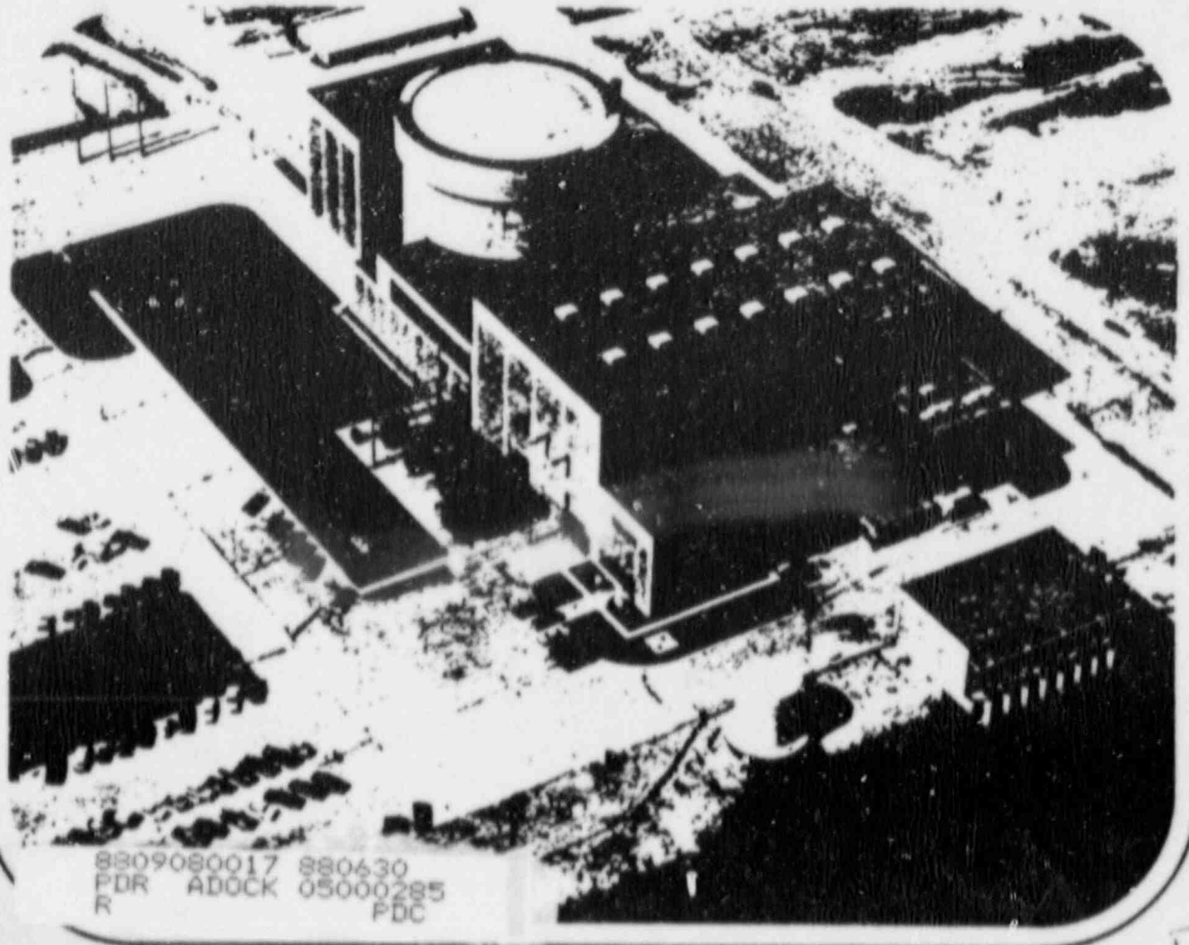
Omaha Public Power District
Fort Calhoun Station Unit No. 1

Semi Annual Report
for
Technical Specification
Section 5.9.4

January 1, 1988 to June 30, 1988 inclusive



Docket No. 50-285

Operating License No. DPR-40

INTRODUCTION

This report is submitted in accordance with Sections 5.9.1.b and 5.9.4.a of the Technical Specifications of the Fort Calhoun Station Unit No. 1, Facility Operating License DPR-40.

This report covers the period of January 1, 1988 through June 30, 1988 for the Semi-Annual Effluent Report for Technical Specification 5.9.4.a. The Effluent Report is presented in the format outlined in Regulatory Guide 1.21, Revision 1.

In addition, this report provides the results of quarterly dose calculations performed in accordance with Technical Specification Sections 2.9.1(1)b and 2.9.1(2)b. Results are presented by quarter for the period January 1, 1988 through June 30, 1988.

Further, descriptions of any changes made during the preceding six months to the Offsite Dose Calculation Manual and/or the Process Control Program for the Fort Calhoun Station are presented.

W. Gary Gates

Manager

Fort Calhoun Station

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Technical Specifications 2.9.1(1)b and 2.9.1(2)b

January 1, 1988 - June 30, 1988

Quarterly Dose Calculation Results

January 1, 1988 through June 30, 1988

With the implementation of the Fort Calhoun Station Radiological Effluent Technical Specifications (RETS) on October 1, 1985, radiation doses in the unrestricted area from liquid and gaseous effluents must be calculated on a quarterly basis in accordance with Sections 2.9.1(1)b and 2.9.1(2)b. These calculations are performed to ensure the annual dose limits delineated in Appendix I of 10 CFR Part 50 and implemented by the RETS are not exceeded. If the results of the quarterly calculations exceed fifty percent (50%) of the annual limits of Appendix I, actions are taken to reduce effluents so that resultant doses do not exceed the annual limits during the remainder of the year and a special report is submitted to the NRC.

This section presents the results of the quarterly dose calculations performed since January 1, 1988. Details are shown in Tables on pages I-3 through I-4 as to the types, sources and resultant doses from the effluents, annual limits and a comparison to the annual limits.

As can be seen by review of the quarterly calculational results, OPPD is in compliance with the referenced Technical Specifications. The quarterly totals are well below the 50% annual dose acceptance criteria. In addition, the summation of the quarterly totals shows OPPD to be less than the annual limits and in compliance with the regulations and Technical Specifications.

FORT CALHOUN STATION UNIT NO. 1

FC-421
RO 8-19-86

QUARTERLY CUMULATIVE DOSE CONTRIBUTIONS
FROM RADIOACTIVE EFFLUENTS

FIRST QUARTER , 1988

A. LIQUID EFFLUENTS:

	TOTAL BODY DOSE (MREM)	CRITICAL ORGAN DOSE (LIVER, MREM)
MONITOR/HOTEL TANK	4.42E-02	6.17E-02
STEAM GENERATOR	1.74E-04	6.64E-07
TOTALS	4.44E-02	6.17E-02
TECH SPEC 2.9.1.A OBJECTIVE	3.0	10.0
PERCENT OF OBJECTIVE	1.481%	0.617%

B. GASEOUS EFFLUENTS:

	TOTAL BODY GAMMA DOSE (MRAD)	TOTAL BODY BETA DOSE (MRAD)
1. NOBEL GAS AIR DOSE	1.69E-03	2.81E-03
TECH SPEC 2.9.1.B OBJECTIVE	10.0	20.0
PERCENT OF OBJECTIVE	0.017%	0.014%

	TOTAL BODY DOSE (MREM)	CRITICAL ORGAN DOSE (THYROID, MREM)
2. I-131, H-3, AND PARTICULATES WITH HALF-LIVES > 8 DAYS		
INHALATION*	2.08E-06	6.13E-05
GROUND & FOOD*	5.24E-05	1.26E-02
TOTALS	5.45E-05	1.26E-02
TECH SPEC 2.9.1.B OBJECTIVE	15.0	15.0
PERCENT OF OBJECTIVE	0.000%	0.084%

* - HIGHEST OF INFANT OR CHILD DOSE FACTORS

FORT CALHOUN STATION UNIT NO. 1

FC-421
RO 8-19-86

QUARTERLY CUMULATIVE DOSE CONTRIBUTIONS
FROM RADIOACTIVE EFFLUENTS

SECOND QUARTER , 1988

A. LIQUID EFFLUENTS:

	TOTAL BODY DOSE (MREM)	CRITICAL ORGAN DOSE (LIVER, MREM)
MONITOR/HOTEL TANK	3.49E-01	4.95E-01
STEAM GENERATOR	5.30E-07	5.30E-07
TOTALS	3.49E-01	4.95E-01
TECH SPEC 2.9.1.A OBJECTIVE	3.0	10.0
PERCENT OF OBJECTIVE	11.640%	4.946%

B. GASEOUS EFFLUENTS:

	TOTAL BODY GAMMA DOSE (MRAD)	TOTAL BODY BETA DOSE (MRAD)
1. NOBEL GAS AIR DOSE	4.61E-03	1.10E-02
TECH SPEC 2.9.1.B OBJECTIVE	10.0	20.0
PERCENT OF OBJECTIVE	0.046%	0.055%

	TOTAL BODY DOSE (MREM)	CRITICAL ORGAN DOSE (THYROID, MREM)
2. I-131, H-3, AND PARTICULATES WITH HALF-LIVES > 8 DAYS		
INHALATION*	3.14E-06	9.52E-05
GROUND & FOOD*	5.07E-05	1.96E-02
TOTALS	5.38E-05	1.97E-02
TECH SPEC 2.9.1.B OBJECTIVE	15.0	15.0
PERCENT OF OBJECTIVE	0.000%	0.131%

* - HIGHEST OF INFANT OR CHILD DOSE FACTORS

SECTION II

ANNUAL OCCUPATIONAL EXPOSURE REPORT

Technical Specification (5.9.1.b)

Not Applicable to this Report

SECTION III

RADIOACTIVE EFFLUENT RELEASE - GASEOUS EFFLUENTS

Technical Specification (5.9.4.A)

Table 1A Gaseous Effluents - Summation of All Releases

Table 1B Not Applicable

Table 1C Gaseous Effluents - Summation of All Releases

January 1, 1988 to June 30, 1988

Radioactive Effluent Releases - First and Second Quarters

GASEOUS EFFLUENTS

Radioactive gaseous releases for the reporting period totaled 36.5 Curies of inert gases. Averaged over the first and second quarters of the reporting period, the gross gaseous activity release rates were 1.94E+00 µCi/Sec. and 8.17E+00 µCi/Sec., respectively.

Radioactive halogens and particulates with half-lives greater than eight days released during the reporting period totaled 1.22E-04 Curies. Averaged over the first and second quarters of the reporting period, the halogen release rates were 5.95E-06 µCi/Sec. and 9.25E-06 µCi/Sec., respectively. Averaged over the first and second quarters of the reporting period, the particulate release rates were 3.14E-07 µCi/Sec. and 2.27E-08 µCi/Sec. respectively.

Radioactive tritium released during the reporting period totaled 2.20E-01 Curies. Gross alpha radioactivity released during the reporting period totaled 3.74E-05 Curies.

TABLE 1A

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 88

		1 QUARTER				2 QUARTER			
NUCLIDES IN CURIES		CONT	DECAY	RM060	TOTAL	CONT	DECAY	RM060	TOTAL
A. FISSION&ACTIVATION GASES									
TOTAL RELEASE	CI	1.52E+01	3.97E-02	0.00E+00	1.53E+01	6.33E+01	3.11E-01	0.00E+00	6.42E+01
AVG RELEASE RATE FOR PERIOD	UCI/SEC	1.94E+00	5.05E-03	0.00E+00	1.94E+00	8.13E+00	3.95E-02	0.00E+00	8.17E+00
PERCENT OF LIMIT TECH SPEC = NONE	%								
B. IODINES									
TOTAL RELEASE IODINE - 131	CI	0.00E+00	0.00E+00	4.68E-05	4.68E-05	0.00E+00	0.00E+00	7.28E-05	7.28E-05
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	5.95E-06	5.95E-06	0.00E+00	0.00E+00	9.25E-06	9.25E-06
PERCENT OF LIMIT TECH SPEC = NONE	%								
C. PARTICULATES									
PARTICULATES WITH HALF LIVES .GT. 8 DAYS	CI	0.00E+00	0.00E+00	2.47E-06	2.47E-06	0.00E+00	0.00E+00	1.78E-07	1.78E-07
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	3.14E-07	3.14E-07	0.00E+00	0.00E+00	2.27E-08	2.27E-08
PERCENT OF LIMIT TECH SPEC = NONE	%								
GROSS ALPHA RADIOACTIVITY	CI	0.00E+00	0.00E+00	6.82E-06	6.82E-06	0.00E+00	0.00E+00	3.06E-05	3.06E-05
D. TRITIUM									
TOTAL RELEASE	CI	8.73E-02	0.00E+00	0.00E+00	8.73E-02	1.33E-01	0.00E+00	0.00E+00	1.33E-01
AVG RELEASE RATE FOR PERIOD	UCI/SEC	1.11E-02	0.00E+00	0.00E+00	1.11E-02	1.69E-02	0.00E+00	0.00E+00	1.69E-02
PERCENT OF LIMIT TECH SPEC = NONE	%								

TABLE 1C

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 88

	1 QUARTER				2 QUARTER			
NUCLIDES IN CURIES	CONT	DECAY	RMO60	TOTAL	CONT	DECAY	RMO60	TOTAL
FISSION GASES								
XENON-133	1.42E+01	1.93E-03	0.00E+00	1.42E+01	6.15E+01	2.78E-01	0.00E+00	6.17E+01
KRYPTON-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-03	0.00E+00	0.00E+00	7.41E-03
XENON-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-01	1.48E-03	0.00E+00	6.88E-01
KRYPTON-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XENON-133M	1.44E-01	0.00E+00	0.00E+00	1.44E-01	4.21E-01	0.00E+00	0.00E+00	4.21E-01
XENON-135	4.04E-01	0.00E+00	0.00E+00	4.04E-01	6.68E-01	0.00E+00	0.00E+00	6.68E-01
KRYPTON-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XENON-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KRYPTON-85	0.00E+00	3.87E-02	0.00E+00	3.87E-02	0.00E+00	3.14E-02	0.00E+00	3.14E-02
XENON-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARGON-41	5.41E-01	0.00E+00	0.00E+00	5.41E-01	6.67E-01	0.00E+00	0.00E+00	6.67E-01
TOTAL FOR PERIOD	1.52E+01	3.97E-02	0.00E+00	1.53E+01	6.39E+01	3.11E-01	0.00E+00	6.42E+01
IODINES								
IODINE-131 CTD.	0.00E+00	0.00E+00	4.68E-05	4.68E-05	0.00E+00	0.00E+00	7.28E-05	7.28E-05
IODINE-133 CTD.	0.00E+00	0.00E+00	4.02E-04	4.02E-04	0.00E+00	0.00E+00	9.55E-04	9.55E-04
IODINE-135 CTD.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	0.00E+00	0.00E+00	4.48E-04	4.48E-04	0.00E+00	0.00E+00	1.03E-03	1.03E-03
PARTICULATES								
STRONTIUM-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-07	1.35E-07
STRONTIUM-90	0.00E+00	0.00E+00	2.18E-08	2.18E-08	0.00E+00	0.00E+00	4.28E-08	4.28E-08
IODINE-131 PRF.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IODINE-133 PRF.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BARIUM-140	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CESIUM-137	0.00E+00	0.00E+00	2.45E-06	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CESIUM-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
COBALT-58	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MANGANESE-54	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
COBALT-60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IODINE-135 PRF.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LANTHANUM-140	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CERIUM-144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CERIUM-141	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MOLYBDENUM-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IRON-59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZINC-65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	0.00E+00	0.00E+00	2.47E-06	2.47E-06	0.00E+00	0.00E+00	1.78E-07	1.78E-07
TRITIUM & GROSS ALPHA								
TRITIUM	8.73E-02	0.00E+00	0.00E+00	8.73E-02	1.33E-01	0.00E+00	0.00E+00	1.33E-01
GROSS ALPHA	0.00E+00	0.00E+00	6.82E-06	6.82E-06	0.00E+00	0.00E+00	3.06E-05	3.06E-05

SECTION IV

RADIOACTIVE EFFLUENT RELEASES - LIQUID EFFLUENTS

Technical Specification (5.9.4.A.)

Table 2A Liquid Effluents - Summation of All Releases

Table 2B Liquid Effluents - Summation of All Releases

January 1, 1988 to June 30, 1988

Radioactive Effluent Releases - First and Second Quarters

Liquid Effluents

During the reporting period, a total of 1.59E-01 Curies of radioactive liquid materials less tritium and dissolved noble gases were released to the Missouri River at an average concentration of 4.58E-10 μCi/ml. This represents 4.6E-01% of the limits specified in Appendix B to 10 CFR Part 20 (1.0E-07 μCi/ml) for unrestricted areas.

Dilution water during the period amounted to 3.48E+11 liters, while radioactive liquid waste volume was 6.27E+07 liters.

Additionally, 167.3 Curies of tritium were discharged at an average concentration of 4.80E-07 μCi/ml or 1.60E-02% of MPC (3.0E-03 μCi/ml).

Gross alpha radioactivity released during the reporting period totaled 7.22E-05 Curies.

TABLE 2A

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 88

		1 QUARTER	2 QUARTER
A. FISSION&ACTIVATION PRODUCTS			
TOTAL RELEASE (NO TRITIUM,GAS,ALPHA)	CI	7.63E-02	8.28E-02
AVG DILUTED CONCENTRATION	UCI/ML	4.20E-10	4.86E-10
PERCENT OF LIMIT 10 CFR 20, APP. B = 1.0E-07	%	4.29E-01	4.86E-01
B. TRITIUM			
TOTAL RELEASE	CI	8.68E+01	8.05E+01
AVG DILUTED CONCENTRATION	UCI/ML	4.88E-07	4.72E-07
PERCENT OF LIMIT 10 CFR 20, APP. B = 3.0E-03	%	1.63E-02	1.57E-02
C. DISSOLVED&ENTRAINED GASES			
TOTAL RELEASE	CI	8.89E-02	9.10E-02
AVG DILUTED CONCENTRATION	UCI/ML	5.00E-10	5.34E-10
PERCENT OF LIMIT TECH SPEC = 2.0E-04 UCI/ML	%	2.50E-04	2.67E-04
D. GROSS ALPHA RADIOACTIVITY			
TOTAL RELEASE	CI	6.64E-05	5.75E-06
E. VOLUME OF WASTE RELEASE			
PRIOR TO DIL.	LITERS	3.20E+07	3.07E+07
F. VOLUME OF DILUTION WATER			
THIS PERIOD	LITERS	1.78E+11	1.70E+11

TABLE 2B

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 88

	1 QUARTER		2 QUARTER	
NUCLIDES IN CURIES	CONT	BATCH	CONT	BATCH
STRONTIUM-89	0.00E+00	1.66E-05	0.00E+00	9.16E-04
STRONTIUM-90	9.71E-05	2.24E-04	0.00E+00	5.22E-06
COBALT-57	0.00E+00	0.00E+00	0.00E+00	3.46E-05
MOLYBDENUM-99	0.00E+00	1.31E-04	0.00E+00	0.00E+00
TECHNETIUM-99M	0.00E+00	1.23E-04	0.00E+00	4.14E-05
CERIUM-141	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TIN-117M	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM-51	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IODINE-131	0.00E+00	1.65E-02	0.00E+00	1.08E-04
IODINE-133	0.00E+00	1.06E-03	0.00E+00	0.00E+00
BARIUM-140	0.00E+00	0.00E+00	0.00E+00	2.24E-04
RUTHENIUM-103	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CESIUM-137	0.00E+00	6.37E-03	0.00E+00	4.86E-02
ZIRCONIUM-95	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NIOBIUM-95	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CESIUM-134	0.00E+00	2.32E-03	0.00E+00	1.67E-02
COBALT-58	0.00E+00	1.53E-03	0.00E+00	4.18E-03
MANGANESE-54	0.00E+00	4.14E-04	0.00E+00	4.43E-04
CESIUM-136	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IRON-59	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZINC-65	0.00E+00	0.00E+00	0.00E+00	0.00E+00
COBALT-60	0.00E+00	5.78E-04	0.00E+00	3.15E-03
LANTHANUM-140	0.00E+00	9.74E-04	0.00E+00	8.70E-04
ANTIMONY-124	0.00E+00	3.82E-05	0.00E+00	0.00E+00
CERIUM-144	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ANTIMONY-125	0.00E+00	4.60E-02	0.00E+00	7.28E-03
SILVER-110M	0.00E+00	0.00E+00	0.00E+00	1.01E-04
RUTHENIUM-106	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SELENIUM-75	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ANTIMONY-126	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	9.71E-05	7.62E-02	0.00E+00	8.28E-02
DISSOLVED GASES				
ENTRAINED GASES				
XENON-133	0.00E+00	8.79E-02	0.00E+00	9.09E-02
XENON-135	0.00E+00	1.08E-03	0.00E+00	1.58E-04
TOTAL FOR PERIOD	0.00E+00	8.89E-02	0.00E+00	9.10E-02
OTHER, ALPHA & TRITIUM				
ALPHA	6.41E-05	2.36E-06	0.00E+00	5.75E-06
TRITIUM	1.00E-01	8.67E+01	7.49E-02	8.04E+01
GROSS BETA/GAMMA	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	1.00E-01	8.67E+01	7.49E-02	8.04E+01
AVG. CONC. IN UCI/ML				
ALPHA	1.25E-12	2.27E-12	0.00E+00	7.20E-12
TRITIUM	2.10E-09	8.89E-05	1.46E-09	7.37E-05

SECTION V

RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE

Technical Specification (5.9.4.a.)

January 1, 1988 to June 30, 1988

V. RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE EFFLUENT AND WASTE DISPOSAL REPORT

January 1988 through June 1988

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (NOT IRRADIATED)

1. Type of Waste	Month Shipped	Number of Shipments	Volume Cu. Meter	Curie Content	Est. Total % Error
a. Spent resins, filter sludges, evaporator bottoms, etc.	January	0	0	0	N/A
	February	0	0	0	N/A
	March	0	0	0	N/A
	April	0	0	0	N/A
	May	0	0	0	N/A
	June	0	0	0	N/A
Six Month Total (Type A)		0	0	0	N/A
b. Dry compressable, contaminated equipment, etc.	January	0	0	0	N/A
	February	0	0	0	N/A
	March	0	0	0	N/A
	April	1	15.52	.717	20%
	May	0	0	0	N/A
	June	1	14.45	.954	20%
Six Month Total (Type B)		2	29.97	1.671	20%
c. Irradiated components and other categories	January	0	0	0	NA
	February	0	0	0	NA
	March	0	0	0	NA
	April	0	0	0	NA
	May	0	0	0	NA
	June	0	0	0	NA
Six Month Total (Type C)		0	0	0	
d. Other	January	0	0	0	NA
	February	0	0	0	NA
	March	0	0	0	NA
	April	0	0	0	NA
	May	0	0	0	NA
	June	0	0	0	NA
Six Month Total (Type D)		0	0	0	

V. RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE EFFLUENT AND WASTE DISPOSAL REPORT (Continued)

B. ESTIMATE OF MAJOR NUCLIDE COMPOSITION (By Type of Waste)

1. Percentage of Curies from Represented Isotopes

	Isotope	Percent	Curies	
a.	No Shipments	N/A	N/A	All other nuclides constitute less than 1%.
b.	Cs137	64.6	1.079	All other nuclides constitute less than 1%.
	Cs134	17.7	.296	
	Co58	7.7	.129	
	Co60	5.9	.099	
c.	N/A	N/A	N/A	
d.	N/A	N/A	N/A	

C. SOLID WASTE (DISPOSITION)

Number of Shipments	Transportation Mode	Destination
1	Closed Sole Use Vehicle	Barnwell, South Carolina
1	Closed Sole Use Vehicle	Richland, Washington

D. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

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

V. RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE EFFLUENT AND WASTE DISPOSAL REPORT (Continued)

E. PCP and ODCM Changes for the Period January 1, 1988 - June 30, 1988

In accordance with Technical Specification 5.9.4.a, the radioactive effluent release report shall include any changes to the Offsite Dose Calculation Manual (ODCM) and the Process Control Program (PCP).

Changes were made to the ODCM. The air monitor location for Blair was moved and this location change was incorporated into the ODCM, Table 10. Also, Section 8.0 of the ODCM was changed to coincide with the USAR (Section 11.1.3.7) and Standing Order T-3, Section 2.3 which considers 30 days as the normal holdup time for the gas decay tank. Previously, the ODCM had listed 17 days as the holdup time.

Changes were also made to the PCP during this reporting period. In Section 1.1 a definition of the High Integrity Container was added. Additionally, a change was made to Section 1.2.4. The explanation concerning filter cartridge elements was expanded. This was done to reduce contamination and exposure problems while working with spent filters.

SECTION VI

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED BY STABILITY CLASS AND METEOROLOGY DATA PER BATCH RELEASE

(Regulatory Guide 1.21)

January 1, 1988 to June 30, 1988

VI. JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED BY STABILITY CLASS AND METEOROLOGY DATA PER BATCH RELEASE

A. Meteorology data per batch tables will have -99 values signifying either invalid data or no data available.

B. Meteorology Data Recovery

Data recovery for the Semi-Annual January through June 1988 reporting period, exceeded 90 percent for all parameters except WD 110 and AZ 110 due to sensor malfunction. The data bases were too low in recovery necessitating synthetic data recovery to restore to 99.9% recovery or certainly greater than 99%.

Tower Parameter	Hours Recovered	Recovery Rate (%)
WD 110	3851	88 - Synthetic Data Developed
WD 45	4295	98
WD 10	4317	98.8
WS 110	4350	99.6
WS 45	4368	100
WS 10	4368	100
DT 110	4368	100
T 10 C	4368	100
AZ 110	3966	90.8 - Synthetic Data Developed
AZ 10	4309	98.6

TABLE 15B - A

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	1.	1.	1.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	7.	2.5
NE	0.	0.	1.	2.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	6.	2.1
ENE	0.	0.	0.	1.	1.	0.	1.	1.	0.	3.	2.	0.	0.	0.	0.	9.	3.9
E	0.	0.	1.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.7
ESE	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.8
SE	0.	0.	1.	0.	1.	1.	0.	0.	0.	0.	0.	2.	2.	2.	0.	9.	5.5
SSE	0.	0.	0.	0.	0.	0.	1.	1.	0.	0.	1.	1.	0.	2.	1.	7.	6.3
S	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	1.	2.	2.	4.	4.	14.	8.0
SSW	0.	0.	0.	1.	0.	1.	0.	4.	0.	0.	0.	0.	0.	0.	0.	6.	3.2
SW	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.7
WSW	0.	0.	0.	0.	0.	1.	0.	1.	2.	1.	3.	0.	0.	0.	0.	8.	4.6
W	0.	0.	0.	1.	2.	1.	2.	1.	0.	0.	2.	0.	0.	0.	0.	9.	3.2
WNW	0.	0.	2.	0.	0.	1.	2.	3.	2.	3.	6.	2.	0.	4.	0.	25.	4.8
NW	0.	0.	2.	1.	2.	4.	0.	1.	2.	14.	19.	15.	8.	6.	0.	74.	5.4
NNW	0.	2.	1.	1.	2.	4.	8.	9.	13.	3.	7.	1.	0.	0.	0.	51.	3.7
N	0.	0.	1.	0.	2.	2.	1.	1.	1.	2.	0.	1.	0.	0.	0.	10.	3.1
TOTAL	0.	2.	10.	10.	11.	20.	19.	24.	20.	26.	41.	23.	12.	18.	5.	241.	4.6

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 11.1

TABLE 158 - B

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 ,,, FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.3	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	1.	2.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	4.	2.1
NE	0.	0.	4.	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	6.	1.9
ENE	0.	1.	1.	1.	3.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	7.	2.0
E	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.8
ESE	0.	0.	1.	3.	3.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	9.	2.6
SE	0.	0.	0.	0.	4.	3.	0.	0.	0.	0.	1.	1.	1.	0.	3.	13.	4.9
SSE	0.	0.	0.	1.	1.	1.	4.	2.	2.	0.	1.	3.	2.	2.	2.	21.	5.2
S	0.	0.	1.	1.	1.	2.	4.	4.	1.	0.	2.	9.	2.	3.	1.	31.	5.2
SSW	0.	0.	3.	1.	0.	0.	1.	6.	3.	1.	1.	0.	3.	2.	6.	27.	5.7
SW	0.	0.	0.	1.	2.	2.	2.	3.	1.	1.	0.	1.	2.	0.	0.	15.	3.8
WSW	0.	0.	0.	0.	0.	0.	1.	0.	1.	2.	0.	0.	0.	0.	0.	4.	4.0
W	0.	0.	2.	1.	2.	3.	2.	3.	1.	0.	4.	0.	0.	0.	0.	18.	3.3
WNW	0.	0.	4.	1.	3.	1.	2.	3.	0.	4.	6.	0.	0.	1.	0.	25.	3.7
NW	4.	2.	3.	7.	1.	5.	2.	3.	4.	5.	9.	5.	4.	3.	1.	58.	4.1
NNW	0.	2.	2.	3.	1.	11.	5.	4.	8.	9.	5.	1.	1.	0.	0.	52.	3.6
N	0.	0.	0.	4.	4.	6.	2.	6.	5.	1.	0.	0.	0.	0.	0.	28.	3.0
TOTAL	4.	5.	22.	27.	25.	35.	25.	36.	27.	24.	30.	20.	15.	11.	13.	319.	4.0

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 14.7

TABLE 15B - C

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	2.	1.	0.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	7.	2.5
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ENE	0.	0.	0.	0.	3.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	4.	2.5
E	0.	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.6
ESE	0.	0.	0.	2.	2.	1.	1.	0.	6.	0.	1.	0.	0.	0.	0.	13.	3.4
SE	0.	0.	2.	1.	2.	1.	1.	1.	1.	0.	0.	0.	2.	0.	1.	12.	3.9
SSE	0.	0.	0.	0.	2.	2.	2.	2.	0.	0.	4.	6.	2.	1.	0.	21.	5.1
S	0.	0.	0.	0.	2.	1.	1.	1.	1.	2.	3.	5.	1.	0.	0.	17.	4.9
SSW	0.	0.	2.	0.	0.	1.	1.	0.	4.	0.	3.	1.	0.	0.	1.	13.	4.3
SW	0.	0.	0.	0.	1.	3.	0.	0.	0.	1.	1.	0.	0.	0.	0.	6.	3.4
WSW	0.	0.	0.	0.	1.	0.	2.	?.	0.	0.	0.	0.	0.	0.	0.	5.	3.2
W	0.	0.	0.	0.	1.	2.	1.	1.	0.	1.	0.	0.	0.	0.	0.	6.	3.0
WNW	0.	1.	3.	0.	2.	0.	2.	2.	4.	3.	2.	1.	0.	1.	0.	21.	3.6
NW	3.	1.	3.	2.	3.	2.	4.	5.	7.	11.	9.	12.	6.	5.	0.	73.	4.7
NNW	3.	0.	1.	2.	1.	4.	2.	3.	7.	3.	1.	2.	0.	1.	1.	31.	3.7
N	0.	0.	3.	1.	3.	1.	2.	5.	1.	0.	0.	J.	0.	0.	0.	16.	2.7
TOTAL	6.	2.	16.	12.	23.	19.	20.	25.	31.	21.	24.	27.	11.	8.	3.	248.	4.0

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 11.4

TABLE 15B - D

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	1.	2.	1.	3.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	10.	2.1
NE	0.	1.	0.	0.	0.	1.	1.	0.	0.	0.	1.	0.	0.	0.	0.	4.	3.1
ENE	0.	2.	1.	3.	2.	1.	0.	2.	1.	0.	0.	1.	0.	0.	0.	13.	2.5
E	0.	1.	0.	1.	2.	1.	3.	0.	2.	2.	1.	0.	0.	0.	0.	13.	3.3
ESE	0.	1.	3.	2.	4.	4.	1.	2.	0.	0.	3.	0.	0.	0.	0.	20.	2.6
SE	0.	1.	2.	3.	3.	6.	9.	5.	8.	5.	1.	8.	7.	2.	2.	62.	4.5
SSE	0.	1.	0.	0.	6.	9.	5.	7.	5.	4.	10.	15.	5.	2.	3.	72.	4.9
S	1.	0.	2.	1.	2.	4.	5.	3.	0.	3.	5.	8.	9.	6.	1.	50.	5.3
SSW	0.	0.	1.	2.	2.	0.	9.	5.	1.	2.	3.	6.	3.	2.	0.	36.	4.5
SW	0.	1.	1.	1.	1.	3.	0.	1.	3.	1.	2.	1.	2.	2.	1.	20.	4.6
WSW	0.	1.	0.	1.	1.	4.	0.	2.	4.	3.	2.	1.	0.	0.	0.	19.	3.7
W	0.	7.	7.	9.	8.	5.	15.	8.	0.	0.	0.	0.	0.	0.	0.	59.	2.3
WNW	0.	6.	16.	13.	15.	9.	7.	10.	11.	1.	12.	2.	2.	0.	0.	104.	2.9
NW	11.	2.	10.	16.	16.	13.	19.	18.	14.	9.	21.	13.	8.	2.	0.	172.	3.5
NNW	7.	1.	1.	3.	9.	9.	8.	4.	0.	3.	1.	1.	0.	0.	0.	47.	2.5
N	0.	0.	1.	2.	3.	3.	4.	4.	3.	0.	0.	0.	0.	0.	0.	20.	2.9
TOTAL	19.	26.	47.	58.	77.	72.	89.	71.	52.	33.	62.	56.	36.	16.	7.	721.	3.6

NUMBER OF INVALID OBSERVATIONS= 11.

