Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247
402/636-2000

February 28, 1991
LIC-91-080R

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 Radioactive Effluent Release Report and Annual Occupational Exposure Report

This submittal contains the Semi-Annual "Radioactive Effluent Release Report" for the period of July 1, 1990 through December 31, 1990 as required by Technical Specification 5.9.4.a and 10 CFR 50.36a. Also included is the 1990 "Annual Occupational Exposure Report" for January 1, 1990 through December 31, 1990 as required by Technical Specification 5.9.1.b.

If you should have any questions, please contact me.

Sincerely,

W. G. Gates

W. G. Gates
Division Manager
Nuclear Operations

WGG/sel

Enclosures

c: LeBoeuf, Lamb, Leiby & MacRae
R. D. Martin, NRC Regional Administrator, Region IV
W. C. Walker, NRC Project Manager
R. P. Mullikin, NRC Senior Resident Inspector
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INTRODUCTION

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

This report covers the period of July 1, 1990 thru December 31, 1990 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 1.12, 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 July 1, 1990 thru December 31, 1990.

Further, description 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.

Alan D. Richard

for T. L. Patterson
Manager - Fort Calhoun Station

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SECTION I

QUARTERLY DOSES FROM EFFLUENTS

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

July 1, 1990 - December 31, 1990

Quarterly Dose Calculation Results

July 1, 1990 through December 31, 1990

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 July 1, 1990. 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.

QUARTERLY CUMULATIVE DOSE CONTRIBUTIONS FROM RADIOACTIVE EFFLUENTS

THIRD QUARTER, 1990

I. LIQUID EFFLUENTS:	TOTAL BODY DOSE (mREM)	CRITICAL ORGAN DOSE (mREM)
Monitor/Hotel Tank:	2.46E-01	3.56E-01
Steam Generator:	0.00E-01	0.00E-01
Totals:	2.46E-01	3.56E-01
T.S. 2.9.1.A. Annual Objective:	3.00E+00	1.00E+01
Percent of TS Annual Objective:		
This Quarter:	8.21%	3.56%
Year to Date:	43.07%	18.73%

II. GASEOUS EFFLUENTS:	TOTAL BODY GAMMA DOSE (mREM)	TOTAL BODY BETA DOSE (mREM)
A. Noble Gas Air Dose:	5.26E-03	1.38E-02
T.S. 2.9.1.A. Annual Objective:	1.00E+01	2.00E+01
Percent of TS Annual Objective:		
This Quarter:	0.05%	0.07%
Year to Date:	0.21%	0.29%

B. I-131, H-3, and Particulates with Half-Lives > 8 Days	TOTAL BODY DOSE (mREM)	CRITICAL ORGAN DOSE (Thyroid, mREM)
*Inhalation:	6.60E-06	2.24E-04
*Ground and Food:	9.89E-05	4.62E-02
Totals:	1.06E-04	4.64E-02
T.S. 2.9.1.B. Annual Objective:	1.50E+01	1.50E+01
Percent of TS Annual Objective:		
This Quarter:	0.00%	0.31%
Year to Date:	0.00%	0.94%

* Highest of Infant or Child Dose Factors

QUARTERLY CUMULATIVE DOSE CONTRIBUTIONS FROM RADIOACTIVE EFFLUENTS

FOURTH QUARTER, 1990

I. LIQUID EFFLUENTS:	TOTAL BODY DOSE (mREM)	CRITICAL ORGAN DOSE (mREM)
Monitor/Hotel Tank:	2.85E-01	3.70E-01
Steam Generator:	2.70E-06	2.70E-06
Totals:	2.85E-01	3.70E-01
T.S. 2.9.1.A. Annual Objective:	3.00E+00	1.00E+01
Percent of TS Annual Objective:		
This Quarter:	9.48%	3.70%
Year to Date:	52.55%	22.43%

II. GASEOUS EFFLUENTS:	TOTAL BODY GAMMA DOSE (mREM)	TOTAL BODY BETA DOSE (mREM)
A. Noble Gas Air Dose:	7.20E-03	2.00E-02
T.S. 2.9.1.B. Annual Objective:	1.00E+01	2.00E+01
Percent of TS Annual Objective:		
This Quarter:	0.07%	0.10%
Year to Date:	0.28%	0.39%

B. I-131, H-3, and Particulates with Half-Lives > 8 Days	TOTAL BODY DOSE (mREM)	CRITICAL ORGAN DOSE (Thyroid, mREM)
*Inhalation:	9.11E-05	1.67E-03
*Ground and Food:	9.32E-04	3.37E-01
Totals:	1.02E-03	3.38E-01
T.S. 2.9.1.B. Annual Objective:	1.50E+01	1.50E+01
Percent of TS Annual Objective:		
This Quarter:	0.01%	2.26%
Year to Date:	0.01%	3.20%

* Highest of Infant or Child Dose Factors

SECTION II

ANNUAL OCCUPATIONAL EXPOSURE REPORT

Technical Specifications 2.9.1.b

January 1, 1990 to December 31, 1990

USNRC ANNUAL REG GUIDE 1.16 REPORT
OMAHA PUBLIC POWER DISTRICT - NRC LICENSE: DPR-40
P.O. BOX 399
FORT CALHOUN, NEBRASKA 68023-0399

WORK & JOB FUNCTION	NUMBER OF PERSONNEL (>100.0 MREM)			TOTAL MAN-REM		
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT WORKERS & OTHERS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT WORKERS & OTHERS
REACTOR OPERATIONS & SURVEILLANCE						
Maintenance Personnel	2.098	0.468	1.939	1.040	0.215	0.660
Operating Personnel	24.930	0.000	1.813	8.944	0.000	0.305
Health Physics Personnel	10.457	0.000	12.426	11.545	0.000	6.954
Supervisory Personnel	3.229	0.000	0.000	1.145	0.000	0.000
Engineering Personnel	2.562	0.091	1.261	1.380	0.010	0.360
ROUTINE MAINTENANCE						
Maintenance Personnel	27.985	15.204	51.620	14.858	9.010	32.467
Operating Personnel	0.825	0.000	0.977	0.235	0.000	0.440
Health Physics Personnel	6.139	0.000	25.872	5.210	0.000	20.063
Supervisory Personnel	2.596	0.000	0.000	0.490	0.000	0.000
Engineering Personnel	8.356	0.091	5.558	2.250	0.010	4.210
INSERVICE INSPECTION						
Maintenance Personnel	6.114	4.074	33.411	3.421	2.000	36.467
Operating Personnel	1.709	0.000	0.147	0.275	0.000	0.060
Health Physics Personnel	2.481	0.000	4.027	3.485	0.000	4.205
Supervisory Personnel	0.137	0.000	0.000	0.030	0.000	0.000
Engineering Personnel	1.607	0.091	9.527	0.710	0.010	9.572
SPECIAL MAINTENANCE						
Maintenance Personnel	22.452	8.006	43.629	17.240	5.370	28.412
Operating Personnel	3.416	0.000	0.133	1.079	0.000	0.070
Health Physics Personnel	5.736	0.000	4.629	6.860	0.000	4.380
Supervisory Personnel	3.419	0.000	0.000	0.855	0.000	0.000
Engineering Personnel	4.493	0.727	10.925	2.195	0.080	7.440
WASTE PROCESSING						
Maintenance Personnel	0.166	0.005	0.019	0.080	0.005	0.015
Operating Personnel	0.392	0.000	0.000	0.170	0.000	0.000
Health Physics Personnel	4.762	0.000	6.497	3.655	0.000	4.220
Supervisory Personnel	0.537	0.000	0.000	0.175	0.000	0.000
Engineering Personnel	0.003	0.000	0.000	0.005	0.000	0.000
REFUELING						
Maintenance Personnel	15.468	17.001	13.916	12.598	16.906	8.445
Operating Personnel	4.877	0.000	0.827	0.930	0.000	0.460
Health Physics Personnel	1.864	0.000	2.867	2.455	0.000	2.900
Supervisory Personnel	2.063	0.000	0.000	0.365	0.000	0.000
Engineering Personnel	3.112	0.000	0.920	1.155	0.000	0.135
TOTALS						
Maintenance Personnel	74.283	44.758	144.534	49.237	33.506	106.646
Operating Personnel	36.148	0.000	3.897	11.633	0.000	1.335
Health Physics Personnel	31.439	0.000	56.318	34.210	0.000	42.722
Supervisory Personnel	12.000	0.000	0.000	3.060	0.000	0.000
Engineering Personnel	20.132	1.000	28.192	7.705	0.110	21.717
GRAND TOTALS	174	46	233	105.845	33.616	172.420

ANNUAL OCCUPATIONAL RADIATION EXPOSURE 10CFR 20 REPORT
PERSONNEL WHOLE BODY EXPOSURE FOR CALENDAR YEAR 1990
P. O. BOX 399
FORT CALHOUN, NEBRASKA 68023-0399

OMAHA PUBLIC POWER DISTRICT - NRC LICENSE: DPR-40

ANNUAL DOSE RANGES * (REM)	NUMBER OF INDIVIDUALS IN EACH RANGE
NO MEASURABLE EXPOSURE	854
MEASURABLE EXPOSURE < 0.100	295
0.10 - 0.25	149
0.25 - 0.50	120
0.50 - 0.75	74
0.75 - 1.00	44
1.00 - 2.00	76
2.00 - 3.00	2
3.00 - 4.00	0
4.00 - 5.00	0
5.00 - 6.00	0
6.00 - 7.00	0
7.00 - 8.00	0
8.00 - 9.00	0
9.00 -10.00	0
10.00 -11.00	0
11.00-12.00	0
12 +	0
TOTAL NUMBER OF INDIVIDUALS REPORTED:	1614

THE ABOVE INFORMATION IS SUBMITTED FOR:

(1) - THE TOTAL NUMBER OF INDIVIDUALS FOR WHOM PERSONNEL MONITORING WAS REQUIRED UNDER 10CFR 20.202(A) OR 10CFR 34.33(A) DURING THE CALENDAR YEAR,

OR (2) - THE TOTAL NUMBER OF INDIVIDUALS FOR WHOM PERSONNEL MONITORING WAS PROVIDED DURING THE CALENDAR YEAR INCLUDING (1) ABOVE.

* INDIVIDUAL VALUES EXACTLY EQUAL TO THE VALUES SEPARATING EXPOSURE RANGES ARE REPORTED IN THE HIGHER RANGE.

SECTION III

RADIOACTIVE EFFLUENT RELEASES - GASEOUS EFFLUENTS

Technical Specifications (5.9.4.a)

Table 1A Gaseous Effluents - Summation of All Releases

Table 1B Not Applicable

Table 1C Gaseous Effluents - Summation of All Releases

July 1, 1990 to December 31, 1990

Radioactive Effluent Releases - Third and Fourth Quarters

GASEOUS EFFLUENTS

Radioactive gaseous releases for the reporting period totaled 200 Curies of inert gases. Over the third and fourth quarters of the reporting period, the gross gaseous activity release rates were 1.03E+01 μCi/sec and 1.49E+01 μCi/Sec, respectively.

Radioactive halogens and particulates with half-lives greater than eight days released during the reporting period totaled 1.46E-03 Curies. Over the third and fourth quarters of the reporting period, the halogen release rates were 2.16E-05 μCi/sec and 1.57E-04 μCi/sec, respectively. The particulate release rate for isotopes with half lives greater than 8 days for the third quarter was 2.05E-06 μCi/sec. The release rate for particulates with half lives greater than 8 days for the fourth quarter was 2.40E-06 μCi/sec.

Total radioactive tritium released during the reporting period totaled 4.24E+00 Curies. Gross alpha radioactivity released during the reporting period totaled 3.89E-06 Curies.

ABNORMAL GASEOUS EFFLUENTS

There was one abnormal gaseous release (90105) during the reporting period. On December 9, 1990, an unexpected release occurred from a sample line relief valve. The resulting release did not exceed 10 CFR 20 limits. The total curies of radioactive materials released to the environment totalled 0.0549 curies or 54,900 μCi.

Isotopic activity in μCi/cc for this release include:

Xenon-133	4.560E-01	Krypton-87	3.680E-02
Krypton-85M	2.200E-02	Xenon-138	1.400E-01
Krypton-88	5.280E-02	Argon-41	1.500E-02
Xenon-133M	1.080E-02	Xenon-135M	1.440E-01
Xenon-135	1.930E-01	Trituim	2.230E-06

This activity is included in fourth quarter containment release totals found in Tables 1A and 1C, "Gaseous Effluents - Summation of All Releases." Meteorological data is recorded for the release duration and included in Tables 15B and 15G for the fourth quarter.

TABLE 1A

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

SEMI-ANNUAL FOR JULY THRU DEC 90

		3 QUARTER				4 QUARTER			
NUCLIDES IN CURIES		CONT	DECAY	RMO60	TOTAL	CONT	DECAY	RMO60	TOTAL
A. FISSION&ACTIVATION GASES									
TOTAL RELEASE	CI	8.14E+01	2.13E-01	0.00E+00	8.16E+01	1.17E+02	1.46E+00	0.00E+00	1.18E+02
AVG RELEASE RATE FOR PERIOD	UCI/SEC	1.02E+01	2.68E-02	0.00E+00	1.03E+01	1.47E+01	1.84E-01	0.00E+00	1.49E+01
PERCENT OF LIMIT TECH SPEC = NONE	%								
B. IODINES									
TOTAL RELEASE IODINE - 131	CI	0.00E+00	0.00E+00	1.72E-04	1.72E-04	0.00E+00	0.00E+00	1.25E-03	1.25E-03
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	2.16E-05	2.16E-05	0.00E+00	0.00E+00	1.57E-04	1.57E-04
PERCENT OF LIMIT TECH SPEC = NONE	%								
C. PARTICULATES									
PARTICULATES WITH HALF LIVES .GT. 8 DAYS	CI	0.00E+00	0.00E+00	1.63E-05	1.63E-05	0.00E+00	0.00E+00	1.91E-05	1.91E-05
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	2.05E-06	2.05E-06	0.00E+00	0.00E+00	2.40E-06	2.40E-06
PERCENT OF LIMIT TECH SPEC = NONE	%								
GROSS ALPHA RADIOACTIVITY	CI	0.00E+00	0.00E+00	1.77E-06	1.77E-06	0.00E+00	0.00E+00	2.12E-06	2.12E-06
D. TRITIUM									
TOTAL RELEASE	CI	2.79E-01	0.00E+00	0.00E+00	2.79E-01	3.96E+00	0.00E+00	0.00E+00	3.96E+00
AVG RELEASE RATE FOR PERIOD	UCI/SEC	3.51E-02	0.00E+00	0.00E+00	3.51E-02	4.98E-01	0.00E+00	0.00E+00	4.98E-01
PERCENT OF LIMIT TECH SPEC = NONE	%								

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JULY THRU DEC 90

	3 QUARTER				4 QUARTER			
NUCLIDES IN CURIES	CONT	DECAY	RMOBO	TOTAL	CONT	DECAY	RMOBO	TOTAL
FISSION GASES								
XENON-133	7.91E+01	1.97E-01	0.00E+00	7.93E+01	1.14E+02	1.09E+00	0.00E+00	1.15E+02
KRYPTON-85M	8.39E-03	0.00E+00	0.00E+00	8.39E-03	1.66E-02	0.00E+00	0.00E+00	1.66E-02
XENON-131M	5.53E-01	3.89E-04	0.00E+00	5.54E-01	7.87E-01	7.65E-02	0.00E+00	8.64E-01
KRYPTON-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	0.00E+00	0.00E+00	2.38E-03
XENON-133M	4.33E-01	4.33E-04	0.00E+00	4.33E-01	6.74E-01	0.00E+00	0.00E+00	6.74E-01
XENON-135	8.92E-01	2.62E-04	0.00E+00	8.93E-01	1.00E+00	5.47E-02	0.00E+00	1.06E+00
KRYPTON-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-03	0.00E+00	0.00E+00	1.66E-03
XENON-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-03	0.00E+00	0.00E+00	6.30E-03
KRYPTON-85	0.00E+00	1.45E-02	0.00E+00	1.45E-02	0.00E+00	2.43E-01	0.00E+00	2.43E-01
XENON-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.48E-03	0.00E+00	0.00E+00	6.48E-03
ARGON-41	4.04E-01	0.00E+00	0.00E+00	4.04E-01	3.36E-01	0.00E+00	0.00E+00	3.36E-01
TOTAL FOR PERIOD	8.14E+01	2.13E-01	0.00E+00	8.16E+01	1.17E+02	1.46E+00	0.00E+00	1.18E+02
IODINES								
IODINE-131 CTD.	0.00E+00	0.00E+00	1.72E-04	1.72E-04	0.00E+00	0.00E+00	1.25E-03	1.25E-03
IODINE-133 CTD.	0.00E+00	0.00E+00	4.06E-04	4.06E-04	0.00E+00	0.00E+00	7.32E-04	7.32E-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	5.78E-04	5.78E-04	0.00E+00	0.00E+00	1.98E-03	1.98E-03
PARTICULATES								
STRONTIUM-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
STRONTIUM-90	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CARBON-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-08	1.60E-08
IRON-55	0.00E+00	0.00E+00	8.50E-06	8.50E-06	0.00E+00	0.00E+00	1.02E-05	1.02E-05
IODINE-129	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NICKEL-63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PHOSPORUS-32	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-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	0.00E+00	0.00E+00	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	7.81E-06	7.81E-06	0.00E+00	0.00E+00	8.85E-06	8.85E-06
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	1.63E-05	1.63E-05	0.00E+00	0.00E+00	1.91E-05	1.91E-05
TRITIUM & GROSS ALPHA								
TRITIUM	2.79E-01	0.00E+00	0.00E+00	2.79E-01	3.96E+00	0.00E+00	0.00E+00	3.96E+00
GROSS ALPHA	0.00E+00	0.00E+00	1.77E-06	1.77E-06	0.00E+00	0.00E+00	2.12E-06	2.12E-06

Note: Lower Limit of Detection (LLD) is reported as "0".

