-03	7.03E-06	0.0
COW MILK								
ADULT	4.88E-04	1.18E-04	5.93E-04	6.31E-04	3.69E-04	3.70E-02	5.59E-05	0.0
TEEN	5.43E-04	1.47E-04	9.90E-04	1.10E-03	6.50E-04	5.85E-02	1.13E-04	0.0
CHILD	6.13E-04	1.05E-04	2.17E-03	1.87E-03	1.07E-03	1.16E-01	1.71E-04	0.0
INFANT	8.00E-04	1.27E-04	3.41E-03	3.75E-03	1.77E-03	2.81E-01	3.05E-04	0.0
GOATMILK								
ADULT	1.27E-03	8.76E-05	1.44E-03	1.65E-03	7.39E-04	4.44E-02	1.68E-04	0.0
TEEN	1.32E-03	1.14E-04	2.43E-03	2.89E-03	1.29E-03	7.02E-02	3.38E-04	0.0
CHILD	1.26E-03	8.76E-05	5.40E-03	4.88E-03	2.12E-03	1.39E-01	5.12E-04	0.0
INFANT	1.43E-03	8.88E-05	8.35E-03	9.53E-03	3.46E-03	3.37E-01	9.14E-04	0.0
INHAL								
ADULT	2.78E-05	3.67E-05	1.88E-04	2.56E-05	2.19E-05	2.84E-03	6.14E-04	0.0
TEEN	2.80E-05	3.48E-05	2.10E-04	3.47E-05	2.99E-05	3.53E-03	9.05E-04	0.0
CHILD	2.37E-05	1.37E-05	2.06E-04	3.31E-05	2.79E-05	4.00E-03	7.38E-04	0.0
INFANT	1.18E-05	4.79E-06	9.23E-05	2.63E-05	1.79E-05	3.66E-03	4.86E-04	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES N

ANNUAL BETA AIR DOSE = 7.00E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 1.14E+00 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.64E-01	7.64E-01	7.64E-01	7.64E-01	7.64E-01	7.64E-01	7.71E-01	1.47E+00
GROUND	1.66E-02	1.66E-02	1.66E-02	1.66E-02	1.66E-02	1.66E-02	1.66E-02	1.95E-02
VEGET								
ADULT	6.88E-03	3.09E-03	2.42E-02	1.90E-03	7.58E-04	3.76E-02	1.80E-04	0.0
TEEN	8.43E-03	3.40E-03	3.17E-02	2.92E-03	1.07E-03	3.20E-02	3.29E-04	0.0
CHILD	1.36E-02	2.37E-03	5.56E-02	4.79E-03	1.65E-03	4.95E-02	4.93E-04	0.0
MEAT								
ADULT	2.29E-04	5.58E-04	3.68E-04	1.76E-04	6.91E-05	4.35E-03	1.44E-05	0.0
TEEN	1.39E-04	3.02E-04	2.58E-04	1.40E-04	5.53E-05	3.15E-03	1.33E-05	0.0
CHILD	1.65E-04	1.54E-04	3.85E-04	1.78E-04	6.89E-05	4.76E-03	1.54E-05	0.0
COW MILK								
ADULT	1.27E-03	3.06E-04	1.99E-03	1.51E-03	1.02E-03	1.21E-01	1.23E-04	0.0
TEEN	1.49E-03	3.88E-04	3.21E-03	2.64E-03	1.80E-03	1.91E-01	2.48E-04	0.0
CHILD	1.88E-03	2.87E-04	6.74E-03	4.47E-03	2.96E-03	3.79E-01	3.75E-04	0.0
INFANT	2.51E-03	3.25E-04	1.03E-02	9.14E-03	4.98E-03	9.20E-01	6.68E-04	0.0
GOATMILK								
ADULT	3.16E-03	2.92E-04	4.52E-03	3.78E-03	1.88E-03	1.45E-01	3.69E-04	0.0
TEEN	3.44E-03	3.87E-04	7.36E-03	6.62E-03	3.30E-03	2.30E-01	7.43E-04	0.0
CHILD	3.72E-03	3.02E-04	1.56E-02	1.12E-02	5.41E-03	4.54E-01	1.12E-03	0.0
INFANT	4.40E-03	3.04E-04	2.35E-02	2.20E-02	8.89E-03	1.10E+00	2.00E-03	0.0
INHAI								
ADULT	6.76E-05	7.28E-05	5.92E-04	5.27E-05	5.28E-05	6.93E-03	9.76E-04	0.0
TEEN	7.06E-05	7.15E-05	6.56E-04	7.18E-05	7.24E-05	8.67E-03	1.46E-03	0.0
CHILD	6.28E-05	2.96E-05	6.37E-04	6.87E-05	6.75E-05	9.95E-03	1.20E-03	0.0
INFANT	3.10E-05	1.07E-05	2.80E-04	5.64E-05	4.38E-05	9.11E-03	8.21E-04	0.0