PERCENT OF VALID OBSERVATIONS= 33.3

TABLE 15B - E

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.4 TO +1.5 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.5
NE	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.7
ENE	1.	3.	5.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	13.	1.1
E	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.0
ESE	1.	6.	6.	11.	8.	3.	1.	2.	1.	1.	0.	0.	0.	0.	0.	40.	1.9
SE	0.	6.	3.	5.	9.	7.	3.	7.	2.	4.	5.	2.	1.	0.	0.	54.	3.0
SSE	0.	2.	2.	1.	2.	3.	0.	2.	2.	0.	2.	0.	0.	0.	0.	16.	2.7
S	0.	3.	4.	0.	1.	2.	1.	5.	0.	5.	7.	8.	2.	1.	0.	39.	4.4
SSW	1.	4.	2.	2.	2.	3.	2.	2.	2.	2.	7.	4.	6.	2.	3.	44.	4.6
SW	6.	3.	3.	1.	1.	0.	1.	0.	0.	1.	1.	1.	4.	2.	1.	25.	3.4
WSW	3.	9.	1.	1.	1.	3.	4.	5.	0.	0.	1.	0.	0.	0.	0.	28.	2.0
W	3.	24.	9.	6.	2.	1.	6.	0.	2.	1.	0.	0.	0.	0.	0.	54.	1.4
WNW	2.	19.	33.	19.	6.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	82.	1.3
NW	7.	10.	5.	7.	9.	8.	3.	0.	0.	0.	0.	0.	0.	0.	0.	49.	1.5
NNW	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.6
N	0.	1.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.3
TOTAL	24.	97.	76.	69.	42.	31.	22.	24.	9.	14.	23.	15.	13.	5.	4.	458.	2.3

NUMBER OF INVALID OBSERVATIONS= 4.

PERCENT OF VALID OBSERVATIONS= 21.2

TABLE 158 - F

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +1.6 TO +4.0 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.5
NE	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.0
ENE	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.6
E	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.1
ESE	1.	3.	3.	2.	2.	7.	1.	0.	1.	0.	0.	0.	0.	0.	0.	20.	2.0
SE	1.	7.	3.	0.	2.	5.	3.	2.	1.	1.	0.	0.	0.	0.	0.	25.	2.0
SSE	0.	4.	0.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.2
S	0.	3.	4.	2.	0.	2.	1.	1.	1.	2.	3.	1.	0.	0.	0.	20.	2.9
SSW	0.	0.	0.	0.	0.	0.	1.	2.	1.	0.	3.	1.	1.	1.	5.	15.	6.6
SW	1.	1.	1.	0.	0.	1.	0.	0.	1.	0.	1.	0.	1.	0.	0.	7.	3.2
WSW	1.	1.	1.	0.	0.	0.	0.	0.	0.	1.	2.	0.	0.	0.	0.	6.	2.9
W	0.	4.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	0.9
WNW	1.	18.	9.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	32.	0.9
NW	0.	6.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	1.0
NNW	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.6
N	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.5
TOTAL	6.	57.	24.	13.	5.	15.	7.	5.	5.	4.	9.	2.	2.	1.	5.	160.	2.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 7.4

TABLE 15B - G

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +4.1 TO +INF IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.5
NE	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.4
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.5
ESE	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.3
SE	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.9
SSE	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.7
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.0
WNW	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.2
NW	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.5
NNW	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.4
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	5.	12.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	20.	0.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.9

TABLE 158 - ALL

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIPECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	2.	6.	7.	4.	2.	6.	4.	0.	0.	0.	0.	0.	0.	0.	31.	2.2
NE	0.	4.	6.	2.	0.	4.	2.	0.	1.	0.	1.	0.	0.	0.	0.	20.	2.0
ENE	1.	9.	7.	9.	9.	1.	1.	5.	1.	3.	2.	1.	0.	0.	0.	49.	2.2
E	1.	5.	2.	7.	2.	2.	3.	0.	2.	2.	1.	0.	0.	0.	0.	27.	2.2
ESE	2.	11.	14.	21.	19.	16.	5.	4.	8.	2.	5.	0.	0.	0.	0.	107.	2.3
SE	1.	16.	11.	9.	21.	23.	16.	15.	12.	10.	7.	13.	13.	4.	6.	177.	3.7
SSE	0.	10.	2.	4.	11.	15.	13.	14.	9.	4.	18.	25.	9.	7.	6.	147.	4.5
S	1.	6.	11.	4.	6.	11.	12.	15.	3.	12.	21.	33.	16.	14.	6.	171.	5.0
SSW	1.	4.	8.	6.	4.	5.	14.	19.	11.	5.	17.	12.	13.	7.	15.	141.	4.9
SW	7.	5.	5.	4.	5.	9.	3.	4.	5.	4.	5.	3.	9.	4.	2.	74.	3.8
WSW	4.	11.	2.	2.	3.	8.	7.	10.	7.	7.	8.	1.	0.	0.	0.	70.	3.0
W	4.	35.	19.	17.	16.	12.	26.	13.	3.	2.	6.	0.	0.	0.	0.	153.	2.1
WNW	5.	45.	67.	37.	26.	12.	14.	19.	17.	11.	26.	5.	2.	6.	0.	292.	2.5
NW	25.	23.	24.	35.	31.	32.	28.	27.	27.	39.	58.	45.	26.	16.	1.	437.	3.8
NNW	12.	12.	5.	9.	13.	28.	23.	20.	28.	18.	14.	5.	1.	1.	1.	190.	3.2
N	0.	3.	7.	8.	13.	12.	9.	16.	10.	3.	0.	0.	0.	0.	0.	81.	2.8
TOTAL	64.	201.	196.	181.	183.	192.	182.	185.	144.	122.	189.	143.	89.	59.	37.	2167.	3.4

NUMBER OF INVALID OBSERVATIONS= 17.

PERCENT OF VALID OBSERVATIONS= 99.2

TABLE 159 - A

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.05	0.05	0.05	0.04	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.5
NE	0.00	0.00	0.05	0.09	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	2.1
ENE	0.00	0.00	0.00	0.05	0.05	0.00	0.05	0.04	0.00	0.14	0.09	0.00	0.00	0.00	0.00	0.42	3.9
E	0.00	0.00	0.05	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.7
ESE	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.8
SE	0.00	0.00	0.05	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.09	0.00	0.42	5.5
SSE	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.05	0.04	0.00	0.09	0.04	0.32	6.3
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.09	0.09	0.19	0.18	0.65	8.0
SSW	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	3.2
SW	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.7
WSW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.09	0.04	0.14	0.00	0.00	0.00	0.00	0.37	4.6
W	0.00	0.00	0.00	0.05	0.09	0.05	0.09	0.04	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.41	3.2
WNW	0.00	0.00	0.09	0.00	0.00	0.05	0.09	0.14	0.09	0.14	0.28	0.09	0.00	0.18	0.00	1.15	4.8
NW	0.00	0.00	0.09	0.05	0.09	0.18	0.00	0.05	0.09	0.64	0.88	0.69	0.37	0.28	0.00	3.41	5.4
NNW	0.00	0.09	0.05	0.05	0.09	0.18	0.37	0.41	0.60	0.14	0.32	0.05	0.00	0.00	0.00	2.35	3.7
N	0.00	0.00	0.05	0.00	0.09	0.09	0.05	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.46	3.1
TOTAL	0.00	0.09	0.48	0.49	0.51	0.92	0.88	1.10	0.91	1.19	1.90	1.05	0.55	0.83	0.22	11.12	4.6

NUMBER OF INVALID OBSERVATIONS= 0

PERCENT OF VALID OBSERVATIONS= 11.1

TABLE 159 - B

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.90	0.00	0.05	0.09	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	2.1
NE	0.00	0.00	0.18	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.28	1.9
ENE	0.00	0.05	0.05	0.04	0.14	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.0
E	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.8
ESE	0.00	0.00	0.05	0.14	0.14	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.42	2.6
SE	0.00	0.00	0.00	0.00	0.18	0.14	0.00	0.00	0.00	0.00	0.05	0.05	0.04	0.00	0.14	0.60	4.9
SSE	0.00	0.00	0.00	0.05	0.05	0.05	0.18	0.09	0.09	0.00	0.05	0.14	0.09	0.09	0.09	0.97	5.2
S	0.00	0.00	0.05	0.05	0.05	0.09	0.18	0.18	0.05	0.00	0.09	0.41	0.09	0.14	0.05	1.43	5.2
SSW	0.00	0.00	0.14	0.05	0.00	0.00	0.05	0.28	0.14	0.04	0.04	0.00	0.14	0.09	0.28	1.25	5.7
SW	0.00	0.00	0.00	0.05	0.09	0.09	0.09	0.14	0.05	0.05	0.00	0.04	0.09	0.00	0.00	0.69	3.8
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.18	4.0
W	0.00	0.00	0.09	0.05	0.09	0.14	0.09	0.14	0.05	0.00	0.18	0.00	0.00	0.00	0.00	0.83	3.3
WNW	0.00	0.00	0.18	0.05	0.14	0.05	0.09	0.14	0.00	0.18	0.28	0.00	0.00	0.04	0.00	1.15	3.7
NW	0.19	0.09	0.14	0.32	0.05	0.23	0.09	0.14	0.18	0.23	0.42	0.23	0.18	0.14	0.05	2.68	4.1
NNW	0.00	0.09	0.09	0.14	0.05	0.51	0.23	0.18	0.37	0.41	0.23	0.05	0.05	0.00	0.00	2.40	3.6
N	0.00	0.00	0.00	0.18	0.18	0.28	0.09	0.28	0.23	0.05	0.00	0.00	0.00	0.00	0.00	1.29	3.0
TOTAL	0.19	0.23	1.02	1.26	1.16	1.63	1.14	1.65	1.25	1.10	1.38	0.92	0.68	0.50	0.61	14.72	4.0

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 14.7

TABLE 159 - C

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.09	0.05	0.00	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.5
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
ENE	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	2.5
E	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.6
ESE	0.00	0.00	0.00	0.09	0.09	0.05	0.05	0.00	0.28	0.00	0.04	0.00	0.00	0.00	0.00	0.60	3.4
SE	0.00	0.00	0.09	0.05	0.09	0.05	0.05	0.05	0.04	0.00	0.00	0.00	0.09	0.00	0.04	0.55	3.9
SSE	0.00	0.00	0.00	0.00	0.09	0.09	0.09	0.09	0.00	0.00	0.19	0.28	0.09	0.05	0.00	0.97	5.1
S	0.00	0.00	0.00	0.00	0.09	0.05	0.05	0.05	0.04	0.09	0.14	0.23	0.04	0.00	0.00	0.78	4.9
SSW	0.00	0.00	0.09	0.00	0.00	0.05	0.05	0.00	0.18	0.00	0.14	0.05	0.00	0.00	0.04	0.60	4.3
SW	0.00	0.00	0.00	0.00	0.05	0.14	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.28	3.4
WSW	0.00	0.00	0.00	0.00	0.05	0.00	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	3.2
W	0.00	0.00	0.00	0.00	0.05	0.09	0.05	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.28	3.0
WNW	0.00	0.05	0.14	0.00	0.09	0.00	0.09	0.09	0.18	0.14	0.09	0.05	0.00	0.05	0.00	0.97	3.6
NW	0.14	0.05	0.14	0.09	0.14	0.09	0.18	0.23	0.32	0.51	0.42	0.55	0.28	0.23	0.00	3.37	4.7
NNW	0.14	0.00	0.05	0.09	0.05	0.18	0.09	0.14	0.32	0.14	0.05	0.09	0.00	0.05	0.04	1.43	3.7
N	0.00	0.00	0.14	0.05	0.14	0.05	0.09	0.23	0.04	0.60	0.00	0.00	0.00	0.00	0.00	0.74	2.7
TOTAL	0.28	0.10	0.74	0.56	1.07	0.89	0.92	1.15	1.40	0.97	1.11	1.25	0.50	0.38	0.12	11.44	4.0

NUMBER OF INVALID OBSERVATIONS= 1

PERCENT OF VALID OBSERVATIONS= 11.4

TABLE 159 - E

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.05	0.09	0.04	0.14	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	2.1
NE	0.00	0.05	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.19	3.1
ENE	0.00	0.09	0.05	0.14	0.09	0.05	0.00	0.09	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.61	2.5
E	0.00	0.05	0.00	0.05	0.09	0.05	0.14	0.03	0.09	0.09	0.04	0.00	0.00	0.00	0.00	0.60	3.3
ESE	0.00	0.05	0.14	0.09	0.18	0.18	0.05	0.09	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.92	2.6
SE	0.00	0.05	0.09	0.14	0.14	0.28	0.41	0.23	0.37	0.23	0.05	0.37	0.32	0.09	0.09	2.86	4.5
SSE	0.00	0.05	0.00	0.00	0.28	0.42	0.23	0.32	0.23	0.18	0.46	0.69	0.23	0.09	0.14	3.32	4.9
S	0.05	0.00	0.09	0.05	0.09	0.18	0.23	0.14	0.00	0.14	0.23	0.37	0.41	0.28	0.05	2.31	5.3
SSW	0.00	0.00	0.05	0.09	0.09	0.00	0.41	0.23	0.05	0.09	0.14	0.28	0.14	0.09	0.00	1.66	4.5
SW	0.00	0.05	0.05	0.05	0.05	0.14	0.00	0.05	0.14	0.04	0.09	0.04	0.09	0.09	0.04	0.92	4.6
WSW	0.00	0.05	0.00	0.05	0.05	0.18	0.00	0.09	0.18	0.14	0.09	0.05	0.00	0.00	0.00	0.88	3.7
W	0.00	0.32	0.32	0.42	0.37	0.23	0.69	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.72	2.3
WNW	0.00	0.28	0.74	0.60	0.69	0.42	0.32	0.46	0.51	0.05	0.55	0.09	0.09	0.00	0.00	4.80	2.9
NW	0.51	0.09	0.46	0.74	0.74	0.60	0.88	0.83	0.65	0.41	0.97	0.60	0.37	0.09	0.00	7.94	3.5
NNW	0.32	0.05	0.05	0.14	0.41	0.41	0.37	0.18	0.00	0.14	0.05	0.05	0.00	0.00	0.00	2.17	2.5
N	0.00	0.00	0.05	0.09	0.14	0.14	0.18	0.18	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.92	2.9
TOTAL	0.88	1.23	2.18	2.69	3.55	3.33	4.10	3.26	2.41	1.51	2.85	2.58	1.65	0.73	0.32	33.27	3.6

NUMBER OF INVALID OBSERVATIONS= 11.

PERCENT OF VALID OBSERVATIONS= 33.3

TABLE 159 - E

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.4 *D +1.5 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.5
NE	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.7
ENE	0.05	0.14	0.23	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	1.1
E	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.0
ESE	0.05	0.28	0.28	0.51	0.37	0.14	0.05	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0.00	1.85	1.9
SE	0.00	0.28	0.14	0.23	0.42	0.32	0.14	0.32	0.09	0.18	0.23	0.09	0.05	0.00	0.00	2.09	3.0
SSE	0.00	0.10	0.09	0.05	0.09	0.14	0.00	0.09	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.74	2.7
S	0.00	0.14	0.18	0.00	0.05	0.09	0.05	0.23	0.00	0.23	0.32	0.37	0.09	0.05	0.00	1.80	4.4
SSW	0.05	0.19	0.09	0.09	0.09	0.14	0.09	0.09	0.09	0.09	0.32	0.19	0.28	0.09	0.14	2.03	4.6
SW	0.28	0.14	0.14	0.05	0.05	0.00	0.05	0.00	0.00	0.05	0.04	0.04	0.18	0.09	0.04	1.15	3.4
WSW	0.14	0.41	0.05	0.05	0.05	0.14	0.18	0.23	0.00	0.00	0.04	0.00	0.00	0.00	0.00	1.29	2.0
W	0.14	1.11	0.41	0.28	0.09	0.05	0.28	0.00	0.09	0.04	0.00	0.00	0.00	0.00	0.00	2.49	1.4
WNW	0.09	0.88	1.52	0.88	0.28	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.78	1.3
NW	0.32	0.46	0.23	0.32	0.42	0.37	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.26	1.5
NNW	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.6
N	0.00	0.05	0.09	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.3
TOTAL	1.12	4.51	3.49	2.74	1.95	1.44	1.02	1.09	0.40	0.63	1.04	0.69	0.60	0.23	0.18	21.13	2.3

NUMBER OF INVALID OBSERVATIONS= 4.

PERCENT OF VALID OBSERVATIONS= 21.2

TABLE 159 - F

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +1.6 TO +4.0 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.5
NE	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.0
ENE	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.6
E	0.00	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.1
ESE	0.05	0.14	0.14	0.09	0.09	0.32	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.92	2.0
SE	0.05	0.32	0.14	0.00	0.09	0.23	0.14	0.09	0.05	0.04	0.00	0.00	0.00	0.00	0.00	1.15	2.0
SSE	0.05	0.18	0.00	0.09	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.2
S	0.00	0.14	0.18	0.09	0.00	0.09	0.05	0.05	0.05	0.09	0.14	0.04	0.00	0.00	0.00	0.92	2.9
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.05	0.00	0.14	0.05	0.04	0.04	0.23	0.69	6.6
SW	0.05	0.05	0.05	0.00	0.00	0.65	0.00	0.00	0.04	0.00	0.04	0.00	0.04	0.00	0.00	0.32	3.2
WSW	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.00	0.00	0.00	0.00	0.28	2.9
W	0.00	0.18	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.9
WNW	0.05	0.83	0.42	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.9
NW	0.00	0.28	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	1.0
NNW	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.6
N	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.5
TOTAL	0.29	2.64	1.13	0.58	0.23	0.69	0.34	0.23	0.23	0.17	0.41	0.09	0.08	0.04	0.23	7.38	2.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 7.4

TABLE 159 - G

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +4.1 TO +INF IN PERCENT DATA USED -- WD10 ,WS10 ,DI10D

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	USAR
NNE	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.5
NE	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.4
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
E	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.5
ESE	0.00	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.3
SE	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.9
SSE	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.7
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
W	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.0
WNW	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.2
NW	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.5
NNW	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.4
N	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
TOTAL	0.22	0.56	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.7

NUMBER OF INVALID OBSERVATIONS= 0

PERCENT OF VALID OBSERVATIONS= 0.9

TABLE 159 - ALL

DATA PERIOD 01/01/1988 THROUGH 03/31/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.09	0.28	0.32	0.19	0.09	0.28	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	2.2
NE	0.00	0.18	0.28	0.09	0.00	0.18	0.09	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.92	2.0
ENE	0.05	0.41	0.32	0.41	0.41	0.05	0.05	0.23	0.05	0.14	0.09	0.05	0.00	0.00	0.00	2.25	2.2
E	0.05	0.23	0.09	0.33	0.09	0.09	0.14	0.00	0.09	0.09	0.05	0.00	0.00	0.00	0.00	1.25	2.2
ESE	0.09	0.51	0.65	0.97	0.88	0.74	0.23	0.18	0.37	0.09	0.23	0.00	0.00	0.00	0.00	4.94	2.3
SE	0.05	0.74	0.51	0.42	0.97	1.06	0.74	0.69	0.55	0.46	0.32	0.60	0.60	0.18	0.28	8.17	3.7
SSE	0.00	0.46	0.09	0.18	0.51	0.69	0.60	0.65	0.42	0.18	0.83	1.15	0.42	0.32	0.28	6.78	4.5
S	0.05	0.28	0.51	0.18	0.28	0.51	0.55	0.69	0.14	0.55	0.97	1.52	0.74	0.64	0.28	7.89	5.0
SSW	0.05	0.19	0.37	0.28	0.18	0.23	0.65	0.88	0.51	0.23	0.78	0.55	0.60	0.32	0.69	6.51	4.9
SW	0.32	0.23	0.23	0.19	0.23	0.42	0.14	0.18	0.23	0.18	0.23	0.14	0.42	0.18	0.09	3.41	3.8
WSW	0.19	0.51	0.09	0.09	0.14	0.37	0.32	0.46	0.32	0.32	0.37	0.05	0.00	0.00	0.00	3.23	3.0
W	0.18	1.62	0.88	0.78	0.74	0.55	1.20	0.60	0.14	0.09	0.28	0.00	0.00	0.00	0.00	7.06	2.1
WNW	0.23	2.08	3.09	1.71	1.20	0.55	0.64	0.88	0.78	0.51	1.20	0.23	0.09	0.28	0.00	13.47	2.5
NW	1.15	1.06	1.11	1.61	1.43	1.48	1.29	1.25	1.24	1.80	2.68	2.08	1.20	0.74	0.05	20.17	3.8
NNW	0.55	0.55	0.23	0.42	0.60	1.29	1.06	0.92	1.29	0.83	0.65	0.23	0.05	0.05	0.05	8.77	3.2
N	0.00	0.14	0.32	0.37	0.60	0.55	0.42	0.74	0.46	0.14	0.00	0.00	0.00	0.00	0.00	3.74	2.8
TOTAL	2.96	9.28	9.05	8.35	8.45	8.85	8.40	8.53	6.64	5.61	8.73	6.60	4.12	2.71	1.72	100.00	3.4

NUMBER OF INVALID OBSERVATIONS= 17.

PERCENT OF VALID OBSERVATIONS= 99.2

TABLE 158 - A

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	0.	1.	0.	2.	1.	0.	0.	0.	0.	0.	0.	1.	5.	4.8
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	0.	0.	2.	6.8
ENE	0.	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	2.	3.6
E	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.4
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SE	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.5
SSE	0.	0.	0.	0.	1.	3.	0.	0.	0.	0.	1.	1.	0.	0.	5.	11.	6.7
S	0.	0.	0.	0.	2.	0.	0.	1.	1.	1.	0.	1.	5.	2.	3.	16.	6.6
SSW	0.	0.	0.	1.	0.	3.	0.	0.	0.	2.	1.	2.	2.	0.	1.	12.	5.2
SW	0.	0.	0.	1.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	6.	2.3
WSW	0.	0.	0.	1.	1.	0.	0.	1.	0.	0.	0.	1.	0.	0.	0.	4.	3.6
W	0.	0.	1.	3.	3.	2.	3.	4.	0.	0.	0.	0.	0.	0.	0.	16.	2.6
WNW	0.	0.	1.	2.	5.	3.	0.	1.	1.	0.	1.	0.	0.	0.	0.	14.	2.6
NW	0.	0.	1.	3.	3.	1.	4.	4.	0.	0.	1.	3.	0.	0.	0.	20.	3.3
NNW	0.	0.	0.	2.	4.	2.	5.	1.	2.	5.	1.	0.	0.	0.	0.	22.	3.4
N	0.	0.	1.	1.	2.	9.	17.	7.	3.	3.	4.	1.	1.	0.	0.	49.	3.5
TOTAL	0.	0.	4.	14.	25.	26.	34.	21.	7.	11.	9.	10.	9.	2.	10.	182.	3.9

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.3

TABLE 158 - B

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	0.	1.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.9
NE	0.	0.	0.	0.	1.	1.	2.	5.	2.	0.	0.	0.	0.	0.	0.	11.	3.5
ENE	0.	0.	0.	0.	0.	0.	1.	0.	1.	2.	2.	0.	0.	0.	0.	6.	4.5
E	0.	0.	0.	0.	0.	2.	1.	4.	2.	0.	0.	0.	0.	0.	1.	10.	4.1
ESE	0.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	2.	3.1
SE	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	3.	0.	1.	0.	0.	6.	5.4
SSE	0.	1.	0.	0.	0.	0.	1.	2.	2.	1.	3.	0.	1.	3.	10.	24.	7.3
S	0.	0.	1.	1.	0.	0.	4.	1.	0.	2.	3.	5.	5.	2.	3.	27.	6.0
SSW	0.	0.	0.	1.	1.	1.	0.	2.	1.	1.	0.	7.	2.	0.	0.	16.	5.0
SW	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.7
WSW	0.	0.	0.	0.	0.	1.	2.	3.	0.	0.	0.	0.	0.	0.	0.	6.	3.3
W	0.	0.	0.	1.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	4.	2.6
WNW	0.	0.	1.	4.	3.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	12.	2.1
NW	0.	0.	0.	1.	3.	2.	0.	0.	1.	0.	1.	0.	0.	0.	0.	8.	2.9
NNW	0.	0.	0.	1.	4.	4.	1.	6.	4.	1.	1.	1.	0.	0.	0.	23.	3.4
N	0.	0.	0.	4.	1.	4.	4.	0.	0.	2.	4.	1.	0.	0.	0.	20.	3.4
TOTAL	0.	1.	2.	13.	15.	20.	23.	23.	14.	11.	17.	14.	9.	5.	14.	181.	4.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.3

TABLE 158 - C

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	2.1
NE	0.	0.	0.	1.	1.	1.	2.	2.	0.	0.	0.	0.	0.	0.	0.	7.	2.9
ENE	0.	0.	0.	0.	1.	0.	3.	1.	1.	0.	0.	0.	0.	0.	0.	6.	3.2
E	0.	0.	0.	0.	0.	4.	3.	1.	0.	0.	0.	1.	0.	0.	0.	9.	3.3
ESE	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.1
SE	0.	0.	0.	1.	0.	2.	1.	1.	0.	3.	0.	4.	0.	0.	2.	14.	5.4
SSE	0.	0.	0.	0.	0.	1.	0.	2.	5.	6.	13.	9.	5.	3.	3.	47.	5.9
S	0.	0.	0.	0.	1.	1.	0.	3.	2.	0.	6.	7.	2.	2.	1.	25.	5.7
SSW	0.	0.	0.	0.	0.	0.	0.	2.	1.	1.	2.	5.	3.	0.	0.	14.	5.9
SW	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	2.	0.	0.	0	3.	5.4
WSW	0.	1.	0	1.	1.	0.	0.	0.	0.	0.	2.	2.	0.	0.	0.	7.	4.0
W	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.	2.	0.	0.	0.	0.	5.	4.0
WNW	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.	1	0.	0.	0.	0.	3.	3.6
NW	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	5.	4.6
NNW	0.	0.	1.	2.	4.	3.	1.	1.	3.	0.	0.	0.	1.	0.	0.	16.	2.9
N	0.	1.	1.	1.	3.	3.	2.	2.	1.	1.	1.	1.	1.	0.	0.	18.	3.4
TOTAL	0.	2.	3.	9.	14.	17	13.	17.	14.	11.	27.	34.	12.	5.	6.	184.	4.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.4

TABLE 158 - D

DATA PERIOD 04/01/1988 THROUGH 0' 30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	2.	1.	3.	7.	2.	3.	1.	0.	0.	2.	0.	0.	0.	21.	3.0
NE	0.	0.	1.	3.	6.	3.	7.	6.	0.	0.	0.	0.	0.	0.	0.	26.	2.7
ENE	0.	0.	3.	3.	8.	9.	5.	6.	0.	0.	0.	0.	0.	0.	0.	34.	2.6
E	0.	0.	3.	4.	7.	5.	7.	13.	9.	2.	2.	0.	1.	0.	0.	53.	3.3
ESE	0.	0.	1.	2.	5.	3.	5.	1.	2.	1.	3.	0.	0.	0.	0.	23.	3.1
SE	0.	0.	0.	0.	2.	1.	1.	2.	4.	4.	10.	6.	4.	0.	3.	37.	5.5
SSE	0.	0.	1.	1.	3.	12.	8.	8.	15.	17.	29.	29.	16.	11.	5.	155.	5.4
S	0.	0.	1.	2.	1.	4.	8.	4.	10.	6.	16.	15.	17.	9.	0.	93.	5.5
SSW	0.	0.	1.	0.	2.	3.	1.	3.	3.	2.	7.	9.	7.	1.	0.	39.	5.3
SW	0.	0.	1.	0.	0.	0.	1.	1.	1.	1.	4.	0.	0.	2.	0.	11.	5.0
WSW	0.	0.	0.	0.	1.	1.	2.	1.	1.	2.	2.	0.	0.	0.	0.	10.	3.8
W	0.	0.	1.	0.	2.	2.	3.	3.	1.	0.	0.	0.	0.	0.	0.	12.	2.9
WNW	0.	0.	4.	6.	2.	3.	1.	2.	4.	1.	1.	0.	0.	0.	0.	24.	2.6
NW	0.	1.	3.	7.	5.	13.	4.	5.	7.	3.	2.	1.	0.	0.	0.	51.	3.0
NNW	0.	0.	4.	9.	13.	9.	6.	6.	3.	0.	2.	1.	0.	0.	0.	53.	2.7
N	0.	1.	3.	5.	7.	7.	3.	5.	6.	3.	9.	12.	7.	0.	0.	68.	4.3
TOTAL	0.	2.	29.	43.	67.	82.	64.	69.	67.	42.	87.	75.	52.	23.	8.	710.	4.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 32.6

TABLE 158 - E

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.4 TO +1.5 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	2.	4.	2.	3.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.	13.	1.9
NE	1.	6.	2.	1.	2.	0.	1.	2.	1.	1.	0.	1.	0.	0.	0.	18.	2.1
ENE	0.	1.	5.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	1.5
E	0.	3.	4.	6.	1.	3.	2.	1.	1.	0.	0.	0.	0.	0.	0.	21.	1.9
ESE	0.	6.	4.	3.	1.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	16.	1.4
SE	0.	2.	7.	8.	9.	10.	10.	11.	2.	6.	0.	0.	1.	0.	0.	66.	2.8
SSE	1.	1.	2.	2.	7.	12.	13.	9.	13.	12.	12.	3.	0.	0.	0.	87.	3.7
S	0.	0.	2.	2.	4.	12.	10.	14.	10.	14.	17.	16.	4.	1.	0.	106.	4.4
SSW	0.	1.	0.	0.	1.	1.	0.	2.	7.	7.	17.	18.	2.	1.	0.	57.	5.3
SW	2.	4.	1.	3.	2.	0.	0.	0.	0.	1.	3.	5.	3.	1.	0.	25.	3.9
WSW	1.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	8.	1.5
W	2.	10.	7.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	22.	0.9
WNW	0.	11.	25.	2.	1.	1.	1.	0.	0.	0.	0.	0	0.	0.	0.	41.	1.1
NW	0.	10.	14.	17.	4.	10.	3.	4.	1.	1.	0.	0.	0.	0.	0.	64.	1.8
NNW	1.	4.	6.	5.	6.	1.	2.	1.	0.	0.	3.	0.	1.	0.	0.	30.	2.3
N	0.	1.	3.	7.	1.	1.	1.	2.	1.	2.	1.	1.	0.	0.	0.	21.	2.6
TOTAL	8.	66.	87.	62.	43.	56.	43.	46.	37.	44.	54.	45.	11.	3.	0.	695.	3.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 27.8