SECTION IV

RADIOACTIVE EFFLUENT RELEASES - LIQUID EFFLUENTS

Technical Specifications (5.9.4.a)

Table 2A Liquid Effluents - Summation of All Releases

Table 2B Liquid Effluents - Summation of All Releases

July 1, 1990 - December 31, 1990

LIQUID EFFLUENTS

During the reporting period, a total of 1.73E+00 Curies of radioactive liquid materials less tritium, dissolved noble gases, and alpha were released to the Missouri River at an average concentration of 4.71E-09 μCi/ml. This represents 4.7% 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 3.53E+11 liters, while radioactive liquid waste volume was 7.45E+07 liters.

Additionally, 120.0 Curies of tritium were discharged at an average diluted concentration 3.39E-07 μCi/ml or 1.11E-02% of MPC (3.0E-03 μCi/ml).

Gross alpha radioactivity released during the reporting period totaled 3.03E-04 Curies.

TABLE 2A

EFFLU[redacted]AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JULY THRU DEC 90

		3 QUARTER	4 QUARTER
A. FISSION&ACTIVATION PRODUCTS			
TOTAL RELEASE (NO TRITIUM,GAS,ALPHA)	CI	1.47E+00	2.61E-01
AVG DILUTED CONCENTRATION	UCI/ML	7.81E-09	1.60E-09
PERCENT OF LIMIT 10 CFR 20, APP. B = 1.0E-07	%	7.81E+00	1.60E+00
B. TRITIUM			
TOTAL RELEASE	CI	8.19E+01	3.79E+01
AVG DILUTED CONCENTRATION	UCI/ML	4.34E-07	2.32E-07
PERCENT OF LIMIT 10 CFR 20, APP. B = 3.0E-03	%	1.45E-02	7.72E-03
C. DISSOLVED&ENTRAINED GASES			
TOTAL RELEASE	CI	1.54E-01	3.83E-01
AVG DILUTED CONCENTRATION	UCI/ML	8.16E-10	2.34E-09
PERCENT OF LIMIT TECH SPEC = 2.0E-04 UCI/ML	%	4.08E-04	1.17E-03
D. GROSS ALPHA RADIOACTIVITY			
TOTAL RELEASE	CI	0.00E+00	3.03E-06
E. VOLUME OF WASTE RELEASE			
PRIOR TO DIL.	LITERS	3.84E+07	3.61E+07
F. VOLUME OF DILUTION WATER			
THIS PERIOD	LITERS	1.89E+11	1.64E+11

TABLE 2B

FLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JULY THRU DEC 80

	3 QUARTER		4 QUARTER	
NUCLIDES IN CURIES	CONT	BATCH	CONT	BATCH
STRONTIUM-89	0.00E+00	1.24E-03	0.00E+00	9.29E-05
STRONTIUM-90	0.00E+00	8.85E-05	0.00E-00	1.09E-04
CARBON-14	0.00E+00	1.22E+00	0.00E+00	1.08E-01
IRON-55	0.00E+00	6.38E-02	0.00E+00	4.51E-02
IODINE-129	0.00E+00	1.93E-06	0.00E+00	7.75E-05
NICKEL-63	0.00E+00	0.00E+00	0.00E-00	0.00E+00
PHOSPHORUS-32	0.00E+00	0.00E+00	0.00E+00	0.00E+00
COBALT-57	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
TECHNETIUM-99M	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
TIN-117M	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHROMIUM-51	0.00E+00	7.05E-03	0.00E+00	7.82E-05
IODINE-131	0.00E+00	2.61E-02	0.00E+00	9.88E-06
IODINE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BARIUM-140	0.00E+00	4.42E-04	0.00E+00	0.00E+00
RUTHENIUM-103	0.00E+00	1.72E-04	0.00E+00	0.00E+00
CESIUM-137	0.00E+00	4.37E-02	0.00E+00	4.84E-02
ZIRCONIUM-95	0.00E+00	5.38E-04	0.00E+00	0.00E+00
NIOBIUM-95	0.00E+00	1.46E-03	0.00E+00	2.64E-05
CESIUM-134	0.00E+00	8.96E-03	0.00E+00	1.06E-02
COBALT-58	0.00E+00	6.22E-02	0.00E+00	2.94E-02
MANGANESE-54	0.00E+00	1.22E-04	0.00E+00	8.05E-06
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	7.71E-03	0.00E+00	3.36E-03
LANTHANUM-140	0.00E+00	3.48E-03	0.00E+00	1.67E-04
ANTIMONY-124	0.00E+00	7.87E-04	0.00E+00	1.29E-04
CERIUM-144	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ANTIMONY-125	0.00E+00	1.96E-02	0.00E+00	1.57E-02
SILVER-110M	0.00E+00	1.59E-03	0.00E+00	1.97E-04
RUTHENIUM-106	0.00E+00	1.02E-04	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	0.00E+00	1.47E+00	0.00E+00	2.61E-01
DISSOLVED GASES				
ENTRAINED GASES				
XENON-133	0.00E+00	1.54E-01	0.00E+00	3.79E-01
XENON-135	0.00E+00	7.92E-05	0.00E+00	5.46E-05
XENON-135M	0.00E+00	0.00E+00	0.00E+00	2.14E-03
XENON-133M	0.00E+00	0.00E+00	0.00E+00	1.83E-03
TOTAL FOR PERIOD	0.00E+00	1.54E-01	0.00E+00	3.83E-01
OTHER, ALPHA & TRITIUM				
ALPHA	0.00E+00	0.00E+00	0.00E+00	3.03E-06
TRITIUM	0.00E+00	8.19E+01	1.63E-01	3.77E+01
GROSS BETA/GAMMA	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	0.00E+00	8.19E+01	1.63E-01	77E+01
AVG. CONC IN UCI/ML				
ALPHA	0.00E+00	0.00E+00	0.00E+00	1.51E-12
TRITIUM	0.00E+00	1.57E-05	3.69E-09	2.01E-05

Yttrium-90 activity is equal to Strontuim-90 (Sr-90/Y-90 secular equilibrium) for the third and fourth quarters. Yttrium-90 quantities are not shown on this table, but are included in LADTAP Dose Calculations.

Note: Lower Limit of Detection (LLD) is reported as "0".

SECTION V

RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE

Technical Specifications (5.9.4.a)

July 1, 1990 - December 31, 1990

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

July 1, 1990 through December 31, 1990

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.	July	0	0	0	N/A
	August	0	0	0	N/A
	September	0	0	0	N/A
	October	1	4.47	1.708	20
	November	0	0	0	N/A
	December	0	0	0	N/A
Six Month Total (Type A)		1	4.47	1.708	N/A
b. Dry compressable, contaminated equipment, etc.	July	0	0	0	N/A
	August	0	0	0	N/A
	September	0	0	0	N/A
	October	8	19.95	0.590	20
	November	25	37.88	0.813	20
	December	18	15.29	0.058	20
Six Month Total (Type B)		51	73.12	1.461	20%
c. Irradiated components and other categories	July	0	0	0	NA
	August	0	0	0	NA
	September	0	0	0	NA
	October	0	0	0	NA
	November	0	0	0	NA
	December	0	0	0	NA
Six Month Total (Type C)		0	0	0	NA
d. Other	July	0	0	0	NA
	August	0	0	0	NA
	September	0	0	0	NA
	October	0	0	0	NA
	November	0	0	0	NA
	December	0	0	0	NA
Six Month Total (Type D)		0	0	0	NA

III. 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.	Cs-134	59.1%	1.010	All other nuclides
	Tc-99	11.4%	0.195	are <1% of waste
	Mo-99	11.4%	0.195	
	C-14	3.9%	0.068	
	H-3	3.9%	0.068	
	Co-60	2.9%	0.050	
	Cs-137	2.8%	0.048	
	Fe-55	1.5%	0.027	
	Mn-54	1.5%	0.026	
b.	Cs-137	60.5%	0.884	All other nuclides
	Co-58	11.5%	0.169	are <1% of waste
	Cs-134	5.6%	0.082	
	Tc-99	4.5%	0.067	
	Mo-99	4.5%	0.067	
	Ru-103	2.7%	0.040	
	Rh-103	2.7%	0.040	
	Ag-110m	2.6%	0.039	
	Ce-144	1.9%	0.028	
	Pr-144	1.9%	0.028	
	Co-60	1.0%	0.016	
c.	N/A	N/A	N/A	
d.	N/A	N/A	N/A	

C. SOLID WASTE (DISPOSITION)

Number of Shipments	Transportation Mode	Destination
52	Closed Sole Use Vehicle	Barnwell, South Carolina

D. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

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

Radioactive Effluent Releases - Solid Radioactive

Waste Effluent and Waste Disposal Report

(Continued)

E. PCP and ODCM Changes for the Period July 1, 1990 - December 31, 1990

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).

No changes were made to the PCP.

No changes were made to the ODCM.

SECTION VI

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

(Regulatory Guide 1.21)

July 1, 1990 - December 31, 1990

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. Meteorological Data Recovery

Data recovery from the on-site weather tower for the period July through December 1990 was short of the 90 percent regulatory recovery guide at 38.2 percent. Contributing parameters include WD110, WD45, WD10, WS110, WS45, WS10, Delta T110M, and T10M. Data losses and tower downtime during this period were due to system hardware failures. The following table is a summary of the parameters and their respective recovery rates for the period:

Parameter	Actual Recovery Rate	Recovered Parameter Hrs/ Total Parameter Hrs
WD110	0.3822	1688/4416
WD45	0.3988	1761/4416
WD10	0.3920	1731/4416
WS110	0.3707	1637/4416
WS45	0.3659	1616/4416
WS10	0.3680	1625/4416
Delta T110M	0.4171	1842/4416
T10M	0.3582	1582/4416

Total Possible Hours: 35,328

Actual Tower Recovery: 13,482

Recovery Rate: 0.3816

B. Meteorological Data Recovery (Continued)

Hourly meteorological data used to replace missing tower data for the months of July 1990 through December 1990 originated from the North Omaha National Weather Service and NOAA Daily Synoptic Weather Maps. This raw data was used in formulating synthetic hourly data calculated in accordance with a proceduralized Pasquill-Turner transformation which utilizes solar angle, time of day, cloud cover, and wind speed to determine the Pasquill Class.

The tabulations of the Weather Tower Data for July 1, 1990 through December 31, 1990 look appropriate for the season as indicated. The Pasquill Classes observed for the six month period are detailed below. The first three months of the second half of 1990 (July-September) were:

Pasquill Class	A	B	C	D	E	F	G		Total
% Obs.	0.5	8.2	10.4	38.6	27.5	14.0	0.8	=	100.0

and for October through December were:

Pasquill Class	A	B	C	D	E	F	G		Total
% Obs.	0.5	5.4	13.1	36.1	23.6	17.4	3.9	=	100.0

The data, when corrected and/or supplemented by the synthetic data, derived from NWS NOAA data brought the recovery rate up above that required for maintaining adequate recovery as specified by the Nuclear Regulatory Commission. Recovery of synthetic and actual data requires a minimum recovery rate of 90 percent for the year.

On the basis of the data and its cross-checks, the weather data as amended is completely valid for use in tabulating reactor vent releases.

TABLE 158 - A

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ESE	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.4
SE	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.0
SSE	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	2.	3.8
S	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.7
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SW	0.	0.	1.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	4.	2.1
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NW	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.2
NNW	0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	0.	0.	2.	1.	0.	5.	2.	0.	0.	1.	0.	0.	0.	0.	0.	11.	2.5

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.5

TABLE 158 - B

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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.	1.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.5
NE	0.	0.	4.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.4
ENE	0.	0.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.3
E	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.3
ESE	0.	0.	1.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.8
SE	0.	2.	7.	5.	10.	7.	3.	0.	0.	0.	2.	1.	0.	0.	0.	37.	2.3
SSE	0.	0.	3.	4.	4.	9.	6.	0.	1.	0.	1.	0.	0.	0.	0.	28.	2.5
S	0.	0.	1.	7.	10.	2.	6.	1.	4.	0.	1.	1.	0.	0.	0.	33.	2.7
SSW	0.	0.	1.	1.	1.	0.	0.	1.	0.	0.	2.	0.	0.	0.	0.	6.	3.1
SW	0.	0.	1.	1.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	13.	2.1
WSW	0.	1.	2.	3.	3.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	2.	1.8
W	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.9
WNW	0.	0.	2.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.0
NW	0.	0.	0.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.5
NNW	0.	1.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.8
N	0.	0.	4.	1.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	16.	1.8
TOTAL	0.	0.	5.	6.	3.	0.	2.	0.	0.	0.	6.	2.	0.	0.	0.	182.	2.2
	0.	5.	41.	38.	37.	25.	20.	3	5.	0.							