COOPER NUCLEAR STATION : FIRST SEMIANNUAL PERIOD 1982 : COMBINED RELEASE
SPECIAL LOCATION # 2 LOCATION
AT 1.00 MILES SSW

ANNUAL BETA AIR DOSE = 3.83E-01 MILLRADS
ANNUAL GAMMA AIR DOSE = 6.22E-01 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.18E-01	4.18E-01	4.18E-01	4.18E-01	4.18E-01	4.18E-01	4.22E-01	8.06E-01
GROUND	9.59E-03	9.59E-03	9.59E-03	9.59E-03	9.59E-03	9.59E-03	9.59E-03	1.13E-02
VEGET								
ADULT	5.16E-03	1.96E-03	1.89E-02	1.17E-03	4.55E-04	1.96E-02	1.13E-04	0.0
TEEN	6.37E-03	2.18E-03	2.47E-02	1.81E-03	6.49E-04	1.67E-02	2.07E-04	0.0
CHILD	1.04E-02	1.55E-03	4.33E-02	2.97E-03	1.01E-03	2.59E-02	3.09E-04	0.0
MEAT								
ADULT	1.49E-04	3.24E-04	2.75E-04	1.08E-04	4.08E-05	2.27E-03	9.07E-06	0.0
TEEN	9.04E-05	1.76E-04	1.91E-04	8.56E-05	3.26E-05	1.64E-03	8.37E-06	0.0
CHILD	1.07E-04	9.00E-05	2.81E-04	1.09E-04	4.06E-05	2.48E-03	9.67E-06	0.0
COW MILK								
ADULT	8.15E-04	1.82E-04	1.39E-03	9.07E-04	5.73E-04	6.32E-02	7.73E-05	0.0
TEEN	9.55E-04	2.32E-04	2.21E-03	1.59E-03	1.01E-03	1.00E-01	1.56E-04	0.0
CHILD	1.20E-03	1.73E-04	4.55E-03	2.69E-03	1.66E-03	1.98E-01	2.35E-04	0.0
INFANT	1.55E-03	1.94E-04	6.77E-03	5.44E-03	2.78E-03	4.81E-01	4.19E-04	0.0
GOATMILK								
ADULT	2.04E-03	1.86E-04	3.16E-03	2.33E-03	1.10E-03	7.58E-02	2.32E-04	0.0
TEEN	2.23E-03	2.47E-04	5.07E-03	4.08E-03	1.93E-03	1.20E-01	4.67E-04	0.0
CHILD	2.45E-03	1.94E-04	1.06E-02	6.87E-03	3.16E-03	2.37E-01	7.05E-04	0.0
INFANT	2.83E-03	1.94E-04	1.56E-02	1.35E-02	5.16E-03	5.77E-01	1.26E-03	0.0
INHAL								
ADULT	4.20E-05	4.76E-05	3.63E-04	3.26E-05	3.06E-05	3.93E-03	6.82E-04	0.0
TEEN	4.35E-05	4.62E-05	4.02E-04	4.42E-05	4.19E-05	4.91E-03	1.01E-03	0.0
CHILD	3.83E-05	1.89E-05	3.90E-04	4.23E-05	3.91E-05	5.63E-03	8.32E-04	0.0
INFANT	1.87E-05	6.77E-06	1.71E-04	3.43E-05	2.53E-05	5.16E-03	5.64E-04	0.0