TABLE 15B - F

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +1.6 TO +4.0 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.2
NE	0.	6.	0.	1.	0.	2.	0.	1.	0.	0.	0.	1.	0.	0.	0.	11.	1.8
ENE	0.	5.	3.	1.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	10.	1.3
E	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.1
ESE	0.	1.	7.	3.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	13.	1.4
SE	1.	4.	3.	1.	6.	5.	5.	1.	1.	1.	0.	0.	0.	0.	0.	28.	2.2
SSE	2.	4.	1.	0.	3.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	18.	2.0
S	0.	5.	1.	0.	4.	12.	7.	7.	2.	1.	1.	1.	0.	0.	0.	41.	2.8
SSW	2.	5.	0.	1.	1.	0.	1.	2.	4.	0.	0.	0.	0.	0.	0.	16.	2.2
SW	0.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.6
WSW	2.	7.	0.	1.	1.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	14.	1.3
W	2.	19.	5.	0.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	29.	0.9
WNW	1.	12.	18.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	38.	1.0
NW	0.	2.	5.	2.	4.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	14.	1.6
NNW	0.	2.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.3
N	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.5
TOTAL	12.	78.	46.	17.	24.	26.	17.	14.	9.	2.	2.	2.	0.	0.	0.	249.	1.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 11.4

TABLE 15B - G

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +4.1 TO +INF IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	3.	2.9
NE	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.3
ENE	2.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.6
E	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.1
ESE	1.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.7
SE	2.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.6
SSE	0.	1.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	2.	2.3
S	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.7
SSW	0.	1.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.	3.	4.2
SW	1.	0.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	3.	1.6
WSW	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.5
W	3.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	9.	1.4
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NW	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.1
NNW	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	1.	1.	4.	6.2
N	2.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	1.	0.	9.	14.	7.6
TOTAL	16.	27.	6.	0.	0.	1.	1.	1.	2.	0.	0.	1.	3.	1.	11.	70.	2.8

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 3.2

TABLE 158 - ALL

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	3.	7.	4.	11.	9.	7.	4.	1.	0.	1.	2.	1.	0.	1.	51.	2.8
NE	2.	12.	3.	6.	10.	7.	12.	16.	3.	1.	0.	3.	1.	0.	0.	76.	2.6
ENE	2.	11.	12.	5.	10.	11.	10.	8.	2.	2.	3.	0.	0.	0.	0.	76.	2.3
E	2.	4.	9.	11.	9.	14.	14.	19.	12.	2.	2.	1.	1.	0.	1.	100.	2.9
ESE	1.	13.	12.	8.	7.	7.	5.	1.	4.	1.	3.	0.	0.	0.	0.	65.	2.0
SE	3.	10.	11.	10.	17.	20.	17.	15.	7.	16.	13.	10.	6.	0.	5.	160.	3.5
SSE	3.	7.	4.	3.	14.	31.	25.	22.	37.	36.	58.	42.	22.	17.	23.	344.	5.0
S	0.	5.	5.	5.	12.	30.	29.	30.	25.	24.	43.	45.	33.	16.	7.	309.	4.9
SSW	2.	7.	1.	3.	5.	8.	2.	11.	17.	13.	27.	41.	17.	2.	3.	159.	5.1
SW	3.	6.	4.	4.	5.	2.	2.	3.	1.	2.	7.	7.	3.	3.	0.	54.	3.6
WSW	3.	15.	1.	4.	4.	3.	4.	6.	2.	2.	4.	4.	0.	0.	0.	52.	2.5
W	7.	34.	14.	6.	7.	7.	10.	7.	2.	0.	2.	0.	0.	0.	1.	97.	1.7
WNW	1.	23.	49.	21.	12.	9.	4.	4.	5.	1.	3.	0.	0.	0.	1.	133.	1.7
NW	2.	13.	23.	31.	20.	26.	11.	14.	9.	4.	4.	7.	0.	0.	0.	164.	2.5
NNW	2.	6.	12.	19.	31.	20.	15.	15.	12.	6.	7.	3.	2.	1.	1.	152.	2.9
N	3.	5.	8.	18.	14.	24.	28.	16.	11.	11.	19.	16.	10.	0.	9.	192.	3.9
TOTAL	36.	176.	177.	158.	188.	228.	195.	191.	150.	121.	196.	181.	96.	39.	52.	2184.	3.6

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 100.0

TABLE 159 - A

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.00	0.00	0.05	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.23	4.8
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.09	6.8
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.6
E	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.4
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
SE	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.5
SSE	0.00	0.00	0.00	0.00	0.05	0.14	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.23	0.50	6.7
S	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.05	0.05	0.04	0.00	0.04	0.23	0.09	0.14	0.73	5.6
SSW	0.00	0.00	0.00	0.05	0.00	0.14	0.00	0.00	0.00	0.09	0.05	0.09	0.09	0.00	0.04	0.55	5.2
SW	0.00	0.00	0.00	0.05	0.14	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	2.3
WSW	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.18	3.6
W	0.00	0.00	0.04	0.14	0.14	0.09	0.14	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	2.6
WNW	0.00	0.00	0.05	0.09	0.23	0.14	0.00	0.05	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.64	2.6
NW	0.00	0.00	0.05	0.14	0.14	0.05	0.18	0.18	0.09	0.00	0.04	0.14	0.00	0.00	0.00	0.92	3.3
NNW	0.00	0.00	0.00	0.09	0.18	0.09	0.23	0.05	0.09	0.23	0.05	0.00	0.00	0.00	0.00	1.01	3.4
N	0.00	0.00	0.05	0.05	0.09	0.41	0.78	0.32	0.14	0.14	0.18	0.05	0.04	0.00	0.00	2.25	3.5
TOTAL	0.00	0.00	0.19	0.66	1.16	1.20	1.56	0.96	0.32	0.50	0.40	0.45	0.40	0.09	0.45	8.34	3.9

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.3

TABLE 159 - B

DATA PERIOD 04/01/1986 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.00	0.00	0.05	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.9
NE	0.00	0.00	0.00	0.00	0.05	0.04	0.09	0.23	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.50	3.5
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.09	0.09	0.00	0.00	0.00	0.00	0.28	4.5
E	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.18	0.09	0.00	0.00	0.00	0.00	0.00	0.05	0.46	4.1
ESE	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.1
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.14	0.00	0.05	0.00	0.00	0.28	5.4
SSE	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.09	0.09	0.04	0.14	0.00	0.04	0.14	0.46	1.10	7.3
S	0.00	0.00	0.05	0.05	0.00	0.00	0.18	0.04	0.00	0.09	0.14	0.23	0.23	0.09	0.14	1.24	6.0
SSW	0.00	0.00	0.00	0.05	0.05	0.05	0.00	0.09	0.04	0.04	0.00	0.32	0.09	0.00	0.00	0.73	5.0
SW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	2.7
WSW	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	3.3
W	0.00	0.00	0.00	0.05	0.00	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	2.6
WNW	0.00	0.00	0.05	0.18	0.14	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	2.1
NW	0.00	0.00	0.00	0.05	0.14	0.09	0.00	0.00	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.37	2.9
NNW	0.00	0.00	0.00	0.05	0.18	0.18	0.05	0.27	0.18	0.05	0.05	0.04	0.00	0.00	0.00	1.05	3.4
N	0.00	0.00	0.00	0.19	0.05	0.18	0.18	0.00	0.00	0.09	0.18	0.05	0.00	0.00	0.00	0.92	3.4
TOTAL	0.00	0.05	0.10	0.62	0.71	0.89	1.06	1.04	0.63	0.49	0.78	0.54	0.41	0.23	0.65	8.30	4.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.3

TABLE 15B - C

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN PERCENT DATA USED -- WD10 .WS10 .DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.00	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	2.1
NE	0.00	0.00	0.00	0.05	0.05	0.04	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.9
ENE	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.28	3.2
E	0.00	0.00	0.00	0.00	0.00	0.18	0.14	0.05	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.41	3.3
ESE	0.00	0.00	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.1
SE	0.00	0.00	0.00	0.05	0.00	0.09	0.05	0.04	0.00	0.14	0.00	0.18	0.00	0.00	0.09	0.64	5.4
SSE	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.09	0.23	0.27	0.60	0.41	0.23	0.14	0.14	2.15	5.9
S	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.14	0.09	0.00	0.27	0.32	0.09	0.09	0.05	1.15	5.7
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.04	0.09	0.23	0.14	0.00	0.00	0.64	5.9
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.14	5.4
WSW	0.00	0.05	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.32	4.0
W	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.04	0.00	0.09	0.00	0.00	0.00	0.00	0.23	4.0
WNW	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.14	3.6
NW	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.23	4.6
NNW	0.00	0.00	0.05	0.09	0.18	0.14	0.05	0.04	0.14	0.00	0.00	0.00	0.04	0.00	0.00	0.73	2.9
N	0.00	0.05	0.05	0.05	0.14	0.14	0.09	0.09	0.05	0.05	0.04	0.04	0.04	0.00	0.00	0.83	3.4
TOTAL	0.00	0.10	0.15	0.44	0.64	0.77	0.61	0.78	0.64	0.50	1.22	1.54	0.54	0.23	0.28	8.44	4.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.4

TABLE 159 - D

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.09	0.05	0.14	0.32	0.09	0.14	0.04	0.00	0.00	0.09	0.00	0.00	0.00	0.96	3.0
NE	0.00	0.00	0.05	0.14	0.27	0.14	0.32	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	2.7
ENE	0.00	0.00	0.14	0.14	0.37	0.41	0.23	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	2.6
E	0.00	0.00	0.14	0.18	0.32	0.23	0.32	0.60	0.41	0.09	0.09	0.00	0.05	0.00	0.00	2.43	3.3
ESE	0.00	0.00	0.05	0.09	0.23	0.14	0.23	0.04	0.09	0.04	0.14	0.00	0.00	0.00	0.00	1.05	3.1
SE	0.00	0.00	0.00	0.00	0.09	0.05	0.05	0.09	0.18	0.18	0.46	0.28	0.18	0.00	0.14	1.70	5.5
SSE	0.00	0.00	0.05	0.04	0.14	0.55	0.37	0.37	0.69	0.78	1.33	1.33	0.73	0.50	0.23	7.11	5.4
S	0.00	0.00	0.05	0.09	0.05	0.18	0.37	0.18	0.46	0.27	0.73	0.69	0.78	0.41	0.00	4.26	5.5
SSW	0.00	0.00	0.05	0.00	0.09	0.14	0.05	0.14	0.14	0.09	0.32	0.41	0.32	0.04	0.00	1.79	5.3
SW	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.05	0.04	0.04	0.18	0.00	0.00	0.09	0.00	0.50	5.0
WSW	0.00	0.00	0.00	0.00	0.05	0.05	0.09	0.05	0.04	0.09	0.09	0.00	0.00	0.00	0.00	0.46	3.8
W	0.00	0.00	0.05	0.00	0.09	0.09	0.14	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.55	2.9
WNW	0.00	0.00	0.18	0.27	0.09	0.14	0.05	0.09	0.18	0.05	0.05	0.00	0.00	0.00	0.00	1.10	2.6
NW	0.00	0.05	0.14	0.32	0.23	0.60	0.18	0.23	0.32	0.14	0.09	0.04	0.00	0.00	0.00	2.34	3.0
NNW	0.00	0.00	0.18	0.41	0.60	0.41	0.28	0.27	0.14	0.00	0.09	0.05	0.00	0.00	0.00	2.43	2.7
N	0.00	0.05	0.14	0.23	0.32	0.32	0.14	0.23	0.27	0.14	0.41	0.55	0.32	0.00	0.00	3.12	4.3
TOTAL	0.00	0.10	1.36	1.96	3.08	3.77	2.96	3.16	3.04	1.91	3.98	3.44	2.38	1.04	0.37	32.55	4.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 32.6

TABLE 159 - E

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.4 TO +1.5 IN PERCENT DATA USED -- WD10 .WS10 .DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.18	0.09	0.14	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.60	1.9
NE	0.05	0.27	0.09	0.05	0.09	0.00	0.05	0.09	0.05	0.04	0.00	0.04	0.00	0.00	0.00	0.82	2.1
ENE	0.00	0.05	0.23	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	1.5
E	0.00	0.14	0.18	0.27	0.05	0.14	0.09	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.96	1.9
ESE	0.00	0.27	0.18	0.14	0.05	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.73	1.4
SE	0.00	0.09	0.32	0.37	0.41	0.46	0.46	0.50	0.09	0.28	0.00	0.00	0.05	0.00	0.00	3.03	2.8
SSE	0.05	0.04	0.09	0.09	0.32	0.55	0.60	0.41	0.60	0.55	0.55	0.14	0.00	0.00	0.00	3.99	3.7
S	0.00	0.00	0.09	0.09	0.18	0.55	0.46	0.64	0.46	0.64	0.78	0.74	0.18	0.05	0.00	4.86	4.4
SSW	0.00	0.05	0.00	0.00	0.05	0.05	0.00	0.09	0.32	0.32	0.78	0.82	0.09	0.04	0.00	2.61	5.3
SW	0.09	0.18	0.05	0.14	0.09	0.00	0.00	0.00	0.00	0.05	0.14	0.23	0.14	0.04	0.00	1.15	3.9
WSW	0.05	0.18	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.37	1.5
W	0.09	0.46	0.32	0.09	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.9
WNW	0.00	0.50	1.15	0.09	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	1.1
NW	0.00	0.46	0.64	0.78	0.18	0.46	0.14	0.18	0.05	0.04	0.00	0.00	0.00	0.00	0.00	2.93	1.8
NNW	0.05	0.18	0.27	0.23	0.27	0.05	0.09	0.05	0.00	0.00	0.14	0.00	0.05	0.00	0.00	1.38	2.3
N	0.00	0.05	0.14	0.32	0.05	0.05	0.05	0.09	0.04	0.09	0.04	0.04	0.00	0.00	0.00	0.96	2.6
TOTAL	0.38	3.01	3.96	2.85	1.97	2.60	1.98	2.10	1.69	2.01	2.48	2.05	0.51	0.13	0.00	27.74	3.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 27.8

TABLE 159 - F

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +1.6 TO +4.0 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	2.2
NE	0.00	0.27	0.00	0.05	0.00	0.09	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.51	1.8
ENE	0.00	0.23	0.14	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.46	1.3
E	0.05	0.05	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.1
ESE	0.00	0.05	0.32	0.14	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	1.4
SE	0.05	0.18	0.14	0.05	0.27	0.23	0.23	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	1.28	2.2
SSE	0.09	0.18	0.05	0.00	0.14	0.14	0.14	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.83	2.0
S	0.00	0.23	0.05	0.00	0.18	0.55	0.32	0.32	0.09	0.05	0.05	0.04	0.00	0.00	0.00	1.88	2.8
SSW	0.09	0.23	0.00	0.05	0.05	0.00	0.04	0.09	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.73	2.2
SW	0.00	0.18	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.6
WSW	0.09	0.32	0.00	0.05	0.05	0.05	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.3
W	0.09	0.87	0.23	0.00	0.09	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.9
WNW	0.05	0.55	0.82	0.27	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74	1.0
NW	0.00	0.09	0.23	0.09	0.18	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.6
NNW	0.00	0.09	0.05	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	1.3
N	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.5
TOTAL	0.56	3.56	2.13	0.79	1.10	1.19	0.78	0.65	0.39	0.09	0.09	0.09	0.00	0.00	0.00	11.42	1.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 11.4

TABLE 159 - G

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +4.1 TO +INF IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.14	2.9
NE	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.3
ENE	0.09	0.23	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.6
E	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.1
ESE	0.05	0.27	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.7
SE	0.09	0.18	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.6
SSE	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.3
S	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	2.7
SSW	0.00	0.05	0.00	0.00	0.00	0.06	0.00	0.00	0.05	0.00	0.00	0.00	0.04	0.00	0.00	0.14	4.2
SW	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.6
WSW	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.5
W	0.14	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.41	1.4
WNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
NW	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.1
NNW	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.04	0.04	0.18	6.2
N	0.09	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.41	0.64	7.6
TOTAL	0.75	1.25	0.29	0.00	0.00	0.04	0.05	0.04	0.09	0.00	0.00	0.05	0.12	0.04	0.49	3.21	2.8

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 3.2

TABLE 159 - ALL

DATA PERIOD 04/01/1988 THROUGH 06/30/1988 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN PERCENT DATA USED -- WD10 .WS10 .DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO INF	TOTAL	UBAR
NNE	0.00	0.14	0.32	0.18	0.50	0.41	0.32	0.18	0.05	0.00	0.05	0.09	0.05	0.00	0.04	2.33	2.8
NE	0.09	0.55	0.14	0.27	0.46	0.32	0.55	0.73	0.14	0.05	0.00	0.14	0.04	0.00	0.00	3.48	2.6
ENE	0.09	0.50	0.55	0.23	0.46	0.50	0.46	0.37	0.09	0.09	0.14	0.00	0.00	0.00	0.00	3.48	2.3
E	0.09	0.18	0.37	0.50	0.41	0.64	0.64	0.87	0.55	0.09	0.09	0.05	0.05	0.00	0.05	4.58	2.9
ESE	0.05	0.59	0.69	0.37	0.32	0.32	0.23	0.05	0.18	0.04	0.14	0.00	0.00	0.00	0.00	2.98	2.0
SE	0.14	0.46	0.50	0.46	0.78	0.92	0.78	0.69	0.32	0.73	0.59	0.46	0.27	0.00	0.23	7.33	3.5
SSE	0.14	0.32	0.18	0.14	0.64	1.42	1.14	1.01	1.69	1.65	2.66	1.92	1.01	0.78	1.05	15.75	5.0
S	0.00	0.23	0.23	0.23	0.55	1.37	1.33	1.37	1.15	1.10	1.97	2.06	1.51	0.73	0.32	14.15	4.9
SSW	0.09	0.32	0.04	0.14	0.23	0.37	0.09	0.50	0.78	0.59	1.24	1.83	0.78	0.09	0.14	7.28	5.1
SW	0.14	0.37	0.18	0.18	0.23	0.09	0.09	0.14	0.04	0.09	0.32	0.32	0.14	0.14	0.00	2.47	3.6
WSW	0.14	0.69	0.05	0.18	0.18	0.14	0.18	0.28	0.09	0.09	0.18	0.18	0.00	0.00	0.00	2.38	2.5
W	0.32	1.56	0.64	0.27	0.32	0.32	0.46	0.32	0.09	0.00	0.09	0.00	0.00	0.00	0.05	4.44	1.7
WNW	0.05	1.05	2.24	0.96	0.55	0.41	0.18	0.18	0.23	0.05	0.14	0.00	0.00	0.00	0.05	6.09	1.7
NW	0.09	0.60	1.05	1.42	0.92	1.19	0.51	0.64	0.41	0.18	0.18	0.32	0.00	0.00	0.00	7.51	2.5
NNW	0.09	0.27	0.55	0.87	1.42	0.91	0.69	0.69	0.55	0.27	0.32	0.14	0.09	0.05	0.05	6.96	2.9
N	0.14	0.23	0.37	0.83	0.64	1.10	1.28	0.73	0.50	0.50	0.87	0.73	0.46	0.00	0.41	8.79	3.9
TOTAL	1.66	8.06	8.10	7.23	8.61	10.43	8.93	8.75	6.86	5.52	8.98	8.29	4.40	1.79	2.39	100.00	3.6

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 100.0

RELEASE NUMBER 88001 CONTAINMENT PURGE

STARTING TIME JAN 7,1988 HOUR 18 MINUTE 7

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	4.2	252.5	-1.1
19	7.7	205.8	-1.1
20	8.5	208.6	-0.7
21	9.6	220.6	-1.2
22	10.0	225.8	-1.3
23	9.8	230.2	-1.2
24	7.0	247.2	-0.4
1	4.5	281.0	-1.1
2	4.1	300.3	-1.0
3	5.2	296.4	-1.7
4	4.1	298.9	-1.2
5	4.7	298.1	-1.2
6	5.6	305.8	1.8
7	6.5	318.6	-1.3
8	6.8	318.1	-1.5
9	6.9	316.8	-1.6
10	8.0	321.7	-1.6
11	6.6	333.2	-1.9
12	7.6	327.6	-2.0
13	7.3	337.9	-2.3
14	7.0	337.7	-2.0
15	6.7	340.4	-2.2
16	6.9	345.4	-2.0
17	6.9	342.2	-1.9
18	5.7	326.4	-1.1
19	6.7	329.3	-1.9
20	5.1	328.6	-1.9
21	6.4	326.1	-1.4
22	6.0	314.7	-1.4
23	7.0	325.4	-1.5
24	6.4	327.5	-1.7
1	6.4	326.7	-1.7
2	5.8	330.1	-1.5
3	3.5	312.4	-1.3
4	2.2	308.9	-0.5
5	2.3	299.1	-0.6
6	2.2	290.3	-0.7
7	2.0	282.8	-0.5
8	1.7	271.9	-0.4
9	1.6	317.0	-0.2
10	2.5	298.4	-1.5
11	2.1	329.1	-2.2
12	2.7	298.6	-2.1
13	2.7	317.1	-2.2
14	3.0	313.2	-1.9
15	2.4	297.5	-2.0
16	2.8	262.0	-1.8
17	2.5	202.4	-1.8
18	3.1	191.0	-1.0

19	1.7	172.7	0.7
20	1.6	196.9	1.4
21	1.5	190.7	1.8
22	2.2	187.8	2.0
23	1.8	188.2	1.6
24	1.8	149.8	2.6
1	3.7	157.4	2.4
2	5.4	179.3	1.1
3	4.2	152.9	0.6
4	4.2	131.8	0.9
5	3.0	149.3	-0.1
6	5.2	158.8	-0.8
7	5.7	147.5	-0.8
8	6.4	158.4	-1.0
9	7.1	159.1	-1.2
10	10.1	170.5	-1.6
11	12.2	184.1	-1.8
12	14.5	187.8	-1.9
13	15.2	179.4	-1.9
14	14.5	180.7	-2.0
15	14.0	180.6	-1.9
16	14.6	176.4	-1.7
17	13.1	167.8	-1.3
18	16.0	174.3	-1.2
19	19.6	174.5	-1.2
20	19.7	178.8	-1.0
21	18.9	181.7	-1.4
22	15.1	182.6	-1.5
23	13.3	169.5	-1.2
24	14.9	168.5	-1.1
1	16.9	182.3	-1.4
2	15.9	177.8	-1.4
3	7.1	187.8	-1.2
4	8.3	160.7	-1.0
5	8.2	150.8	-1.1
6	4.9	124.3	-0.6
7	8.4	165.5	-0.4
8	10.5	190.0	-0.5

STOP TIME JAN 11,1988 HOUR 7 MINUTE 32

RELEASE NUMBER 88002 CONTAINMENT PURGE

STARTING TIME JAN 14,1988 HOUR 18 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	5.4	186.5	-1.2
19	7.5	193.1	-1.0
20	12.7	197.3	-0.3
21	14.4	202.9	-0.6
22	7.8	182.5	-0.9
23	5.1	146.9	-0.6
24	6.4	148.8	-0.4
1	5.1	111.9	-0.4
2	4.0	261.5	-0.8
3	4.1	126.7	-0.9
4	3.9	131.0	-0.1
5	4.9	142.9	0.6
6	4.5	166.1	0.6
7	5.3	126.3	0.4
8	6.2	120.1	0.2
9	5.3	125.0	-0.6
10	5.7	135.2	-1.3
11	6.5	150.7	-1.9
12	8.1	180.3	-1.8
13	9.8	179.6	-1.8
14	9.3	169.3	-1.6
15	13.1	173.0	-1.6
16	13.4	178.9	-1.1
17	13.2	173.9	-0.7
18	11.7	161.7	-0.5
19	12.9	172.3	-0.6
20	18.4	174.9	-0.4
21	18.6	178.4	-0.8
22	16.9	173.5	-1.0
23	14.9	172.5	-1.0
24	10.0	152.9	-1.0
1	8.0	149.9	-0.4
2	11.0	155.9	-0.7
3	12.1	167.1	-0.6
4	12.9	183.2	-0.6
5	21.6	200.7	-0.3
6	21.5	211.4	-0.4
7	12.4	211.5	-0.5
8	5.1	220.2	0.2
9	4.5	240.6	0.4
10	5.0	266.3	-1.0
11	7.8	277.1	-1.2
12	9.8	287.1	-1.6
13	8.3	291.0	-1.4
14	8.5	298.9	-1.7
15	8.3	303.6	-1.4
16	5.8	304.5	-1.3
17	5.0	288.2	-0.7
18	2.8	286.8	-0.2

19	1.4	267.2	-0.2
20	1.3	253.6	0.1
21	1.1	258.8	1.2
22	1.7	300.6	1.5
23	1.8	305.6	1.3
24	1.8	305.7	1.2
1	2.2	300.6	1.1
2	1.9	302.3	1.2
3	1.1	278.7	1.6
4	1.1	253.9	2.3
5	0.7	236.1	2.2
6	1.2	284.8	1.7
7	2.3	36.3	1.9
8	1.0	225.0	2.5
9	1.7	290.5	2.0
10	1.5	309.9	0.3
11	3.1	321.1	-1.6
12	3.3	353.4	-1.7
13	3.2	347.7	-1.9
14	3.6	313.9	-1.8
15	4.1	337.7	-1.9
16	2.1	45.0	-1.7
17	2.2	37.9	-1.7
18	1.2	72.1	-0.2
19	1.1	255.2	1.0
20	1.4	180.3	2.4
21	1.5	283.5	3.5
22	1.1	131.9	3.8
23	1.7	147.6	3.7
24	1.8	330.6	3.8
1	1.4	304.3	4.2
2	1.9	84.1	5.3
3	3.3	19.5	4.9
4	3.1	117.5	4.4
5	2.0	76.8	3.0
6	2.3	232.0	2.8
7	4.1	96.1	2.1
8	6.0	109.5	3.9

STOP TIME JAN 18,1988 HOUR 7 MINUTE 16

RELEASE NUMBER 88003 CONTAINMENT PURGE

STARTING TIME JAN 21,1988 HOUR 20 MINUTE 24

TIME HOUR	wS10 MPH	wD10 DEG	DT110 DEG C
20	1.2	300.1	2.2
21	2.9	183.4	2.1
22	2.6	173.2	1.8
23	2.8	125.7	0.6
24	4.1	115.9	7.1
1	4.0	189.8	-0.8
2	5.6	214.6	-0.9
3	3.9	227.6	-0.4
4	2.3	297.4	-0.1
5	4.6	298.1	-0.5
6	5.0	290.7	-0.1
7	7.5	277.4	-0.1
8	7.5	279.2	-0.6
9	7.7	276.4	-0.6
10	6.8	276.8	-1.1
11	7.5	278.2	-1.2
12	12.0	303.6	-1.4
13	12.2	305.6	-1.4
14	11.1	306.3	-1.6
15	9.4	297.7	-1.4
16	10.3	303.4	-1.6
17	9.6	297.9	-1.1
18	7.1	297.9	-1.2
19	6.2	295.8	-1.1
20	4.8	282.4	-1.1
21	3.9	267.0	-1.0
22	5.8	252.4	-1.0
23	5.9	247.6	-0.7
24	4.9	241.1	-0.6
1	7.0	219.7	0.1
2	8.0	207.8	0.3
3	4.3	162.0	0.3
4	4.7	163.2	-0.7
5	5.7	146.7	-0.9
6	6.6	135.1	-1.3
7	5.5	166.2	-1.1
8	8.0	186.1	-1.5
9	6.5	188.6	-1.4
10	8.1	207.9	-1.1
11	16.1	224.6	0.8
12	11.8	253.5	-0.6
13	12.7	284.6	-0.7
14	15.7	295.8	-1.0
15	17.6	304.4	-1.2
16	19.4	310.2	-1.4
17	18.8	310.9	-1.5
18	18.6	322.6	-1.8
19	15.4	323.5	-1.6
20	10.6	325.0	-1.3

21	9.1	319.9	-1.3
22	8.8	305.5	-1.2
23	5.8	303.3	-1.0
24	4.4	287.6	-0.8
1	4.1	279.2	0.1
2	2.1	266.4	0.4
3	4.0	265.4	-0.1
4	6.3	245.5	0.1
5	5.4	195.2	-0.4
6	8.4	248.2	1.2
7	9.4	266.2	0.1
8	10.2	274.2	-0.2
9	9.1	280.8	-0.1
10	7.4	275.4	-0.9
11	8.0	275.9	-1.3
12	6.5	271.3	-1.5
13	7.0	272.5	-1.3
14	9.0	291.1	-1.1
15	11.9	300.9	-1.1
16	9.5	286.2	-1.3
17	7.9	282.4	-1.2
18	15.6	314.5	-1.1
19	17.1	323.7	-1.5
20	18.0	327.3	-1.6
21	16.4	328.5	-1.7
22	17.6	323.8	-1.7
23	16.8	324.2	-1.5
24	19.3	325.4	-1.6
1	16.9	320.6	-1.4
2	16.6	315.6	-1.4
3	14.5	315.0	-1.5
4	13.2	315.3	-1.4
5	11.2	312.1	-1.3
6	12.1	315.0	-1.5
7	11.2	312.0	-1.3
8	10.6	316.4	-1.6

STOP TIME JAN 25,1988 HOUR 7 MINUTE 15

RELEASE NUMBER 88004 CONTAINMENT PURGE

STARTING TIME JAN 28,1988 HOUR 20 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	5.7	128.8	0.7
21	11.0	163.2	0.4
22	14.1	172.8	0.9
23	16.6	181.9	1.4
24	15.0	186.8	0.9
1	14.1	191.7	0.7
2	13.4	190.0	0.9
3	10.1	183.8	0.2
4	10.3	188.7	0.2
5	6.4	129.0	0.7
6	5.5	126.8	0.3
7	9.4	166.0	-0.1
8	9.9	175.9	-0.3
9	9.3	167.2	-0.5
10	10.2	170.0	-1.2
11	11.8	181.3	-1.1
12	13.0	178.2	-1.5
13	12.1	180.0	-1.3
14	15.8	189.8	-1.5
15	14.5	188.3	-1.4
16	10.7	193.7	-1.3
17	7.0	198.7	-1.1
18	7.8	182.4	-0.4
19	10.8	181.5	0.5
20	13.3	183.6	0.9
21	12.9	182.8	0.6
22	11.2	184.4	0.7
23	14.7	188.0	0.8
24	19.0	200.3	-0.2
1	8.0	198.6	-0.8
2	6.8	188.2	-0.6
3	5.7	155.5	-0.6
4	4.3	157.1	-0.7
5	5.1	150.1	-0.6
6	6.2	156.4	-0.3
7	6.9	169.7	0.4
8	8.0	170.6	0.3
9	6.4	154.6	-0.2
10	6.1	137.1	-0.6
11	10.7	162.0	-1.0
12	13.6	190.8	-1.5
13	12.4	209.5	-1.5
14	9.8	205.7	-1.7
15	8.8	197.6	-1.6
16	8.9	206.4	-1.5
17	7.2	209.6	-1.4
18	4.0	195.3	-0.4
19	6.0	192.3	1.1
20	8.2	203.4	2.0