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.2

TABLE 158 - C

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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 5.5	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.	5.	2.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	2.0
NE	0.	0.	3.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.7
ENE	0.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.2
E	0.	3.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	1.2
ESE	1.	2.	5.	2.	1.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.	13.	2.0
SE	0.	0.	4.	7.	9.	9.	0.	1.	2.	1.	1.	0.	0.	0.	0.	34.	2.4
SSE	0.	1.	3.	3.	7.	9.	7.	1.	0.	0.	2.	2.	0.	0.	0.	35.	2.8
S	0.	1.	3.	9.	8.	6.	4.	2.	0.	0.	0.	2.	1.	1.	0.	37.	2.7
SSW	0.	0.	0.	5.	1.	2.	0.	1.	1.	0.	1.	1.	0.	0.	0.	12.	3.0
SW	0.	0.	2.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	10.	2.0
WSW	0.	1.	0.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.9
W	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.7
WNW	0.	1.	0.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.6
NW	0.	1.	0.	2.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	6.	2.2
NNW	0.	1.	3.	8.	2.	1.	3.	0.	0.	1.	2.	1.	0.	0.	1.	23.	2.9
N	1.	0.	3.	8.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.	1.	19.	2.2
TOTAL	2.	11.	35.	59.	41.	35.	17.	6.	4.	2.	6.	6.	1.	2.	2.	229.	2.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 10.4

TABLE 15B - D

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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 FWEQUENCY 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.	10.	12.	6.	5.	3.	0.	0.	3.	0.	0.	0.	0.	0.	39.	1.8
NE	0.	2.	21.	7.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	36.	1.4
ENE	0.	5.	15.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	34.	1.3
E	0.	3.	15.	12.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	34.	1.5
ESE	1.	3.	12.	9.	5.	2.	3.	1.	3.	1.	1.	0.	0.	0.	0.	41.	2.0
SE	4.	6.	17.	34.	16.	23.	14.	4.	5.	3.	12.	0.	1.	0.	0.	139.	2.5
SSE	1.	3.	20.	23.	20.	22.	8.	5.	11.	7.	8.	3.	0.	0.	0.	131.	2.7
S	0.	2.	3.	15.	16.	18.	8.	5.	8.	1.	11.	3.	2.	1.	0.	93.	3.2
SSW	1.	2.	3.	5.	4.	7.	1.	0.	3.	3.	3.	3.	0.	1.	1.	37.	3.4
SW	0.	0.	2.	0.	2.	3.	0.	1.	0.	0.	0.	0.	0.	0.	0.	8.	2.1
WSW	0.	2.	5.	5.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	17.	1.6
W	1.	0.	3.	5.	3.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	13.	2.0
WNW	1.	0.	2.	4.	5.	4.	3.	0.	0.	0.	0.	0.	0.	0.	0.	19.	2.1
NW	0.	2.	11.	10.	6.	10.	5.	2.	0.	0.	0.	0.	0.	0.	0.	46.	2.0
NNW	0.	3.	11.	17.	13.	12.	10.	6.	6.	2.	0.	1.	0.	0.	1.	82.	2.6
N	0.	4.	16.	21.	7.	7.	6.	3.	2.	3.	4.	3.	2.	0.	5.	83.	3.1
TOTAL	9.	40.	166.	193.	114.	115.	63.	27.	38.	20.	39.	13.	6.	2.	7.	852.	2.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 38.6

TABLE 158 - E

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	3.	4.	9.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	19.	1.0
NE	2.	4.	12.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	21.	1.1
ENE	0.	2.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	1.1
E	0.	6.	13.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	22.	1.1
ESE	0.	4.	12.	4.	7.	3.	0.	3.	0.	0.	0.	0.	0.	0.	0.	33.	1.7
SE	6.	6.	27.	25.	15.	17.	6.	7.	1.	1.	2.	0.	0.	0.	0.	113.	1.9
SSE	3.	2.	11.	29.	23.	21.	10.	4.	3.	0.	1.	0.	0.	0.	0.	107.	2.2
S	1.	2.	5.	19.	20.	7.	0.	5.	3.	4.	4.	2.	0.	0.	0.	72.	2.6
SSW	1.	2.	3.	5.	5.	1.	0.	0.	0.	4.	4.	0.	0.	0.	0.	25.	2.7
SW	0.	2.	1.	0.	0.	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	6.	2.2
WSW	1.	5.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	0.8
W	2.	4.	2.	2.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	11.	1.1
WNW	2.	7.	0.	1.	2.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	17.	1.5
NW	3.	10.	9.	9.	1.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	36.	1.3
NNW	3.	9.	16.	18.	6.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	55.	1.4
N	1.	6.	15.	14.	3.	4.	2.	1.	0.	0.	0.	0.	0.	0.	0.	46.	1.6
TOTAL	28.	75.	150.	135.	83.	59.	23.	24.	8.	9.	11.	2.	0.	0.	0.	607.	1.8

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 27.5

TABLE 15B - F

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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.	9.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	1.3
NE	0.	4.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	16.	1.1
ENE	0.	5.	4.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	12.	1.1
E	0.	2.	7.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	1.3
ESE	0.	2.	5.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	1.4
SE	1.	6.	25.	6.	5.	8.	0.	1.	0.	0.	0.	0.	0.	0.	0.	52.	1.5
SSE	0.	0.	5.	24.	14.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	51.	1.9
S	0.	1.	13.	21.	12.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	54.	1.7
SSW	0.	0.	7.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	13.	1.5
SW	0.	2.	3.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	1.1
WSW	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.4
W	1.	1.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.1
WNW	2.	3.	2.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.9
NW	0.	1.	4.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.3
NNW	0.	1.	2.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.6
N	0.	2.	10.	5.	5.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	25.	1.6
TOTAL	7.	32.	111.	86.	45.	25.	3.	1.	0.	0.	0.	0.	0.	0.	0.	310.	1.5

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 14.0

TABLE 15B - G

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ESE	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.1
SE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSE	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	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.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.6
SW	0.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.0
WSW	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.2
W	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.5
WNW	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.5
NW	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.6
NNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	5.	8.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	17.	0.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.8

TABLE 158 - ALL

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	3.	8.	29.	26.	10.	8.	3.	0.	0.	0.	0.	0.	0.	0.	0.	87.	1.5
NE	2.	10.	50.	14.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	85.	1.3
ENE	0.	12.	41.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	72.	1.2
E	0.	15.	41.	22.	2.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	83.	1.3
ESE	4.	11.	35.	21.	17.	6.	3.	4.	4.	1.	1.	0.	0.	1.	0.	108.	1.8
SE	11.	20.	80.	77.	55.	64.	24.	13.	8.	5.	17.	1.	1.	0.	0.	376.	2.1
SSE	4.	8.	42.	83.	68.	68.	33.	10.	15.	8.	12.	5.	0.	0.	0.	356.	2.4
S	1.	6.	25.	71.	66.	42.	18.	13.	15.	5.	16.	8.	3.	2.	0.	291.	2.6
SSW	2.	4.	14.	21.	13.	10.	1.	2.	4.	7.	10.	4.	0.	1.	1.	94.	2.9
SW	0.	7.	11.	12.	8.	6.	5.	3.	1.	0.	0.	0.	0.	0.	0.	53.	1.9
WSW	4.	9.	11.	7.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	40.	1.3
W	6.	7.	11.	10.	4.	2.	0.	1.	0.	0.	0.	0.	1.	0.	0.	42.	1.4
WNW	6.	12.	4.	11.	8.	10.	4.	1.	0.	0.	0.	0.	0.	0.	0.	56.	1.6
NW	3.	16.	27.	22.	8.	14.	8.	3.	0.	0.	0.	0.	0.	0.	0.	101.	1.7
NNW	3.	14.	36.	45.	24.	16.	15.	7.	6.	3.	2.	2.	0.	0.	2.	175.	2.2
N	2.	12.	49.	54.	22.	14.	12.	4.	2.	3.	4.	3.	2.	0.	6.	189.	2.3
TOTAL	51.	171.	506.	515.	320.	264.	128.	67.	55.	32.	62.	23.	7.	4.	9.	2208.	2.1

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 100.0

TABLE 159 - A

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
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	0.00	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	0.00	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
ESE	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	2.4
SE	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	3.0
SSE	0.00	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	0.09	3.8
S	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	2.7
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	0.05	0.05	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	2.1
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	0.00	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
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	0.00	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	0.00	0.04	1.2
NNW	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
N	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
TOTAL	0.00	0.00	0.09	0.05	0.00	0.23	0.09	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.50	2.5

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.5

TABLE 159 - B

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	0.05	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.5
NE	0.00	0.00	0.18	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.4
ENE	0.00	0.00	0.32	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.3
E	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
ESE	0.00	0.00	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.8
SE	0.00	0.09	0.32	0.23	0.45	0.32	0.13	0.00	0.00	0.00	0.09	0.04	0.00	0.00	0.00	1.67	2.3
SSE	0.00	0.00	0.14	0.18	0.18	0.41	0.27	0.00	0.05	0.00	0.04	0.00	0.00	0.00	0.00	1.27	2.5
S	0.00	0.00	0.05	0.32	0.45	0.09	0.27	0.05	0.18	0.00	0.04	0.04	0.00	0.00	0.00	1.49	2.7
SSW	0.00	0.00	0.05	0.05	0.04	0.00	0.00	0.04	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.27	3.1
SW	0.00	0.05	0.09	0.14	0.14	0.04	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	2.1
WSW	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	0.00	0.00	0.09	1.8
W	0.00	0.00	0.09	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.9
WNW	0.00	0.00	0.00	0.14	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.0
NW	0.00	0.05	0.09	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	1.5
NNW	0.00	0.00	0.18	0.05	0.00	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.8
N	0.00	0.00	0.23	0.27	0.13	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	1.8
TOTAL	0.00	0.24	1.89	1.74	1.66	1.12	0.89	0.13	0.23	0.00	0.26	0.08	0.00	0.00	0.00	8.24	2.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.2

TABLE 159 - C

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 RUN FROM TAPE SERIES TR1-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	0.23	0.09	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	2.0
NE	0.00	0.00	0.14	0.09	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.7
ENE	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	1.2
E	0.00	0.13	0.23	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	1.2
ESE	0.05	0.09	0.23	0.09	0.05	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.59	2.0
SE	0.00	0.00	0.18	0.32	0.41	0.41	0.00	0.05	0.09	0.04	0.04	0.00	0.00	0.00	0.00	1.54	2.4
SSE	0.00	0.04	0.14	0.14	0.32	0.41	0.32	0.04	0.00	0.00	0.09	0.09	0.00	0.00	0.00	1.59	2.8
S	0.00	0.05	0.14	0.41	0.36	0.27	0.18	0.09	0.00	0.00	0.00	0.09	0.05	0.04	0.00	1.68	2.7
SSW	0.00	0.00	0.00	0.23	0.05	0.09	0.00	0.05	0.04	0.00	0.04	0.04	0.00	0.00	0.00	0.54	3.0
SW	0.00	0.00	0.09	0.14	0.14	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	2.0
WSW	0.00	0.05	0.00	0.00	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	1.9
W	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
WNW	0.00	0.05	0.00	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	1.6
NW	0.00	0.05	0.00	0.09	0.05	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	2.2
NNW	0.00	0.05	0.14	0.36	0.09	0.05	0.14	0.00	0.00	0.04	0.09	0.04	0.00	0.00	0.04	1.04	2.9
N	0.05	0.00	0.14	0.36	0.18	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.86	2.2
TOTAL	0.10	0.51	1.61	2.69	1.85	1.57	0.76	0.27	0.17	0.08	0.26	0.26	0.05	0.08	0.08	10.37	2.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 10.4

TABLE 159 - D

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	0.14	0.45	0.54	0.27	0.23	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	1.8
NE	0.00	0.09	0.95	0.32	0.23	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	1.4
ENE	0.00	0.23	0.68	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	1.3
E	0.00	0.14	0.68	0.54	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	1.5
ESE	0.05	0.14	0.54	0.41	0.23	0.09	0.14	0.04	0.14	0.04	0.04	0.00	0.00	0.00	0.00	1.86	2.0
SE	0.18	0.27	0.77	1.54	0.73	1.04	0.63	0.18	0.23	0.14	0.54	0.00	0.05	0.00	0.00	6.30	2.5
SSE	0.04	0.14	0.90	1.04	0.90	1.00	0.36	0.23	0.50	0.32	0.36	0.14	0.00	0.00	0.00	5.93	2.7
S	0.00	0.09	0.14	0.68	0.72	0.81	0.36	0.23	0.36	0.05	0.50	0.14	0.09	0.04	0.00	4.21	3.2
SSW	0.04	0.09	0.14	0.23	0.18	0.32	0.04	0.00	0.14	0.14	0.14	0.14	0.00	0.04	0.04	1.68	3.4
SW	0.00	0.00	0.09	0.00	0.09	0.14	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	2.1
WSW	0.00	0.09	0.23	0.23	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	1.5
W	0.04	0.00	0.14	0.23	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.59	2.0
WNW	0.04	0.00	0.09	0.18	0.23	0.18	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	2.1
NW	0.00	0.09	0.50	0.45	0.27	0.45	0.23	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.08	2.0
NNW	0.00	0.14	0.50	0.77	0.59	0.54	0.45	0.27	0.27	0.09	0.00	0.05	0.00	0.00	0.04	3.71	2.6
N	0.00	0.18	0.72	0.95	0.32	0.32	0.27	0.14	0.09	0.14	0.18	0.13	0.09	0.00	0.23	3.76	3.1
TOTAL	0.39	1.83	7.52	8.74	5.17	5.20	2.85	1.22	1.73	0.92	1.76	0.60	0.27	0.08	0.31	38.59	2.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 38.6

TABLE 159 - E

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	0.14	0.18	0.41	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	1.0
NE	0.09	0.18	0.54	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	1.1
ENE	0.00	0.09	0.50	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	1.1
E	0.00	0.27	0.59	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.1
ESE	0.00	0.18	0.54	0.18	0.32	0.14	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	1.7
SE	0.27	0.27	1.22	1.13	0.68	0.77	0.27	0.32	0.05	0.05	0.09	0.00	0.00	0.00	0.00	5.12	1.9
SSE	0.14	0.09	0.50	1.31	1.04	0.95	0.45	0.18	0.14	0.00	0.05	0.00	0.00	0.00	0.00	4.85	2.2
S	0.04	0.09	0.23	0.86	0.90	0.32	0.00	0.23	0.14	0.18	0.18	0.09	0.00	0.00	0.00	3.26	2.6
SSW	0.04	0.09	0.14	0.23	0.23	0.04	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.00	1.13	2.7
SW	0.00	0.09	0.05	0.00	0.00	0.00	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.27	2.2
WSW	0.04	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	0.00	0.45	0.8
W	0.09	0.18	0.09	0.09	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	1.1
WNW	0.09	0.32	0.00	0.05	0.09	0.14	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	1.5
NW	0.14	0.45	0.41	0.41	0.04	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	1.3
NNW	0.14	0.41	0.72	0.81	0.27	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.49	1.4
N	0.05	0.27	0.68	0.63	0.14	0.18	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.08	1.6
TOTAL	1.27	3.39	6.80	6.11	3.75	2.68	1.04	1.08	0.37	0.41	0.50	0.09	0.00	0.00	0.00	27.49	1.8

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 27.5

TABLE 159 - F

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	0.04	0.41	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	1.3
NE	0.00	0.18	0.45	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	1.1
ENE	0.00	0.23	0.18	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	1.1
E	0.00	0.09	0.32	0.18	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	1.3
ESE	0.00	0.09	0.23	0.27	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	1.4
SE	0.05	0.27	1.13	0.27	0.23	0.36	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	1.5
SSE	0.00	0.00	0.23	1.09	0.63	0.27	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.31	1.9
S	0.00	0.05	0.59	0.95	0.54	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45	1.7
SSW	0.00	0.00	0.32	0.18	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	1.5
SW	0.00	0.09	0.14	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	1.1
WSW	0.14	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	0.23	0.4
W	0.05	0.05	0.18	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.1
WNW	0.09	0.14	0.09	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.9
NW	0.00	0.05	0.18	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.3
NNW	0.00	0.05	0.09	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.6
N	0.00	0.09	0.45	0.23	0.23	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	1.6
TOTAL	0.33	1.47	5.03	3.89	2.03	1.12	0.13	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.04	1.5

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 14.0

TABLE 159 - G

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 RUN FROM TAPE SERIES TRI-SX

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	0.00	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
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	0.00	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	0.00	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	0.09	0.1
ESE	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
SE	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	0.09	0.7
SSE	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	0.00	0.0
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	0.05	1.6
SSW	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	0.14	1.0
SW	0.00	0.09	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	0.09	1.2
WSW	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.5
W	0.09	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
WNW	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	0.04	0.6
NW	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	0.00	0.00	0.00	0.0
NNW	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
N	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	0.77	0.7
TOTAL	0.23	0.35	0.05	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.8

TABLE 159 - ALL

DATA PERIOD 07/01/1990 THROUGH 09/30/1990 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	0.14	0.36	1.31	1.18	0.45	0.36	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.94	1.5
NE	0.09	0.45	2.27	0.63	0.32	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.85	1.3
ENE	0.00	0.54	1.86	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.26	1.2
E	0.00	0.68	1.86	1.00	0.09	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.76	1.3
ESE	0.18	0.50	1.58	0.95	0.77	0.27	0.14	0.18	0.18	0.05	0.05	0.00	0.00	0.04	0.00	4.89	1.8
SE	0.50	0.91	3.62	3.49	2.49	2.90	1.09	0.59	0.36	0.23	0.77	0.04	0.04	0.00	0.00	17.03	2.1
SSE	0.18	0.36	1.90	3.76	3.08	3.08	1.50	0.45	0.68	0.36	0.54	0.23	0.00	0.00	0.00	16.12	2.4
S	0.05	0.27	1.13	3.22	2.99	1.90	0.81	0.59	0.68	0.23	0.72	0.36	0.14	0.09	0.00	13.18	2.6
SSW	0.09	0.18	0.63	0.95	0.59	0.45	0.05	0.09	0.18	0.32	0.45	0.18	0.00	0.05	0.05	4.26	2.9
SW	0.00	0.32	0.50	0.54	0.36	0.27	0.23	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	2.40	1.9
WSW	0.18	0.41	0.50	0.32	0.36	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81	1.3
W	0.27	0.32	0.50	0.45	0.18	0.09	0.00	0.05	0.00	0.00	0.00	0.00	0.04	0.00	0.00	1.90	1.4
WNW	0.27	0.55	0.18	0.50	0.36	0.45	0.18	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	1.6
NW	0.14	0.72	1.22	1.00	0.36	0.63	0.36	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.57	1.7
NNW	0.14	0.63	1.63	2.04	1.09	0.72	0.68	0.32	0.27	0.14	0.09	0.09	0.00	0.00	0.09	7.93	2.2
N	0.09	0.54	2.22	2.45	1.00	0.63	0.51	0.18	0.09	0.14	0.18	0.14	0.09	0.00	0.27	8.56	2.3
TOTAL	2.32	7.74	22.91	23.34	14.49	11.92	5.81	2.78	2.48	1.47	2.80	1.04	0.31	0.18	0.41	100.00	2.1