APPENDIX D

X/Q AND DOSE CALCULATION MODELS AND ASSUMPTIONS

1.0 INTRODUCTION

The transport and dilution of radioactive materials in the form of aerosols, vapors, or gases released into the atmosphere from a nuclear power station are a function of the state of the atmosphere along the plume path, the topography of the region, and the characteristics of the effluents themselves. For a routine airborne release, the concentration of radioactive material in the surrounding region depends on the amount of effluent released, the height of the release, the momentum and buoyancy of the emitted plume, the wind speed, atmospheric stability, and airflow patterns of the site.

In order to evaluate the impact of a nuclear power station under normal operating conditions in a year of "typical" weather conditions, the routine diffusion estimates of effluent relative concentrations (X/Q) within a radius of 50 miles from the station are required. The method of evaluating atmospheric dispersion of gaseous effluents, based on the U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide 1.111 (1976), is described here.

2.0 METEOROLOGICAL DATA

Basic meterological parameters influencing effluent dispersion in the atmosphere are wind speed, wind direction, and atmospheric stability. The following guidelines are used in the categorization of meterological data.

2.1 WIND SPEED

Wind speeds representing the conditions at the actual release height are used when the release is considered to be elevated. Wind speeds measured at the 10-meter level are used when the effluent plume is considered to be a ground release.

2.2 WIND DIRECTION

Wind direction, defined as the direction from which the wind is blowing, is grouped into 16 compass-point sectors corresponding to 22.5-degree sectors.

2.3 ATMOSPHERIC STABILITY

Atmospheric stability is divided into seven categories to represent Pasquill stability classes A (extremely unstable) through G (extremely stable). The method for evaluating the atmospheric stability is based on vertical temperature difference between the release point and the 10-meter level. Criteria for classifying atmospheric stability in terms of Pasquill stability classes A through G are presented as follows:

Stability Classification	Pasquill Category	(θ (degrees))	(ΔT (°C/100m))
Extremely unstable	A	$\theta \geq 22.5$	$\Delta T \leq -1.9$
Moderately unstable	B	$22.5 > \theta \geq 17.5$	$-1.9 < \Delta T \leq -1.7$
Slightly unstable	C	$17.5 > \theta \geq 12.5$	$-1.7 < \Delta T \leq -1.5$
Neutral	D	$12.5 > \theta \geq 3.8$	$-1.5 < \Delta T \leq -0.5$
Slightly stable	E	$7.5 > \theta \geq 2.1$	$-0.5 < \Delta T \leq 1.5$
Moderately stable	F	$3.8 > \theta \geq$	$1.5 < \Delta T \leq 4.0$
Extremely stable	G	$2.1 > \theta$	$4.0 < \Delta T$

2.4 JOINT FREQUENCY DISTRIBUTION

Joint frequency distributions of wind direction and wind speed by atmospheric stability class are used as meteorological data input for routine diffusion estimates. The compilation of joint frequency distributions is done on quarterly, semi-annual, and annual basis. Wind speeds are grouped according to the Beaufort wind scale (i.e., calm, 1-4, 4-8, 8-13, 13-19, 19-25, 25-32, 32-39, 39-45 and greater than 45 mph). Wind directions are divided into 16 compass-point directions (22.5-degree sectors).