21	5.6	213.8	2.8
22	4.9	274.3	1.7
23	3.1	325.6	-0.4
24	5.9	320.7	-1.3
1	7.3	320.3	-1.2
2	10.5	320.1	-1.5
3	10.4	325.0	-1.6
4	12.2	323.3	-1.4
5	11.6	322.2	-1.5
6	13.4	322.2	-1.5
7	12.8	326.3	-1.6
8	12.9	322.5	-1.6
9	13.9	322.3	-1.7
10	12.0	320.3	-1.8
11	12.7	327.2	-1.9
12	10.5	333.9	-1.9
13	11.0	336.6	-2.0
14	9.5	340.5	-2.0
15	9.1	335.2	-1.8
16	9.0	335.2	-1.7
17	8.9	336.5	-1.8
18	8.8	336.2	-2.2
19	9.0	339.5	-1.5
20	8.2	350.5	-1.7
21	9.9	350.2	-1.8
22	7.6	339.3	-1.8
23	8.7	348.9	-1.8
24	8.1	350.4	-1.6
1	8.6	358.5	-1.5
2	8.5	357.7	-1.8
3	9.0	356.7	-1.7
4	10.2	337.4	-1.7
5	11.4	347.1	-2.0
6	10.1	345.9	-1.9
7	9.1	358.2	-1.5
8	9.3	354.5	-1.3

STOP TIME FEB 1,1988 HOUR 7 MINUTE 45

RELEASE NUMBER 88005 CONTAINMENT PURGE

STARTING TIME FEB 4,1988 HOUR 18 MINUTE 10

TIME HOUR	wS10 MPH	wD10 DEG	DT110 DEG C
18	11.2	316.7	-1.4
19	10.3	325.5	-1.5
20	8.4	324.0	-1.5
21	5.4	328.2	-1.4
22	3.3	305.1	-1.4
23	3.8	288.3	-1.1
24	4.8	285.5	-1.2
1	6.8	305.7	-1.6
2	8.3	317.2	-1.5
3	9.1	325.1	-1.6
4	10.7	323.6	-1.5
5	11.4	325.9	-1.8
6	11.0	324.4	-1.5
7	10.7	323.1	-1.5
8	10.1	326.3	-1.4
9	9.2	327.0	-1.9
10	10.4	325.3	-2.0
11	10.9	323.1	-2.1
12	10.5	313.2	-2.4
13	10.3	312.4	-2.4
14	10.9	316.8	-2.2
15	11.0	309.8	-2.3
16	10.4	308.0	-2.3
17	10.2	303.5	-1.8
18	7.8	298.0	-1.5
19	5.0	292.3	-1.3
20	3.0	276.2	-1.1
21	6.6	273.8	-1.1
22	6.8	269.8	-0.9
23	6.9	268.1	-1.0
24	7.5	270.4	-0.9
1	6.5	277.5	-0.9
2	6.6	279.8	-0.9
3	5.1	275.4	-1.0
4	4.9	285.6	-0.7
5	3.8	277.5	-0.9
6	4.4	268.9	-0.9
7	4.9	274.9	-1.2
8	2.9	273.7	-0.6
9	2.2	267.0	-1.2
10	3.1	205.5	-1.7
11	4.7	163.6	-1.9
12	8.4	167.9	-1.8
13	11.8	177.9	-2.1
14	13.8	174.9	-1.8
15	14.6	179.2	-2.0
16	14.7	164.5	-1.9
17	17.7	174.8	-1.8
18	18.7	177.2	-1.7

19	14.3	163.1	-1.6
20	12.9	161.5	-1.5
21	14.4	166.7	-1.1
22	16.1	175.4	-1.2
23	19.1	185.6	-0.9
24	17.5	190.6	-1.1
1	17.5	200.4	-1.2
2	14.3	213.0	-1.3
3	11.8	213.9	-0.7
4	10.7	229.5	0.1
5	6.9	267.6	-6.3
6	7.3	309.1	-0.7
7	6.6	325.3	-1.0
8	7.1	337.7	-1.4
9	10.3	339.7	-1.7
10	9.2	334.7	-2.0
11	10.2	331.6	-2.0
12	9.0	332.0	-2.0
13	9.0	339.4	-2.4
14	8.7	328.2	-2.2
15	7.5	333.4	-2.1
16	7.4	331.5	-1.9
17	5.9	332.6	-1.9
18	4.8	326.0	-1.7
19	2.8	309.3	-1.2
20	1.4	253.9	-0.4
21	0.7	221.4	-0.2
22	1.1	130.2	-0.6
23	3.1	125.7	-1.1
24	3.0	142.9	-1.0
1	5.6	125.0	-1.2
2	8.7	128.9	-1.4
3	9.2	131.2	-1.1
4	9.6	137.8	-1.3
5	10.1	136.6	-1.3
6	12.2	153.0	-1.4
7	14.7	164.6	-1.3
8	14.2	161.9	-1.1
9	16.2	172.3	-1.4
10	18.3	180.2	-1.7

STOP TIME FEB 8,1988 HOUR 9 MINUTE 30

RELEASE NUMBER 88006 CONTAINMENT PURGE

STARTING TIME FEB 12,1988 HOUR 18 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DIF10 DEG C
18	0.9	110.2	-0.5
19	1.8	121.7	1.0
20	1.4	127.0	2.1
21	0.9	140.5	2.9
22	1.4	115.4	3.3
23	1.3	131.1	3.9
24	0.8	91.7	4.4
1	0.8	334.2	4.7
2	0.9	308.2	4.7
3	1.3	324.6	3.9
4	1.0	49.7	4.4
5	0.9	63.2	3.5
6	1.2	69.9	2.5
7	1.0	92.8	2.1
8	1.9	114.2	1.4
9	4.6	116.2	0.5
10	7.4	120.1	-0.7
11	9.1	110.7	0.2
12	11.4	113.7	-0.6
13	11.8	112.8	-0.7
14	13.3	115.8	-0.7
15	14.4	130.3	-0.8
16	13.2	128.3	-1.0
17	12.9	130.9	-0.1
18	12.6	129.7	-0.1
19	9.2	125.3	0.3
20	7.9	132.8	-0.1
21	6.7	123.5	0.2
22	8.1	127.9	0.8
23	8.1	146.1	0.2
24	7.5	146.2	-0.1
1	2.9	117.4	1.5
2	3.1	311.7	2.7
3	2.1	283.2	2.8
4	1.6	283.3	3.5
5	4.0	307.3	2.1
6	6.6	318.5	0.4
7	6.0	316.0	-0.2
8	5.9	333.5	-1.0
9	7.1	344.9	-1.4
10	8.6	356.7	-1.6

STOP TIME FEB 14,1988 HOUR 9 MINUTE 39

RELEASE NUMBER 88007 CONTAINMENT PURGE

STARTING TIME FEB 17,1988 HOUR 13 MINUTE 34

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
13	3.7	269.2	-1.8
14	4.5	271.4	-1.8
15	4.6	264.7	-1.8
16	5.5	235.2	-1.7
17	4.8	237.1	-1.7
18	3.5	219.2	-0.9
19	3.2	193.7	1.0
20	2.5	184.7	3.3
21	5.7	185.5	2.6
22	7.7	180.7	2.3
23	7.1	189.6	3.1
24	7.9	200.5	1.1
1	9.9	204.0	1.2
2	9.0	192.8	0.9
3	8.3	188.1	-0.2
4	8.7	181.2	-0.4
5	10.6	189.2	-0.1
6	11.4	198.9	0.3
7	12.8	202.9	0.9
8	12.9	202.7	0.9
9	13.4	206.9	0.1
10	13.6	203.7	-0.9
11	13.2	200.1	-1.4
12	13.9	196.8	-1.5
13	12.3	202.9	-1.6
14	10.5	212.5	-1.8
15	8.9	202.0	-1.7
16	9.0	194.7	-1.6
17	7.8	194.1	-1.3
18	4.9	191.3	-1.2
19	4.7	185.4	0.6
20	8.1	181.9	1.2
21	10.8	188.2	1.5
22	12.1	190.2	2.0
23	11.8	200.5	1.6
24	12.1	209.2	1.1
1	9.4	224.6	1.8
2	2.5	274.8	1.0
3	3.4	284.4	0.4
4	3.2	287.3	0.1
5	5.5	300.2	-0.5
6	4.7	301.1	-0.7
7	3.2	286.1	-0.1
8	4.2	283.2	-0.2
9	4.0	285.0	-1.1
10	4.4	275.7	-1.6
11	6.0	267.7	-1.8
12	8.6	262.4	-1.7
13	9.2	260.4	-1.7

14	13.6	293.4	-1.6
15	14.7	305.9	-1.5
16	14.2	309.0	-1.3
17	11.6	303.6	-1.2
18	12.1	309.3	-0.8
19	10.1	308.7	-0.8
20	8.9	299.3	-0.8
21	9.0	297.9	-0.7
22	9.3	298.5	-0.8
23	9.5	298.6	-0.7
24	8.0	301.8	-0.6
1	7.7	301.4	-0.8
2	6.5	327.8	-1.1
3	4.6	332.3	-1.2
4	5.0	332.0	-1.2
5	8.4	356.7	-1.8

STOP TIME FEB 20,1988 HOUR 4 MINUTE 41

STARTING TIME FEB 20,1988 HOUR 6 MINUTE 1

TIME HOUR	wS10 MPH	wD10 DEG	DT110 DEG C
6	7.5	334.9	-1.6
7	7.8	335.9	-1.5
8	6.4	346.3	-1.5
9	7.9	334.6	-1.6
10	9.6	342.5	-1.9
11	8.8	349.6	-2.0
12	8.0	345.7	-2.0
13	7.7	343.1	-2.4
14	6.4	345.2	-2.1
15	5.3	358.6	-2.0
16	4.7	353.5	-1.9
17	3.4	342.2	-1.7
18	2.7	30.9	-1.5
19	2.8	58.0	-1.4
20	3.3	81.1	-1.5
21	3.9	83.0	-1.6
22	3.9	113.0	-1.4
23	5.9	119.2	-1.5
24	6.5	135.8	-1.4
1	5.9	143.6	-1.7
2	6.1	140.5	-1.4
3	7.7	140.9	-1.4
4	8.4	158.7	-1.5
5	7.7	154.4	-1.5
6	6.7	150.6	-1.4
7	7.4	164.9	-1.2
8	7.7	169.2	-1.3
9	5.8	186.8	-1.3
10	5.0	191.0	-1.5

11	7.4	243.6	-1.7
12	7.3	283.8	-1.9
13	8.2	286.7	-1.9
14	8.0	271.7	-2.0
15	10.4	248.9	-1.8
16	10.3	232.5	-1.6
17	11.8	213.8	-1.2
18	10.2	193.8	-0.5
19	12.8	191.2	-0.2
20	11.7	179.2	0.4
21	15.5	193.5	-0.3
22	16.9	209.6	-0.3
23	17.9	213.1	-0.1
24	18.7	222.3	0.2
1	16.4	225.3	0.6
2	18.4	224.2	1.1
3	16.4	230.7	0.7
4	6.7	265.7	0.2
5	8.0	296.2	-0.1
6	8.1	321.5	-0.6
7	6.7	323.4	-0.4
8	6.6	316.5	-0.1
9	11.0	323.2	-1.2

STOP TIME FEB 22,1988 HOUR 8 MINUTE 2

RELEASE NUMBER 88008 CONTAINMENT PURGE

STARTING TIME FEB 25,1988 HOUR 18 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	4.1	212.8	-1.1
19	3.3	175.2	1.7
20	4.0	185.9	3.6
21	7.2	195.5	3.5
22	11.0	198.6	3.5
23	16.4	209.0	3.6
24	18.0	209.2	2.3
1	21.2	213.1	2.2
2	20.2	214.4	1.4
3	20.1	212.7	2.4
4	20.1	213.0	2.4
5	20.9	208.8	1.7
6	21.4	212.0	1.9
7	17.6	219.6	2.6
8	10.1	237.9	1.6
9	3.2	298.0	-1.1
10	6.4	264.9	-1.7
11	6.6	276.0	-1.9
12	5.2	282.8	-1.9
13	5.7	297.3	-1.9
14	7.6	304.8	-2.0
15	8.3	322.5	-1.9
16	9.2	321.6	-1.9
17	9.1	323.1	-1.7
18	7.6	319.0	-1.2

STOP TIME FEB 26,1988 HOUR 17 MINUTE 56

STARTING TIME FEB 26,1988 HOUR 19 MINUTE 31

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
19	5.6	313.2	0.7
20	5.0	322.0	-0.1
21	5.6	314.2	0.8
22	3.7	290.5	1.5
23	2.5	282.7	1.3
24	2.3	297.0	1.0
1	1.5	284.3	1.7
2	1.3	285.2	1.6
3	1.3	287.7	2.2
4	1.4	300.3	2.0
5	0.7	115.9	2.3
6	1.5	288.5	2.1
7	2.4	294.2	1.8
8	2.3	302.5	1.8

9	2.0	320.2	0.6
10	3.4	0.3	-1.7
11	2.8	350.5	-1.7
12	2.9	350.2	-1.6
13	3.0	347.6	-2.0
14	3.9	354.3	-1.9
15	3.4	358.7	-1.9
16	2.5	37.2	-2.0
17	2.5	59.3	-1.8
18	2.9	112.2	-1.2
19	2.1	170.6	1.4
20	1.4	150.4	4.1
21	1.8	159.6	5.5
22	5.8	177.8	3.7
[illegible]	9.0	178.0	3.0
24	11.8	181.1	3.7
1	13.8	175.4	2.2
2	12.6	177.4	1.3
3	12.0	187.2	1.5
4	14.1	196.9	0.4
5	15.0	202.1	0.2
6	20.0	206.1	0.9
7	17.6	214.9	0.4
8	11.6	241.8	1.0
9	9.1	300.6	-1.3
10	14.5	332.0	-1.6
11	13.0	340.9	-1.9
12	13.4	342.9	-2.0
13	13.8	342.5	-1.9
14	13.1	345.5	-2.0
15	11.1	337.9	-2.0
16	10.6	338.6	-1.9
17	8.9	339.5	-1.6
18	7.6	337.8	-1.5
19	4.1	321.0	-0.6
20	3.8	316.6	0.6
21	1.5	279.6	1.3
22	1.7	279.3	1.5
23	1.8	281.8	2.1
24	1.4	287.0	2.2
1	1.3	310.8	2.4
2	1.6	305.0	3.3
3	1.1	4.1	3.5
4	1.1	17.2	2.7
5	1.5	311.7	2.5
6	0.9	270.6	1.7
7	0.8	290.8	2.2
8	0.5	329.4	2.3

STOP TIME FEB 29,1988 HOUR 7 MINUTE 50

RELEASE NUMBER 88009 CONTAINMENT LARGE

STARTING TIME MAR 3,1988 HOUR 20 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	1.2	53.3	0.6
21	1.2	344.2	0.8
22	0.8	252.0	0.3
23	1.6	125.0	-0.3
24	1.3	71.1	-0.4
1	0.7	282.3	0.2
2	0.6	255.9	0.7
3	0.7	278.1	1.0
4	1.0	274.9	0.9
5	0.5	202.4	1.0
6	0.8	276.2	0.9
7	0.6	270.9	1.3
8	0.9	281.6	0.8
9	1.1	39.0	-1.1
10	4.2	120.5	-1.9
11	6.4	124.0	-2.0
12	6.1	123.8	-2.2
13	6.9	119.5	-2.1
14	6.2	131.4	-1.9
15	5.8	125.7	-2.0
16	5.5	116.8	-2.0
17	4.6	120.4	-1.8
18	4.1	123.8	-1.3
19	0.9	168.6	-0.1
20	0.2	226.8	1.4
21	1.0	134.4	1.7
22	1.1	102.6	2.2
23	3.1	113.9	1.0
24	2.4	122.6	0.7
1	2.8	123.0	0.4
2	4.6	121.1	-0.1
3	5.2	137.2	-0.1
4	4.5	173.8	-0.6
5	4.9	168.4	-0.5
6	4.5	146.2	-0.1
7	3.7	113.7	0.6
8	5.1	119.4	0.1
9	8.0	116.4	-1.0
10	7.4	159.1	-1.8
11	8.3	171.6	.9
12	7.5	181.5	.8
13	7.5	180.3	-2.0
14	6.4	171.4	-1.9
15	4.9	179.1	-1.9
16	6.3	183.7	-1.8
17	8.3	178.4	-1.8
18	9.9	171.5	-1.5
19	5.7	180.1	-0.5
20	2.8	148.8	0.5

21	2.2	116.9	0.6
22	5.6	164.4	-0.5
23	12.7	207.5	0.6
24	11.1	199.1	0.5
1	15.9	202.5	0.5
2	11.6	214.9	-0.1
3	6.5	206.2	-0.5
4	4.8	173.2	-0.5
5	7.4	202.0	-0.4
6	5.8	170.2	-0.9
7	5.8	176.1	-0.9
8	7.5	169.2	-1.1
9	6.6	206.0	-1.2
10	6.3	197.1	-1.6
11	8.7	199.8	-2.1
12	8.7	196.6	-2.1
13	7.7	201.3	-2.1
14	8.3	197.8	-1.9
15	8.4	235.3	-2.0
16	8.0	-99.0	-1.9
17	8.7	-99.0	-1.7
18	7.5	-99.0	-1.3
19	7.5	-99.0	0.2
20	9.4	-99.0	1.0
21	9.7	-99.0	1.3
22	12.8	-99.0	0.4

STOP TIME MAR 6,:988 HOUR 21 MINUTE 50

RELEASE NUMBER 88010 CONTAINMENT PURGE

STARTING TIME MAR 10,1988 HOUR 17 MINUTE 29

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	22.5	132.6	-1.3
18	22.4	130.2	-0.9
19	15.5	135.5	-0.9
20	13.7	133.6	-0.8
21	15.9	132.5	-0.8
22	17.0	132.5	-0.9
23	15.8	138.4	-0.9
24	15.8	137.2	-0.9
1	14.2	129.2	-0.4
2	11.9	126.6	-0.1
3	8.5	129.0	0.6
4	8.5	123.1	1.0
5	10.0	133.3	0.2
6	13.7	139.6	0.0
7	12.9	144.2	-0.1
8	11.7	146.8	-1.0
9	15.3	156.6	-1.6
10	14.4	170.6	-1.9
11	14.2	188.4	-2.0
12	16.9	187.6	-2.0
13	20.5	187.6	-2.1
14	23.0	191.5	-2.0
15	25.2	192.0	-2.0
16	24.4	199.9	-1.7
17	21.3	210.6	-1.7
18	20.2	215.7	-1.4
19	18.5	212.2	-1.2
20	15.7	219.4	-1.2
21	15.0	219.6	-1.3
22	18.1	215.7	-1.3
23	16.9	222.5	-1.4
24	19.4	222.6	-1.4
1	11.4	217.2	-1.5
2	9.4	213.0	-1.3
3	6.7	211.4	-1.4
4	1.5	287.0	-1.5
5	4.9	297.4	-1.3
6	12.9	296.3	-1.3
7	17.6	308.0	-1.2
8	17.0	303.6	-1.3
9	18.9	306.5	-1.6
10	17.4	309.8	-1.8
11	19.0	313.5	-1.8
12	19.0	316.1	-2.0
13	18.3	313.4	-2.0
14	18.3	313.9	-2.1
15	18.4	314.7	-1.9

STOP TIME MAR 12,1988 HOUR 14 MINUTE 0

STARTING TIME MAR 12,1988 HOUR 18 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	17.8	317.9	-1.6
19	16.5	320.7	-1.5
20	14.1	323.9	-1.4
21	14.1	319.5	-1.5
22	14.7	322.5	-1.6
23	15.5	319.0	-1.4
24	13.5	319.1	-1.5
1	13.6	322.9	-1.2
2	12.4	324.6	-1.5
3	11.4	321.5	-1.3
4	9.3	315.8	-1.3
5	9.2	314.3	-1.1
6	10.1	312.5	-1.1
7	9.7	305.6	-1.4
8	11.6	312.7	-1.6
9	14.1	319.3	-2.0
10	14.6	317.7	-2.2
11	13.7	319.6	-2.3
12	13.1	323.9	-2.4
13	13.2	321.8	-2.5
14	13.7	321.0	-2.5
15	14.2	318.9	-2.5
16	14.7	321.8	-2.3
17	15.0	323.6	-2.1
18	15.2	315.1	-1.8
19	12.2	323.9	-1.4
20	11.3	321.6	-1.3
21	9.3	309.5	-1.3
22	7.5	304.6	-1.0
23	7.8	302.5	-1.2
24	8.2	304.6	-1.0
1	8.9	307.0	-1.1
2	8.7	306.3	-0.8
3	7.7	307.6	-1.0
4	8.9	306.6	-1.1
5	8.2	304.9	-1.1
6	7.4	308.7	-1.0
7	7.8	312.2	-1.1
8	9.9	314.4	-1.6

STOP TIME MAR 14,1988 HOUR 7 MINUTE 48

RELEASE NUMBER 88011 CONTAINMENT PURGE

STARTING TIME MAR 17,1988 HOUR 16 MINUTE 21

TIME HOUR	WS10 MPH	WD1G DEG	DT110 DEG C
16	8.1	332.8	-2.1
17	7.8	324.6	-2.0
18	8.4	318.6	-1.6
19	5.9	323.9	-0.9
20	4.9	317.6	0.5
21	2.8	297.0	1.4
22	5.9	314.5	0.3
23	6.2	313.3	0.2
24	4.3	301.3	0.2
1	3.4	292.0	0.7
2	1.7	286.5	0.3
3	3.2	280.2	0.5
4	3.2	286.9	0.4
5	2.8	278.1	0.7
6	3.0	296.1	0.7
7	3.6	293.9	0.5
8	5.2	293.6	-1.2
9	7.4	309.5	-1.8
10	8.3	316.8	-2.1
11	9.3	327.4	-2.1
12	10.3	332.6	-2.2
13	11.9	325.4	-2.4
14	11.9	320.2	-2.5
15	10.5	329.0	-2.2
16	10.3	325.0	-2.3
17	9.4	330.1	-1.9
18	9.3	331.4	-1.6
19	7.1	329.2	-0.8
20	4.3	316.7	0.5
21	2.5	303.2	0.5
22	1.4	252.8	0.3
23	1.1	263.7	0.4
24	1.6	271.5	-0.2
1	1.3	264.3	0.5
2	1.3	234.2	1.4
3	2.2	255.3	2.0
4	1.8	266.3	1.4
5	1.4	251.2	1.2
6	3.1	209.3	0.2
7	1.8	349.3	-0.3
8	2.5	302.1	-0.6
9	3.2	260.6	-1.2
10	5.0	222.4	-1.8
11	9.7	243.2	-2.1
12	13.0	242.0	-2.2
13	11.6	266.2	-2.3
14	14.3	300.9	-2.5
15	13.1	308.3	-2.2
16	11.3	311.0	-2.3

17	10.6	304.5	-2.6
18	8.4	302.3	-1.5
19	2.2	294.9	0.6

STOP TIME MAR 19,1988 HOUR 18 MINUTE 58

STARTING TIME MAR 19,1988 HOUR 21 MINUTE 30

TIME HOUR	WS10 MPH	WD1C DEG	DTHG DEG C
21	1.9	126.9	2.5
22	1.7	59.5	1.1
23	3.9	72.8	-0.1
24	5.2	88.5	-1.1
1	4.5	79.0	-1.0
2	4.2	73.9	-0.7
3	2.9	98.8	-0.5
4	3.6	119.1	-0.2
5	1.8	103.4	0.1
6	2.3	77.3	0.2
7	2.4	124.1	0.9
8	4.9	121.7	-0.8
9	9.7	121.0	-1.7
10	11.7	131.6	-1.9
11	7.2	153.8	-1.8
12	6.7	185.5	-1.9
13	5.6	240.1	-2.1
14	4.8	276.8	-2.3
15	3.5	305.3	-2.2
16	3.6	347.8	-2.1
17	2.9	327.5	-2.0

STOP TIME MAR 20,1988 HOUR 16 MINUTE 37

RELEASE NUMBER 88012 CONTAINMENT PURGE

STARTING TIME MAR 25,1988 HOUR 18 MINUTE 22

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	11.5	291.7	-1.7
19	4.9	292.5	-0.4
20	5.9	274.6	-0.5
21	7.1	279.1	-0.6
22	7.0	271.6	-0.3
23	8.7	275.9	-0.5
24	8.0	268.9	-0.5
1	8.6	265.7	-0.5
2	8.3	275.2	-0.6
3	4.0	270.5	-0.2
4	6.4	276.7	-0.1
5	13.1	299.8	-1.1
6	13.9	303.7	-1.0
7	11.9	297.6	-1.4
8	15.1	304.5	-1.6
9	16.4	307.2	-2.1
10	16.8	305.6	-2.5
11	15.4	306.6	-2.6
12	15.2	307.0	-2.8
13	15.3	305.8	-2.9
14	15.7	311.7	-2.6
15	14.3	308.8	-2.5
16	12.5	310.1	-2.4
17	10.9	306.0	-2.2
18	9.0	307.0	-1.8
19	4.0	293.1	-0.6
20	0.4	219.1	1.0
21	2.3	136.4	2.2
22	2.3	135.2	2.9
23	3.2	110.6	3.7
24	4.5	112.0	3.2
1	4.6	109.2	3.6
2	5.6	126.4	1.9
3	6.3	119.8	1.6
4	5.8	116.7	1.8
5	8.3	133.4	1.3
6	10.0	131.4	0.5
7	15.4	131.6	-0.4
8	17.2	126.7	-1.1
9	17.1	130.0	-1.7
10	20.0	145.7	-1.9
11	20.6	161.0	-1.9
12	21.6	166.5	-2.1
13	25.7	188.0	-2.2
14	25.0	189.3	-2.1
15	24.1	189.6	-2.1
16	25.0	192.7	-1.9
17	22.3	185.4	-1.8
18	21.5	175.0	-1.4

19	18.6	171.1	-1.2
20	16.3	166.1	-1.1
21	17.0	172.4	-1.0
22	16.3	163.2	-1.0
23	17.9	154.7	-1.1
24	23.3	152.3	-1.2
1	22.7	155.7	-1.2
2	23.5	162.8	-1.2
3	15.0	197.4	-1.2
4	7.6	201.7	-1.0
5	9.8	305.9	-1.4
6	8.6	314.9	-1.5
7	10.4	320.2	-1.6
8	8.3	325.9	-1.5
9	10.8	324.0	-1.3
10	13.3	323.3	-1.7
11	15.1	321.8	1.6
12	12.4	331.9	-1.8
13	10.0	333.0	-1.7
14	10.3	335.2	-1.6
15	10.2	341.8	-1.7
16	10.4	339.0	-1.3
17	10.8	334.0	-1.4
18	7.9	342.7	-1.4
19	6.5	335.8	-1.1
20	8.0	333.3	-1.1
21	5.7	324.9	-1.1
22	3.7	312.8	-0.8
23	4.5	307.7	-0.9
24	6.9	314.4	-0.6
1	8.3	324.5	-0.8
2	6.9	322.6	-0.7
3	9.4	323.4	-1.1
4	7.4	319.5	-0.9
5	5.8	320.5	-1.0

STOP TIME MAR 29,1988 HOUR 4 MINUTE 0

RELEASE NUMBER 88013 CONTAINMENT PURGE

STARTING TIME MAR 31,1988 HOUR 17 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	8.1	64.5	-2.0
18	8.8	59.5	-1.5
19	7.6	43.6	-1.0
20	7.5	24.3	-0.9
21	7.3	27.3	-1.1
22	7.3	27.1	-1.2
23	5.3	19.9	-1.2
24	4.9	25.1	-1.2
1	4.9	41.8	-1.3
2	5.2	46.6	-1.5
3	5.3	29.6	-1.4
4	4.6	18.3	-1.3
5	4.2	326.1	-1.3
6	3.9	334.0	-1.3
7	3.5	339.9	-1.1
8	3.5	340.6	-1.4
9	4.3	347.4	-1.5
10	6.1	4.4	-1.4
11	6.0	16.1	-1.4
12	7.7	44.3	-1.6
13	9.2	49.7	-1.7
14	8.5	47.5	-1.5
15	6.4	52.2	-1.5
16	6.0	27.2	-1.5
17	6.9	31.2	-1.4
18	6.7	55.1	-1.1
19	4.0	39.5	-1.0
20	3.3	30.7	-0.5
21	4.5	59.2	-0.4
22	7.4	88.4	-0.8
23	8.0	94.8	-1.2
24	8.3	87.5	-0.9
1	8.1	88.7	-1.1
2	6.4	82.9	-0.6
3	7.2	81.8	-0.6
4	7.0	84.6	-0.4
5	5.5	79.4	-0.3
6	7.5	92.1	-0.5
7	6.0	87.7	-0.4
8	7.6	108.7	-0.7
9	5.1	114.2	-1.1
10	3.8	116.5	-0.8
11	7.3	84.3	-1.6
12	9.3	145.7	-1.4
13	13.5	126.3	-1.6
14	13.4	143.7	-1.6
15	15.5	149.6	-1.6
16	18.7	147.5	-1.8
17	14.3	153.0	-1.6

18	10.3	168.0	-1.5
19	9.3	182.3	-1.3
20	5.1	170.3	-1.2
21	2.7	161.5	-1.3
22	3.0	169.7	-1.2
23	2.3	134.8	-0.5
24	1.2	218.8	0.3
1	1.0	246.2	1.6
2	0.7	149.1	1.7
3	1.6	159.6	2.3
4	1.0	152.1	2.5
5	2.3	213.9	2.9
6	1.9	48.0	1.8
7	1.3	224.5	1.6
8	4.0	252.9	0.2
9	3.0	265.3	-0.6
10	4.6	252.9	-1.2
11	6.3	269.3	-1.7
12	5.6	265.8	-1.8
13	7.2	259.3	-1.7
14	8.1	246.5	-1.9
15	8.0	241.6	-1.9
16	7.9	245.1	-1.9
17	7.4	246.6	-1.8
18	6.6	225.0	-1.5
19	4.4	192.0	-0.9
20	3.9	141.4	1.0
21	3.2	106.9	2.4
22	3.0	102.4	2.4
23	14.1	183.8	2.0
24	13.7	178.9	0.5
1	12.8	175.1	1.2
2	12.7	177.7	1.6
3	15.1	186.9	0.6
4	14.0	195.5	0.6
5	8.8	196.9	-0.2
6	9.9	187.8	0.1
7	12.2	191.3	0.1
8	16.6	195.8	-0.1

STOP TIME APR 4,1988 HOUR 7 MINUTE 30

RELEASE NUMBER 88014 CONTAINMENT PURGE

STARTING TIME APR 7,1988 HOUR 18 MINUTE 12

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	16.5	175.7	-1.5
19	13.1	175.5	-0.8
20	9.5	150.4	-0.4
21	12.0	146.6	-0.6
22	15.1	150.3	-0.7
23	17.3	156.7	-0.7
24	17.3	160.4	-0.9
1	15.0	159.6	-0.7
2	14.1	153.8	-0.7
3	14.3	151.6	-0.7
4	14.9	157.6	-0.9
5	13.9	151.4	-0.9
6	15.8	148.4	-0.9
7	16.2	146.3	-1.0
8	17.9	151.7	-1.3
9	18.9	152.8	-1.7
10	21.1	161.5	-1.8
11	24.7	163.9	-2.0
12	22.2	160.8	-2.0
13	22.3	164.8	-2.0
14	25.2	159.4	-2.1
15	24.1	165.8	-1.8
16	23.4	157.5	-1.8
17	21.1	161.4	-1.6
18	17.8	156.9	-1.2
19	12.6	153.4	-0.9
20	8.9	193.0	-1.0
21	6.9	292.2	-1.1
22	6.0	292.9	-1.0
23	8.9	314.8	-1.2
24	8.6	327.7	-1.3
1	10.3	323.7	-1.2
2	12.7	322.2	-1.4
3	14.6	324.9	-1.6
4	14.4	326.1	-1.6
5	14.9	326.6	-1.4
6	12.9	329.2	-1.3
7	9.4	327.3	-1.3
8	9.5	323.9	-1.2
9	9.0	329.3	-1.4
10	9.1	343.7	-1.6
11	9.6	341.6	-1.7
12	9.2	343.2	-1.5
13	10.0	349.6	-1.8
14	9.8	345.2	-1.8
15	11.3	351.0	-2.0
16	10.7	359.4	-2.0
17	10.3	357.2	-1.9
18	9.1	0.8	-1.6