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 100.0

TABLE 158 - A

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NE	0.	0.	0.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	2.3
ENE	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.2
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
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.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
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	0.	0.	0.	0.	1.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	3.	2.7
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.	0.	0.	0.	0.	4.	4.8
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	0.	0.	0.	0.	4.	2.	2.	0.	0.	3.	1.	0.	0.	0.	0.	12.	3.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.5

TABLE 158 - B

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.4
NE	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.9
ENE	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	2.	4.2
E	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.9
ESE	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.7
SE	0.	1.	0.	1.	2.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	6.	2.3
SSE	0.	0.	0.	2.	1.	0.	1.	1.	2.	0.	1.	0.	0.	0.	0.	8.	3.3
S	0.	1.	3.	1.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	1.	10.	2.5
SSW	0.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	5.	4.7
SW	0.	0.	5.	1.	0.	1.	0.	0.	0.	0.	0.	1.	2.	0.	0.	10.	3.0
WSW	0.	0.	5.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.7
W	0.	0.	3.	6.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.	1.7
WNW	0.	0.	3.	4.	3.	0.	2.	0.	1.	3.	0.	0.	0.	0.	0.	16.	2.6
NW	0.	0.	3.	4.	3.	0.	2.	1.	5.	6.	4.	0.	0.	0.	0.	26.	3.8
NNW	0.	0.	1.	1.	0.	5.	3.	1.	5.	6.	4.	0.	0.	0.	0.	3.	2.4
N	0.	0.	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	2.3
TOTAL	0.	2.	1.	1.	1.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	119.	2.8
			24.	23.	13.	16.	8.	4.	8.	9.	5.	2.	2.	0.	3.		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 5.4

TABLE 158 - C

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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.	1.	1.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	5.	2.4
NE	0.	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.2
ENE	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.3
E	0.	0.	1.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	3.	3.1
ESE	0.	0.	2.	2.	0.	0.	1.	3.	3.	0.	0.	0.	0.	0.	0.	11.	3.0
SE	0.	0.	2.	4.	7.	4.	3.	2.	2.	4.	0.	0.	0.	0.	1.	29.	3.1
SSE	0.	0.	0.	3.	9.	11.	9.	3.	1.	5.	1.	0.	0.	0.	0.	42.	3.0
S	0.	1.	3.	2.	2.	1.	10.	1.	0.	1.	3.	1.	0.	0.	0.	25.	3.1
SSW	0.	2.	2.	2.	2.	1.	3.	5.	6.	0.	0.	0.	0.	0.	1.	24.	3.2
SW	0.	2.	3.	1.	1.	2.	0.	0.	2.	0.	0.	1.	0.	1.	0.	13.	2.9
WSW	0.	0.	2.	2.	0.	2.	0.	0.	1.	0.	0.	0.	1.	0.	0.	8.	2.8
W	0.	2.	1.	0.	1.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	10.	2.2
WNW	0.	0.	4.	0.	5.	0.	3.	2.	1.	1.	0.	0.	0.	0.	0.	16.	2.6
NW	0.	1.	2.	2.	7.	18.	9.	12.	9.	7.	1.	1.	0.	0.	0.	66.	3.3
NNW	0.	0.	0.	1.	5.	3.	5.	2.	0.	0.	1.	0.	0.	0.	0.	17.	2.9
N	0.	0.	0.	3.	4.	2.	4.	1.	0.	0.	0.	0.	0.	0.	0.	14.	2.5
TOTAL	0.	7.	24.	23.	44.	46.	52.	33.	26.	18.	6.	3.	1.	1.	2.	286.	3.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 13.1

TABLE 158 - D

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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.	1.	4.	3.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	2.2
NE	1.	0.	1.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.5
ENE	1.	0.	4.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.4
E	0.	1.	1.	2.	2.	0.	1.	0.	0.	2.	0.	0.	0.	0.	0.	9.	2.5
ESE	2.	4.	4.	6.	5.	3	3.	3.	1.	0.	0.	0.	0.	0.	0.	31.	2.0
SE	1.	2.	11	10.	9.	16.	14.	9.	7.	2.	2.	0.	0.	0.	0.	83.	2.7
SSE	2.	2.	5	11.	6.	18.	19.	7.	8.	7.	11.	5.	2.	0.	0.	103.	3.3
S	0.	2.	4.	3.	6.	9.	5.	3.	1.	5.	5.	8.	10.	5.	0.	66.	4.5
SSW	0.	4.	3.	4.	3.	2.	3.	8.	1.	1.	0.	3.	0.	0.	0.	32.	2.8
SW	1.	3.	2.	4.	3.	4.	1.	0.	1.	0.	0.	0.	1.	0.	0.	20.	2.1
WSW	2.	2.	4.	4.	0.	1.	1.	2.	0.	0.	1.	0.	0.	0.	0.	17.	1.9
W	2.	6.	2.	4.	1.	4.	1.	2.	0.	0.	0.	0.	0.	0.	0.	22.	1.7
WNW	3.	3.	3.	4.	9.	8.	5.	3.	5.	2.	5.	6.	0.	0.	1.	57.	3.3
NW	0.	8.	17.	13.	9.	16.	21.	21.	22.	14.	15.	3.	0.	0.	1.	160.	3.2
NNW	1.	3.	2.	4.	7.	12.	15.	10.	4.	3.	4.	0.	0.	0.	1.	66.	3.1
N	2.	0.	4.	8.	26.	22.	9.	6.	11.	4.	0.	0.	0.	0.	1.	93.	2.8
TOTAL	18.	40.	68.	87.	90.	122.	98.	74.	61.	40.	43.	25.	13.	5.	4.	788.	3.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 36.1

TABLE 15B - E

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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 15 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.	1.	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.9
NE	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.1
ENE	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.9
E	0.	6.	4.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	13.	1.1
ESE	4.	7.	3.	12.	5.	1.	4.	2.	1.	0.	0.	0.	0.	0.	0.	39.	1.7
SE	1.	4.	9.	11.	5.	14.	15.	10.	3.	1.	1.	0.	0.	0.	0.	74.	2.5
SSE	1.	7.	4.	1.	7.	24.	13.	4.	0.	1.	2.	1.	1.	0.	0.	66.	2.6
S	1.	2.	7.	6.	1.	3.	11.	2.	6.	0.	3.	6.	2.	1.	0.	51.	3.4
SSW	0	6.	4.	2.	0.	9.	0.	4.	3.	2.	5.	2.	1.	0.	0.	38.	3.1
SW	3.	3.	1.	4.	2.	1.	3.	1.	2.	0.	1.	0.	0.	0.	0.	21.	2.1
WSW	2.	8.	1	3.	3.	1.	3.	1.	3.	0.	0.	0.	0.	0.	0.	25.	1.8
W	4.	9.	10.	5.	5.	4.	0.	1.	0.	0.	0.	0.	0.	0.	0.	38.	1.4
WNW	3.	9.	10.	5.	3.	3.	1.	2.	0.	0.	0.	0.	0.	0.	0.	36.	1.4
NW	2.	5.	12.	7.	6.	5.	5.	5.	1.	1.	0.	0.	0	0.	0.	49.	2.0
NNW	0.	4.	6.	2.	0.	9.	4.	2.	0.	0.	0.	0.	0.	0.	0.	27.	2.1
N	1.	2.	3.	3.	9.	5.	2.	3.	1.	0.	0.	0.	0.	0.	0.	29.	2.2
TOTAL	22.	74.	76.	63.	50.	81.	61.	37.	20.	5.	12.	9.	4.	1.	0.	515.	2.3

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 23.6

TABLE 15B - F

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	3.	2.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	0.8
NE	0.	1.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.4
ENE	1.	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.2
E	0.	0.	5.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	1.4
ESE	2.	4.	8.	12.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	30.	1.4
SE	2.	6.	13.	19.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	57.	1.6
SSE	0.	2.	2.	9.	11.	5.	0.	1.	0.	0.	1.	0.	0.	0.	0.	31.	2.1
S	2.	3.	7.	14.	2.	1.	1.	2.	0.	0.	1.	1.	0.	0.	0.	34.	1.9
SSW	0.	2.	5.	12.	3.	2.	1.	1.	2.	1.	2.	1.	0.	0.	0.	32.	2.4
SW	0.	5.	6.	4.	0.	1.	1.	2.	2.	3.	7.	0.	0.	0.	0.	31.	2.9
WSW	2.	6.	5.	1.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	18.	1.3
W	3.	11.	7.	4.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	26.	1.0
WNW	2.	9.	9.	2.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	27.	1.2
NW	2.	3.	5.	7.	5.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.	28.	1.7
NNW	0.	2.	4.	1.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	9.	1.4
N	0.	9.	11.	5.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	27.	1.2
TOTAL	19.	65.	93.	100.	46.	20.	8.	7.	4.	4.	11.	2.	0.	0.	0.	379.	1.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 17.4

TABLE 15B - G

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	6.9 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.1
NE	1.	3.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.8
ENE	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.3
E	0.	1.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.2
ESE	0.	2.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.1
SE	0.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.1
SSE	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.8
S	0.	0.	2.	1.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.1
SSW	1.	1.	6.	2.	0.	0.	0.	1.	1.	3.	3.	0.	0.	0.	0.	12.	3.5
SW	0.	0.	2.	0.	1.	0.	1.	1.	1.	1.	2.	0.	0.	0.	0.	9.	3.4
WSW	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.9
W	1.	3.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.0
WNW	2.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.7
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NNW	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.4
N	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.2
TOTAL	12.	20.	32.	3.	2.	0.	3.	2.	2.	4.	5.	0.	0.	0.	0.	85.	1.6

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 3.9

TABLE 15B - ALL

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	3.	4.	7.	7.	7.	7.	2.	1.	0.	0.	0.	0.	0.	0.	0.	38.	1.8
NE	2.	4.	7.	9.	3.	2.	1.	0.	0.	1.	0.	0.	0.	0.	0.	28.	1.5
ENE	2.	1.	9.	4.	1.	2.	1.	0.	0.	0.	0.	1.	0.	0.	0.	21.	1.7
E	0.	8.	17.	8.	5.	0.	1.	1.	1.	2.	0.	0.	0.	0.	0.	43.	1.7
ESE	8.	17.	23.	34.	11.	5.	10.	8.	5.	0.	0.	0.	0.	0.	0.	121.	1.8
SE	4.	14.	38.	45.	39.	35.	32.	23.	12.	7.	3.	0.	0.	0.	1.	253.	2.4
SSE	3.	13.	13.	26.	34.	58.	42.	16.	11.	13.	10.	6.	3.	0.	0.	254.	2.9
S	3.	9.	26.	27.	12.	17.	29.	8.	7.	6.	12.	12.	12.	5.	1.	191.	3.4
SSW	1.	15.	16.	23.	8.	14.	7.	19.	13.	7.	10.	6.	1.	0.	3.	143.	3.0
SW	4.	13.	19.	14.	7.	9.	6.	4.	8.	4.	10.	2.	3.	1.	0.	104.	2.6
WSW	6.	17.	17.	10.	6.	7.	5.	3.	4.	0.	1.	0.	1.	0.	0.	77.	1.8
W	10.	31.	25.	19.	10.	14.	5.	3.	0.	0.	0.	0.	0.	0.	0.	117.	1.4
WNW	10.	25.	31.	15.	24.	12.	11.	7.	7.	9.	6.	6.	0.	0.	1.	164.	2.3
NW	4.	16.	37.	30.	27.	46.	39.	40.	37.	28.	20.	4.	0.	0.	1.	329.	3.0
NNW	4.	10.	13.	8.	14.	26.	25.	14.	4.	3.	5.	0.	0.	0.	1.	127.	2.6
N	7.	11.	19.	20.	41.	33.	16.	10.	12.	4.	0.	0.	0.	0.	1.	174.	2.3
TOTAL	71.	208.	317.	299.	249.	287.	232.	157.	121.	83.	83.	41.	20.	7.	9.	2184.	2.5

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 100.0

TABLE 159 - A

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
NE	0.00	0.00	0.00	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	2.3
ENE	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	0.00	0.09	2.2
E	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
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
SSE	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
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	0.00	0.00	0.00	0.00	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	2.7
WNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.04	0.00	0.00	0.00	0.00	0.18	4.8
NW	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
NNW	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
N	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
TOTAL	0.00	0.00	0.00	0.00	0.19	0.09	0.09	0.00	0.00	0.14	0.04	0.00	0.00	0.00	0.00	0.55	3.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.5

TABLE 159 - B

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	%BAR
NNE	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
NE	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	0.00	0.00	0.04	1.9
ENE	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.09	4.2
E	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	0.00	0.00	0.09	1.9
ESE	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	0.00	0.14	1.7
SE	0.00	0.05	0.00	0.04	0.09	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	2.3
SSE	0.00	0.00	0.00	0.09	0.05	0.00	0.05	0.05	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.37	3.3
S	0.00	0.05	0.14	0.05	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.46	2.5
SSW	0.00	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.23	4.7
SW	0.00	0.00	0.23	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.00	0.00	0.46	3.0
WSW	0.00	0.00	0.23	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	1.7
W	0.00	0.00	0.14	0.27	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	1.7
WNW	0.00	0.00	0.14	0.18	0.14	0.00	0.09	0.00	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.73	2.6
NW	0.00	0.00	0.05	0.05	0.00	0.23	0.14	0.04	0.23	0.27	0.18	0.00	0.00	0.00	0.00	1.19	3.8
NNW	0.00	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	0.14	2.4
N	0.00	0.00	0.05	0.05	0.04	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.3
TOTAL	0.00	0.10	1.12	1.06	0.59	0.74	0.37	0.18	0.36	0.41	0.22	0.08	0.09	0.00	0.13	5.45	2.8

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 5.4

TABLE 159 - C

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	0.05	0.05	0.05	0.06	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.4
NE	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	0.00	0.00	0.09	2.2
ENE	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	3.3
E	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.14	3.1
ESE	0.00	0.00	0.09	0.09	0.00	0.00	0.04	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.50	3.0
SE	0.00	0.00	0.09	0.19	0.32	0.18	0.14	0.09	0.09	0.18	0.00	0.00	0.00	0.00	0.05	1.33	3.1
SSE	0.00	0.00	0.00	0.14	0.41	0.50	0.41	0.14	0.05	0.23	0.04	0.00	0.00	0.00	0.00	1.92	3.0
S	0.00	0.05	0.14	0.09	0.09	0.05	0.46	0.04	0.00	0.04	0.14	0.04	0.00	0.00	0.00	1.14	3.1
SSW	0.00	0.09	0.09	0.09	0.09	0.05	0.14	0.23	0.27	0.00	0.00	0.00	0.00	0.00	0.05	1.10	3.2
SW	0.00	0.09	0.14	0.05	0.05	0.09	0.00	0.09	0.09	0.00	0.00	0.04	0.00	0.04	0.00	0.59	2.9
WSW	0.00	0.00	0.09	0.09	0.00	0.09	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.37	2.8
W	0.00	0.09	0.05	0.00	0.05	0.18	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	2.2
WNW	0.00	0.00	0.18	0.00	0.23	0.00	0.14	0.09	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.73	2.6
NW	0.00	0.00	0.09	0.09	0.32	0.73	0.41	0.55	0.41	0.32	0.05	0.05	0.00	0.00	0.00	3.02	3.3
NNW	0.00	0.00	0.00	0.05	0.23	0.14	0.23	0.09	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.78	2.9
N	0.00	0.00	0.00	0.14	0.18	0.09	0.18	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	2.5
TOTAL	0.00	0.32	1.11	1.07	2.02	2.10	2.37	1.51	1.19	0.81	0.27	0.13	0.05	0.04	0.10	13.09	3.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 13.1