3.0 RELEASE MODE

For nuclear power stations, most gaseous effluents are released through tall stacks, through vents located near the tops of buildings, or through combinations of the two. They are dispersed by variations of wind direction and speed, and by turbulence (mixing action) of the atmosphere. Gaseous effluents released from tall stacks generally produce peak ground-level concentrations near or beyond the site boundary, whereas near-ground level releases produce monotonically decreasing concentrations from the release point to all locations downwind. Under certain conditions, the effluent plume may become entrained in the aerodynamic wake of a building and mix rapidly down to the ground level.

Methods have been developed to estimate the effective release height, which is defined as the sum of the physical height of the release point and the rise of the plume above the stacks, for calculations of effluent concentrations at all downwind locations. The important parameters in these methods include the initial release height, the location of the release point in relation to obstructions, size and shape of the release point, the initial vertical velocity of the effluent, the heat content of the effluent, ambient wind speed and temperature, and atmospheric stability.

The acceptable method that is used to determine the release mode is described below.

3.1 EFFLUENT RELEASE MODE

For effluents exhausted from release points that are higher than twice the height of adjacent solid structures, the effective release height (h_e) is determined from

$$h_e = h_s + h_{pr} - h_t \qquad (3\text{-}1)$$

where h_s = physical height of the release point above the ground;
h_{pr} = rise of the plume above the release point; and
h_t = minimum terrain height above the stack base between the release point and the point for which the calculation is made (h_t must be greater than or equal to zero).

For effluents released from points less than or equal to the height of adjacent solid structures, a ground-level release is assumed ($h_e = 0$).

For effluents released from vents or other points that are less than twice the height of adjacent solid structures, the effluent plume is considered as an elevated release whenever the vertical exit velocity (W_o) of the plume is at least five times the horizontal wind speed (U) at the height of release, i.e., $W_o/U \geq 5.0$. If W_o/U is less than 1.0, or unknown, a ground-level release is assumed ($h_e = 0$).

For cases where the ratio of plume exit velocity to horizontal wind speed is between one and five, a mixed release mode is assumed, in which the plume is considered as an elevated release during part of the time and as a ground-level release ($h_e = 0$) during the remainder of the time. An entrainment coefficient, E_t, is determined for such cases from the following relations:

$$E_t = 2.58 - 1.58\ (W_o/U) \text{ for } 1 < W_o/U \leq 1.5 \qquad (3\text{-}2)$$

and

$$E_t = 0.3 - 0.06\ (W_o/U) \text{ for } 1.5 < W_o/U \leq 5.0 \qquad (3\text{-}3)$$

The release is considered to occur as an elevated release 100 $(1\text{-}E_t)$ percent of the time, as a ground release $100E_t$ percent of the time. Each of these cases is evaluated separately and the concentration is calculated according to the fraction of time each type of release occurs.

3.2 PLUME RISE CALCULATION

Nuclear power stations generally have cold plumes, so that the plume rise is calculated from Briggs' (1969) momentum rise formulae. For neutral or unstable atmosphere, the smaller value of h_{pr} calculated from the following equations is used:

$$h_{pr} = 1.44\ (W_o/U)^{2/3}\ (x/D)^{1/3}\ D \qquad (3\text{-}4)$$

and

$$h_{pr} = 3\ (W_o/U)\ D \qquad (3\text{-}5)$$

where D = inside diameter of the stack or other release points;
W_o = vertical exit velocity of the plume;
U = mean wind speed at the height of release; and
x = downwind distance from the release point.