19	6.4	356.1	-1.2
20	2.9	341.1	-0.3
21	2.1	291.5	0.9
22	2.3	290.9	1.7
23	3.0	293.6	1.8
24	3.7	297.1	2.4
1	6.3	312.5	1.1
2	5.8	307.2	1.0
3	4.0	307.0	0.8
4	4.1	305.1	0.9
5	4.1	310.3	0.6
6	2.1	319.1	-0.2
7	1.6	308.7	0.3
8	2.2	301.8	-0.2
9	3.9	318.2	-1.3
10	5.4	337.0	2.0
11	6.9	357.6	-2.1
12	6.8	4.9	-2.2
13	7.4	4.5	-2.4
14	8.1	2.2	-2.5
15	7.0	347.8	-2.4
16	7.1	351.6	-2.0
17	7.6	330.5	-1.6
18	7.7	347.0	-1.6
19	3.9	7.2	-1.3
20	0.5	264.2	0.4
21	1.0	214.0	1.4
22	0.9	259.3	2.1
23	1.5	288.[illegible]	3.1
24	0.9	281.	3.2

STOP TIME APR 10,1988 HOUR 23 MINUTE 52

RELEASE NUMBER 88015 CONTAINMENT PURGE

STARTING TIME APR 14,1988 HOUR 18 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	6.7	327.7	-2.2

STOP TIME APR 14,1988 HOUR 13 MINUTE 40

STARTING TIME APR 15,1988 HOUR 13 MINUTE 59

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
13	6.6	350.6	-2.4
14	7.2	351.3	-2.5
15	6.9	6.0	-2.4
16	6.0	355.2	-2.3
17	5.8	355.9	-2.1
18	6.7	0.3	-2.2
19	4.8	352.2	-1.8
20	2.8	348.5	-1.2
21	1.0	263.9	0.6
22	0.9	226.2	1.8
23	0.4	210.5	2.8
24	0.2	226.2	4.6
1	0.3	267.8	4.8
2	0.9	146.0	5.7
3	1.3	119.9	6.4
4	0.6	138.8	7.1
5	0.2	89.0	8.3
6	0.8	106.9	7.8
7	0.7	45.2	8.0
8	1.1	106.8	7.2
9	3.8	129.4	0.8
10	9.5	181.6	-1.6
11	10.7	188.6	-2.0
12	9.9	186.7	-2.1
13	10.2	210.3	-2.1
14	10.7	207.2	-2.2
15	12.0	201.2	-2.2
16	14.8	176.8	-2.2
17	13.6	193.1	-1.9
18	14.0	191.4	-1.9
19	12.8	201.9	-1.7
20	10.1	180.4	-1.2
21	7.8	163.0	-0.5
22	5.7	166.8	-0.3
23	8.8	171.8	0.1
24	9.4	180.1	0.2
1	14.7	193.1	1.1
2	13.9	192.0	0.6

3	12.5	184.2	0.8
4	12.8	189.7	0.2
5	14.1	200.7	-0.4
6	15.3	208.5	-0.2
7	12.4	210.2	-0.4
8	15.8	210.5	-0.7
9	17.8	228.3	-1.2
10	7.3	261.6	-1.9
11	9.3	298.2	-2.5

STOP TIME APR 17,1988 HOUR 10 MINUTE 53

RELEASE NUMBER 88015 CONTAINMENT PURGE

STARTING TIME APR 17,1988 HOUR 11 MINUTE 5

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	9.3	298.2	-2.5
12	10.7	329.4	-2.4
13	13.4	349.8	-2.4
14	13.1	347.4	-2.6
15	17.6	348.9	-2.5
16	10.9	345.6	-2.2
17	10.6	1.9	-2.0
18	11.1	357.8	-1.9
19	11.3	357.4	-1.8
20	10.4	355.5	-1.3
21	9.3	355.7	-1.1
22	8.5	0.6	-1.1
23	7.2	359.8	-0.8
24	7.6	355.0	-0.9
1	7.1	343.6	-1.1
2	6.3	346.7	-1.1
3	5.0	352.0	-0.9
4	4.8	330.5	-0.5
5	6.8	315.3	0.4
6	7.1	326.5	-0.2
7	5.9	332.6	-0.7
8	5.9	321.3	-0.7

STOP TIME APR 18,1988 HOUR 7 MINUTE 34

RELEASE NUMBER 88016 CONTAINMENT PURGE

STARTING TIME APR 21,1988 HOUR 18 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	8.5	67.0	-1.7
19	9.5	69.3	-1.6

STOP TIME APR 21,1988 HOUR 18 MINUTE 47

RELEASE NUMBER 88017 CONTAINMENT PURGE

STARTING TIME APR 21,1988 HOUR 20 MINUTE 48

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	8.2	56.2	-1.7

STOP TIME APR 21,1988 HOUR 8 MINUTE 15

STARTING TIME APR 22,1988 HOUR 11 MINUTE 27

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	7.1	51.5	-1.4
12	7.4	50.3	-1.2
13	7.0	46.5	-1.2
14	5.9	22.9	-1.0
15	5.6	18.9	-1.3
16	5.8	15.7	-1.0
17	4.6	351.4	-1.1
18	4.6	351.9	-1.0
19	3.8	336.2	-1.1
20	3.3	333.5	-1.0
21	3.0	318.8	-1.3
22	3.3	301.2	-0.9
23	4.5	307.4	-1.0
24	5.7	306.6	-1.1
1	9.9	321.6	-1.1
2	7.2	316.8	-1.1
3	8.7	317.1	-1.1
4	9.1	323.2	-1.2
5	8.8	322.7	-1.2
6	10.4	323.3	-1.1
7	9.4	325.4	-1.2
8	8.8	326.0	-1.5
9	9.1	321.4	-1.4
10	9.2	332.5	-1.7
11	10.0	338.3	-2.0
12	8.1	338.7	-2.0
13	7.0	336.8	-2.1
14	7.1	313.2	-2.0
15	8.2	319.4	-2.1
16	8.8	324.7	-1.9
17	7.8	318.1	-2.1
18	6.7	327.1	-1.8
19	6.2	318.9	-1.8
20	3.5	316.6	-0.8
21	1.3	274.8	1.1
22	1.0	256.7	0.5
23	1.2	266.5	1.3
24	1.2	267.1	0.8

1	0.8	241.2	0.9
2	0.8	202.8	2.4
3	1.0	169.3	3.8
4	1.1	128.3	4.6
5	1.6	106.3	5.4
6	1.1	74.3	5.1
7	4.5	128.1	3.0
8	6.3	151.9	0.7
9	9.5	165.7	-0.8
10	13.8	182.0	-1.7
11	15.9	183.1	-1.8
12	17.3	184.9	-2.1
13	17.0	199.3	-2.2
14	16.9	203.7	-2.1
15	15.4	212.6	-2.2
16	15.1	205.9	-2.2
17	14.9	208.3	-1.5
18	9.4	204.3	-0.9
19	12.5	213.3	-0.7
20	9.7	194.4	1.1
21	10.3	207.4	0.7
22	8.8	202.2	1.9
23	8.9	203.9	1.6
24	7.7	188.9	1.8
1	8.1	187.5	0.7
2	8.2	188.3	1.8
3	7.8	211.8	1.9
4	2.1	92.5	0.4
5	2.2	262.0	1.6
6	4.7	238.7	1.9
7	2.8	322.1	0.2
8	2.6	298.5	-0.5

STOP TIME APR 25,1988 HOUR 7 MINUTE 21

RELEASE NUMBER 88018 CONTAINMENT PURGE

STARTING TIME APR 30,1988 HOUR 0 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	5.4	188.3	1.1
2	7.7	178.2	0.9
3	7.5	177.7	0.8
4	7.5	168.6	0.4
5	5.6	167.0	0.6
6	5.5	155.5	0.6
7	4.6	145.6	1.0
8	4.5	139.9	0.5
9	6.3	151.7	-0.8
10	9.0	166.3	-1.7
11	12.9	174.9	-1.8
12	1 .7	173.8	-1.9
13	1 .6	174.1	-2.0
14	18.1	179.6	-2.0
15	18.0	174.8	-2.1
16	16.5	174.4	-2.1
17	17.0	176.6	-1.9
18	16.3	171.4	-1.7
19	14.4	172.7	-1.6
20	12.7	166.7	-1.3
21	9.4	158.6	-0.9
22	9.6	153.8	-0.6
23	9.0	162.2	-0.7
24	8.7	165.6	-0.5
1	9.7	165.3	-0.5
2	10.1	165.4	-0.5
3	9.3	164.5	-0.2
4	8.8	158.7	-0.1
5	7.8	138.7	0.5
6	8.9	126.7	1.9
7	11.0	133.6	1.5
8	10.9	133.6	-0.4
9	11.6	140.8	-1.3
10	14.2	149.9	-1.6
11	18.6	158.6	-1.8
12	22.1	159.7	-2.0
13	25.1	158.7	-2.0
14	23.4	165.6	-2.0
15	23.2	161.6	-2.0
16	22.8	165.2	-2.0
17	22.4	163.1	-1.8
18	21.2	156.1	-1.7
19	20.2	163.3	-1.4
20	16.6	164.1	-1.3
21	16.0	152.1	-1.0
22	15.1	147.1	-0.9
23	15.1	140.8	-0.8
24	12.7	136.8	-0.7
1	10.3	137.7	-0.5

2	9.9	140.0	-0.3
3	7.0	125.6	0.7
4	7.2	137.2	0.9
5	8.1	135.4	0.8
6	7.9	134.9	-0.1
7	8.8	139.8	-0.5
8	11.6	129.0	-0.8
9	13.4	136.2	-1.5
10	16.7	138.5	-1.8
11	20.4	84.2	-1.7
12	26.0	25.9	-3.7
13	24.2	145.2	-1.6
14	27.0	139.1	-1.6
15	26.1	140.0	-1.4
16	23.6	143.8	-1.5
17	21.7	140.4	-1.3
18	19.6	146.9	-1.0
19	17.2	148.5	-0.9
20	11.6	243.6	-1.0
21	5.5	284.0	-0.8
22	3.7	293.1	-0.7

STOP TIME MAY 2,1988 HOUR 21 MINUTE 33

RELEASE NUMBER 88019 CONTAINMENT PURGE

STARTING TIME MAY 5,1988 HOUR 18 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	7.1	172.0	-1.8
19	6.0	157.4	-1.5
20	5.7	172.6	-1.1
21	5.5	172.1	0.1
22	5.3	191.1	1.7
23	3.0	175.4	3.8
24	7.6	196.4	1.7
1	9.2	204.4	1.8
2	8.1	193.8	3.3
3	6.7	187.6	2.9
4	8.6	146.2	3.4
5	8.8	183.6	1.5
6	11.6	174.2	1.1
7	9.6	148.9	0.7
8	8.2	148.3	0.5
9	10.2	155.2	-1.2
10	11.7	156.0	-1.6
11	18.0	162.3	-1.6
12	15.1	154.9	-1.6
13	14.4	151.7	-1.6
14	14.5	150.0	-1.2
15	17.2	153.4	-1.5
16	19.0	159.1	-1.7
17	21.0	162.1	-1.8
18	21.1	161.4	-1.5
19	19.3	155.3	-1.2
20	21.2	158.0	-1.2
21	19.2	156.0	-1.0
22	18.9	159.4	-1.0
23	19.3	161.1	-1.0
24	18.6	158.1	-1.0
1	19.3	156.7	-1.0
2	20.1	163.9	-1.0
3	20.6	162.5	-1.1
4	19.0	165.0	-1.1
5	10.9	167.1	-0.8
6	9.9	129.3	-0.5
7	13.3	130.5	-0.6
8	15.6	135.4	-0.7
9	17.1	145.7	-1.2
10	21.3	154.7	-1.5
11	21.9	161.3	-1.6
12	22.4	170.5	-1.9
13	20.0	182.4	-2.0
14	20.0	190.5	-2.1
15	19.9	194.2	-2.1
16	21.5	184.8	-2.0
17	22.0	179.2	-1.9
18	22.3	183.9	-1.7

19	19.7	190.4	-1.5
20	13.8	203.2	0.2
21	9.0	149.1	4.5
22	14.6	174.7	0.6
23	19.3	172.0	-0.7
24	13.0	151.1	0.4
1	12.9	165.1	-0.6
2	11.9	181.3	-0.7
3	9.2	210.3	-0.1
4	8.2	162.5	-0.4
5	11.3	191.5	-0.9
6	9.3	218.1	-0.9
7	3.2	268.8	-0.3
8	2.8	284.3	-0.3
9	4.2	295.6	-1.7
10	5.0	300.6	-2.0
11	4.9	300.2	-1.9
12	6.1	288.1	-2.2
13	5.9	292.6	-1.9
14	6.3	283.5	-2.1
15	6.5	279.8	-2.2
16	8.3	276.9	-2.3
17	9.1	268.0	-1.6
18	9.8	252.8	-1.4
19	11.7	261.9	-1.5
20	8.3	270.4	-1.3
21	8.0	278.1	-1.1
22	5.4	277.2	-0.7
23	6.7	280.4	-1.0
24	7.5	268.0	-1.1
1	7.9	270.8	-1.1
2	7.1	270.0	-1.2
3	9.3	287.2	-1.2
4	9.0	294.3	-1.2
5	9.6	299.1	-1.1
6	9.2	302.5	-1.1
7	10.3	302.2	-1.2
8	8.0	291.5	-1.3

STOP TIME MAY 9,1988 HOUR 7 MINUTE 47

RELEASE NUMBER 88020 CONTAINMENT PURGE

STARTING TIME MAY 12,1988 HOUR 20 MINUTE 41

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	4.9	313.8	-1.4
21	2.4	295.7	-0.5
22	1.0	302.6	1.8
23	3.3	360.1	2.1
24	3.4	300.2	2.3
1	2.9	279.8	3.3
2	3.0	280.8	2.3
3	1.5	274.6	2.7
4	1.6	272.9	2.7
5	1.6	267.3	3.8
6	1.3	266.6	4.2
7	0.9	271.7	4.1
8	0.6	270.9	4.8
9	0.5	286.5	3.4
10	1.0	7.9	0.3
11	1.7	351.6	-1.6
12	1.6	244.3	-1.7
13	3.7	258.7	-1.7
14	3.9	290.9	-2.0
15	4.8	302.7	-2.0
16	5.3	312.3	-1.9
17	5.4	294.8	-2.0
18	4.5	276.8	-2.0
19	4.1	291.0	-2.0
20	4.9	318.4	-1.3
21	1.7	314.7	-0.6
22	2.6	298.7	0.7
23	2.1	286.2	2.7
24	.6	277.3	2.7
1	2.5	270.4	2.2
2	1.5	270.2	2.9
3	0.6	259.7	3.3
4	0.7	166.6	3.8
5	2.4	129.0	3.9
6	3.0	149.5	3.1
7	2.0	62.7	3.5

STOP TIME MAY 14,1988 HOUR 7 MINUTE 47

STARTING TIME MAY 14,1988 HOUR 7 MINUTE 2

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
7	2.0	62.7	3.5
8	1.2	27.3	6.5
9	0.6	4.6	4.2
10	1.9	23.2	0.6
11	7.3	182.6	-1.3
12	8.8	7	-1.4
13	8.0	.9	-1.6
14	5.2	, .0	-1.7
15	7.7	164.4	-1.6
16	9.0	162.7	-1.6
17	9.5	155.5	-1.6
18	8.9	16 4	-1.8
19	8.6	187.6	-1.6
20	7.5	187.9	-1.3
21	5.7	198.2	-0.6
22	5.2	180.0	0.8
23	5.7	175.7	2.2
24	5.9	176.0	1.8
1	8.5	176.7	1.2
2	7.1	185.4	1.3
3	6.6	184.5	1.7
4	6.3	175.8	1.8
5	7.7	177 ^	1.5
6	11.4	196.	0.6
7	14.0	206.2	0.5
8	11.7	204.0	0.6
9	9.4	196.8	-0.5
10	13.9	205.2	-1.1
11	15.2	203.2	-1.5
12	16.7	208.7	-1.5
13	16.3	204.0	-1.8
14	15.0	206.3	-1.9
15	13.4	209.2	-1.9
16	14.7	205.5	-1.9
17	13.3	202.5	-2.0
18	8.2	205.6	-1.6
19	12.8	200.5	-1.6
20	12.1	197.2	-1.2
21	8.7	192.0	-0.9
22	7.9	182.3	-0.1
23	8.6	183.3	0.2
24	10.3	186.9	0.2
1	10.1	190.7	1.3
2	8.6	196.4	-0.1
3	9.3	194.5	-0.1
4	7.6	190.0	1.7
5	10.8	189.0	0.2
6	7.0	177.4	0.4
7	7.9	173.0	1.4

8	10.7	175.9	1.8
9	7.3	165.0	0.1
10	5.8	179.3	-1.3

STOP TIME MAY 16,1988 HOUR 9 MINUTE 39

RELEASE NUMBER 88021 CONTAINMENT PURGE

STARTING TIME MAY 19,1988 HOUR 18 MINUTE 17

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	8.8	149.0	-1.7
19	10.4	153.7	-1.7
20	11.2	159.8	-1.5
21	16.1	137.5	0.9
22	10.5	136.0	0.6
23	5.9	151.3	0.8
24	7.2	186.2	1.3
1	9.3	163.8	0.7
2	8.5	144.6	0.6
3	5.4	154.7	1.6
4	2.4	229.4	1.2
5	2.2	136.2	2.1
6	2.8	119.0	2.9
7	1.6	251.7	2.8
8	1.8	126.6	2.8
9	2.0	110.2	1.9

STOP TIME MAY 20,1988 HOUR 8 MINUTE 46

STARTING TIME MAY 20,1988 HOUR 9 MINUTE 54

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	2.0	110.2	1.9
10	3.7	98.7	0.5
11	5.0	110.9	-0.7
12	6.0	115.1	-1.3
13	6.1	113.6	-1.4
14	6.5	114.1	-1.5
15	6.2	94.6	-1.8
16	6.0	85.6	-2.0
17	8.8	117.3	-1.8
18	12.4	141.1	-0.6
19	7.9	190.2	1.6
20	6.7	194.4	-0.8
21	7.1	186.1	-1.0
22	18.6	215.5	-0.5
23	6.7	240.2	-0.8
24	4.2	5.4	-0.5
1	2.1	10.5	-0.4
2	1.6	198.6	-0.1
3	3.0	135.9	-0.3
4	4.3	155.3	-0.1
5	2.5	143.0	0.7
6	1.9	139.0	0.2
7	1.6	101.3	0.7

8	1.4	155.4	1.0
9	1.4	53.1	1.1
10	1.7	110.3	0.9
11	2.2	72.2	-0.2
12	3.0	119.0	-1.2
13	4.0	147.9	-1.3
14	3.1	23.7	- .2
15	3.8	343.2	-1.1
16	3.4	294.8	-0.7
17	9.3	260.8	1.2
18	4.7	155.2	0.4
19	4.1	123.0	-0.4
20	3.4	79.9	-0.7
21	3.6	88.3	-0.9
22	3.1	89.7	-0.9
23	1.8	355.4	-0.5
24	1.1	123.4	0.2
1	1.5	84.3	0.3
2	1.7	265.1	0.3
3	2.0	319.7	-0.1
4	2.9	331.1	-0.6
5	3.1	266.2	-0.1
6	4.5	90.4	-0.3
7	2.4	275.1	0.5
8	2.0	302.6	0.3
9	2.0	54.8	-0.3
10	3.9	83.4	-0.6
11	6.0	91.3	-0.7
12	4.7	39.3	-1.1
13	8.2	97.8	-1.1
14	9.7	99.7	-1.2
15	8.3	98.5	-1.4
16	9.0	90.9	-1.4
17	8.3	84.3	-1.4
18	5.8	84.0	-0.8
19	6.0	66.2	-0.8
20	4.4	66.2	-0.9
21	3.5	352.8	-0.6
22	4.7	348.0	-0.7
23	6.4	349.6	-0.9
24	5.3	331.4	-0.5
1	5.3	342.7	-0.7
2	5.5	342.8	-0.5
3	5.2	357.3	-0.7
4	4.0	352.5	-0.7
5	4.8	339.1	-0.7
6	5.6	6.8	-0.7
7	5.6	3.4	-0.7
8	5.1	356.6	-0.6

STOP TIME MAY 23,1988 HOUR 7 MINUTE 35

RELEASE NUMBER 88022 CONTAINMENT PURGE

STARTING TIME MAY 26,1988 HOUR 18 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	16.5	192.2	-1.7
19	14.7	194.2	-1.5
20	16.0	184.5	-1.3
21	14.6	179.3	-1.2
22	14.3	176.1	-0.8
23	12.1	171.6	-0.6
24	12.5	165.1	-0.5
1	14.0	169.7	-0.4
2	13.8	165.6	-0.6
3	15.2	167.5	-0.6
4	15.9	178.2	-0.6
5	15.4	180.3	-0.6
6	14.5	177.9	-0.4
7	12.9	159.8	-0.4
8	14.2	164.1	-0.2
9	18.1	178.0	-0.2
10	19.4	177.7	-0.7
11	14.5	166.1	-1.1
12	16.9	171.3	-1.2
13	17.8	182.3	-1.3
14	15.8	191.3	-1.6
15	15.4	184.5	-1.7
16	15.0	189.3	-1.7
17	16.3	183.0	-1.7
18	15.3	182.4	-1.7
19	13.8	184.8	-1.4
20	13.5	185.0	-1.4
21	12.9	176.0	-1.1
22	11.0	168.4	-0.8
23	10.9	159.2	-0.5
24	13.7	167.2	-0.5
1	14.4	171.8	-0.5
2	16.5	181.1	-0.5
3	16.1	187.3	-0.5
4	15.4	190.2	-0.5
5	15.8	193.1	-0.4
6	14.1	191.3	-0.4
7	13.2	189.8	-0.3
8	12.3	179.4	-0.6
9	11.4	172.1	-0.2
10	14.2	176.1	-0.6
11	15.4	180.2	-0.9
12	15.0	182.7	-1.2
13	13.9	183.1	-1.4
14	14.7	188.9	-1.6
15	11.3	174.9	-1.6
16	12.8	170.8	-1.7
17	12.4	174.0	-1.6
18	13.5	178.1	-1.6

19	11.9	173.3	-1.6
20	13.6	187.8	-1.4
21	14.5	150.9	-1.1
22	9.9	144.0	-0.5
23	7.3	130.0	0.1
24	7.1	130.3	0.5
1	10.9	157.1	-0.6
2	12.0	162.7	-0.7
3	12.8	165.6	-0.7
4	13.3	164.9	-0.7
5	12.1	163.8	-0.6
6	12.4	166.6	-0.5
7	12.2	168.2	-0.4
8	11.9	165.5	-0.4
9	12.0	166.6	-0.5
10	11.9	165.8	-0.7
11	14.0	163.5	-1.0
12	15.2	165.6	-1.3
13	16.5	172.5	-1.4
14	16.7	169.6	-1.7
15	17.8	164.0	-1.6
16	16.6	168.2	-1.6
17	18.2	175.6	-1.5
18	19.9	169.1	-1.5
19	16.7	158.8	-1.3
20	17.2	163.7	-1.2
21	15.5	164.6	-1.0
22	12.8	156.6	-0.8
23	12.3	158.1	-0.6
24	12.3	154.5	-0.6
1	11.6	146.7	-0.5
2	11.8	147.1	-0.4
3	10.4	148.8	-0.3
4	11.6	149.7	-0.3
5	13.4	155.4	-0.5
6	13.9	161.0	-0.6
7	12.5	157.5	-0.5
8	11.8	152.2	-0.4

STOP TIME MAY 30,1988 HOUR 7 MINUTE 40

RELEASE NUMBER 88023 CONTAINMENT PURGE

STARTING TIME JUNE 2,1998 HOUR 16 MINUTE 45

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
16	6.0	81.3	-1.6
17	7.5	92.4	-1.3
18	7.0	85.9	-1.2
19	4.9	89.8	-0.9
20	5.2	84.7	-1.2
21	3.3	74.5	-0.9
22	2.8	14.2	-0.3
23	2.3	313.3	0.8
24	2.8	291.7	3.0
1	4.4	304.2	2.4
2	2.8	266.9	1.2
3	3.0	277.2	1.0
4	2.7	296.4	2.1
5	1.9	277.1	1.8
6	2.2	302.6	1.8
7	2.2	284.0	1.4
8	2.0	268.4	1.5
9	2.0	284.7	1.0
10	2.1	307.9	0.7
11	2.6	345.8	-1.1
12	2.1	356.0	-1.4
13	2.8	345.1	-1.6
14	3.2	4.0	-1.8
15	4.3	341.7	-1.7
16	4.0	352.9	-1.6
17	4.9	17.8	-1.7
18	5.1	16.5	-1.8
19	4.1	46.5	-1.5
20	5.6	77.2	-1.1
21	4.0	85.6	-0.4
22	3.0	27.0	-0.4
23	2.6	294.6	-0.1
24	1.5	271.0	0.3
1	1.7	302.7	1.4
2	1.5	185.2	2.0
3	2.6	136.1	1.9
4	5.0	135.2	0.8
5	6.0	139.3	-0.2
6	6.1	148.1	0.3
7	6.4	152.4	-0.3
8	5.9	149.9	-0.7
9	5.9	154.5	-0.3
10	6.2	147.3	-0.7
11	7.6	160.3	-1.1
12	11.3	165.5	-1.2
13	12.1	167.6	-1.4
14	10.6	157.4	-1.5
15	12.4	166.2	-1.5
16	11.8	168.8	-1.5

17	12.4	166.1	-1.6
18	11.0	173.9	-1.6
19	8.7	171.0	-1.5
20	7.9	160.2	-1.4
21	7.2	161.1	-1.2
22	6.1	159.9	-0.8
23	2.8	176.0	0.7
24	1.4	137.0	3.6
1	3.5	134.1	3.5
2	5.8	139.8	2.4
3	5.5	131.3	1.6
4	7.4	153.9	1.1
5	7.0	153.7	1.6
6	5.2	142.5	2.7
7	8.8	155.1	1.7
8	5.7	169.6	1.5
9	4.9	166.9	1.4
10	8.3	177.0	0.7
11	8.9	185.5	-1.1
12	9.6	190.5	-1.3
13	9.5	187.4	-1.5
14	11.1	167.7	-1.5
15	10.6	163.2	-1.6
16	10.5	160.4	-1.6
17	11.3	157.2	-1.6
18	11.4	159.6	-1.5
19	10.9	160.7	-1.5
20	10.1	160.4	-1.4
21	8.2	155.0	-1.2
22	5.5	157.3	-0.7
23	5.1	158.9	0.8
24	5.5	175.3	2.2
1	5.5	171.6	2.6
2	6.0	184.2	2.2
3	7.3	187.1	2.2
4	5.2	180.9	2.6
5	5.7	187.0	3.6
6	6.4	169.8	3.1
7	6.7	179.6	3.0

STOP TIME JUNE 6,1988 HOUR 6 MINUTE 6

RELEASE NUMBER 88024 CONTAINMENT PURGE

STARTING TIME JUNE 9,1988 HOUR 16 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
16	9.7	95.8	-1.8
17	8.1	91.0	-1.8
18	8.0	86.9	-1.8
19	7.8	95.0	-1.6
20	7.8	99.0	-1.4
21	6.3	90.8	-1.2
22	4.9	87.3	-0.7
23	2.7	119.4	0.8
24	1.4	257.8	3.5
1	1.2	207.4	3.3
2	1.2	153.3	3.5
3	1.0	218.1	3.8
4	1.5	120.6	4.7
5	1.9	117.4	5.9
6	1.8	68.2	7.7
7	1.9	73.3	7.1
8	1.5	67.5	7.9
9	1.7	62.2	6.2
10	2.9	109.1	2.2
11	8.3	203.3	-1.1
12	8.3	195.8	-1.3
13	9.1	181.6	-1.4
14	9.2	169.4	-1.5
15	8.6	164.9	-1.6
16	9.2	161.5	-1.6
17	9.6	158.3	-1.6
18	9.4	162.8	-1.6
19	10.4	144.3	-1.4
20	9.2	159.7	-1.3
21	7.8	166.3	-1.1
22	6.1	152.6	-0.5
23	5.2	150.4	1.0
24	5.0	147.0	2.9
1	5.8	147.0	3.6
2	6.7	157.3	3.6
3	7.3	168.8	2.6
4	8.1	186.0	2.6
5	9.6	192.5	2.9
6	8.3	181.0	1.7
7	7.2	162.5	1.2
8	6.8	152.0	1.2
9	7.1	173.9	1.2
10	9.1	168.8	-0.3
11	10.4	168.0	-1.0
12	11.0	178.8	-1.2
13	16.3	187.1	-1.4
14	15.8	178.3	-1.5
15	15.3	164.0	-1.5
16	15.9	168.4	-1.4

17	15.9	167.8	-1.5
18	14.5	168.6	-1.4
19	14.3	164.8	-1.2
20	13.5	166.4	-1.0
21	11.2	164.7	-0.8
22	10.7	158.7	-0.5
23	9.4	149.1	-0.1
24	9.0	143.9	0.4
1	9.0	153.0	0.4
2	10.4	161.4	-0.1
3	13.0	171.2	-0.3
4	11.1	171.4	-0.4
5	11.1	169.1	-0.5
6	10.8	174.0	-0.4
7	9.8	166.8	-0.3
8	10.4	169.3	-0.2
9	10.9	168.8	-0.5
10	11.3	166.9	-0.7
11	12.9	171.5	-0.9
12	13.9	177.3	-1.2
13	14.3	172.4	-1.3
14	14.7	170.4	-1.4
15	15.5	172.1	-1.4
16	15.7	140.9	-1.4
17	16.0	0.1	-1.3
18	15.3	7.8	-1.3
19	15.3	2.4	-1.2
20	14.4	2.3	-1.1
21	12.3	7.2	-0.8
22	11.8	0.4	-0.6
23	10.1	360.0	.2
24	8.5	360.0	0.1
1	8.7	153.9	-0.2
2	11.1	167.7	-0.1
3	11.3	174.3	-0.4
4	11.8	176.6	-0.5
5	14.6	176.7	-0.5
6	14.9	177.6	-0.4
7	15.1	194.8	-0.4