TABLE 159 - D

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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 -- WL1U ,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	0.18	0.14	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	2.2
NE	0.05	0.00	0.05	0.23	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	1.5
ENE	0.05	0.00	0.18	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.4
E	0.00	0.05	0.05	0.09	0.09	0.00	0.04	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.41	2.5
ESE	0.09	0.18	0.18	0.27	0.23	0.14	0.14	0.14	0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.42	2.0
SE	0.05	0.09	0.51	0.46	0.41	0.73	0.64	0.41	0.32	0.09	0.09	0.00	0.00	0.00	0.00	3.80	2.7
SSE	0.09	0.09	0.23	0.50	0.28	0.83	0.87	0.32	0.37	0.32	0.50	0.23	0.09	0.00	0.00	4.72	3.3
S	0.00	0.09	0.18	0.14	0.27	0.41	0.23	0.14	0.04	0.23	0.23	0.37	0.46	0.23	0.00	3.02	4.5
SSW	0.00	0.18	0.14	0.18	0.14	0.09	0.14	0.37	0.04	0.04	0.00	0.14	0.00	0.00	0.00	1.46	2.8
SW	0.05	0.14	0.09	0.18	0.14	0.18	0.05	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.91	2.1
WSW	0.09	0.09	0.18	0.18	0.00	0.05	0.05	0.09	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.78	1.9
W	0.09	0.28	0.09	0.18	0.05	0.18	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	1.7
WNW	0.14	0.14	0.14	0.18	0.41	0.37	0.23	0.14	0.23	0.09	0.23	0.27	0.00	0.00	0.04	2.61	3.3
NW	1.00	0.37	0.78	0.59	0.41	0.73	0.96	0.96	1.01	0.64	0.69	0.14	0.00	0.00	0.05	7.33	3.2
NNW	0.05	0.14	0.09	0.18	0.32	0.55	0.69	0.46	0.18	0.14	0.18	0.00	0.00	0.00	0.04	3.02	3.1
N	0.09	0.00	0.18	0.37	1.19	1.01	0.41	0.28	0.50	0.18	0.00	0.00	0.00	0.00	0.05	4.26	2.8
TOTAL	0.84	1.84	3.12	3.96	4.12	5.58	4.50	3.40	2.78	1.82	1.97	1.15	0.59	0.23	0.18	36.08	3.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 36.1

TABLE 159 - E

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	0.05	0.00	0.00	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.9
NE	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
ENE	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	0.9
E	0.00	0.28	0.18	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	1.1
ESE	0.18	0.32	0.14	0.55	0.23	0.05	0.18	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.79	1.7
SE	0.05	0.18	0.41	0.50	0.23	0.64	0.69	0.46	0.14	0.05	0.04	0.00	0.00	0.00	0.00	3.39	2.5
SSE	0.05	0.32	0.18	0.05	0.32	1.10	0.59	0.18	0.00	0.05	0.09	0.05	0.04	0.00	0.00	3.02	2.6
S	0.05	0.09	0.32	0.27	0.05	0.14	0.50	0.09	0.27	0.00	0.14	0.27	0.09	0.05	0.00	2.33	3.4
SSW	0.00	0.28	0.18	0.09	0.00	0.41	0.00	0.18	0.14	0.09	0.23	0.09	0.05	0.00	0.00	1.74	3.1
SW	0.14	0.14	0.05	0.18	0.09	0.05	0.14	0.04	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.96	2.1
WSW	0.09	0.37	0.04	0.14	0.14	0.04	0.14	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	1.14	1.8
W	0.18	0.41	0.46	0.23	0.23	0.18	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74	1.4
WNW	0.14	0.41	0.46	0.23	0.14	0.14	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65	1.4
NW	0.09	0.23	0.55	0.32	0.27	0.23	0.23	0.23	0.05	0.04	0.00	0.00	0.00	0.00	0.00	2.24	2.0
NNW	0.00	0.19	0.28	0.09	0.00	0.41	0.18	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	2.1
N	0.05	0.09	0.14	0.14	0.41	0.23	0.09	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	1.33	2.2
TOTAL	1.02	3.41	3.48	2.88	2.30	3.70	2.78	1.68	0.92	0.23	0.54	0.41	0.18	0.05	0.00	23.58	2.3

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 23.6

TABLE 159 - F

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 RUN FROM TAPE SERICS 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 .DT>J0

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	0.14	0.09	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.8
NE	0.00	0.05	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.4
ENE	0.05	0.00	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.2
E	0.00	0.00	0.23	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	1.4
ESE	0.09	0.18	0.37	0.55	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	1.4
SE	0.09	0.27	0.60	0.87	0.73	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.61	1.6
SSE	0.00	0.09	0.09	0.41	0.50	0.23	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	1.42	2.1
S	0.09	0.14	0.32	0.64	0.09	0.05	0.05	0.09	0.00	0.00	0.05	0.04	0.00	0.00	0.00	1.56	1.9
SSW	0.00	0.09	0.23	0.55	0.14	0.09	0.05	0.05	0.09	0.04	0.09	0.04	0.00	0.00	0.00	1.46	2.4
SW	0.00	0.23	0.27	0.18	0.00	0.05	0.05	0.09	0.09	0.14	0.32	0.00	0.00	0.00	0.00	1.42	2.9
WSW	0.09	0.27	0.23	0.05	0.05	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	1.3
W	0.14	0.50	0.32	0.18	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.0
WNW	0.09	0.41	0.41	0.09	0.19	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	1.2
NW	0.09	0.14	0.23	0.32	0.23	0.18	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.7
NNW	0.00	0.09	0.18	0.05	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	1.4
N	0.00	0.41	0.50	0.23	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	1.2
TOTAL	0.87	2.96	4.25	4.58	2.12	0.93	0.37	0.32	0.18	0.18	0.51	0.08	0.00	0.00	0.00	17.35	1.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 17.4

TABLE 159 - G

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 RUN FROM TAPE SERIES TRI-EX

ARKANSAS PUBLIC POWER DISTRICT
ORT 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	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.1
NE	0.00	0.14	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	0.32	0.8
ENE	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.3
E	0.00	0.05	0.27	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	1.2
ESE	0.00	0.09	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	0.32	1.1
SE	0.00	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	0.18	1.1
SSE	0.00	0.09	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	0.18	0.8
S	0.00	0.00	0.09	0.05	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.1
SSW	0.05	0.05	0.00	0.09	0.00	0.00	0.00	0.04	0.04	0.14	0.14	0.00	0.00	0.00	0.00	0.55	3.5
SW	0.00	0.00	0.09	0.00	0.05	0.00	0.05	0.05	0.04	0.04	0.09	0.00	0.00	0.00	0.00	0.41	3.4
WSW	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	0.9
W	0.05	0.14	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.0
WNW	0.09	0.19	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	0.37	0.7
NW	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
NNW	0.14	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	0.23	0.4
N	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.2
TOTAL	0.55	0.94	1.45	0.14	0.09	0.00	0.14	0.09	0.08	0.18	0.23	0.00	0.00	0.00	0.00	3.89	1.6

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 3.9

TABLE 159 - ALL

DATA PERIOD 10/01/1990 THROUGH 12/31/1990 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	0.14	0.18	0.32	0.32	0.32	0.32	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74	1.8
NE	0.09	0.18	0.32	0.41	0.14	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.5
ENE	0.09	0.05	0.41	0.18	0.05	0.09	0.05	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.96	1.7
E	0.00	0.37	0.78	0.37	0.23	0.00	0.05	0.04	0.04	0.09	0.00	0.00	0.00	0.00	0.00	1.97	1.7
ESE	0.37	0.78	1.05	1.56	0.50	0.23	0.46	0.36	0.23	0.00	0.00	0.00	0.00	0.00	0.00	5.54	1.8
SE	0.18	0.64	1.74	2.06	1.79	1.60	1.46	1.05	0.55	0.32	0.14	0.00	0.00	0.00	0.05	11.58	2.4
SSE	0.14	0.60	0.50	1.19	1.56	2.66	1.92	0.73	0.50	0.59	0.73	0.27	0.14	0.00	0.00	11.63	2.9
S	0.14	0.41	1.19	1.24	0.55	0.78	1.33	0.37	0.32	0.27	0.55	0.73	0.55	0.27	0.05	8.75	3.4
SSW	0.05	0.69	0.73	1.05	0.37	0.64	0.32	0.87	0.59	0.32	0.46	0.27	0.05	0.00	0.14	6.55	3.0
SW	0.18	0.60	0.87	0.64	0.32	0.41	0.27	0.18	0.37	0.18	0.46	0.09	0.14	0.05	0.00	4.76	2.6
WSW	0.27	0.78	0.78	0.46	0.27	0.32	0.23	0.14	0.18	0.00	0.05	0.00	0.05	0.00	0.00	3.53	1.8
W	0.46	1.42	1.14	0.87	0.46	0.64	0.23	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.36	1.4
WNW	0.46	1.14	1.42	0.69	1.10	0.55	0.50	0.32	0.32	0.41	0.28	0.27	0.00	0.00	0.05	7.51	2.3
NW	0.18	0.73	1.69	1.37	1.24	2.11	1.79	1.83	1.69	1.28	0.92	0.18	0.00	0.00	0.05	15.06	3.0
NNW	0.18	0.46	0.59	0.37	0.64	1.19	1.14	0.64	0.18	0.14	0.23	0.00	0.00	0.00	0.05	5.81	2.6
N	0.32	0.50	0.87	0.92	1.88	1.51	0.73	0.46	0.55	0.18	0.00	0.00	0.00	0.00	0.05	7.97	2.3
TOTAL	3.25	9.53	14.50	13.70	11.42	13.14	10.62	7.18	5.52	3.78	3.82	1.85	0.93	0.32	0.44	100.00	2.5

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 100.0

RELEASE NUMBER 90050 CONTAINMENT PURGE

STARTING TIME JUNE 30,1990 HOUR 9 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	3.5	0.9	-1.4
10	5.4	286.8	-1.4
11	4.7	63.3	-1.2
12	4.6	31.2	-1.2
13	6.2	34.1	-1.9
14	5.4	46.3	-1.9
15	5.7	38.9	-1.6
16	6.1	49.8	-1.4
17	4.8	53.6	-1.9
18	4.4	11.4	-1.3
19	4.3	42.9	-0.8
20	2.8	81.7	-0.5
21	1.3	239.9	1.4
22	2.7	161.1	1.2
23	1.4	202.3	1.7
24	0.3	123.7	2.7
1	0.3	245.9	2.7
2	0.5	284.2	4.1
3	0.6	140.9	3.5
4	1.0	183.6	1.7
5	1.3	225.2	1.3
6	1.5	8.3	1.9
7	0.7	48.4	1.1
8	5.3	111.6	0.2
9	8.2	116.6	-0.9
10	8.9	139.5	-1.4
11	8.9	126.7	-1.6
12	10.5	132.1	-1.6
13	10.8	153.8	-2.0
14	11.5	135.8	-1.8
15	12.9	140.1	-1.6
16	12.5	140.5	-1.7
17	14.1	145.0	-1.7
18	11.8	151.3	-1.4
19	9.2	138.8	-1.2
20	6.9	132.6	-0.7
21	4.7	126.9	0.1
22	5.5	129.3	0.5
23	8.1	135.6	-0.1
24	6.6	128.3	0.5
1	6.2	125.0	0.2
2	8.4	134.3	-0.2
3	10.2	136.8	-0.2

STOP TIME JULY 2,1990 HOUR 2 MINUTE 58

STARTING TIME JULY 2,1990 HOUR 4 MINUTE 53

TIME HOUR	WS10 MPH	WD10 DEG	DT116 DEG C
[illegible]	11.3	134.3	-0.4
5	12.0	134.2	-0.5
6	13.1	137.0	-0.3
7	12.7	134.1	-0.5
8	7.8	143.8	-0.9
9	7.3	137.2	-1.3
10	11.0	155.9	-1.7
11	11.1	163.4	-1.6
12	9.1	166.8	-1.3
13	6.9	160.3	-1.7
14	9.2	163.1	-1.7
15	5.7	155.1	-1.7
16	16.1	125.8	-0.9
17	5.6	149.7	-0.5
18	7.2	199.2	-1.0
19	5.8	197.2	-0.3
20	3.9	164.5	2.2
[illegible]	5.6	143.1	3.2
22	8.8	158.8	0.7
23	7.8	165.1	0.2
24	8.5	174.2	0.5
1	9.5	183.2	0.6
2	10.7	197.8	0.8
3	13.1	208.8	0.3
4	12.5	208.8	0.7
5	10.9	204.3	0.5
6	10.1	207.7	0.8
7	10.2	195.3	1.1
8	11.3	194.1	0.1
9	11.8	198.8	-0.7
10	11.3	203.2	-1.3

STOP TIME JULY 3,1990 HOUR 9 MINUTE 48

RELEASE NUMBER 90051 CONTAINMENT PURGE

STARTING TIME JULY 5,1990 HOUR 17 MINUTE 10

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
-	3.3	3.4	-1.2
18	3.5	51.9	-1.2
19	2.2	40.6	-1.0
20	1.4	244.9	-0.9
21	1.4	348.5	-0.5
22	0.9	337.9	0.2
23	0.6	051.5	0.5
24	0.2	202.1	0.9
1	3.4	263.6	1.4
2	2.1	230.7	2.0
3	3.2	311.1	1.8
4	2.4	311.6	1.2
5	2.6	236.2	1.1
6	1.4	192.8	0.8
-	1.3	132.2	0.2
8	2.7	193.1	-0.7
9	6.4	116.3	-1.0
	9.7	123.3	-1.3
11	8.0	142.2	-1.0
12	8.3	137.0	-0.7
13	10.5	130.8	-0.5
14	12.6	130.8	-0.8
15	12.4	141.8	-1.2

STOP TIME JULY 6,1990 HOUR 14 MINUTE 39

RELEASE NUMBER 90052 CONTAINMENT PURGE

STARTING TIME JULY 6,1990 HOUR 21 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
22	7.2	112.2	-1.0
23	7.5	111.3	-0.7
24	8.3	125.1	-0.4
1	10.5	130.6	-0.5
2	12.8	132.1	-0.7
3	11.8	128.6	-0.6
4	12.2	141.4	-0.7
5	10.1	157.6	-0.9
6	8.5	157.7	-0.8
7	9.9	161.5	-0.8
8	9.8	160.2	-0.8
9	9.8	158.8	-0.9
10	12.6	163.0	-1.1
11	12.7	164.1	-1.2
12	13.0	168.0	-1.5
13	14.1	171.0	-1.5
14	13.7	162.6	-1.6
15	15.3	168.1	-1.5
16	17.7	172.0	-1.6
17	18.3	169.7	-1.4
18	17.0	174.9	-1.5
19	14.6	172.4	-0.9
20	9.9	162.7	-0.9
21	9.3	152.9	-0.7
22	11.0	155.5	-0.4
23	14.3	160.7	-0.6
24	14.3	163.1	-0.6
1	14.2	167.3	-0.6
2	12.7	174.2	-0.7
3	13.3	176.0	-0.7
4	13.0	179.1	-0.6
5	12.1	178.1	-0.4
6	10.9	175.0	-0.6
7	8.1	224.5	-0.8
8	1.0	262.0	0.7
9	4.7	185.5	0.1
10	5.4	226.0	-1.1
11	3.6	284.8	-1.6
12	4.0	297.1	-1.7
13	6.6	341.4	-1.7
14	6.8	358.6	-1.7
15	6.3	345.7	-1.8
16	5.6	345.9	-1.7
17	4.3	352.0	-1.5
18	3.7	5.1	-1.5
19	4.0	356.1	-1.2
20	5.8	344.8	-1.0
21	5.4	359.4	-0.9
22	4.0	350.0	-1.1