For stable atmosphere, the results from Equations (3-4) and (3-5) are compared with the results from the following equations:

$$h_{pr} = 4\ (F_m/S)^{1/4} \qquad (3\text{-}6)$$

and

$$h_{pr} = 1.5\ (F_m/U)^{1/3}\ S^{-1/6} \qquad (3\text{-}7)$$

and the smallest value for h_{pr} is used. In the foregoing relations

$F_m = W_o^2 D^2/4$ = momentum flux parameter;

$S = \frac{g}{T_a}\ \frac{\delta\theta}{\delta Z}$ = stability parameter

g = acceleration of gravity; and

T_a = ambient air temperature

The quality $\delta\theta/\delta Z$ represents the vertical potential temperature gradient given by:

Stability Class	$\delta\theta/\delta Z$ (°K/m)
A	-0.020
B	-0.018
C	-0.016
D	-0.010
E	0.020
F	0.035
G	0.050

When the vertical exit velocity of the plume is less than 1.5 times the horizontal mean wind speed, a height correction for aerodynamic downwash C, given by

$$C = 3(1.5 - W_o/U)D \tag{3-8}$$

is subtracted from Equation (3-1)

3.3 DIFFUSION MODEL

The Gaussian straight-line trajectory model, which assumes that the air flow transports and diffuses effluents along a straight line through the entire region of interest in the airflow direction, is modified to account for various modes of effluent releases. In the case of an elevated release, plume rise due to momentum or buoyancy effects is incorporated into the calculation. For those effluents that are entrained into the wake cavity region of a building, mixing of effluent into the wake cavity is usually assumed. The mixing zone can constitute a plume with an initial cross section of one-half or more of the cross-sectional area of the building.

The mathematical equation used in the Gaussion straight-line trajectory model is:

$$\left[\frac{X}{Q}\right]_i = 2.032 \sum_j \sum_k \frac{f_{ijk}}{x U_{jk} \Sigma_{zk}} \exp\left[-\frac{1}{2}\frac{h_e^2}{\sigma_{zk}^2}\right] \tag{3-9}$$

$$\Sigma_{zk} = (\sigma_{zk}^2 + 0.5\, D_z^2/\pi)^{1/2} \leq \sqrt{3}\sigma_{zk} \tag{3-10}$$

where
- i = index identifying downwind direction section;
- j = index identifying wind speed class;
- k = index identifying atmospheric stability class;
- $\left[\frac{X}{Q}\right]$ = average effluent concentration normalized by source strength at the specific downwind distance;
- f = joint frequency distribution of wind direction, wind speed class, and atmospheric stability class;
- x = distance from the release point to a receptor;
- U = wind speed;
- Σ_z = vertical plume spread with a volumetric building wake correction for a release within the building wake cavity;
- σ_z = vertical plume spread without volumetric building wake correction; and
- D_z = maximum adjacent building height either up or downwind of the release point.

The term Σ_{zk} given in Equations (3-9) and (3-10) is used for ground-level release ($h_e = 0$) within the building wake cavity. For an elevated release, no volumetric building wake correction needs to be considered, i.e., $\Sigma_{zk} = \sigma_{zk}$.

The X/Q dose calculations were performed by means of a computer program XOQDOQ (U.S. NRC 1977).

4.0 GASEOUS EFFLUENT DOSE CALCULATION MODELS AND ASSUMPTIONS

Calculations of dose ratios through gaseous pathways are performed by means of a computer program called GASPAR, (U.S. NRC 1977) which has been formulated according to the requirements of U.S. NRC Regulatory Guide 1.109. The pathways used in the program's calculations are direct plume, ground level deposition, inhalation, ingestion of vegetation contaminated by radioiodine deposition, ingestion of milk from cows which consume the contaminated vegetation, and ingestion of meat from beef that consume the contaminated vegetation.

GASPAR computes both individual doses and population doses. For each case, both building vent releases and elevated stack releases are taken into account when computing the doses. The doses from the building vent releases and elevated stack releases are added together to obtain total dose. The dose calculations for individuals are performed considering four different age groups: infant (0-1 years age), child (1-11 years age), teenager (12-18 years age), and adult (over 18 years age). For each age group and each pathway, radiation doses are calculated for total body, GI-tract, bone, liver, kidney, thyroid, lung and skin.

The analytical methods employed in GASPAR for computing individual and population doses are described in U.S. NRC Regulatory Guide 1.109.