STOP TIME JUNE 13,1988 HOUR 6 MINUTE 0

RELEASE NUMBER 88025 CONTAINMENT PURGE

STARTING TIME JUNE 16,1988 HOUR 20 MINUTE 1

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	6.7	153.8	-1.2
21	6.8	150.9	-1.1
22	5.7	151.1	-0.7
23	4.0	144.0	1.3
24	4.7	135.6	2.7
1	5.8	140.9	3.0
2	7.7	157.7	2.1
3	6.9	145.4	2.5
4	7.1	142.5	1.8
5	9.7	151.8	0.5
6	9.2	159.3	-0.3
7	8.5	179.1	-0.3
8	8.1	232.6	-0.6
9	10.4	207.7	-0.3
10	5.8	182.7	-0.1
11	2.3	79.2	-0.8
12	4.7	67.4	-1.6
13	4.5	68.4	-1.5
14	6.2	99.7	-1.3
15	9.2	177.6	-1.4
16	10.2	181.4	-1.5
17	11.1	166.8	-1.5
18	11.1	125.3	-1.2
19	9.5	125.3	-1.0
20	9.2	190.6	-1.1
21	10.2	178.9	-0.9
22	9.2	151.9	-0.6
23	7.8	152.4	0.2
24	7.8	150.9	0.3
1	10.2	152.5	0.2
2	10.0	187.8	0.1
3	8.5	180.7	0.2
4	10.6	191.7	0.1
5	11.5	209.7	-0.3
6	10.7	219.3	-0.2
7	12.1	334.8	-0.3
8	9.0	1.4	-0.3
9	8.7	0.9	-0.5
10	10.6	3.6	-0.8
11	11.2	10.5	-1.1
12	12.4	2.2	-1.1
13	12.7	2.5	-1.3
14	14.3	0.3	-1.4
15	14.7	1.5	-1.4
16	15.4	6.1	-1.5
17	15.0	359.6	-1.4
18	16.7	2.7	-1.4
19	15.8	1.2	-1.2
20	15.6	3.7	-1.0

21	14.2	22.2	-0.8
22	12.4	106.9	-0 5
23	9 9	155.2	-0.2
24	10.2	142.5	-0.2
1	10.8	171.5	-0.3
2	13.3	180.6	-0.4
3	15.4	185.5	-0.5
4	15.6	183.7	-0.5
5	16.2	186.9	-0.5
6	15.3	187.4	-0.4
7	14.5	187.2	-0.5
8	12.6	194.8	-0.5
9	10.0	179.5	-0.5
10	12.3	183.3	-0.6
11	16.2	294.5	-1.C
12	12.5	353.1	-1.2
13	11.3	298.5	-1.4
14	10.8	213.0	-1.4
15	10.8	213.3	-1.4
16	10.7	215.1	-1.4
17	8.2	224.4	-1.6
18	9.6	336.6	-1.6
19	7.2	162.2	-1.5
20	6.8	174.8	-1.3
21	6.5	152.5	-1.3
22	8.0	91.1	-1.1
23	7.1	114.0	-0.8
24	4.4	130.5	0.1
1	2.7	128.0	5.5
2	1.9	119.3	4.3
3	3.8	54.6	2.8
4	3.6	59.2	2.1
5	1.6	68.5	3.5
6	2.1	63.9	4.1
7	3.7	109.5	3.0
8	4.2	113.3	0.2
9	6.0	46.6	-1.1

STOP TIME JUNE 20,1988 HOUR 8 MINUTE 35

RELEASE NUMBER 88026 CONTAINMENT PURGE

STARTING TIME JUNE 23,1988 HOUR 20 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	9.9	173.2	-1.1
21	8.6	155.8	-1.0
22	7.0	129.0	-0.5
23	9.1	143.7	-0.7
24	7.2	149.6	-0.3
1	7.0	159.3	1.0
2	7.2	160.2	1.3
3	7.3	166.4	0.6
4	9.4	180.5	0.4
5	9.5	191.1	0.5
6	10.4	198.3	0.3
7	10.2	209.6	0.3
8	11.0	210.8	0.1
9	11.2	218.1	-0.9
10	11.3	216.8	0.1
11	12.8	222.7	-1.3
12	13.1	224.8	-1.4
13	14.6	223.4	-1.6
14	13.7	206.7	-1.8
15	14.6	202.3	-1.5
16	13.6	209.9	-1.6
17	14.5	212.2	-1.4
18	13.1	212.2	-1.0
19	12.3	207.3	-0.7
20	8.3	207.6	-0.1
21	5.8	204.3	0.8
22	5.9	188.4	2.1
23	6.8	190.8	1.3
24	9.8	194.8	0.7
1	10.7	202.6	0.3
2	10.9	203.9	0.1
3	11.5	218.5	-0.2
4	12.9	228.6	0.1
5	15.4	230.1	0.4
6	14.7	231.8	0.4

STOP TIME JUNE 25,1988 HOUR 5 MINUTE 0

STARTING TIME JUNE 25, 1988 HOUR 5 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
5	15.4	230.1	0.4
6	14.7	231.8	0.4
7	13.9	232.6	0.6
8	13.6	239.7	0.2
9	10.5	236.4	-0.6
10	4.4	277.9	-1.3
11	3.8	311.4	-1.8
12	6.0	9.6	-1.9
13	6.1	8.8	-2.1
14	7.2	14.9	-1.9
15	7.7	36.8	-1.9
16	7.8	3.8	-2.0
17	7.4	7.7	-1.7
18	7.7	10.4	-1.5
19	6.8	5.1	-1.3
20	6.8	13.8	-0.7
21	5.7	8.2	-0.2
22	3.8	1.6	0.7
23	2.0	327.8	1.2
24	2.4	323.0	1.9
1	2.8	294.7	2.1
2	3.5	311.7	2.3
3	2.8	304.1	3.4
4	2.9	320.8	3.0
5	3.2	312.7	2.9
6	4.9	312.5	2.2
7	5.3	308.0	2.0
8	2.9	332.4	0.1
9	4.1	48.1	-1.5
10	6.6	76.8	-1.6
11	7.8	87.6	-1.9
12	7.6	86.8	-2.0
13	7.5	59.2	-2.1
14	8.4	70.0	-2.0
15	7.9	89.1	-1.9
16	7.5	48.1	-1.9
17	7.1	10.8	-1.8
18	6.9	68.8	-1.6
19	6.6	75.1	-1.3
20	6.2	54.7	-1.0
21	4.2	17.3	-0.1
22	3.6	101.3	0.6
23	2.6	120.3	1.1
24	1.5	211.7	1.8
1	1.0	323.5	2.8
2	1.3	280.9	3.4
3	1.9	295.7	4.0
4	1.2	258.4	4.2
5	1.4	278.4	4.4

6	1.4	232.4	4.0
7	1.7	0.1	3.3
8	4.9	228.7	0.3
9	7.8	157.1	-1.2

STOP TIME JUNE 27,1988 HOUR 8 MINUTE 1

RELEASE NUMBER 88001 DECAY TANK PURGE

STARTING TIME JAN 26,1988 HOUR 20 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	4.8	116.1	-0.7
21	2.7	108.1	-0.6
22	1.2	244.4	0.2
23	1.1	303.6	1.7
24	1.1	297.9	2.2
1	1.0	287.3	1.9
2	0.8	74.1	0.9
3	1.0	123.9	1.2

STOP TIME JAN 27,1988 HOUR 2 MINUTE 33

RELEASE NUMBER 88002 DECAY TANK PURGE

STARTING TIME FEB 29,1988 HOUR 17 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	4.7	304.3	-1.6
18	2.4	349.5	-1.3
19	1.3	175.3	0.6
20	0.9	152.2	2.7
21	1.4	117.8	5.0
22	1.6	149.9	5.2
23	0.9	99.5	6.8
24	1.9	125.0	6.0
1	8.2	198.2	3.4
2	8.9	191.3	3.6

STOP TIME MAR 1,1988 HOUR 1 MINUTE 46

RELEASE NUMBER 88003 DECAY TANK PURGE

STARTING TIME MAR 16,1988 HOUR 18 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	3.7	22.1	-1.5
19	1.6	86.5	-1.5
20	1.0	199.8	-0.3
21	0.7	220.8	0.1
22	2.1	214.6	-0.1
23	1.6	229.4	-0.7
24	3.4	212.7	-1.3
1	2.2	266.7	-1.1
2	2.7	292.3	-0.9

STOP TIME MAR 17,1988 HOUR 1 MINUTE 29

RELEASE NUMBER 88004 DECAY TANK PURGE

STARTING TIME APR 11,1988 HOUR 18 MINUTE 42

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	5.4	7.3	-1.8
19	3.0	10.6	-1.0
20	0.9	291.4	0.7
21	1.2	251.4	1.7
22	1.2	258.3	1.9
23	0.5	254.0	2.6
24	1.1	271.5	3.1
1	0.2	261.7	4.6
2	0.2	313.9	5.6
3	0.4	128.8	6.6

STOP TIME APR 12,1988 HOUR 2 MINUTE 15

RELEASE NUMBER 88005 DECAY TANK PURGE

STARTING TIME MAY 4,1988 HOUR 9 MINUTE 43

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	6.4	334.5	-1.4
10	5.5	334.6	-1.7
11	4.6	347.1	-2.1
12	3.4	300.6	-2.1
13	3.5	308.6	-2.2
14	4.8	320.8	-2.4
15	5.3	307.6	-2.6
16	4.7	298.4	-2.3
17	3.5	315.2	-2.1

STOP TIME MAY 4,1988 HOUR 16 MINUTE 39

RELEASE NUMBER 88006 DECAY TANK PURGE

STARTING TIME MAY 18,1988 HOUR 14 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	10.6	136.6	-1.6
15	10.2	145.5	-1.7

STOP TIME MAY 18,1988 HOUR 14 MINUTE 38

STARTING TIME MAY 18,1988 HOUR 14 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	10.6	136.6	-1.6
15	10.2	145.5	-1.7

STOP TIME MAY 18,1988 HOUR 14 MINUTE 50

RELEASE NUMBER 88006 DECAY TANK PURGE

STARTING TIME MAY 18,1988 HOUR 14 MINUTE 51

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	10.6	136.6	-1.6
15	10.2	145.5	-1.7
16	11.2	137.5	-1.8
17	11.7	146.2	-1.9
18	11.0	150.2	-1.7
19	10.2	142.2	-1.8
20	10.8	140.6	-1.8

STOP TIME MAY 18,1988 HOUR 19 MINUTE 59

RELEASE NUMBER 88007 DECAY TANK PURGE

STARTING TIME JUNE 23,1988 HOUR 11 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	3.8	132.8	0.6
12	5.0	127.3	-0.1
13	7.5	129.7	-1.0
14	9.8	134.3	-1.1
15	12.1	143.4	-1.1
16	12.5	155.9	-1.3
17	12.9	161.2	-1.5
18	10.6	163.4	-1.4

STOP TIME JUNE 23,1988 HOUR 17 MINUTE 46

SECTION VII

ENVIRONMENTAL MONITORING

Technical Specification (5.9.4.b)

Not Applicable to this Report

SECTION VIII

POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS

(Regulatory Guide 1.21)

January 1, 1988 to June 30, 1988

POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS

A. Potential Semiannual Doses to Individuals from Gaseous Releases

Total body, skin and organ doses from ground releases were calculated in millirem (mrem) to an average adult, teenager, child and infant using the annual configuration of the GASPAR program. Results to each receptor are shown in Tables VIII-A-1 through VIII-A-34. Also, the doses to the same groups, Table VIII-B-1, in units of millirads (mrad), due to gamma and beta radiation carried by air, were computed using GASPAR. In its annual configuration, GASPAR assumes that all release rates are entered in curies per year (CI/yr). If the total curies released per isotope during the semiannual period are assumed released for an annual period (CI/yr), this release rate reduction is conveniently offset by the annual usage or dose factors, thereby allowing GASPAR to calculate semiannual doses.

The inputs to GASPAR for the semiannual period from January 1, 1988 through June 30, 1988 were as follows:

(1) All gaseous effluents were as discribed in Section III.

(2) Entrained gases (Xe-133 and Xe-135) from liquid effluents were described in section IV.

(3) Semiannual "X/Q's" at the actual receptor locations, which were corrected for open terrain, plume depletion, and radioactive decay factors were calculated according to Regulatory Guide 1.111. Also included were semiannual deposition rates corrected for the open terrain factor.

(4) The production, intake and grazing fractions were as follows: 1.0 for fresh leafy vegetation grown locally, 0.5 for the pasture grazing season, 0.76 for vegetation intake grown in gardens, 1 for daily intake of animals while on pasture and 8 g/m^3 for the air water concentration.

(5) All dose factors, transport times from receptor to individual, and usage factors were defined by Regulatory Guide 1.109 in GASPAR.

(6) Site specific information, within a five mile radius of the plant, on types of receptors located in each sector was used. That is, if a cow was not present in a sector, then the milk pathway for the sector was not considered. If it was present, then its actual sector distance was used.

These inputs introduce a most conservative approach for the following reasons:

(1) The open terrain and deposition corrections increase semi-annual "X/Q's" by a factor ranging between 1.0 and 4.0.

(2) The production, intake and grazing fractions, as defined in the input definition statement, represent an environmental area in an extremely conservative manner.

B. Potential Semiannual Doses to Population from Gaseous Releases

The GASPAR program in its annual configuration was also used to calculate the ALARA integrated population dose summary for the total body, skin and organ doses in manrems for all individuals within a 50 mile radius population. Results are shown in Table VIII-C-1. The population integrated dose is the summation of the dose received by

all individuals and has units of man-thyroid-rem when used as in the individual case with the addition of the following:

(1) A total population of 734,668 based on the 1980 census, was used to define the sector segments within a 50 mile radius of the plant.

(2) Total productions for milk, meat and vegetation were based on 1973 annual data for Nebraska as recommended by the NRC for use in GASPAR.

C. Potential Semiannual Doses to Individuals from Liquid Releases

Total body, skin and organ mrem for liquid releases were calculated for all significant liquid pathways using the annual configuration of the LADTAP program. Dose conversion factors used by LADTAP for ingestion and shoreline deposition are shown in Table VIII-D-1. Results are shown in Tables VIII-D-2 through VIII-D-9.

The inputs to LADTAP for the semiannual period from January 1, 1988 through June 30, 1988 were as follows:

(1) All liquid effluents were as described in Section III, except for the entrained gases (Xe-133 and Xe-135).

(2) A plant discharge rate of 802 cubic feet per second (CFS) or 8.02E+02 was used.

(3) Dilution factors (inverse of the mixing ratios) were computed based on Regulatory Guide 1.113 (equation 7 in Section 2.a.1 of Appendix A) for a one-dimensional transport model.

(4) A drinking water transport time of 6.6 hours to the Omaha intake and 7.0 hours to the Council Bluffs intake for the ALARA doses in

Table VIII-D-2 through VIII-D-5 was used. For Tables VIII-D-6 through VIII-D-9, a transport time of 0.0 was used from the plant to the discharge site.

(5) A shore width factor of 0.2 was used.

(6) All consumption rates, using rates, and transport times from receptor to individual were as defined by Regulatory Guide 1.109 in LADTAP.

The discharge site in Tables VIII-D-6 through VIII-D-9 chosen to present a most conservative estimate of mrem dose for an average adult, teenager, child and infant. A conservative approach is also presented by the assumption that Omaha and Council Bluffs receive all drinking water from the Missouri River.

D. Potential Semiannual Doses to Population from Liquid Releases

The LADTAP program in its annual configuration was also used to calculate the total body and organ doses for the population of 734,668 within a 50 mile radius of the plant. Results are shown in Tables VIII-E-1 through VIII-E-6. The same input was used as in the individual cases with the addition of the following:

(1) Dilution factors and transport times for the pathways of sportfish, commercial fish, recreation and biota were calculated based on a distance of two miles downstream as approximately the distance to the nearest recreational facility DeSoto Bend National Wildlife Refuge.

(2) The total fish harvest for both sport and commercial purposes was calculated using an average commercial fish catch for Nebraska.

E. Direct Radiation Doses to Individuals and Population

Direct radiation doses, attributed to the gamma radiation emitted from the containment structure, were not observed above local background at any TLD sample locations for this semiannual period

Table VIII-A-1

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 1 RES
AT 4.53 MILES N

BETA AIR DOSE = 3.15E-04 MILLRADS
GAMMA AIR DOSE = 1.30E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.85E-05	7.85E-05	7.85E-05	7.85E-05	7.85E-05	7.85E-05	8.15E-05	2.03E-04
GROUND	4.65E-07	4.65E-07	4.65E-07	4.65E-07	4.65E-07	4.65E-07	4.65E-07	5.44E-07
INHAL								
ADULT	1.05E-06	1.06E-06	6.72E-08	1.10E-06	1.16E-06	1.46E-05	1.03E-06	1.02E-06
TEEN	1.07E-06	1.08E-06	8.89E-08	1.14E-06	1.22E-06	1.89E-05	1.04E-06	1.03E-06
CHILD	9.56E-07	9.35E-07	1.13E-07	1.22E-06	1.09E-06	2.33E-05	9.15E-07	9.11E-07
INFANT	5.56E-07	5.33E-07	8.14E-08	6.26E-07	6.39E-07	2.11E-05	5.27E-07	5.24E-07

Table VIII-A-2

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 2 VEG,RES
AT 1.86 MILES NNE

BETA AIR DOSE = 1.25E-03 MILLRADS
GAMMA AIR DOSE = 5.24E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.16E-04	3.16E-04	3.16E-04	3.16E-04	3.16E-04	3.16E-04	3.28E-04	8.14E-04
GROUND	2.02E-06	2.02E-06	2.02E-06	2.02E-06	2.02E-06	2.02E-06	2.02E-06	2.37E-06
VEGET								
ADULT	9.50E-06	7.75E-06	4.87E-06	9.61E-06	9.03E-06	1.96E-04	7.51E-06	7.33E-06
TEEN	1.05E-05	8.76E-06	5.36E-06	1.15E-05	1.03E-05	1.66E-04	8.72E-06	8.39E-06
CHILD	1.57E-05	1.33E-05	1.20E-05	1.81E-05	1.57E-05	2.57E-04	1.35E-05	1.30E-05
INHAL								
ADULT	4.19E-06	4.23E-06	2.84E-07	4.39E-06	4.62E-06	6.07E-05	4.07E-06	4.06E-06
TEEN	4.25E-06	4.28E-06	3.75E-07	4.55E-06	4.86E-06	7.85E-05	4.11E-06	4.09E-06
CHILD	3.80E-06	3.71E-06	4.74E-07	4.07E-06	4.34E-06	9.68E-05	3.73E-06	3.61E-06
INFANT	2.21E-06	2.12E-06	3.41E-07	2.50E-06	2.56E-06	8.79E-05	2.09E-06	2.08E-06

Table VIII-A-3

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 3 RES
AT 1.47 MILES NE

BETA AIR DOSE = 2.57E-03 MILLRADS
GAMMA AIR DOSE = 1.05E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.29E-04	6.29E-04	6.29E-04	6.29E-04	6.29E-04	6.29E-04	6.55E-04	1.65E-03
GROUND	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.92E-06
INHAL								
ADULT	8.69E-06	8.76E-06	5.92E-07	9.11E-06	9.57E-06	1.26E-04	8.45E-06	8.42E-06
TEEN	8.82E-06	8.87E-06	7.81E-07	9.43E-06	1.01E-05	1.62E-04	8.52E-06	8.47E-06
CHILD	7.88E-06	7.70E-06	9.86E-07	8.44E-06	8.99E-06	2.00E-04	7.53E-06	7.49E-06
INFANT	4.58E-06	4.39E-06	7.08E-07	5.19E-06	5.30E-06	1.82E-04	4.34E-06	4.31E-06

Table VIII-A-4

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 4 VEG
AT 1.54 MILES NE

BETA AIR DOSE = 2.35E-03 MILLRADS
GAMMA AIR DOSE = 9.53E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.72E-04	5.72E-04	5.72E-04	5.72E-04	5.72E-04	5.72E-04	5.95E-04	1.50E-03
GROUND	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.68E-06
VEGET								
ADULT	1.54E-05	1.42E-05	3.47E-06	1.55E-05	1.51E-05	1.48E-04	1.40E-05	1.39E-05
TEEN	1.74E-05	1.62E-05	4.52E-06	1.81E-05	1.73E-05	1.27E-04	1.61E-05	1.59E-05
CHILD	2.66E-05	2.48E-05	8.57E-06	2.83E-05	2.66E-05	1.97E-04	2.50E-05	2.46E-05
INHAL								
ADULT	7.94E-06	8.01E-06	5.40E-07	8.33E-06	8.24E-06	1.15E-04	7.72E-06	7.70E-06
TEEN	8.06E-06	8.11E-06	7.11E-07	8.62E-06	9.20E-06	1.48E-04	7.79E-06	7.75E-06
CHILD	7.20E-06	7.04E-06	8.98E-07	7.71E-06	8.21E-06	1.83E-04	6.88E-06	6.85E-06
INFANT	4.19E-06	4.01E-06	6.45E-07	4.74E-06	4.84E-06	1.66E-04	3.97E-06	3.94E-06

Table VIII-A-5

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 5 RES,VEG
AT 4.79 MILES ENE

BETA AIR DOSE = 2.53E-04 MILLRADS
GAMMA AIR DOSE = 9.27E-05 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.49E-05	5.49E-05	5.49E-05	5.49E-05	5.49E-05	5.49E-05	5.74E-05	1.5,E-04
GROUND	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.27E-07
VEGET								
ADULT	1.67E-06	1.57E-06	2.63E-07	1.67E-06	1.64E-06	1.15E-05	1.56E-06	1.55E-06
TEEN	1.89E-06	1.79E-06	3.43E-07	1.94E-06	1.88E-06	1.01E-05	1.79E-06	1.77E-06
CHILD	2.90E-06	2.76E-06	6.51E-07	3.02E-06	2.90E-06	1.56E-05	2.78E-06	2.75E-06
INHAL								
ADULT	8.83E-07	8.89E-07	5.32E-08	9.21E-07	9.62E-07	1.15E-05	8.61E-07	8.59E-07
TEEN	8.95E-07	8.99E-07	7.01E-08	9.50E-07	1.01E-06	1.48E-05	8.68E-07	8.64E-07
CHILD	7.99E-07	7.83E-07	8.85E-08	8.49E-07	8.98E-07	1.82E-05	7.68E-07	7.64E-07
INFANT	4.64E-07	4.47E-07	6.35E-08	5.18E-07	5.28E-07	1.65E-05	4.42E-07	4.39E-07

Table VIII-A-6

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 6 RES
AT 4.67 MILES E

BETA AIR DOSE = 6.75E-04 MILLIRADS
GAMMA AIR DOSE = 2.45E-04 MILLIRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.52E-04	4.01E-04
GROUND	2.43E-07	2.43E-07	2.43E-07	2.43E-07	2.43E-07	2.43E-07	2.43E-07	2.84E-07
INHAL								
ADULT	2.36E-06	2.38E-06	1.42E-07	2.48E-06	2.57E-06	3.06E-05	2.30E-06	2.30E-06
TEEN	2.39E-06	2.40E-06	1.87E-07	2.54E-06	2.69E-06	3.95E-05	2.32E-06	2.31E-06
CHILD	2.14E-06	2.09E-06	2.37E-07	2.27E-06	2.40E-06	4.84E-05	2.05E-06	2.04E-06
INFANT	1.24E-06	1.19E-06	1.70E-07	1.38E-06	1.41E-06	4.39E-05	1.18E-06	1.17E-06

Table VIII-A-7

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 7 VEG
AT 5.03 MILES E

BETA AIR DOSE = 5.93E-04 MILLRADS
GAMMA AIR DOSE = 2.14E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.27E-04	1.27E-04	1.27E-04	1.27E-04	1.27E-04	1.27E-04	1.32E-04	1.51E-04
GROUND	2.11E-07	2.11E-07	2.11E-07	2.11E-07	2.11E-07	2.11E-07	2.11E-07	2.48E-07
VEGET								
ADULT	3.88E-06	3.69E-06	5.11E-07	3.89E-06	3.82E-06	1.30E-05	3.87E-06	3.65E-06
TEEN	4.40E-06	4.22E-06	6.68E-07	4.50E-06	4.38E-06	2.03E-05	4.21E-06	4.18E-06
CHILD	6.75E-06	6.59E-06	1.27E-06	7.06E-06	6.75E-06	3.14E-05	6.52E-06	6.47E-06

Table VIII-A-8

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 8 VEG
AT 1.18 MILES ESE

BETA AIR DOSE = 1.4E-02 MILLRADS
GAMMA AIR DOSE = 6.35E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.84E-03	3.84E-03	3.84E-03	3.84E-03	3.84E-03	3.84E-03	3.98E-03	9.80E-03
GROUND	1.05E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05	1.22E-05
VEGET								
ADULT	9.76E-05	8.86E-05	2.52E-05	9.82E-05	9.52E-05	1.06E-03	8.73E-05	8.64E-05
TEEN	1.10E-04	1.01E-04	3.29E-05	1.15E-04	1.09E-04	1.14E-04	1.01E-04	9.89E-05
CHILD	1.67E-04	1.55E-04	6.23E-05	1.79E-04	1.67E-04	1.42E-03	1.56E-04	1.53E-04

Table VIII-A-9

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 9 RES
AT 4.19 MILES ESE

BETA AIR DOSE = 1.05E-03 MILLRADS
GAMMA AIR DOSE = 4.00E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.38E-04	2.38E-04	2.38E-04	2.38E-04	2.38E-04	2.38E-04	2.48E-04	6.42E-04
GROUND	5.10E-07	5.10E-07	5.10E-07	5.10E-07	5.10E-07	5.10E-07	5.10E-07	5.98E-07
INHAL								
ADULT	3.60E-06	3.63E-06	2.24E-07	3.76E-06	3.93E-06	4.84E-05	3.51E-06	3.50E-06
TEEN	3.65E-06	3.67E-06	2.95E-07	3.88E-06	4.12E-06	6.24E-05	3.53E-06	3.52E-06
CHILD	3.26E-06	3.19E-06	3.73E-07	3.47E-06	3.68E-06	7.67E-05	3.13E-06	3.11E-06
INFANT	1.89E-06	1.82E-06	2.69E-07	2.12E-06	2.17E-06	6.96E-05	1.80E-06	1.79E-06

Table VIII-A-10

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 10 BEEF
AT 5.01 MILES ESE

BETA AIR DOSE = 7.48E-04 MILLRADS
GAMMA AIR DOSE = 2.79E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.66E-04	1.66E-04	1.66E-04	1.66E-04	1.66E-04	1.66E-04	1.73E-04	4.52E-04
MEAT								
ADULT	6.80E-07	6.56E-07	3.74E-08	6.92E-07	6.81E-07	4.22E-06	6.56E-07	6.53E-07
TEEN	4.04E-07	3.92E-07	2.96E-08	4.22E-07	4.13E-07	2.98E-06	3.92E-07	3.89E-07
CHILD	4.83E-07	4.72E-07	5.16E-08	5.13E-07	5.00E-07	4.37E-06	4.74E-07	4.70E-07

Table VIII-A-11

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 11 VEG
AT 1.30 MILES SE

BETA AIR DOSE = 9.76E-03 MILLRADS
GAMMA AIR DOSE = 4.11E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.57E-03	6.38E-03
GROUND	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.44E-05
VEGET								
ADULT	7.03E-05	5.96E-05	2.97E-05	7.10E-05	6.74E-05	1.21E-03	5.82E-05	5.70E-05
TEEN	7.83E-05	6.76E-05	3.87E-05	8.43E-05	7.70E-05	1.02E-03	6.73E-05	6.53E-05
CHILD	1.18E-04	1.03E-04	7.34E-05	1.32E-04	1.18E-04	1.59E-03	1.04E-04	1.01E-04

Table VIII-A-12

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 12 RES
AT 1.66 MILES SE

BETA AIR DOSE = 5.27E-03 MILLRADS
GAMMA AIR DOSE = 2.15E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.29E-03	1.34E-03	3.37E-03
GROUND	6.34E-06	6.34E-06	6.34E-06	6.34E-06	6.34E-06	6.34E-06	6.34E-06	7.43E-06
INHAL								
ADULT	1.78E-05	1.79E-05	1.21E-06	1.86E-05	1.96E-05	2.57E-04	1.73E-05	1.72E-05
TEEN	1.80E-05	1.81E-05	1.59E-06	1.93E-05	2.06E-05	3.32E-04	1.74E-05	1.73E-05
CHILD	1.61E-05	1.57E-05	2.01E-06	1.72E-05	1.84E-05	4.09E-04	1.54E-05	1.53E-05
INFANT	9.37E-06	8.97E-06	1.44E-06	1.06E-05	1.08E-05	3.71E-04	8.87E-06	8.81E-06

Table VIII-A-13

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 13 BEEF
AT 4.74 MILES SE

BETA AIR DOSE = 5.90E-04 MILLRADS
GAMMA AIR DOSE = 2.15E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.27E-04	1.27E-04	1.27E-04	1.27E-04	1.27E-04	1.27E-04	1.33E-04	3.51E-04
MEAT								
ADULT	5.62E-07	5.26E-07	5.79E-08	5.81E-07	5.64E-07	6.03E-06	5.25E-07	5.20E-07
TEEN	3.32E-07	3.14E-07	4.58E-08	3.60E-07	3.46E-07	4.30E-06	3.15E-07	3.10E-07
CHILD	3.95E-07	3.77E-07	7.99E-08	4.41E-07	4.20E-07	6.40E-06	3.80E-07	3.75E-07

Table VIII-A-14

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 14 RES
AT 0.88 MILES SSE

BETA AIR DOSE = 1.09E-02 MILLRADS
GAMMA AIR DOSE = 4.71E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.05E-03	2.85E-03	2.85E-03	2.85E-03	2.85E-03	2.85E-03	2.95E-03	7.25E-03
GROUND	1.92E-05	1.92E-05	1.92E-05	1.92E-05	1.92E-05	1.92E-05	1.92E-05	2.25E-05
INHAL								
ADULT	3.64E-05	3.67E-05	2.57E-06	3.82E-05	4.02E-05	5.43E-04	3.53E-05	3.52E-05
TEEN	3.69E-05	3.72E-05	3.38E-06	3.96E-05	4.24E-05	7.03E-04	3.56E-05	3.54E-05
CHILD	3.30E-05	3.22E-05	4.28E-06	3.54E-05	3.79E-05	8.67E-04	3.15E-05	3.13E-05
INFANT	1.92E-05	1.84E-05	3.03E-06	2.18E-05	2.23E-05	7.86E-04	1.82E-05	1.80E-05

Table VIII-A-15

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-8E
SPECIAL LOCATION # 15 VEG
AT 0.90 MILES SSE

BETA AIR DOSE = 1.06E-02 MILLRADS
GAMMA AIR DOSE = 4.56E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.76E-03	2.76E-03	2.76E-03	2.76E-03	2.76E-03	2.76E-03	2.86E-03	7.02E-03
GROUND	1.80E-05	1.80E-05	1.80E-05	1.80E-05	1.80E-05	1.60E-05	1.80E-05	2.11E-05
VEGET								
ADULT	8.10E-05	6.54E-05	4.33E-05	8.20E-05	7.68E-05	1.75E-03	6.33E-05	6.17E-05
TEEN	8.96E-05	7.39E-05	5.65E-05	9.84E-05	8.77E-05	1.47E-03	7.35E-05	7.06E-05
CHILD	1.33E-04	1.12E-04	1.07E-04	1.55E-04	1.34E-04	2.28E-03	1.14E-04	1.09E-04

Table VIII-A-16

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 16 PORK
AT 1.10 MILES SSE

BETA AIR DOSE = 6.24E-03 MILLRADS
GAMMA AIR DOSE = 2.70E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.64E-03	1.64E-03	1.64E-03	1.64E-03	1.64E-03	1.64E-03	1.70E-03	4.15E-03
MEAT								
ADULT	6.00E-06	5.31E-06	1.10E-06	6.37E-06	6.04E-06	1.11E-04	5.29E-06	5.20E-06
TEEN	3.52E-06	3.17E-06	8.69E-07	4.05E-06	3.79E-06	7.98E-05	3.19E-06	3.10E-06
CHILD	4.13E-06	3.79E-06	1.52E-06	5.00E-06	4.62E-06	1.20E-04	3.85E-06	3.75E-06