22	3.9	356.4	-0.9
23	2.8	347.8	-0.5
24	1.1	354.2	-0.7
1	1.4	335.9	0.3
2	2.7	346.4	0.1
3	1.7	336.2	0.7
4	2.3	335.9	0.3
5	2.9	358.4	-0.3
6	2.2	359.2	-0.2
7	2.9	69.3	-0.5
8	2.7	304.0	-0.5

STOP TIME JULY 9,1990 HOUR 7 MINUTE 49

RELEASE NUMBER 90053 CONTAINMENT PURGE

STARTING TIME JULY 13,1990 HOUR 4 MINUTE 58

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
4	2.2	298.3	1.9
5	1.5	289.6	2.4
6	2.5	307.8	2.1
7	2.9	304.6	1.5
8	3.2	315.9	-0.1
9	3.0	339.2	-0.9
10	3.2	317.3	-1.0
11	3.6	351.7	-1.5
12	3.0	346.9	-1.4
13	3.8	355.4	-1.4
14	5.0	5.3	-1.7
15	5.4	31.2	-1.5
16	4.4	34.9	-1.9
17	4.1	30.9	-1.6
18	4.4	20.7	-1.5
19	3.0	358.5	-1.3
20	2.0	356.7	-0.6
21	2.2	251.2	0.9
22	3.6	194.5	3.1
23	3.4	230.4	3.5
24	3.3	256.4	4.5
1	3.7	233.1	4.3
2	1.9	264.2	5.0
3	2.0	227.3	5.1
4	1.9	275.7	5.6
5	1.4	307.2	4.5
6	3.6	210.3	4.9
7	2.1	257.0	4.7
8	2.2	317.1	1.7
9	1.4	323.1	-0.3
10	1.9	331.4	-1.6
11	2.6	349.2	-1.8
12	3.9	349.9	-1.5
13	3.4	350.7	-1.8
14	3.0	1.0	-1.8
15	2.4	22.0	-1.7
16	2.0	356.8	-1.3
17	2.1	1.3	-1.6
18	1.8	40.0	-1.3
19	1.6	66.6	-1.1
20	2.2	94.1	-0.4
21	1.8	279.4	0.7
22	1.6	126.4	2.7
23	1.2	145.2	3.9
24	1.6	282.3	4.3
1	2.6	163.0	4.0
2	3.3	122.0	2.6
3	2.4	97.6	2.5
4	1.3	245.0	3.5

5	1.3	77.6	2.0
6	1.8	147.9	4.6
7	3.1	197.2	4.0
8	1.7	82.5	0.1
9	2.0	80.3	-1.2
10	4.7	165.7	-1.4
11	8.1	156.5	-1.4
12	9.4	129.0	-1.4
13	12.1	123.0	-1.3
14	10.7	130.7	-1.4
15	9.5	135.5	-1.5
16	9.8	122.8	-1.5
17	10.1	116.0	-1.4
18	9.5	116.9	-1.2
19	6.2	95.2	-1.1
20	5.5	103.4	-0.9
21	1.5	79.1	0.4
22	1.6	287.9	1.4
23	1.8	294.2	1.3
24	1.2	284.0	1.5
1	1.4	295.6	1.7
2	1.0	292.2	1.7
3	0.7	251.3	1.5
4	2.4	224.2	2.5
5	1.6	328.1	2.8
6	1.7	318.0	2.8
7	1.5	95.2	3.2
8	2.4	81.8	0.8

STOP TIME JULY 16,1990 HOUR 7 MINUTE 13

RELEASE NUMBER 90054 CONTAINMENT PURGE

STARTING TIME JULY 19,1990 HOUR 13 MINUTE 3

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
13	8.3	216.6	-0.2
14	3.5	240.8	-0.7

STOP TIME JULY 19,1990 HOUR 13 MINUTE 25

STARTING TIME JULY 19,1990 HOUR 13 MINUTE 51

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
13	8.3	216.6	-0.2
14	3.5	240.8	-0.7
15	4.7	237.6	-0.8
16	2.6	270.5	-1.9
17	1.5	307.5	-1.5
18	1.5	138.2	-0.4
19	3.2	285.7	-0.8
20	2.5	293.6	-0.7
21	2.3	319.2	-0.6
22	2.8	330.9	-0.6
23	0.7	338.5	0.2
24	0.4	17.2	0.2
1	0.6	315.0	0.2
2	1.2	311.0	0.2
3	0.7	266.9	0.8
4	2.0	336.0	0.2
5	3.6	349.0	0.5
6	3.5	345.8	0.4
7	3.8	342.8	0.5
8	4.2	341.5	-0.4
9	3.7	8.3	-0.8
10	3.5	0.9	-0.5
11	4.4	318.9	-0.5
12	4.5	24.9	-1.5
13	4.2	62.6	-1.4
14	3.7	40.9	-1.3
15	3.4	43.7	-1.4
16	2.9	76.1	-1.9
17	2.5	3.6	-1.0
18	2.3	2.2	-0.9
19	1.9	1.6	-0.6
20	1.0	348.4	-0.5
21	1.3	270.6	0.3
22	0.7	314.6	0.9
23	1.1	337.5	0.3
24	0.7	329.1	0.2
1	0.7	45.0	-0.2

2	0.8	23.9	-0.1
3	1.5	12.5	-0.3
4	1.9	328.9	0.5
5	1.5	346.1	0.8
6	2.7	339.9	1.1
	1.4	342.9	0.7
	1.4	2.8	0.1
	0.7	24.3	-0.4
10	1.2	28.8	-0.7
11	3.1	35.5	-1.1
12	4.3	42.2	-1.3
13	6.2	50.4	-1.6
14	4.9	37.1	-1.3
15	5.7	47.9	-1.2
16	4.5	43.3	-1.0
17	4.8	21.1	-0.9
18	2.5	19.2	-0.7
19	6.4	9.5	-0.9
20	6.5	357.9	-1.0
21	5.3	359.5	-0.8
22	4.0	353.0	-0.5
23	3.2	126.0	-0.3
24	5.5	344.0	-0.9
	5.1	338.8	-0.5
2	2.4	327.9	-0.2
3	2.0	312.9	-0.1
4	3.4	321.0	-0.3
5	2.5	320.4	-0.5
6	3.2	321.2	-0.2
7	2.8	322.6	0.1
8	2.0	309.9	-0.3
9	4.0	329.9	-1.1
10	4.5	341.4	-1.4
11	5.2	349.9	-1.6
12	4.8	349.7	-1.7
13	3.9	348.8	-1.7
14	4.0	344.7	-1.6
15	4.1	348.3	-1.6
16	4.8	346.9	-1.5
17	4.6	350.6	-1.4
18	4.4	331.2	-1.4
19	3.9	327.3	-1.5
20	1.8	317.8	-0.8
21	0.1	326.8	0.8
22	0.3	279.1	2.2
23	0.6	300.7	2.1
24	0.3	246.9	3.9
1	0.3	119.7	5.2
2	1.4	161.8	4.4
3	0.6	296.9	3.4
4	0.2	279.1	5.3
5	0.9	216.0	5.4
6	0.3	106.6	5.6
7	0.4	276.7	5.3

STOP TIME JULY 23,1990 HOUR 6 MINUTE 22

RELEASE NUMBER 90055 CONTAINMENT PURGE

STARTING TIME JULY 26,1990 HOUR 16 MINUTE 43

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	5.4	130.0	-1.6
17	2.4	75.0	-1.5
18	3.0	125.0	-1.2
19	3.0	75.0	-0.6
20	3.0	85.0	0.1
21	3.6	145.0	0.5
22	4.2	125.0	1.0
23	5.4	110.0	1.5
24	4.8	130.0	1.5
1	6.0	130.0	1.5
2	4.8	140.0	1.5
3	6.6	160.0	1.5
4	4.2	140.0	1.5
5	6.0	140.0	2.0
6	5.4	130.0	2.0
7	3.6	170.0	1.5
8	6.0	160.0	1.0
9	6.0	160.0	0.5
10	6.0	140.0	-0.5
11	6.6	150.0	-0.7
12	6.0	140.0	-1.0
13	12.1	182.7	-1.2
14	12.2	187.0	-1.3
15	9.2	202.7	-1.3
16	9.4	195.3	-1.0
17	6.5	1[illegible]7.6	-0.9
18	5.0	1[illegible]9.8	-0.9
19	6.6	18[illegible].2	-0.9
20	4.9	169.3	-0.7
21	4.9	162.4	0.1
22	5.7	167.8	0.8
23	4.7	157.8	0.8
24	5.3	170.8	0.6
1	5.6	186.4	-0.3
2	6.2	187.9	-0.2
3	2.2	59.9	-0.2
4	6.3	321.7	-0.1
5	4.8	176.8	-0.3
6	2.4	237.6	-0.1
7	1.5	252.7	0.3
8	3.4	297.3	0.6
9	4.2	135.3	-0.5
10	4.5	121.7	-1.5
11	6.2	126.6	-1.6
12	7.2	128.8	-1.4
13	6.6	146.2	-1.3
14	7.8	155.6	-1.5
15	9.4	184.4	-1.3
16	4.5	264.3	-0.9

17	7.3	321.8	-0.4
18	12.2	0.6	-0.6
19	6.5	29.7	-1.0
20	3.6	30.6	-1.2
[illegible]	1.9	307.6	-0.2
[illegible]	2.6	312.1	0.1
[illegible]	2.5	330.3	0.1
[illegible]	2.3	342.6	0.3
1	7.0	299.7	0.3
2	5.0	340.6	1.1
3	8.0	328.9	0.9
4	6.0	349.1	1.2
5	4.0	348.9	1.3
6	7.0	316.9	0.9
7	5.0	326.9	1.3
8	7.0	336.5	0.3
9	10.0	349.3	-1.2
10	10.0	2.3	-1.1
11	8.0	4.2	-1.3
12	6.5	16.9	-1.4
13	7.5	11.2	-1.4
14	6.1	11.6	-1.4
15	5.8	9.6	-1.4
[illegible]	5.3	11.6	-1.1
17	5.6	13.3	-1.3
18	5.3	12.4	-1.0
19	4.1	12.3	-0.8
20	2.7	7.4	-0.5
21	1.7	318.4	1.2
22	3.6	268.6	2.4
23	2.2	323.1	2.9
24	2.6	345.5	3.0
1	5.4	301.4	2.5
2	3.6	299.6	2.0
3	5.4	301.6	1.4
4	5.4	301.3	1.5
5	4.8	293.6	0.9
6	6.0	321.5	1.6
7	4.2	322.5	1.1
8	6.0	323.0	0.2

STOP TIME JULY 30,1990 HOUR 7 MINUTE 24

RELEASE NUMBER 90056 CONTAINMENT PURGE

STARTING TIME AUG 2 1990 HOUR 18 MINUTE 39

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	3.6	135.0	-1.0
19	3.0	135.0	-0.5
20	3.0	140.0	-0.5
21	3.0	140.0	0.7
22	3.0	140.0	0.9
23	2.7	145.0	0.3
24	2.7	155.0	0.2
1	2.4	165.0	0.5
2	2.7	165.0	2.0
3	3.0	165.0	0.8
4	3.6	165.0	-0.4
5	3.0	155.0	-0.4
6	2.7	145.0	-0.5
7	2.4	135.0	0.6
8	2.7	140.0	0.9
9	3.3	150.0	-0.2
10	3.6	155.0	-0.2
11	3.3	155.0	-0.9
12	3.3	155.0	-0.7
13	3.0	155.0	-0.4
14	2.4	150.0	-0.8
15	2.1	150.0	-0.7
16	2.0	145.0	-1.2
17	2.0	160.0	-0.9
18	2.0	175.0	-0.8
19	2.0	185.0	-0.3
20	2.0	205.0	-0.1
21	2.0	240.0	1.3
22	2.0	260.0	2.2
23	2.4	280.0	2.7
24	3.0	305.0	0.4
1	3.6	340.0	1.5
2	3.6	335.0	1.5
3	3.6	335.0	1.5
4	3.6	330.0	1.5
5	4.2	330.0	1.5
6	4.8	330.0	1.5
7	5.6	330.0	1.0
8	5.1	330.0	0.5
9	5.1	330.0	-0.5
10	4.8	335.0	-0.7
11	5.7	335.0	-1.0
12	6.6	335.0	-1.0
13	7.2	335.0	-1.4
14	6.9	335.0	-1.5
15	6.9	335.0	-1.5
16	6.6	335.0	-1.5
17	5.4	335.0	-1.0
18	4.2	335.0	-1.0

19	3.0	335.0	-0.5
20	3.3	335.0	-0.5
21	3.3	320.0	0.5
22	3.6	320.0	1.0
23	3.6	320.0	1.0
24	3.6	320.0	1.2
1	3.6	340.0	1.0
2	3.6	345.0	1.0
3	3.6	345.0	1.5
4	3.6	350.0	2.0
5	3.9	345.0	1.5
6	3.9	345.0	1.5
7	4.2	340.0	1.0
8	4.5	335.0	0.5
9	4.5	335.0	-0.5
10	4.8	335.0	-0.5
11	5.7	340.0	-0.7
12	6.6	340.0	-1.0
13	7.2	345.0	-1.2
14	6.0	340.0	-1.5
15	4.5	340.0	-1.5
16	3.0	335.0	-1.6
17	3.0	340.0	-1.5
18	3.0	350.0	-1.2
19	3.0	355.0	-1.0
20	2.7	350.0	-0.5
21	2.7	350.0	0.5
22	2.4	345.0	1.0
23	2.1	360.0	1.0
24	2.1	30.0	1.2
1	2.0	50.0	2.0
2	2.0	55.0	2.0
3	2.0	55.0	2.0
4	2.0	60.0	2.0
5	2.0	40.0	2.0
6	2.0	30.0	2.0
7	2.0	10.0	2.0

STOP TIME AUG 6,1990 HOUR 6 MINUTE 11

RELEASE NUMBER 90057 CONTAINMENT PURGE

STARTING TIME AUG 9,1990 HOUR 16 MINUTE 41

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	3.6	195.0	-1.6
18	3.0	165.0	-1.7
19	2.4	135.0	-1.5
20	2.0	95.0	-1.0
21	2.1	110.0	-0.5
22	2.1	125.0	0.5
23	2.4	135.0	0.7
24	2.1	125.0	1.0
1	2.1	125.0	1.5
2	2.0	115.0	1.5
3	2.0	115.0	1.5
4	2.0	115.0	1.5
5	2.0	95.0	1.5
6	2.1	105.0	1.5
7	2.1	115.0	1.5
8	2.4	125.0	1.0
9	3.6	145.0	0.5
10	4.8	165.0	-0.5
	6.0	180.0	-1.0

STOP TIME AUG 10,1990 HOUR 9 MINUTE 24

STARTING TIME AUG 10,1990 HOUR 11 MINUTE 9

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	5.4	205.0	-1.2
12	5.1	235.0	-1.5
13	4.8	255.0	-1.6
14	3.9	210.0	-1.6
15	3.0	160.0	-1.6
16	2.0	100.0	-1.6
17	2.0	90.0	-1.5
18	2.0	80.0	-1.5
19	2.0	70.0	-1.0
20	2.0	70.0	-0.5
21	2.0	70.0	-0.5
22	2.0	65.0	-0.5
23	2.1	60.0	-0.5
24	2.1	60.0	-0.5
1	2.4	60.0	-0.5
2	2.7	50.0	-0.5
3	3.0	40.0	-0.1
4	3.6	30.0	0.5
5	3.3	25.0	0.7
6	3.0	15.0	0.9

7	2.4	10.0	1.0
8	2.7	35.0	0.5
9	2.7	65.0	-0.2
10	3.0	90.0	-0.5
11	3.3	120.0	-0.7
12	3.9	180.0	-1.2
13	4.2	235.0	-1.5
14	3.9	275.0	-1.5
15	3.6	320.0	-1.6
16	3.0	360.0	-1.7
17	3.3	360.0	-1.5
18	3.3	360.0	-1.2
19	3.6	360.0	-1.0
20	3.3	360.0	-0.4
21	3.3	360.0	0.5
22	3.0	360.0	1.2
23	2.7	20.0	1.2
24	2.7	40.0	1.5
1	2.4	45.0	1.5
2	2.7	45.0	2.0
3	2.7	45.0	0.7
4	3.0	45.0	-0.5
5	3.0	50.0	-0.6
6	3.0	55.0	-0.6
7	3.0	65.0	-0.6
8	3.3	65.0	-0.8
9	3.3	65.0	-0.8
10	3.6	65.0	-0.8
11	3.6	70.0	-1.0
12	3.6	70.0	-1.0
13	3.6	75.0	-1.2
14	3.3	80.0	-1.2
15	2.7	80.0	-1.5
16	2.4	85.0	-1.6
17	2.1	65.0	-1.4
18	2.1	45.0	-1.0
19	2.0	25.0	-0.2
20	2.0	25.0	0.5
21	2.1	25.0	1.0
22	2.1	30.0	1.2
23	2.1	30.0	1.5
24	2.1	35.0	2.0
1	2.4	40.0	2.2
2	2.7	50.0	2.2
3	3.3	70.0	2.2
4	3.6	80.0	2.2
5	3.6	100.0	2.2
6	3.6	110.0	2.2
7	3.6	130.0	1.5
8	3.3	125.0	0.7

STOP TIME AUG 13,1990 HOUR 7 MINUTE 35

RELEASE NUMBER 90058 CONTAINMENT PURGE

STARTING TIME AUG 16,1990 HOUR 14 MINUTE 45

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	5.1	174.8	-1.5
15	5.1	168.8	-1.6
16	4.8	187.4	-1.6
17	4.5	183.2	-1.6
18	4.5	168.4	-1.5

STOP TIME AUG 16,1990 HOUR 17 MINUTE 58

RELEASE NUMBER 90059 CONTAINMENT PURGE

STARTING TIME AUG 17,1990 HOUR 13 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
13	8.0	172.0	-1.5
14	6.9	170.0	-1.6
15	7.8	146.0	-1.6
16	9.0	162.0	-1.4
17	7.5	135.0	-1.4
18	6.0	172.0	-1.0
19	4.8	174.0	-0.5
20	5.1	166.0	0.8
21	5.4	165.0	1.2
22	6.0	178.0	1.3
23	5.4	186.0	0.8
24	5.1	186.0	0.9
1	4.8	186.0	1.4

STOP TIME AUG 18,1990 HOUR 0 MINUTE 49

STARTING TIME AUG 18,1990 HOUR 3 MINUTE 6

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
3	4.5	196.0	1.1
4	4.2	201.0	1.2
5	4.5	207.0	1.2
6	4.5	191.0	1.1
7	4.8	198.0	0.5
8	5.1	194.0	-0.5
9	5.7	208.0	-0.7
10	6.0	195.0	-1.2
11	5.4	175.0	-1.4
12	5.1	180.0	-1.6
13	4.8	167.0	-1.6
14	5.7	167.0	-1.7
15	6.6	175.0	-1.7
16	7.2	159.0	-1.5
17	6.0	139.0	-1.4
18	5.4	172.0	-1.0
19	4.8	184.0	-0.6
20	4.8	207.0	-0.1
21	4.8	200.0	0.5
22	4.8	176.0	1.2
23	4.2	190.0	2.4
24	3.9	183.0	1.1
1	3.6	208.0	1.5
2	3.6	188.0	1.5
3	3.6	168.0	1.7
4	3.6	148.0	2.0

5	3.3	168.0	1.5
6	2.7	188.0	1.0
7	2.4	208.0	0.5
8	2.1	217.0	-0.5
9	2.1	227.0	-0.8
10	2.0	237.0	-1.0
11	2.7	237.0	-1.0
12	3.9	237.0	-1.1
13	4.8	237.0	-1.4
14	4.5	248.0	-1.5
15	4.5	263.0	-1.4
16	4.2	278.0	-1.4
17	4.5	283.0	-1.2
18	5.1	283.0	-1.2
19	5.4	288.0	-1.2
20	5.1	293.0	-1.2
21	5.1	303.0	-1.0
22	4.8	308.0	-1.0
23	4.8	288.0	-0.8
24	4.8	268.0	-0.8
1	4.8	250.0	-1.0
2	4.5	245.0	-1.0
3	4.2	245.0	-1.0
4	3.6	240.0	-1.0
5	3.6	291.0	-1.0
6	3.6	276.0	-1.0
7	3.6	297.0	-1.0
8	3.9	341.0	-1.0
9	4.2	330.0	-1.0
10	4.8	313.0	-1.0
11	5.7	314.0	-1.0
12	6.6	296.0	-1.0
13	7.2	298.0	-1.0
14	6.9	300.0	-1.0
15	6.3	323.0	-1.0
16	6.0	356.0	-1.0
17	5.1	7.0	-1.0
18	4.2	8.0	-1.0
19	3.0	355.0	-1.0
20	3.3	322.0	-1.0
21	3.3	331.0	-1.0
22	3.6	308.0	-1.0
23	3.0	0.0	-1.0
24	2.7	2.0	-1.0
1	2.4	325.0	-1.0
2	2.7	315.0	-1.0
3	2.7	310.0	-1.0
4	3.0	305.0	-1.0
5	3.6	320.0	-1.0
6	3.9	335.0	-1.0
7	4.2	355.0	-1.0
8	3.6	340.0	-1.0
9	3.0	325.0	-1.0

STOP TIME AUG 21,1990 HOUR 8 MINUTE 17

RELEASE NUMBER 90060 CONTAINMENT PURGE

STARTING TIME AUG 23,1990 HOUR 18 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT11C DEG C
18	2.5	160.0	-1.0
19	4.8	175.0	-0.7
20	4.8	165.0	-0.5
21	4.8	155.0	-0.5
22	4.8	145.0	-0.6
23	3.9	115.0	-0.6
24	3.0	85.0	-0.5
1	2.4	65.0	2.0
2	3.0	35.0	1.4
3	3.9	5.0	1.7
4	4.8	335.0	1.8
5	4.2	25.0	2.1
6	3.9	75.0	2.1
7	3.6	130.0	1.1
8	3.3	120.0	-0.5
9	2.7	120.0	-1.0
10	2.4	115.0	-1.2
11	3.6	125.0	-1.0
12	4.8	135.0	-1.4
13	5.4	145.0	-1.6
14	4.8	155.0	-1.7
15	4.2	160.0	-1.7
16	3.6	165.0	-1.6
17	3.0	172.0	-1.6
18	2.7	159.0	-1.5
19	2.4	159.0	-0.9
20	3.3	155.0	-0.2
21	4.2	135.0	1.1

STOP TIME AUG 24,1990 HOUR 20 MINUTE 11

RELEASE NUMBER 90061 CONTAINMENT PURGE

STARTING TIME AUG 26,1990 HOUR 6 MINUTE 36

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
6	4.2	153.0	1.5
7	4.2	165.0	0.5
8	4.8	170.0	-0.5
9	5.4	170.0	-1.1
10	6.0	175.0	-1.4
11	6.3	165.0	-1.6
12	6.3	155.0	-1.8
13	6.6	145.0	-1.8
14	6.9	145.0	-1.0
15	6.9	145.0	-1.7
16	7.2	145.0	-1.9
17	6.6	140.0	-2.0
18	5.7	140.0	-1.3
19	4.8	135.0	-0.6
20	5.4	135.0	-0.4
21	5.7	135.0	0.8
22	6.0	135.0	1.0
[illegible]	5.1	145.0	1.2

STOP TIME AUG 26,1990 HOUR 22 MINUTE 49

RELEASE NUMBER 90062 CONTAINMENT PURGE

STARTING TIME AUG 27,1990 HOUR 0 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	3.6	145.0	1.2
2	3.9	145.0	1.3

STOP TIME AUG 27,1990 HOUR 1 MINUTE 50

RELEASE NUMBER 90063 CONTAINMENT PURGE

STARTING TIME AUG 27,1990 HOUR 2 MINUTE 12

TIME HOUR	WS10 MPH	WD10 DEG	DT10 DEG C
-	3.9	145.0	1.3
3	3.9	155.0	1.8
4	4.2	160.0	1.7
5	3.9	165.0	1.6
6	3.9	168.0	1.7
7	3.6	167.0	1.7

STOP TIME AUG 27,1990 HOUR 6 MINUTE 29

RELEASE NUMBER 20064 CONTAINMENT PURGE

STARTING TIME AUG 27,1990 HOUR 6 MINUTE 29

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
6	3.9	168.0	1.7
7	3.6	167.0	1.7
8	4.2	177.0	-0.8
9	4.8	169.0	-1.1
10	5.4	158.0	-1.5

STOP TIME AUG 27,1990 HOUR 9 MINUTE 43

RELEASE NUMBER 90065 CONTAINMENT PURGE

STARTING TIME AUG 27,1990 HOUR 13 MINUTE 51

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
13	3.6	125.0	-1.8
14	4.5	121.0	-1.9
15	5.4	114.0	-2.0

STOP TIME AUG 27,1990 HOUR 14 MINUTE 5

STARTING TIME AUG 27,1990 HOUR 14 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	4.5	121.0	-1.9
15	5.4	114.0	-2.0
16	6.0	131.0	-1.7
17	5.4	162.0	-1.7
18	4.5	184.0	-1.7

STOP TIME AUG 27,1990 HOUR 17 MINUTE 56

RELEASE NUMBER 30066 CONTAINMENT PURGE

STARTING TIME AUG 28,1990 HOUR 2 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
2	3.3	138.0	1.2
3	3.0	160.0	1.5
4	2.4	116.0	1.5
5	2.4	196.0	1.5
6	2.4	155.0	2.0
7	2.4	185.0	2.0

STOP TIME AUG 28,1990 HOUR 6 MINUTE 0

RELEASE NUMBER 90067 CONTAINMENT PURGE

STARTING TIME AUG 28,1990 HOUR 6 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
-	2.4	155.0	2.0
7	2.4	185.0	2.0
8	3.0	176.0	0.5
9	3.3	252.0	-0.5
10	3.6	267.0	-1.1

STOP TIME AUG 28,1990 HOUR 9 MINUTE 53

RELEASE NUMBER 90068 CONTAINMENT PURGE

STARTING TIME AUG 28,1990 HOUR 11 MINUTE 12

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
	3.9	291.0	-1.5
12	3.9	360.0	-1.5
13	4.2	15.0	-1.6
14	3.9	300.0	-1.7
15	3.9	351.0	-1.9
16	3.0	5.0	-1.9
17	3.0	348.0	-1.6
18	3.0	5.0	-1.2
19	3.0	20.0	-0.5
20	3.6	341.0	-0.1

STOP TIME AUG 28,1990 HOUR 19 MINUTE 30

RELEASE NUMBER 90069 CONTAINMENT PURGE

STARTING TIME AUG 28,1990 HOUR 19 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
19	3.0	20.0	-0.5
20	3.6	341.0	-0.1
21	3.9	346.0	0.5
22	4.2	311.0	0.9
23	3.6	330.0	1.2
24	3.0	280.0	1.0

STOP TIME AUG 28,1990 HOUR 23 MINUTE 40

RELEASE NUMBER 90070 CONTAINMENT PURGE

STARTING TIME AUG 28,1990 HOUR 23 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT10 DEG C
23	3.6	330.0	1.2
24	3.0	280.0	1.0
1	2.4	15.0	1.5
2	2.4	5.0	1.5

STOP TIME AUG 29,1990 HOUR 1 MINUTE 25

RELEASE NUMBF 90071 CONTAINMENT PURGE

STARTING TI AUG 29,1990 HOUR 1 MINUTE 25

TIME HOUR	WS10 MPH	WD DEG	DT10 DEG C
1	2.4	15.0	1.5
2	2.4	5.0	1.5
3	2.4	350.0	1.5
4	2.4	335.0	1.5
5	2.1	305.0	1.5
6	2.1	275.0	1.5
7	2.0	245.0	1.5
8	2.1	250.0	-0.5
9	2.1	260.0	-0.9
10	2.4	265.0	-1.0
11	3.0	245.0	-1.4
12	3.6	225.0	-1.6
13	4.2	205.0	-1.6
14	4.5	235.0	-1.7
15	4.5	265.0	-1.8

STOP TIME AUG 29,1990 HOUR 14 MINUTE --

RELEASE NUMBER 90072 CONTAINMENT PURGE

STARTING TIME SEPT 2,1990 HOUR 1 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
	3.0	90.0	-1.0
2	2.7	70.0	-1.0
3	2.7	50.0	-1.0
4	2.4	30.0	-1.0
5	3.0	50.0	-1.0
6	3.6	70.0	-1.0
7	4.2	90.0	-1.0
8	4.8	90.0	-1.2
9	3.0	90.0	-1.4
10	2.4	90.0	-1.6
11	3.9	105.0	-1.6
12	5.1	125.0	-1.7
13	5.4	140.0	-1.7
14	5.1	135.0	-1.7
15	4.5	135.0	-1.7
16	4.2	130.0	-1.7
17	3.3	105.0	-1.5
18	3.3	75.0	-1.2
19	3.0	50.0	-1.0
20	3.3	70.0	-0.8
21	3.3	90.0	-0.6
22	4.2	110.0	-0.4
23	3.9	115.0	1.0
24	3.9	115.0	1.5
1	3.6	115.0	2.0
2	3.9	115.0	2.0
3	4.5	115.0	2.0
4	4.8	115.0	2.0
5	4.2	110.0	2.0
6	3.6	110.0	2.0
7	3.0	105.0	-0.5
8	3.3	130.0	-1.0
9	3.3	160.0	1.2
10	3.6	185.0	-1.7
11	4.5	180.0	-1.8
12	5.1	180.0	-1.8
13	6.6	175.0	-1.9
14	6.9	175.0	-1.8
15	7.5	175.0	-1.8
16	7.8	175.0	-1.7
17	6.6	170.0	-1.0
18	5.4	170.0	-0.8
19	4.2	165.0	-0.5
20	4.8	165.0	0.5
21	5.4	165.0	0.7
22	6.0	165.0	1.0
23	5.4	140.0	1.5
24	5.1	120.0	1.5
1	4.8	95.0	2.0

2	4.2	130.0	2.0
3	3.9	165.0	2.0
4	3.6	195.0	2.0
5	3.3	190.	2.0
6	3.3	190.0	2.0
7	3.0	185.0	-0.5
8	3.9	195.0	-0.8
9	5.1	205.0	-1.2

STOP TIME SEPT 4,1990 HOUR 8 MINUTE 45

RELEASE NUMBER 90073 CONTAINMENT PURGE

STARTING TIME SEPT 6,1990 HOUR 16 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
16	5.4	260.0	-1.7
17	5.7	290.0	-1.5
18	5.7	325.0	-1.0
19	6.0	355.0	-1.0
20	4.8	350.0	-0.5
21	3.9	350.0	1.0
22	3.0	345.0	2.0
23	3.0	275.0	2.0
24	3.0	205.0	2.0
1	3.0	15.0	2.0
2	2.4	15.0	2.2
3	2.1	15.0	2.4
4	2.1	15.0	2.6
5	2.1	10.0	2.8
6	2.1	5.0	3.0
7	2.4	355.0	-0.5
8	2.1	45.0	-0.9
9	2.1	90.0	-1.2

STOP TIME SEPT 7,1990 HOUR 8 MINUTE 17

STARTING TIME SEPT 7,1990 HOUR 11 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	2.4	175.0	-1.6
12	2.7	225.0	-1.7
13	3.0	265.0	-1.8
14	2.4	235.0	-1.8
15	2.1	205.0	-1.7
16	2.1	175.0	-1.7
17	3.0	220.0	-1.5
18	4.2	265.0	-1.4
19	4.8	310.0	-1.0
20	4.5	320.0	-0.5
21	4.5	330.0	1.0
22	4.2	330.0	1.4
23	3.9	345.0	2.0
24	3.9	355.0	2.0
1	3.6	10.0	0.6
2	3.0	20.0	0.5
3	2.7	30.0	1.5
4	2.4	30.0	2.0
5	2.4	55.0	2.0
6	2.4	75.0	2.0
7	2.4	80.0	-0.5