Table VIII-A-17

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 1 RES,VEG
AT 0.72 MILES S

BETA AIR DOSE = 2.28E-02 MILLRADS
GAMMA AIR DOSE = 1.01E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.10E-03	6.10E-03	6.10E-03	6.10E-03	6.10E-03	6.10E-03	6.32E-03	1.53E-02
GROUND	3.52E-05	3.52E-05	3.52E-05	3.52E-05	3.52E-05	3.52E-05	3.52E-05	4.12E-05
VEGET								
ADULT	1.69E-04	1.39E-04	8.46E-05	1.71E-04	1.61E-04	3.43E-03	1.35E-04	1.32E-04
TEEN	1.88E-04	1.57E-04	1.10E-04	2.05E-04	1.84E-04	2.90E-03	1.56E-04	1.51E-04
CHILD	2.80E-04	2.38E-04	2.69E-04	3.22E-04	2.81E-04	4.49E-03	2.42E-04	2.33E-04
INHAL								
ADULT	7.54E-05	7.61E-05	5.40E-06	7.92E-05	8.34E-05	1.14E-03	7.31E-05	7.29E-05
TEEN	7.65E-05	7.70E-05	7.12E-06	8.21E-05	8.79E-05	1.48E-03	7.38E-05	7.34E-05
CHILD	6.84E-05	6.68E-05	8.99E-06	7.35E-05	7.86E-05	1.82E-03	6.52E-05	6.49E-05
INFANT	3.98E-05	3.81E-05	6.46E-06	4.53E-05	4.64E-05	1.66E-03	3.76E-05	3.73E-05

Table VIII-A-18

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 2 BEEF
AT 1.98 MILES S

BETA AIR DOSE = 2.28E-03 MILLRADS
GAMMA AIR DOSE = 9.42E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.67E-04	5.67E-04	5.67E-04	5.67E-04	5.67E-04	5.67E-04	5.89E-04	1.47E-03
MEAT								
ADULT	2.14E-06	1.95E-06	2.88E-07	2.23E-06	2.15E-06	2.96E-05	1.95E-06	1.93E-06
TEEN	1.26E-06	1.17E-06	2.27E-07	1.40E-06	1.33E-06	2.12E-05	1.17E-06	1.15E-06
CHILD	1.49E-06	1.40E-06	3.97E-07	1.72E-06	1.62E-06	3.16E-05	1.42E-06	1.39E-06

Table VIII-A-19

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 3 COW,PORK
AT 2.74 MILES S

BETA AIR DOSE = 1.13E-03 MILLRADS
GAMMA AIR DOSE = 4.53E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.71E-04	2.71E-04	2.71E-04	2.71E-04	2.71E-04	2.71E-04	2.82E-04	7.14E-04
MEAT								
ADULT	1.06E-06	9.73E-07	1.32E-07	1.10E-06	1.06E-06	1.36E-05	9.71E-07	9.60E-07
TEEN	6.23E-07	5.80E-07	1.05E-07	6.86E-07	6.55E-07	9.76E-06	5.83E-07	5.72E-07
CHILD	7.38E-07	6.96E-07	1.83E-07	8.43E-07	7.96E-07	1.46E-05	7.04E-07	6.91E-07
COW MILK								
ADULT	3.03E-06	2.49E-06	9.80E-07	3.52E-06	3.55E-06	1.91E-04	2.33E-06	2.25E-06
TEEN	3.92E-06	3.27E-06	1.75E-06	5.18E-06	5.24E-06	3.03E-04	3.08E-06	2.94E-06
CHILD	6.03E-06	4.92E-06	4.14E-06	8.54E-06	8.48E-06	6.05E-04	4.87E-06	4.64E-06
INFANT	9.35E-06	7.32E-06	7.44E-06	1.56E-05	1.36E-05	1.47E-03	7.45E-06	7.04E-06

Table VIII-A-20

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 4 RES,VEG
AT 0.63 MILES SSW

BETA AIR DOSE = 7.54E-03 MILLRADS
GAMMA AIR DOSE = 3.46E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.11E-03	2.11E-03	2.11E-03	2.11E-03	2.11E-03	2.11E-03	2.18E-03	5.21E-03
GROUND	1.64E-05	1.64E-05	1.64E-05	1.64E-05	1.64E-05	1.64E-05	1.64E-05	1.92E-05
VEGET								
ADULT	6.06E-05	4.65E-05	3.94E-05	6.16E-05	5.69E-05	1.58E-03	4.45E-05	4.30E-05
TEEN	6.66E-05	5.23E-05	5.14E-05	7.46E-05	6.49E-05	1.33E-03	5.19E-05	4.93E-05
CHILD	9.82E-05	7.85E-05	9.74E-05	1.17E-04	9.86E-05	2.05E-03	8.03E-05	7.63E-05
INHAL								
ADULT	2.46E-05	2.49E-05	1.79E-06	2.59E-05	2.73E-05	3.79E-04	2.39E-05	2.38E-05
TEEN	2.50E-05	2.52E-05	2.37E-06	2.69E-05	2.88E-05	4.90E-04	2.41E-05	2.40E-05
CHILD	2.24E-05	2.18E-05	2.99E-06	2.41E-05	2.58E-05	6.06E-04	2.13E-05	2.12E-05
INFANT	1.30E-05	1.24E-05	2.15E-06	1.39E-05	1.52E-05	5.51E-04	1.23E-05	1.22E-05

Table VIII-A-21

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 5 BEEF
AT 0.64 MILES SSW

BETA AIR DOSE = 7.26E-03 MILLRADS
GAMMA AIR DOSE = 3.25E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.97E-03	1.97E-03	1.97E-03	1.97E-03	1.97E-03	1.97E-03	2.04E-03	4.93E-03
MEAT								
ADULT	7.20E-06	6.17E-06	1.65E-06	7.76E-06	7.27E-06	1.65E-04	6.14E-06	8.00E-06
TEEN	4.21E-06	3.68E-06	1.31E-06	5.00E-06	4.61E-06	1.19E-04	3.72E-06	3.58E-06
CHILD	4.90E-06	4.38E-06	2.28E-06	6.22E-06	5.63E-06	1.78E-04	4.48E-06	4.32E-06

Table VIII-A-22

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 6 RES,VEG
AT 0.71 MILES SW

BETA AIR DOSE = 9.25E-03 MILLRADS
GAMMA AIR DOSE = 4.08E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.47E-03	2.47E-03	2.47E-03	2.47E-03	2.47E-03	2.47E-03	2.56E-03	6.23E-03
GROUND	7.98E-06	7.98E-06	7.98E-06	7.98E-06	7.98E-06	7.98E-06	7.98E-06	9.35E-06
VEGET								
ADULT	6.19E-05	5.51E-05	1.92E-05	6.24E-05	6.01E-05	8.02E-04	5.41E-05	5.34E-05
TEEN	6.95E-05	6.26E-05	2.51E-05	7.34E-05	6.87E-05	6.84E-04	6.24E-05	6.11E-05
CHILD	1.05E-04	9.57E-05	4.75E-05	1.15E-04	1.06E-04	1.06E-03	9.66E-05	9.47E-05
INHAL								
ADULT	3.06E-05	3.09E-05	2.19E-06	3.21E-05	3.38E-05	4.63E-04	2.97E-05	2.96E-05
TEEN	3.10E-05	3.12E-05	2.89E-06	3.33E-05	3.57E-05	5.99E-04	2.99E-05	2.98E-05
CHILD	2.77E-05	2.71E-05	3.65E-06	2.98E-05	3.19E-05	7.39E-04	2.65E-05	2.63E-05
INFANT	1.61E-05	1.54E-05	2.62E-06	1.84E-05	1.88E-05	6.72E-04	1.52E-05	1.51E-05

Table VIII-A-23

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 7 BEEF,PORK
AT 0.82 MILES SW

BETA AIR DOSE = 6.82E-03 MILLRADS
GAMMA AIR DOSE = 2.97E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.80E-03	1.80E-03	1.80E-03	1.80E-03	1.80E-03	1.80E-03	1.87E-03	4.56E-03
MEAT								
ADULT	6.12E-06	5.74E-06	6.00E-07	6.32E-06	6.14E-06	6.34E-05	5.73E-06	5.68E-06
TEEN	3.62E-06	3.42E-06	4.74E-07	3.91E-06	3.76E-06	4.52E-05	3.44E-06	3.39E-06
CHILD	4.30E-06	4.11E-06	8.28E-07	4.78E-06	4.57E-06	6.72E-05	4.15E-06	4.09E-06

Table VIII-A-24

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 8 RES,VEG
AT 1.01 MILES WSW

BETA AIR DOSE = 6.53E-03 MILLRADS
GAMMA AIR DOSE = 2.77E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.67E-03	1.67E-03	1.67E-03	1.67E-03	1.67E-03	1.67E-03	1.74E-03	4.29E-03
GROUND	4.57E-06	4.57E-06	4.57E-06	4.57E-06	4.57E-06	4.57E-06	4.57E-06	5.36E-06
VEGET								
ADULT	4.30E-05	3.90E-05	1.10E-05	4.33E-05	4.19E-05	4.66E-04	3.85E-05	3.81E-05
TEEN	4.84E-05	4.44E-05	1.44E-05	5.07E-05	4.80E-05	4.00E-04	4.43E-05	4.36E-05
CHILD	7.37E-05	6.81E-05	2.72E-05	7.90E-05	7.38E-05	6.19E-04	6.87E-05	6.75E-05
INHAL								
ADULT	2.18E-05	2.20E-05	1.53E-06	2.29E-05	2.41E-05	3.23E-04	2.12E-05	2.11E-05
TEEN	2.21E-05	2.23E-05	2.01E-06	2.37E-05	2.53E-05	4.18E-04	2.13E-05	2.12E-05
CHILD	1.98E-05	1.93E-05	2.54E-06	2.12E-05	2.26E-05	5.16E-04	1.89E-05	1.88E-05
INFANT	1.15E-05	1.10E-05	1.83E-06	1.31E-05	1.34E-05	4.69E-04	1.09E-05	1.08E-05

Table VIII-A-25

CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-98
SPECIAL LOCATION # 9 BEEF
AT 2.18 MILES WSW

BETA AIR DOSE = 1.23E-03 MILLRADS
GAMMA AIR DOSE = 4.91E-04 MILLRADS

PATHWAY	T.BODY	GI TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.94E-04	2.94E-04	2.94E-04	2.94E-04	2.94E-04	2.94E-04	3.06E-04	7.77E-04
MEAT								
ADULT	1.10E-06	1.06E-06	6.62E-08	1.12E-06	1.10E-06	7.41E-06	1.06E-06	1.05E-06
TEEN	6.54E-07	6.32E-07	5.24E-09	6.86E-07	6.70E-07	5.23E-06	6.34E-07	6.28E-07
CHILD	7.82E-07	7.62E-07	9.15E-08	8.35E-07	8.11E-07	7.71E-06	7.66E-07	7.59E-07

Table VIII-A-26

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 10 RES,VEG
AT 1.17 MILES W

BETA AIR DOSE = 7.36E-03 MILLRADS
GAMMA AIR DOSE = 1.46E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.84E-04	8.84E-04	8.84E-04	8.84E-04	8.84E-04	8.84E-04	8.17E-04	2.24E-03
GROUND	3.26E-06	3.26E-06	3.26E-06	3.26E-06	3.26E-06	3.26E-06	3.26E-06	3.82E-06
VEGET								
ADULT	2.29E-05	2.01E-05	7.85E-06	2.31E-05	2.22E-05	3.25E-04	1.37E-05	1.94E-05
TEEN	2.57E-05	2.29E-05	1.02E-05	2.73E-05	2.54E-05	2.77E-04	2.28E-05	2.23E-05
CHILD	3.88E-05	3.49E-05	1.94E-05	4.27E-05	3.89E-05	4.29E-04	3.53E-05	3.45E-05
INHAL								
ADULT	1.11E-05	1.12E-05	7.76E-07	1.17E-05	1.23E-05	1.65E-04	1.08E-05	1.08E-05
TEEN	1.13E-05	1.14E-05	1.02E-06	1.21E-05	1.29E-05	2.13E-04	1.09E-05	1.08E-05
CHILD	1.01E-05	9.86E-06	1.29E-06	1.08E-05	1.16E-05	2.63E-04	9.63E-06	9.58E-06
INFANT	5.87E-06	5.62E-06	9.31E-07	6.67E-06	6.82E-06	2.39E-04	5.55E-06	5.51E-06

Table VIII-A-27

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 11 BEEF
AT 2.06 MILES W

BETA AIR DOSE = 9.75E-04 MILLRADS
GAMMA AIR DOSE = 3.95E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.47E-04	6.21E-04
MEAT								
ADULT	8.86E-07	8.37E-07	7.82E-08	9.12E-07	8.89E-07	8.34E-06	8.36E-07	8.29E-07
TEEN	5.24E-07	4.99E-07	6.18E-08	5.62E-07	5.43E-07	5.93E-06	5.01E-07	4.95E-07
CHILD	6.25E-07	6.00E-07	1.08E-07	6.87E-07	6.59E-07	8.81E-06	6.05E-07	5.97E-07

Table VIII-A-28

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11 88
SPECIAL LOCATION # 12 RES
AT 1.98 MILES WNW

BETA AIR DOSE = 1.89E-03 MILLRADS
GAMMA AIR DOSE = 8.01E-04 MILLRADS

PATHWAY	T.BODY	G-I-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.84E-04	4.84E-04	4.84E-04	4.84E-04	4.84E-04	4.84E-04	5.02E-04	1.24E-03
GROUND	1.15E-06	1.15E-06	1.15E-06	1.15E-06	1.15E-06	1.15E-06	1.15E-06	1.35E-06
INHAL								
ADULT	6.31E-06	6.37E-06	4.29E-07	6.62E-06	6.96E-06	9.17E-05	6.14E-06	6.12E-06
TEEN	6.41E-06	6.45E-06	5.66E-07	6.85E-06	7.32E-06	1.19E-04	6.19E-06	6.16E-06
CHILD	5.73E-06	5.80E-06	7.16E-07	6.13E-06	6.54E-06	1.46E-04	5.47E-06	5.44E-06
INFANT	3.33E-06	3.19E-06	5.16E-07	3.77E-06	3.85E-06	1.33E-04	3.15E-06	3.13E-06

Table VIII-A-29

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 13 VEG,GOAT
AT 2.25 MILES WNW

BETA AIR DOSE = 1.44E-03 MILLRADS
GAMMA AIR DOSE = 6.04E-04 MILLRADS

PATHWAY	T.B.	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.64E-04	3.64E-04	3.64E-04	3.64E-04	3.64E-04	3.64E-04	3.78E-04	9.39E-04
GROUND	8.52E-07	8.52E-07	8.52E-07	8.52E-07	8.52E-07	8.52E-07	8.52E-07	9.98E-07
VEGET								
ADULT	9.36E-06	8.62E-06	2.05E-06	9.41E-06	9.16E-06	8.80E-05	8.52E-06	8.44E-06
TEEN	1.06E-05	9.83E-06	2.68E-06	1.10E-05	1.05E-05	7.59E-05	9.81E-06	9.67E-06
CHILD	1.61E-05	1.51E-05	5.08E-06	1.71E-05	1.61E-05	1.18E-04	1.52E-05	1.50E-05
GOATMILK								
ADULT	7.51E-06	6.21E-06	2.10E-06	8.53E-06	8.11E-06	3.06E-04	6.01E-06	5.81E-06
TEEN	9.57E-06	8.13E-06	3.74E-06	1.24E-05	1.17E-05	4.85E-04	7.97E-06	7.57E-06
CHILD	1.45E-05	1.24E-05	8.88E-06	2.03E-05	1.88E-05	9.69E-04	1.26E-05	1.20E-05
INFANT	2.22E-05	1.86E-05	1.55E-05	3.60E-05	2.98E-05	2.34E-03	1.93E-05	1.82E-05

Table VIII-A-30

FORT CALHOUN I RECEPTORS I 16 SECTORS 08-11-88
SPECIAL LOCATION # 14 PORK,BL
AT 2.74 MILES WNW

BETA AIR DOSE = 9.54E-04 MILLIRADS
GAMMA AIR DOSE = 3.90E-04 MILLIRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.35E-04	2.35E-04	2.35E-04	2.35E-04	2.35E-04	2.35E-04	2.44E-04	6.12E-04
MEAT								
ADULT	8.48E-07	8.14E-07	5.49E-08	8.67E-07	8.50E-07	6.09E-06	8.13E-07	8.08E-07
TEEN	5.03E-07	4.86E-07	4.34E-08	5.30E-07	5.16E-07	4.30E-06	4.87E-07	4.82E-07
CHILD	6.02E-07	5.85E-07	7.59E-08	6.45E-07	6.26E-07	6.35E-06	5.88E-07	5.83E-07

Table VIII-A-31

FORT CALHOUN : RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 15 RES,VEG
AT 7.43 MILES NW

BETA AIR DOSE = 1.70E-03 MILLRADS
GAMMA AIR DOSE = 6.98E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.19E-04	4.19E-04	4.19E-04	4.19E-04	4.19E-04	4.19E-04	4.36E-04	1.09E-03
GROUND	1.39E-06	1.39E-06	1.39E-06	1.39E-06	1.39E-06	1.39E-06	1.39E-06	1.63E-06
VEGET								
ADULT	1.15E-05	1.03E-05	3.36E-06	1.16E-05	1.12E-05	1.40E-04	1.01E-05	1.03E-05
TEEN	1.29E-05	1.17E-05	4.38E-06	1.36E-05	1.28E-05	1.20E-04	1.17E-05	1.15E-05
CHILD	1.96E-05	1.79E-05	8.30E-06	2.12E-05	1.96E-05	1.85E-04	1.81E-05	1.77E-05
INHAL								
ADULT	5.72E-06	5.77E-06	3.80E-07	5.99E-06	6.29E-06	8.14E-05	5.56E-06	5.54E-06
TEEN	5.80E-06	5.84E-06	5.01E-07	6.20E-06	6.61E-06	1.05E-04	5.61E-06	5.58E-06
CHILD	5.18E-06	5.07E-06	6.34E-07	5.54E-06	5.90E-06	1.37E-04	4.96E-06	4.93E-06
INFANT	3.01E-06	2.89E-06	4.56E-07	3.40E-06	3.48E-06	1.18E-04	2.86E-06	2.84E-06

Table VIII-A-32

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 16 COW,PORK
AT 3.47 MILES NW

BETA AIR DOSE = 8.40E-04 MILLRADS
GAMMA AIR DOSE = 3.35E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.01E-04	2.01E-04	2.01E-04	2.01E-04	2.01E-04	2.01E-04	2.09E-04	5.30E-04
MEAT								
ADULT	7.63E-07	7.23E-07	6.29E-08	7.84E-07	7.65E-07	6.75E-06	7.22E-07	7.17E-07
TEEN	4.52E-07	4.31E-07	4.97E-08	4.82E-07	4.67E-07	4.79E-06	4.33E-07	4.28E-07
CHILD	5.38E-07	5.19E-07	8.58E-08	5.88E-07	5.66E-07	7.11E-06	5.23E-07	5.17E-07
COW MILK								
ADULT	2.05E-06	1.80E-06	4.66E-07	2.29E-06	2.30E-06	9.13E-05	1.72E-06	1.68E-06
TEEN	2.66E-06	2.35E-06	8.30E-07	3.26E-06	3.29E-06	1.45E-04	2.26E-06	2.19E-06
CHILD	4.12E-06	3.69E-06	1.97E-06	5.32E-06	5.29E-06	2.89E-04	3.57E-06	3.46E-06
INFANT	6.36E-06	5.39E-06	3.54E-06	9.34E-06	8.39E-06	6.99E-04	5.45E-06	5.26E-06

Table VIII-A-33

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 1 RES,VEG
AT 2.02 MILES NNW

BETA AIR DOSE = 1.91E-03 MILLRADS
GAMMA AIR DOSE = 8.05E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.86E-04	4.86E-04	4.86E-04	4.86E-04	4.86E-04	4.86E-04	5.04E-04	1.25E-03
GROUND	3.11E-06	3.11E-06	3.11E-06	3.11E-06	3.11E-06	3.11E-06	3.11E-06	3.64E-06
VEGET								
ADULT	1.45E-05	1.18E-05	7.50E-06	1.47E-05	1.38E-05	3.02E-04	1.15E-05	1.12E-05
TEEN	1.61E-05	1.34E-05	9.78E-06	1.76E-05	1.58E-05	2.55E-04	1.33E-05	1.28E-05
CHILD	2.40E-05	2.02E-05	1.85E-05	2.77E-05	2.41E-05	3.95E-04	2.06E-05	1.98E-05
INHAL								
ADULT	6.39E-06	6.45E-06	4.33E-07	6.71E-06	7.04E-06	9.25E-05	6.22E-06	6.20E-06
TEEN	6.49E-06	6.53E-06	5.71E-07	6.94E-06	7.41E-06	1.20E-04	6.27E-06	6.24E-06
CHILD	5.80E-06	5.67E-06	7.22E-07	6.21E-06	6.62E-06	1.48E-04	5.54E-06	5.51E-06
INFANT	3.37E-06	3.23E-06	5.20E-07	3.82E-06	3.90E-06	1.34E-01	3.19E-06	3.17E-06

Table VIII-A-34

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 08-11-88
SPECIAL LOCATION # 2 BEEF
AT 4.55 MILES NNW

BETA AIR DOSE = 3.61E-04 MILLRADS
GAMMA AIR DOSE = 1.42E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.46E-05	8.46E-05	8.46E-05	8.46E-05	8.46E-05	8.46E-05	8.82E-05	2.25E-04
MEAT								
ADULT	3.46E-07	3.14E-07	5.01E-08	3.63E-07	3.47E-07	5.11E-06	3.14E-07	3.09E-07
TEEN	2.03E-07	1.87E-07	3.96E-08	2.28E-07	2.16E-07	3.66E-06	1.89E-07	1.84E-07
CHILD	2.40E-07	2.25E-07	6.92E-08	2.80E-07	2.62E-07	5.48E-06	2.28E-07	2.23E-07

Table VIII-B-1

FORT CALHOUN 1 DOSE CONTRIBUTIONS FROM GASEOUS EFFLUENTS
UNRESTRICTED AREA BOUNDARY

REQUIRED BY TECHNICAL SPECIFICATION 5.9.4.a.

SEMIANNUAL FOR JAN TO JUNE 88

MAXIMUM SITE BOUNDARY GAMMA AIR DOSE = 1.89E-02 MILLIRAD

MAXIMUM SITE BOUNDARY BETA AIR DOSE = 4.15E-02 MILLIRAD

Table VIII-C-1

FORT CALHOUN SEMIANNUAL 01/88-06/88 TRI-EX TOWER DATA 08-11-88
ALARA INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.17E-03	4.17E-03	4.17E-03	4.17E-03	4.17E-03	4.17E-03	4.45E-03	1.42E-02
	98.97%	99.45%	98.01%	98.56%	98.58%	40.66%	99.56%	99.86%
GROUND	1.66E-05	1.66E-05	1.66E-05	1.66E-05	1.66E-05	1.66E-05	1.66E-05	1.94E-05
	0.39%	0.40%	0.39%	0.39%	0.39%	0.16%	0.37%	0.14%
INHAL	2.55E-06	2.57E-06	5.85E-06	6.33E-06	1.04E-05	1.16E-03	2.76E-07	0.00E+00
	0.06%	0.06%	0.14%	0.15%	0.24%	11.26%	0.01%	0.00%
VEGET	1.74E-05	2.73E-06	4.54E-05	2.35E-05	2.08E-05	3.10E-03	1.63E-06	0.00E+00
	0.41%	0.06%	1.07%	0.56%	0.49%	30.23%	0.04%	0.00%
COW MILK	5.54E-06	1.06E-06	1.09E-05	1.18E-05	1.06E-05	1.57E-03	8.05E-07	0.00E+00
	0.13%	0.03%	0.26%	0.28%	0.25%	15.31%	0.02%	0.00%
MEAT	1.61E-06	2.18E-07	2.73E-06	2.75E-06	1.95E-06	2.44E-04	2.31E-07	0.00E+00
	0.04%	0.01%	0.06%	0.07%	0.05%	2.38%	0.01%	0.00%
TOTAL	4.22E-03	4.20E-03	4.25E-03	4.23E-03	4.23E-03	1.03E-02	4.47E-03	1.42E-02

Table VIII-D-1

FT. CALHOUN SEMIANNUAL RELEASES FOR JAN 1988 TO JUN 1988 08-11-88 REIS

DISCHARGE=8.72E+02 CFS SOURCE TERM MULTIPLIER=1.00E+00

50 MILE POPULATION=7.35E+05 FRACTION --- ADULT=0.66
TEENAGER=0.14
CHILD=0.20

FRESHWATER SITE

* * * ADULT DOSE FACTORS * * *

			INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)		
NUCLIDE	CURIE/.5YR	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON
38SR 89	9.33E-04	3.09E-04	0.00E+00	8.85E-06	0.00E+00	0.00E+00	0.00E+00	4.94E-05	6.50E-13	5.60E-13	1.00E+00
38SR 90	3.26E-04	7.61E-03	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	1.00E+00
27CO 57	3.46E-05	0.00E+00	1.75E-07	2.91E-07	0.00E+00	0.00E+00	0.00E+00	4.44E-06	1.00E-09	9.10E-10	1.00E+00
42MO 99	1.31E-04	0.00E+00	4.31E-06	8.20E-07	0.00E+00	9.77E-06	0.00E+00	9.99E-06	2.20E-09	1.90E-09	1.00E+00
43TC 99	1.64E-04	1.26E-07	1.86E-07	5.00E-08	0.00E+00	2.34E-06	1.58E-08	6.08E-06	0.00E+00	0.00E+00	1.00E+00
53I 131	1.66E-02	4.16E-06	5.96E-06	3.41E-06	1.95E-03	1.02E-05	0.00E+00	1.57E-06	3.40E-09	2.80E-09	1.00E+00
53I 133	1.06E-03	1.43E-06	2.48E-06	7.57E-07	4.77E-04	4.33E-06	0.00E+00	2.18E-06	4.50E-09	3.70E-09	1.00E+00
56BA 140	2.24E-04	2.03E-05	2.55E-08	1.34E-06	0.00E+00	8.68E-09	1.46E-08	4.18E-05	2.40E-09	2.10E-09	1.00E+00
55CS 137	5.52E-02	7.98E-05	1.09E-04	7.15E-05	0.00E+00	3.71E-05	1.23E-05	2.10E-06	4.90E-09	4.20E-09	1.00E+00
55CS 134	1.90E-02	6.22E-05	1.48E-04	1.25E-04	0.00E+00	4.80E-05	1.59E-05	2.59E-06	1.40E-08	1.20E-08	1.00E+00
27CO 58	5.71E-03	0.00E+00	7.46E-07	1.67E-06	0.00E+00	0.00E+00	0.00E+00	1.51E-05	8.20E-09	7.00E-09	1.00E+00
25MN 54	8.57E-04	0.00E+00	4.57E-06	8.73E-07	0.00E+00	1.36E-06	0.00E+00	1.40E-05	6.80E-09	5.80E-09	1.00E+00
27CO 60	3.73E-03	0.00E+00	2.15E-06	4.72E-06	0.00E+00	0.00E+00	0.00E+00	4.02E-05	2.00E-08	1.70E-08	1.00E+00
57LA 140	1.84E-03	2.50E-09	1.26E-09	3.34E-10	0.00E+00	0.00E+00	0.00E+00	9.25E-05	1.70E-08	1.50E-08	1.00E+00
51SB 124	3.82E-05	2.81E-06	5.30E-08	1.11E-06	6.79E-09	0.00E+00	2.18E-06	7.95E-05	1.50E-08	1.30E-08	1.00E+00
51SB 125	5.33E-02	2.23E-06	2.40E-08	4.48E-07	1.98E-09	0.00E+00	2.33E-04	1.97E-05	3.50E-09	3.10E-09	1.00E+00
47AG 110M	1.01E-04	1.60E-07	1.48E-07	8.80E-08	0.00E+00	2.91E-07	0.00E+00	6.04E-05	2.10E-08	1.80E-08	1.00E+00
TH 3	1.67E+02	0.00E+00	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	0.00E+00	0.00E+00	1.00E+00

Table VIII-D-1 (Cont)

* * * TEENAGER DOSE FACTORS * * *

NUCLIDE		CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE) BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SHORELINE (MREM/HR)/(PCI/M**2) SKIN	TOTAL BODY	RECON
38SR	89	9.33E-04	1.60E-04	0.00E+00	1.32E-05	0.00E+00	0.00E+00	0.00E+00	4.99E-05			
38SR	90	3.26E-04	1.04E-02	0.00E+00	2.57E-03	0.00E+00	0.00E+00	0.00E+00	2.20E-04			
53I	131	1.66E-02	5.57E-06	7.87E-06	4.69E-06	2.27E-03	1.02E-05	0.00E+00	1.49E-06			
53.	133	1.06E-03	2.03E-06	3.44E-06	1.06E-06	6.25E-04	4.33E-06	0.00E+00	2.50E-06			
56BA	140	2.24E-04	2.83E-05	3.48E-08	1.82E-06	0.00E+00	8.68E-09	2.33E-08	4.14E-06			
55CS	137	5.52E-02	1.07E-04	1.44E-04	5.05E-05	0.00E+00	3.71E-05	1.91E-05	1.92E-06			
55CS	134	1.90E-02	8.05E-05	1.94E-04	9.06E-05	0.00E+00	4.80E-05	2.35E-05	2.24E-06			
27CO	58	5.71E-03	0.00E+00	9.92E-07	2.26E-06	0.00E+00	0.00E+00	0.00E+00	1.34E-05			
27CO	60	3.73E-03	0.00E+00	2.76E-06	6.30E-06	0.00E+00	0.00E+00	0.00E+00	3.31E-05			
57LA	140	1.84E-03	3.48E-09	1.72E-09	4.55E-10	0.00E+00	0.00E+00	0.00E+00	9.48E-05			
47AG	110M	1.01E-04	2.05E-07	1.94E-07	1.18E-07	0.00E+00	2.91E-07	0.00E+00	5.45E-05			
1H	3	1.67E+02	0.00E+00	1.06E-07	1.06E-07	1.06E-07	1.34E-07	1.06E-07	1.06E-07			

* * * CHILD DOSE FACTORS * * *

NUCLIDE		CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE) BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SHORELINE (MREM/HR)/(PCI/M**2) SKIN	TOTAL BODY	RECON
38SR	89	9.33E-04	1.38E-03	0.00E+00	3.95E-05	0.00E+00	0.00E+00	0.00E+00	5.15E-05			
38SR	90	3.26E-04	1.72E-02	0.00E+00	4.36E-03	0.00E+00	0.00E+00	0.00E+00	2.29E-04			
53I	131	1.66E-02	1.63E-05	1.67E-05	1.26E-05	5.43E-03	1.02E-05	0.00E+00	1.43E-06			
53I	133	1.06E-03	5.98E-06	7.38E-06	2.90E-06	1.78E-03	4.33E-06	0.00E+00	2.99E-06			
56BA	140	2.24E-04	8.26E-05	7.25E-08	4.85E-06	0.00E+00	8.68E-09	4.32E-08	4.21E-06			
55CS	137	5.52E-02	3.12E-04	3.02E-04	4.50E-05	0.00E+00	3.71E-05	3.54E-05	1.84E-06			
55CS	134	1.90E-02	2.24E-04	3.77E-04	8.02E-05	0.00E+00	4.80E-05	4.19E-05	2.04E-06			
27CO	58	5.71E-03	0.00E+00	1.85E-06	5.58E-06	0.00E+00	0.00E+00	0.00E+00	1.10E-05			
27CO	60	3.73E-03	0.00E+00	5.17E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	2.86E-05			
57LA	140	1.84E-03	1.01E-08	3.52E-09	1.19E-09	0.00E+00	0.00E+00	0.00E+00	1.00E-04			
47AG	110M	1.01E-04	5.39E-07	3.64E-07	2.91E-07	0.00E+00	2.91E-07	0.00E+00	4.33E-05			
1H	3	1.67E+02	0.00E+00	2.03E-07	2.03E-07	2.03E-07	1.34E-07	2.03E-07	2.03E-07			

* * * INFANT DOSE FACTORS * * *

NUCLIDE		CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE) BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SHORELINE (MREM/HR)/(PCI/M**2) SKIN	TOTAL BODY	RECON
38SR	89	9.33E-04	2.93E-03	0.00E+00	8.42E-05	0.00E+00	0.00E+00	0.00E+00	5.48E-05			
38SR	90	3.26E-04	2.51E-02	0.00E+00	6.40E-03	0.00E+00	0.00E+00	0.00E+00	2.43E-04			
53I	131	1.66E-02	3.42E-05	4.07E-05	2.38E-05	1.31E-02	1.02E-05	0.00E+00	1.53E-06			
53I	133	1.06E-03	1.26E-05	1.84E-05	5.58E-06	4.35E-03	4.33E-06	0.00E+00	3.27E-06			
56BA	140	2.24E-04	1.74E-04	1.75E-07	8.99E-06	0.00E+00	8.68E-09	1.07E-07	4.43E-06			
55CS	137	5.52E-02	6.53E-04	7.31E-04	4.20E-05	0.00E+00	3.71E-05	8.81E-05	1.89E-06			
55CS	134	1.90E-02	4.58E-04	8.24E-04	6.97E-05	0.00E+00	4.80E-05	9.42E-05	1.96E-06			
27CO	58	5.71E-03	0.00E+00	3.78E-06	9.26E-06	0.00E+00	0.00E+00	0.00E+00	9.79E-06			
27CO	60	3.73E-03	0.00E+00	1.07E-05	2.56E-05	0.00E+00	0.00E+00	0.00E+00	2.64E-05			
57LA	140	1.84E-03	2.12E-08	8.37E-09	2.16E-09	0.00E+00	0.00E+00	0.00E+00	1.04E-04			
47AG	110M	1.01E-04	9.96E-07	7.27E-07	4.81E-07	0.00E+00	2.91E-07	0.00E+00	3.77E-05			
1H	3	1.67E+02	0.00E+00	3.07E-07	3.07E-07	3.07E-07	1.34E-07	3.07E-07	3.07E-07			

TOTAL NUMBER IN SOURCE TERM IS 18 TOTAL RELEASE IS 1.6746E+02

Table VIII-D-2

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

ADULT DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		4.52E-02	7.09E-02	5.03E-02	1.88E-03	2.38E-02	8.00E-03	1.50E-03
DRINKING		2.82E-04	1.04E-03	9.72E-04	1.75E-03	8.45E-04	1.18E-03	7.98E-04
SHORELINE	6.21E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05	5.34E-05
SWIMMING	0.00E+00	4.65E-07	4.65E-07	4.65E-07	4.65E-07	4.65E-07	4.65E-07	4.65E-07
BOATING	0.00E+00	2.33E-07	2.33E-07	2.33E-07	2.33E-07	2.33E-07	2.33E-07	2.33E-07
TOTAL	6.21E-05	4.55E-02	7.20E-02	5.13E-02	3.69E-03	2.47E-02	9.24E-03	2.35E-03

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	21.0	7.3	24.00
DRINKING	730.0	30.8	18.60
SHORELINE	12.0	7.3	0.00
SWIMMING	12.0	7.3	0.00
BOATING	12.0	7.3	0.00

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 78% CS 134 21%	CS 137 68% CS 134 31%	CS 137 62% CS 134 36%	I 131 94% H 3 4%	CS 137 68% CS 134 30%	CS 137 68% CS 134 30% H 3 1%	CS 137 62% CS 134 26% CO 58 1% MN 54 1% CO 60 2% H 3 5%
DRINKING		SR 89 3% SR 90 29% CS 137 51% CS 134 13% SB 125 1%	CS 137 19% CS 134 8% H 3 71%	SR 90 2% CS 137 13% CS 134 7% H 3 76%	I 131 57% H 3 42%	CS 137 8% CS 134 3% H 3 87%	CS 137 1% SB 125 34% H 3 62%	SB 125 4% H 3 92%
SHORELINE	CS 137 62% CS 134 14% CO 60 8% SB 125 13%	CS 137 62% CS 134 14% CO 60 8% SB 125 13%						
SWIM M f		I 131 6% CS 137 27% CS 134 27% CO 58 5% CO 60 8% LA 140 3% SB 125 20%						

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		4.58E-02	7.12E-02	2.77E-02	1.65E-03	1.82E-02	9.26E-03	1.03E-03
DRINKING		2.65E-04	6.82E-04	5.37E-04	1.23E-03	5.90E-04	7.31E-04	4.49E-04
SHORELINE	3.47E-04	2.98E-04	2.98E-04	2.98E-04	2.98E-04	2.98E-04	2.98E-04	2.98E-04
SWIMMING	0.00E+00	2.60E-06	2.60E-06	2.60E-06	2.60E-06	2.60E-06	2.60E-06	2.60E-06
BOATING	0.00E+00	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.30E-06
TOTAL	3.47E-04	4.64E-02	7.22E-02	2.65E-02	3.18E-03	1.91E-02	1.03E-02	1.78E-03

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	16.0	7.3	24.00
DRINKING	510.0	30.8	18.60
SHORELINE	67.0	7.3	0.00
SWIMMING	67.0	7.3	0.00
BOATING	67.0	7.3	0.00

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 78% CS 134 20%	CS 137 68% CS 134 31%	CS 137 51% CS 134 38%	I 131 96% H 3 2%	CS 137 68% CS 134 30%	CS 137 69% CS 134 29%	CS 137 63% CS 134 25% CO 58 1% MN 54 1% CO 60 1% H 3 4%
DRINKING		SR 89 3% SR 90 29% CS 137 51% CS 134 13% SB 125 1%	CS 137 26% CS 134 12% H 3 60%	SR 90 3% CS 137 11% CS 134 7% H 3 76%	I 131 66% H 3 33%	CS 137 8% CS 134 3% H 3 87%	CS 137 3% CS 134 1% SB 125 39% H 3 56%	SB 125 5% H 3 91%
SHORELINE	CS 137 62% CS 134 14% CO 60 8% SB 125 13%	CS 137 62% CS 134 14% CO 60 8% SB 125 13%						
SWIM M †		I 131 6% CS 137 27% CS 134 27% CO 58 5% CO 60 8% LA 140 3% SB 125 20%						

Table VIII-D-4

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

CHILD DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		5.63E-02	6.29E-02	1.07E-02	1.69E-03	7.83E-03	7.31E-03	4.38E-04
DRINKING		6.64E-04	1.34E-03	9.18E-04	2.76E-03	5.90E-04	1.13E-03	8.23E-04
SHORELINE	7.24E-05	6.23E-05	6.23E-05	6.23E-05	6.23E-05	6.23E-05	6.23E-05	6.23E-05
SWIMMING	0.00E+00	5.43E-07	5.43E-07	5.43E-07	5.43E-07	5.43E-07	5.43E-07	5.43E-07
BOATING	0.00E+00	2.72E-07	2.72E-07	2.72E-07	2.72E-07	2.72E-07	2.72E-07	2.72E-07
TOTAL	7.24E-05	5.76E-02	6.43E-02	1.17E-02	4.51E-03	8.49E-03	8.51E-03	1.32E-03

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	6.9	7.3	24.00
DRINKING	510.0	30.8	18.60
SHORELINE	14.0	7.3	0.00
SWIMMING	14.0	7.3	0.00
BOATING	14.0	7.3	0.00

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 79% CS 134 19%	CS 137 69% CS 134 30%	CS 137 61% CS 134 37%	I 131 96% H 3 2%	CS 137 68% CS 134 30%	CS 137 70% CS 134 28%	CS 137 61% CS 134 23% MN 54 1% CO 60 1% H 3 9%
DRINKING		SR 89 4% SR 90 19% CS 137 59% CS 134 14%	CS 137 28% CS 134 12% H 3 58%	SR 90 3% CS 137 6% CS 134 3% H 3 85%	I 131 70% H 3 28%	CS 137 8% CS 134 3% H 3 87%	CS 137 3% CS 134 1% SB 125 25% H 3 69%	SB 125 2% H 3 95%
SHORELINE	CS 137 62% CS 134 14% CO 60 8% SB 125 13%	CS 137 62% CS 134 14% CO 60 8% SB 125 13%						
SWIM M F		I 131 6% CS 137 27% CS 134 27% CO 58 5% CO 60 8% LA 140 3% SB 125 20%						

Table VIII-D-5

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

INFANT DOSES

	DOSE (MREM PER .5YR INTAKE)							
PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
DRINKING		8.42E-04	1.62E-03	8.63E-04	3.85E-03	3.82E-04	1.05E-03	7.93E-04
SHORELINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL	0.00E+00	8.42E-04	1.62E-03	8.63E-04	3.85E-03	3.82E-04	1.05E-03	7.93E-04

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)	SHOREWIDTH FACTOR=0.2
FISH	0.0	7.3	24.00	
DRINKING	330.0	30.8	18.60	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING		SR 89 4%	CS 137 37%	SR 90 3%	I 131 79%	CS 137 8%	CS 137 6%	SB 125 1%
		SR 90 14%	CS 134 14%	CS 137 4%	H 3 19%	CS 134 3%	CS 134 2%	H 3 96%
		CS 137 63%	H 3 47%	CS 134 2%		H 3 87%	SB 125 17%	
		CS 134 15%		H 3 88%			H 3 72%	

Table VIII-D-6

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

ADULT DOSES

	DOSE (MREM PER .5YR INTAKE)							
PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.30E-01	5.18E-01	3.67E-01	1.38E-02	1.74E-01	5.84E-02	1.09E-02
DRINKING		8.70E-03	3.19E-02	2.99E-02	5.48E-02	2.60E-02	3.65E-02	2.46E-02
SHORELINE	4.53E-04	3.90E-04	3.90E-04	3.90E-04	3.90E-04	3.90E-04	3.90E-04	3.90E-04
SWIMMING	0.00E+00	3.40E-06	3.40E-06	3.40E-06	3.40E-06	3.40E-06	3.40E-06	3.40E-06
BOATING	0.00E+00	1.70E-06	1.70E-06	1.70E-06	1.70E-06	1.70E-06	1.70E-06	1.70E-06
TOTAL	4.53E-04	3.39E-01	5.50E-01	3.97E-01	6.89E-02	2.00E-01	9.53E-02	3.59E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	21.0	1.0	24.00
DRINKING	730.0	1.0	12.00
SHORELINE	12.0	1.0	0.00
SWIMMING	12.0	1.0	0.00
BOATING	12.0	1.0	0.00

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 78%	CS 137 68%	CS 137 62%	I 131 94%	CS 137 68%	CS 137 68%	CS 137 62%
		CS 134 21%	CS 134 31%	CS 134 36%	H 3 4%	CS 134 30%	CS 134 30%	CS 134 26%
							H 3 1%	CO 58 1%
								MN 54 1%
								CO 60 2%
								H 3 5%
DRINKING		SR 89 3%	CS 137 19%	SR 90 2%	I 131 57%	CS 137 8%	CS 137 1%	SB 125 4%
		SR 90 29%	CS 134 8%	CS 137 13%	H 3 41%	CS 134 3%	SB 125 34%	H 3 92%
		CS 137 51%	H 3 71%	CS 134 7%		H 3 87%	H 3 62%	
		CS 134 13%		H 3 76%				
		SB 125 1%						
SHORELINE	CS 137 62%	CS 137 62%						
	CS 134 14%	CS 134 14%						
	CO 60 8%	CO 60 8%						
	SB 125 13%	SB 125 13%						
SWIM M f		I 131 6%						
		CS 137 27%						
		CS 134 27%						
		CO 58 5%						
		CO 60 8%						
		LA 140 3%						
		SB 125 20%						

Table VIII-D-7

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.34E-01	5.20E-01	2.02E-01	1.20E-02	1.33E-01	6.76E-02	7.49E-03
DRINKING		8.16E-03	2.10E-02	1.65E-02	3.86E-02	1.82E-02	2.25E-02	1.38E-02
SHORELINE	2.53E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03
SWIMMING	0.00E+00	1.90E-05	1.90E-05	1.90E-05	1.90E-05	1.90E-05	1.90E-05	1.90E-05
BOATING	0.00E+00	9.49E-06	9.49E-06	9.49E-06	9.49E-06	9.49E-06	9.49E-06	9.49E-06
TOTAL	2.53E-03	3.45E-01	5.43E-01	2.21E-01	5.29E-02	1.53E-01	9.23E-02	2.35E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	16.0	1.0	24.00
DRINKING	510.0	1.0	12.00
SHORELINE	67.0	1.0	0.00
SWIMMING	67.0	1.0	0.00
BOATING	67.0	1.0	0.00

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 78% CS 134 20%	CS 137 68% CS 134 31%	CS 137 61% CS 134 38%	I 131 96% H 3 2%	CS 137 68% CS 134 30%	CS 137 69% CS 134 29%	CS 137 63% CS 134 25% CO 58 1% MN 54 1% CO 60 1% H 3 4%
DRINKING		SR 89 3% SR 90 29% CS 137 51% CS 134 13% SB 125 1%	CS 137 26% CS 134 12% H 3 60%	SR 90 3% CS 137 11% CS 134 7% H 3 76%	I 131 66% H 3 32%	CS 137 8% CS 134 3% H 3 87%	CS 137 3% CS 134 1% SB 125 39% H 3 56%	SB 125 5% H 3 91%
SHORELINE	CS 137 62% CS 134 14% CO 60 8% SB 125 13%	CS 137 62% CS 134 14% CO 60 8% SB 125 13%						
SWIM M f		I 131 6% CS 137 27% CS 134 27% CO 58 5% CO 60 8% LA 140 3% SB 125 20%						

Table VIII-D-8

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

CHILD DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		4.15E-01	4.59E-01	7.79E-02	1.24E-02	5.72E-02	5.33E-02	3.20E-03
DRINKING		2.05E-02	4.13E-02	2.83E-02	8.65E-02	1.82E-02	3.50E-02	2.54E-02
SHORELINE	5.29E-04	4.55E-04	4.55E-04	4.55E-04	4.55E-04	4.55E-04	4.55E-04	4.55E-04
SWIMMING	0.00E+00	3.96E-06	3.96E-06	3.96E-06	3.96E-06	3.96E-06	3.96E-06	3.96E-06
BOATING	0.00E+00	1.98E-06	1.98E-06	1.98E-06	1.98E-06	1.98E-06	1.98E-06	1.98E-06
TOTAL	5.29E-04	4.36E-01	5.01E-01	1.07E-01	9.94E-02	7.58E-02	8.88E-02	2.90E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	6.9	1.0	24.00
DRINKING	510.0	1.0	12.00
SHORELINE	14.0	1.0	0.00
SWIMMING	14.0	1.0	0.00
BOATING	14.0	1.0	0.00

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 79%	CS 137 69%	CS 137 61%	I 131 96%	CS 137 68%	CS 137 70%	CS 137 61%
		CS 134 19%	CS 134 30%	CS 134 37%	H 3 2%	CS 134 30%	CS 134 28%	CS 134 23%
								MN 54 1%
								CO 60 1%
								H 3 9%
DRINKING		SR 89 4%	CS 137 28%	SR 90 3%	I 131 71%	CS 137 8%	CS 137 3%	SB 125 2%
		SR 90 19%	CS 134 12%	CS 137 6%	I 133 1%	CS 134 3%	CS 134 1%	H 3 95%
		CS 137 59%	H 3 58%	CS 134 3%	H 3 27%	H 3 87%	SB 125 25%	
		CS 134 14%		H 3 85%			H 3 69%	
SHORELINE	CS 137 62%	CS 137 62%						
	CS 134 14%	CS 134 14%						
	CO 60 8%	CO 60 8%						
	SB 125 13%	SB 125 13%						
SWIM M f		I 131 6%						
		CS 137 27%						
		CS 134 27%						
		CO 58 5%						
		CO 60 8%						
		LA 140 3%						
		SB 125 20%						

Table VIII-D-9

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

INFANT DOSES

	DOSE (MREM PER .5YR INTAKE)							
PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
DRINKING		2.59E-02	4.98E-02	2.66E-02	1.21E-01	1.18E-02	3.24E-02	2.44E-02
SHORELINE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL	0.00E+00	2.59E-02	4.98E-02	2.66E-02	1.21E-01	1.18E-02	3.24E-02	2.44E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)	
FISH	0.0	1.0	24.00	SHOREWIDTH FACTOR=0.2
DRINKING	330.0	1.0	12.00	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING		SR 89 4%	CS 137 37%	SR 90 3%	I 131 79%	CS 137 8%	CS 137 6%	SB 125 1%
		SR 90 14%	CS 134 14%	CS 137 4%	I 133 1%	CS 134 3%	CS 134 2%	H 3 96%
		CS 137 63%	H 3 47%	CS 134 2%	H 3 19%	H 3 87%	SB 125 17%	
		CS 134 15%		H 3 88%			H 3 72%	

Table VIII-E-1

* * * FISH CONSUMPTION POPULATION DOSES * * *
MAN-REM

SPORTFISH HARVEST

			DOSE (MAN-REM)						
PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	5.81E+04	1.23E-01	1.93E-01	1.36E-01	3.12E-03	6.47E-02	2.17E-02	4.04E-03
FISH	TEENAGER	9.29E+03	2.61E-02	4.05E-02	1.58E-02	5.67E-04	1.03E-02	5.28E-03	5.79E-04
FISH	CHILD	5.61E+03	4.54E-02	5.02E-02	8.52E-03	8.11E-04	6.25E-02	5.83E-03	3.47E-04
FISH	TOTAL	7.30E+04	1.94E-01	2.83E-01	1.61E-01	4.49E-03	8.13E-02	3.28E-02	4.96E-03

DILUTION 7.30E+00 CATCH 7.30E+04 TIME(HR)-INCLUDES FOOD PROCESSING TIME OF 1.68E+02 HR 1.69E+02 POPULATION=1.28E+04

AVERAGE INDIVIDUAL CONSUMPTION (KG/YR) ADULT=5.90E+00 TEEN=5.20E+00 CHILD=2.20E+00

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
ADULT	CS 137 78%	CS 137 68%	CS 137 63%	I 131 92%	CS 137 69%	CS 137 68%	CS 137 62%
	CS 134 20%	CS 134 31%	CS 134 36%	H 3 7%	CS 134 30%	CS 134 30%	CS 134 26%
						H 3 1%	CO 58 1%
							MN 54 1%
							CO 60 2%
							H 3 5%
TEENAGER	CS 137 78%	CS 137 68%	CS 137 61%	I 131 95%	CS 137 69%	CS 137 69%	CS 137 63%
	CS 134 20%	CS 134 31%	CS 134 37%	H 3 4%	CS 134 30%	CS 134 29%	CS 134 25%
							CO 58 1%
							MN 54 1%
							CO 60 1%
							H 3 4%
CHILD	CS 137 79%	CS 137 69%	CS 137 61%	I 131 96%	CS 137 69%	CS 137 70%	CS 137 61%
	CS 134 19%	CS 134 29%	CS 134 37%	H 3 3%	CS 134 30%	CS 134 28%	CS 134 23%
							MN 54 1%
							CO 60 1%
							H 3 9%

Table VIII-E-2

• • • FISH CONSUMPTION POPULATION DOSES • • •
MAN-REM

COMMERCIAL HARVEST

DOSE (MAN-REM)

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	3.35E+06	1.17E-02	1.84E-02	1.30E-02	2.35E-04	6.18E-03	2.07E-03	3.85E-04
FISH	TEENAGER	5.35E+05	2.49E-03	3.87E-03	1.51E-03	4.24E-05	9.87E-04	5.04E-04	5.52E-05
FISH	CHILD	3.23E+05	4.34E-03	4.79E-03	8.13E-04	6.05E-05	5.97E-04	5.57E-04	3.30E-05
FISH	TOTAL	4.20E+06	1.85E-02	2.70E-02	1.53E-02	3.38E-04	7.76E-03	3.13E-03	4.73E-04

DILUTION 7.30E+00 CATCH 7.30E+04 TIME(HR)-INCLUDES FOOD PROCESSING TIME OF 2.40E+02 HR 2.41E+02 POPULATION=7.35E+05

AVERAGE INDIVIDUAL CONSUMPTION (KG/YR) ADULT=6.90E+00 TEEN=5.20E+00 CHILD=2.20E+00

• • • ISOTOPE CONTRIBUTION • • •

AGE GROUP	BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
ADULT	CS 137	78%	CS 137	68%	CS 137	63%	I 131	91%	CS 137	69%	CS 137	68%	CS 137	62%
	CS 134	20%	CS 134	31%	CS 134	36%	H 3	8%	CS 134	30%	CS 134	30%	CS 134	26%
											H 3	1%	CO 58	1%
													MN 54	1%
													CO 60	2%
													H 3	5%
TEENAGER	CS 137	78%	CS 137	68%	CS 137	61%	I 131	93%	CS 137	69%	CS 137	69%	CS 137	63%
	CS 134	20%	CS 134	31%	CS 134	37%	H 3	6%	CS 134	30%	CS 134	29%	CS 134	25%
													CO 58	1%
													MN 54	1%
													CO 60	1%
													H 3	4%
CHILD	CS 137	79%	CS 137	70%	CS 137	61%	I 131	94%	CS 137	69%	CS 137	70%	CS 137	61%
	CS 134	19%	CS 134	29%	CS 134	37%	H 3	5%	CS 134	30%	CS 134	28%	CS 134	23%
													MN 54	1%
													CO 60	1%
													H 3	9%

NEPA DOSES

NOTE--TOATL NEPA DOSE MUST INCLUDE SPORT CATCH, DOSES BELOW ARE FOR COMMERCIAL CATCH ONLY

DOSE (MAN-REM)

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	5.81E+04	1.23E-01	1.92E-01	1.36E-01	2.46E-03	6.46E-02	2.17E-02	4.03E-03
FISH	TEENAGER	9.29E+03	2.61E-02	4.05E-02	1.58E-02	4.44E-04	1.03E-02	5.27E-03	5.78E-04
FISH	CHILD	5.61E+03	4.54E-02	5.01E-02	8.51E-03	6.34E-04	6.25E-03	5.83E-03	3.46E-04
FISH	TOTAL	7.30E+04	1.94E-01	2.83E-01	1.61E-01	3.53E-03	8.12E-02	3.28E-02	4.95E-03

Table VIII-E-3

• • • POPULATION WATER CONSUMPTION DOSES • • •

			DOSE (MAN-REM)						
PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	1.29E+08	5.00E-02	1.83E-01	1.72E-01	3.02E-01	1.49E-01	2.09E-01	1.41E-01
DRINKING	TEENAGER	1.93E+07	9.99E-03	2.57E-02	2.03E-02	4.51E-02	2.23E-02	2.76E-02	1.69E-02
DRINKING	CHILD	2.75E+07	3.58E-02	7.24E-02	4.95E-02	1.44E-01	3.18E-02	6.12E-02	4.43E-02
DRINKING	TOTAL	1.76E+08	9.57E-02	2.82E-01	2.42E-01	4.91E-01	2.03E-01	2.98E-01	2.02E-01

POPULATION=5.29E+05 DILUTION=3.08E+01 TRANSIT TIME=3.06E+01 HR (INCLUDING 24 HR FOR TREATMENT FACILITY)

AVERAGE INDIVIDUAL CONSUMPTION (L/YR) ADULT=3.70E+02 TEEN=2.60E+02 CHILD=2.60E+02

• • • ISOTOPE CONTRIBUTION • • •

AGE GROUP	BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
ADULT	SR 89	3%	CS 137	19%	SR 90	2%	I 131	56%	CS 137	8%	CS 137	1%	SB 125	4%
	SR 90	29%	CS 134	8%	CS 137	13%	H 3	43%	CS 134	3%	SB 125	34%	H 3	93%
	CS 137	51%	H 3	71%	CS 134	7%			H 3	87%	H 3	62%		
	CS 134	13%			H 3	76%								
	SB 125	1%												
TEENAGER	SR 89	3%	CS 137	26%	SR 90	3%	I 131	65%	CS 137	8%	CS 137	3%	SB 125	5%
	SR 90	29%	CS 134	12%	CS 137	11%	H 3	34%	CS 134	3%	CS 134	1%	H 3	91%
	CS 137	51%	H 3	60%	CS 134	7%			H 3	89%	SB 125	39%		
	CS 134	13%			H 3	76%					H 3	56%		
	SB 125	1%												
CHILD	SR 89	4%	CS 137	28%	SR 90	3%	I 131	69%	CS 137	8%	CS 137	3%	SB 125	2%
	SR 90	19%	CS 134	12%	CS 137	6%	H 3	29%	CS 134	3%	CS 134	1%	H 3	95%
	CS 137	59%	H 3	58%	CS 134	3%			H 3	87%	SB 125	25%		
	CS 134	14%			H 3	85%					H 3	69%		
	SB 125	1%												

Table VIII-E-4

DOSE (MAN-REM)

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	2.12E+07	8.08E-03	2.97E-02	2.78E-02	4.88E-02	2.42E-02	3.39E-02	2.28E-02
DRINKING	TEENAGER	3.17E+06	1.62E-03	4.16E-03	3.28E-03	7.30E-03	3.60E-03	4.47E-03	2.74E-03
DRINKING	CHILD	4.52E+06	5.79E-03	1.17E-02	8.01E-03	2.33E-02	5.15E-03	9.90E-03	7.18E-03
DRINKING	TOTAL	2.89E+07	1.55E-02	4.56E-02	3.91E-02	7.94E-02	3.29E-02	4.83E-02	3.27E-02

POPULATION=8.70E+04 DILUTION=3.13E+01 TRANSIT TIME=3.10E+01 HR (INCLUDING 24 HR FOR TREATMENT FACILITY)

AVERAGE INDIVIDUAL CONSUMPTION (L/YR) ADULT=3.70E+02 TEEN=2.60E+02 CHILD=2.60E+02

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
ADULT	SR 89 3%	CS 137 19%	SR 90 2%	I 131 56%	CS 137 8%	CS 137 1%	SB 125 4%
	SR 90 29%	CS 134 8%	CS 137 13%	H 3 43%	CS 134 3%	SB 125 34%	H 3 93%
	CS 137 51%	H 3 71%	CS 134 7%		H 3 87%	H 3 62%	
	CS 134 13%		H 3 76%				
TEENAGER	SR 89 3%	CS 137 26%	SR 90 3%	I 131 65%	CS 137 8%	CS 137 3%	SB 125 5%
	SR 90 29%	CS 134 12%	CS 137 11%	H 3 34%	CS 134 3%	CS 134 1%	H 3 91%
	CS 137 51%	H 3 60%	CS 134 7%		H 3 87%	SB 125 39%	
	CS 134 13%		H 3 76%			H 3 56%	
	SB 125 1%						
CHILD	SR 89 4%	CS 137 28%	SR 90 3%	I 131 69%	CS 137 8%	CS 137 3%	SB 125 2%
	SR 90 19%	CS 134 12%	CS 137 6%	H 3 29%	CS 134 3%	CS 134 1%	H 3 95%
	CS 137 59%	H 3 58%	CS 134 3%		H 3 87%	SB 125 25%	
	CS 134 14%		H 3 85%			H 3 69%	

-----CUMULATIVE TOTAL-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	CUMUL TOTAL	2.05E+08	1.11E-01	3.27E-01	2.81E-01	5.70E-01	2.36E-01	3.47E-01	2.35E-01

HYDROSPHERE TRITIUM DOSE

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
WATER	TOTAL	2.20E+00	9.76E-09	9.76E-09	9.76E-09	9.76E-09	9.76E-09	9.76E-09	9 E-09

Table VIII-E-5

* * * RECREATION POPULATION DOSES * * *

			DOSE(MAN-REM)		
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SHORELINE	TOTAL POPUL	4.10E+07	2.12E-01	1.82E-01	1.82E-01

LOCATION- DOWN STREAM

DILUTION=0.73E+01 TRANSIT TIME=0.67E+00 HR SWF=0.2

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	SKIN	TOTAL BODY
ADULT		
	CS 137 62%	CS 137 62%
	CS 134 14%	CS 134 14%
	CO 60 8%	CO 60 8%
	SB 125 13%	SB 125 13%

			DOSE(MAN-REM)		
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SWIMMING	TOTAL POPUL	4.10E+07	0.00E+00	1.59E-03	1.59E-03

LOCATION- DOWN STREAM

DILUTION=0.73E+01 TRANSIT TIME=0.67E+00 HR

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	SKIN	TOTAL BODY
ADULT		
		I 131 6%
		CS 137 27%
		CS 134 27%
		CO 58 5%
		CO 60 8%
		LA 140 3%
		SB 125 20%

			DOSE(MAN-REM)		
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
BOATING	TOTAL POPUL	4.10E+07	0.00E+00	7.95E-04	7.95E-04

LOCATION- DOWN STREAM

DILUTION=0.73E+01 TRANSIT TIME=0.67E+00 H

Table VIII-E-6

• • • DOSE TO BIOTA • • •

MRADS PER .5YR

ILUTION= 1.00E+00 TRANSIT TIME= 0.00E+00 HR

	INTERNAL	EXTERNAL	TOTAL
FISH	1.06E+00	1.43E+00	2.48E+00
INVERTEBRATE	2.26E-01	2.85E+00	3.07E+00
ALGAE	7.32E-01	2.48E-03	7.35E-01
MUSKRAT	7.13E+00	9.50E-01	8.08E+00
RACCOON	2.91E-01	7.12E-01	1.00E+00
HERON	3.58E+01	9.50E-01	3.68E+01
DUCK	6.45E+00	1.42E+00	7.88E+00

• • • ISOTOPE CONTRIBUTION • • •

PATHWAY		BODY
FISH	CS 137	72%
	CS 134	24%
	H 3	2%
INVERTEBRATE	CS 137	17%
	CS 134	5%
	CO 56	1%
	MN 54	45%
	CO 60	2%
	LA 140	15%
	H 3	10%
ALGAE	CS 137	26%
	CS 134	8%
	MN 54	1%
	LA 140	24%
	SB 125	32%
	H 3	3%
MUSKRAT	SR 90	15%
	CS 137	58%
	CS 134	24%
RACCOON	SR 90	12%
	CS 137	53%
	CS 134	24%
	MN 54	6%
	H 3	2%
HERON	CS 137	68%
	CS 134	31%
DUCK	SR 90	16%
	CS 137	59%
	CS 134	22%

Omaha Public Power District
1623 Harney Omaha, Nebraska 68102-2247
402/536-4000

August 30, 1988
LIC-88-770

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: Semi-Annual Report

In accordance with 10 CFR Section 50.36a and the Fort Calhoun Station Unit No. 1 Technical Specifications, Section 5.9.4a, please find enclosed one (1) copy of a report that summarizes effluent releases and environmental operations for the period of January 1, 1988 to June 30, 1988.

Sincerely,

K. J. Morris
Division Manager
Nuclear Operations

KJM/mc

Enclosure

c: LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Ave., N.W.
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R. D. Martin, NRC Regional Administrator
J. A. Calvo, NRC Project Director
P. D. Milano, NRC Project Manager
P. H. Harrell, NRC Senior Resident Inspector

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