8	2.1	90.0	-0.7
9	2.1	105.0	-1.0
10	2.0	115.0	-1.5
11	2.0	175.0	-1.6
12	2.0	235.0	-1.7
	2.0	310.0	-1.8
	2.5	330.0	-1.8
5	2.5	340.0	-1.9
6	3.0	345.0	-1.9
7	2.5	355.0	-1.7
18	2.5	5.0	-1.3
19	2.0	15.0	-1.0
20	2.0	40.0	0.5
21	2.0	60.0	1.0
22	2.0	75.0	1.5
23	2.0	75.0	2.0
24	2.0	75.0	2.0
1	2.0	70.0	2.0
2	2.0	100.0	2.2
3	2.1	120.0	2.4
4	2.4	145.0	2.6
5	2.1	135.0	2.8
6	2.1	125.0	3.0
7	2.1	115.0	-0.5
8	2.1	110.0	-0.9
9	2.1	110.0	-1.2
10	2.1	105.0	-1.5
11	2.1	120.0	-1.6
12	2.1	135.0	-1.7
13	2.4	145.0	-1.8
14	2.4	145.0	-1.8
15	2.4	145.0	-1.7
16	2.4	145.0	-1.7
17	2.4	150.0	-1.5
18	2.4	150.0	-1.4
19	2.4	155.0	-1.2
20	2.4	160.0	-1.0
21	2.4	160.0	-0.8
22	2.4	165.0	-0.6
23	2.4	115.0	-0.6
24	2.4	65.0	-0.6
1	3.0	25.0	-0.6
2	3.0	40.0	0.5
3	3.0	50.0	1.5
4	3.0	65.0	2.0
5	3.3	50.0	2.0
6	3.3	40.0	2.0
7	3.6	20.0	-0.5
8	3.0	30.0	-0.7

STOP TIME SEPT 10,1990 HOUR 7 MINUTE 25

RELEASE NUMBER 90074 CONTAINMENT PURGE

STARTING TIME SEPT 13,1990 HOUR 13 MINUTE 54

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	9.0	185.0	-1.7
15	9.0	185.0	-1.7
16	9.0	185.0	-1.7
17	8.1	185.0	-1.5
18	6.9	185.0	-1.2
19	6.0	185.0	-1.0
20	5.4	185.0	0.5
21	4.8	185.0	1.0
22	4.2	185.0	1.0
23	6.6	235.0	1.0
24	8.4	275.0	1.2
1	10.8	330.0	-1.0
2	9.9	335.0	-1.0
3	9.0	335.0	-1.0
4	8.4	340.0	-0.8
5	7.5	335.0	-0.8
6	6.6	335.0	-0.6
7	6.0	330.0	-0.5
8	7.2	335.0	-0.6
9	8.4	340.0	-0.7
10	9.6	345.0	-0.8
11	8.4	330.0	-1.0
12	7.2	315.0	-1.4
13	6.0	305.0	-1.7
14	7.2	315.0	-1.6
15	8.4	325.0	-1.5
16	9.6	335.0	-1.4
17	7.2	340.0	-1.0
18	4.8	340.0	-0.8
19	3.0	345.0	-0.5
20	2.4	350.0	0.5
21	2.0	5.0	1.5
22	2.0	10.0	1.5
23	2.0	15.0	1.5
24	2.1	25.0	2.0
1	2.4	195.0	2.0
2	2.4	190.0	2.5
3	2.4	190.0	3.0
4	2.4	185.0	3.0
5	2.4	185.0	3.5
6	2.4	185.0	3.8
7	2.4	185.0	2.0
8	3.6	190.0	0.5
9	4.8	190.0	-0.5
10	6.0	195.0	-0.8
11	6.0	205.0	-1.0
12	6.0	215.0	-1.2
13	6.0	225.0	-1.5

14	6.0	245.0	-1.6
15	6.0	270.0	-1.7
16	6.0	290.0	-1.7
17	5.4	320.0	-1.2
18	4.8	345.0	-0.8
[illegible]	4.2	5.0	-0.6
[illegible]	5.1	5.0	0.5
21	6.3	5.0	1.0
22	7.2	5.0	2.0
23	6.3	360.0	2.5
24	5.1	360.0	2.8
1	4.2	360.0	2.0
2	4.5	355.0	2.0
3	4.5	350.0	2.3
4	4.8	340.0	2.5
5	4.5	345.0	2.5
6	4.5	355.0	2.8
7	4.2	355.0	1.0
8	3.6	5.0	-0.5
9	3.3	15.0	-0.8
10	3.0	25.0	-1.2
11	3.9	15.0	-1.4
12	3.9	10.0	-1.6
[illegible]	4.2	5.0	-1.7
14	3.9	355.0	-1.7
15	3.9	15.0	-1.7
16	3.6	25.0	-1.7
17	3.0	30.0	-1.2
18	2.4	40.0	-0.8
[illegible]	2.0	45.0	-0.6
20	2.1	50.0	0.5
21	2.1	60.0	1.0
22	2.4	65.0	1.5
23	2.7	75.0	2.0
24	3.3	85.0	2.5
1	3.6	85.0	3.0
2	3.0	105.0	3.0
3	2.4	125.0	3.0
4	2.0	135.0	3.0
5	2.4	120.0	2.5
6	2.7	105.0	2.5
7	3.0	95.0	1.0

STOP TIME SEPT 17,1990 HOUR 6 MINUTE 15

RELEASE NUMBER 90075 CONTAINMENT PURGE

STARTING TIME SEPT 20,1990 HOUR 14 MINUTE 46

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
4	6.3	150.0	-1.7
15	6.9	150.0	-1.7
16	7.2	155.0	-1.7
17	6.6	160.0	-1.2
18	5.4	160.0	-1.0
19	4.2	155.0	-0.6
20	4.5	160.0	0.5
21	4.5	150.0	1.0
22	4.8	145.0	1.6
23	5.1	150.0	2.0
24	5.1	150.0	2.0
1	5.4	155.0	2.5
2	5.7	160.0	2.2
3	5.7	160.0	1.8
4	6.0	165.0	1.6
5	5.4	160.0	1.5
6	5.1	160.0	0.5
7	4.8	155.0	-0.5
8	5.1	172.0	-0.7
9	5.7	179.0	-0.9
10	6.0	205.0	-1.2

STOP TIME SEPT 21,1990 HOUR 9 MINUTE 10

STARTING TIME SEPT 21,1990 HOUR 11 MINUTE 1

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	5.7	210.0	-1.4
12	5.1	210.0	-1.6
13	4.8	215.0	-1.8
14	4.8	215.0	-1.7
15	4.8	215.0	-1.6
16	4.8	215.0	-1.5
17	4.5	235.0	-1.2
18	3.9	270.0	-1.0
19	3.6	290.0	-0.5
20	4.5	290.0	0.5
21	5.4	290.0	1.0
22	6.0	290.0	-0.6
23	5.7	295.0	-0.7
24	5.7	310.0	-0.8
1	5.4	315.0	-1.0
2	6.0	320.0	-1.0
3	6.6	320.0	-1.0
4	7.2	325.0	-1.0

5	6.9	320.0	-1.0
6	6.3	320.0	-1.0
7	6.0	315.0	-1.0
8	6.9	320.0	-1.2
9	7.8	320.0	-1.3
10	8.4	325.0	-1.4
11	9.6	330.0	-1.4
12	10.8	330.0	-1.5
13	12.0	335.0	-1.5
14	12.9	340.0	-1.5
15	13.8	340.0	-1.5
16	14.4	345.0	-1.4
17	15.0	350.0	-1.3
18	15.6	360.0	-1.2
19	16.2	5.0	-1.0
20	14.7	360.0	-1.0
21	13.2	360.0	-1.0
22	12.0	355.0	-1.0
23	10.2	355.0	-1.0
24	9.0	355.0	-1.0
1	9.0	355.0	-0.5
2	7.8	355.0	0.5
3	6.6	355.0	1.0
4	5.4	355.0	1.5
5	4.5	355.0	2.0
6	3.6	355.0	3.0
7	3.0	355.0	3.5
8	3.3	5.0	0.5
9	3.3	15.0	-0.5
10	3.6	25.0	-1.6
11	3.6	25.0	-1.6
12	3.6	25.0	-1.7
13	3.6	25.0	-1.8
14	3.6	5.0	-1.7
15	3.6	345.0	-1.6
16	3.6	335.0	-1.6
17	3.3	315.0	-1.0
18	2.7	290.0	-0.8
19	2.4	270.0	-0.5
20	2.4	240.0	0.5
21	2.4	210.0	1.5
22	2.4	180.0	2.5
23	3.3	175.0	2.5
24	4.2	175.0	3.0
1	4.8	175.0	2.0
2	4.5	170.0	2.5
3	3.9	170.0	3.0
4	3.6	165.0	3.5
5	4.5	170.0	2.5
6	5.4	170.0	2.0
7	6.0	175.0	1.5

STOP TIME SEPT 24,1990 HOUR 6 MINUTE 6

RELEASE NUMBER 90076 CONTAINMENT PURGE

STARTING TIME SEPT 27,1990 HOUR 13 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
-	7.2	155.0	-1.6
14	6.6	150.0	-1.6
15	6.0	150.0	-1.6
16	5.4	145.0	-1.6
17	5.1	145.0	-1.2
18	5.1	145.0	-0.8
19	4.8	145.0	-0.5
20	4.5	160.0	0.5
21	4.5	170.0	1.0
22	4.2	185.0	2.0
23	4.5	180.0	2.4
24	5.1	180.0	2.6
-	5.4	175.0	2.0
2	4.8	180.0	2.5
3	4.2	180.0	3.0
4	3.6	185.0	3.5
5	4.5	180.0	2.5
6	5.2	170.0	2.0
7	6.0	165.0	1.4
8	6.0	175.0	0.5
9	6.0	185.0	-0.5
10	6.0	195.0	-1.6
11	6.3	190.0	-1.6
12	6.9	190.0	-1.6
13	7.2	185.0	-1.7
14	6.0	180.0	-1.7
15	4.8	180.0	-1.6
16	3.6	175.0	-1.6
17	3.9	180.0	-1.0
18	3.9	180.0	-0.5
19	4.2	185.0	0.5
20	3.6	190.0	1.0
21	3.0	200.0	2.0
22	2.4	205.0	2.5
23	2.7	255.0	3.0
24	2.7	310.0	3.0
1	3.0	5.0	4.0
2	3.0	10.0	4.0
3	3.0	10.0	4.0
4	3.0	15.0	4.0
5	3.0	29.0	3.5
6	3.0	42.0	3.0
7	3.0	55.0	2.0
8	2.7	63.0	-0.5
9	2.7	76.0	-1.0
10	2.4	90.0	-1.6
11	2.7	107.0	-1.7
12	2.7	124.0	-1.7
13	3.0	40.0	-1.8

14	2.7	70.0	-1.7
15	2.7	100.0	-1.7
16	2.4	125.0	-1.7
17	2.1	95.0	-1.0
18	2.1	70.0	-0.7
19	2.0	40.0	0.5
20	2.1	70.0	1.5
21	2.1	100.0	2.0
22	2.4	125.0	3.0
23	2.4	130.0	3.0
24	2.4	140.0	3.0
1	2.4	145.0	4.0
2	2.7	140.0	4.0
3	2.7	130.0	4.0
4	3.0	125.0	4.0
5	3.0	125.0	4.0
6	3.0	125.0	3.5
7	3.0	125.0	1.0
8	3.9	130.0	-0.5
9	5.1	140.0	-1.0
10	6.0	145.0	-1.6
11	6.3	155.0	-1.6
12	6.9	165.0	-1.7
13	7.2	175.0	-1.7
14	6.6	175.0	-1.6
15	6.0	175.0	-1.6
16	5.4	175.0	-1.6
17	5.4	163.0	-1.0
18	5.4	149.0	-0.5
19	5.4	135.0	1.0
20	5.7	140.0	1.2
21	6.3	150.0	1.4
22	6.6	155.0	1.4
23	6.6	155.0	1.8
24	6.6	155.0	2.0
1	5.4	205.0	1.5
2	4.2	225.0	2.5
3	3.3	245.0	3.5
4	2.4	265.0	4.0
5	2.4	270.0	4.0

STOP TIME OCT 1,1990 HOUR 4 MINUTE 54

RELEASE NUMBER 90077 CONTAINMENT PURGE

STARTING TIME OCT 4,1990 HOUR 17 MINUTE 2

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	5.1	210.0	-1.2
18	4.2	190.0	0.5
19	3.6	175.0	1.5
20	3.9	175.0	2.0
21	3.9	175.0	2.5
22	4.2	175.0	2.5
23	2.5	180.0	2.5
24	2.5	190.0	2.0
1	6.0	195.0	1.4
2	6.0	195.0	1.4
3	5.0	195.0	1.4
4	5.0	195.0	1.4
5	5.0	200.0	1.4
6	6.0	200.0	0.5
7	6.0	205.0	-0.6
8	7.2	205.0	-1.0
9	8.4	205.0	-1.2
10	9.6	205.0	-1.6
11	9.6	210.0	-1.6
12	9.6	210.0	-1.6
13	9.6	215.0	-1.6

STOP TIME OCT 5,1990 HOUR 12 MINUTE 53

RELEASE NUMBER 90078 CONTAINMENT PURGE

STARTING TIME OCT 5,1990 HOUR 18 MINUTE 14

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	5.4	185.0	0.6
19	4.8	175.0	1.5
20	5.7	170.0	1.0
21	6.6	170.0	1.0

STOP TIME OCT 5,1990 HOUR 20 MINUTE 34

STARTING TIME OCT 5,1990 HOUR 21 MINUTE 35

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
21	6.6	170.0	1.0
22	7.2	165.0	1.0
23	7.5	175.0	1.0
24	7.5	185.0	1.0
1	7.8	195.0	1.4
2	6.9	200.0	1.8
3	6.0	210.0	2.2
4	5.4	215.0	2.5
5	6.9	255.0	2.0
6	8.4	300.0	1.5
7	9.6	335.0	-0.6
8	9.6	345.0	-0.8
9	9.6	355.0	-1.0
10	9.6	5.0	-1.2
11	8.4	360.0	-1.4
12	7.2	360.0	-1.6
13	6.0	355.0	-1.8
14	6.3	355.0	-1.8
15	6.9	355.0	-1.7
16	7.2	355.0	-1.6
17	7.8	355.0	-1.0
18	8.4	355.0	0.1
19	9.0	355.0	-0.2
20	8.7	350.0	-0.1
21	8.7	350.0	-0.4
22	8.4	345.0	-1.0
23	9.0	350.0	-1.0
24	9.6	350.0	-1.0
1	10.2	355.0	-1.0
2	9.6	350.0	-1.0
3	9.0	350.0	-1.0
4	8.4	345.0	-1.0
5	9.6	345.0	-1.0
6	10.8	345.0	-1.0
7	11.4	345.0	-1.0

8	10.8	340.0	-1.0
9	9.6	340.0	-1.0
10	8.4	335.0	-1.0
11	8.4	345.0	-1.2
12	8.4	355.0	-1.4
13	8.4	5.0	-1.6
14	6.9	10.0	-1.6
15	5.4	10.0	-1.6
16	4.2	15.0	-1.6
17	3.9	10.0	-1.0
18	3.9	10.0	-0.5
19	3.6	5.0	1.5
20	3.3	10.0	2.0
21	3.3	10.0	2.5
22	3.0	15.0	2.5
23	3.6	10.0	2.0
24	4.2	360.0	1.4
1	4.8	355.0	-1.0
2	4.8	355.0	-1.0
3	4.8	355.0	-1.0
4	4.8	355.0	-1.0
5	5.1	350.0	-1.0
6	5.1	350.0	-1.0
7	5.4	345.0	-1.0
8	5.7	360.0	-1.0
9	5.7	10.0	-1.0
10	6.0	25.0	-1.0
11	6.0	20.0	-1.2
12	6.0	10.0	-1.2
13	6.0	5.0	-1.2
14	6.0	360.0	-1.4
15	6.0	360.0	-1.4

STOP TIME OCT 8,1990 HOUR 14 MINUTE 18

RELEASE NUMBER 90079 CONTAINMENT PURGE

STARTING TIME OCT 11,1990 HOUR 13 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	6.6	165.0	-1.6
15	5.6	185.0	-1.4
16	4.6	205.0	-1.2
17	3.6	225.0	-1.0
18	4.2	260.0	-0.6
19	4.8	290.0	0.5
20	5.4	325.0	1.5
21	6.0	325.0	1.4
22	6.6	325.0	1.4
23	7.2	325.0	1.4
24	6.9	330.0	1.4
1	6.3	340.0	1.4
2	7.2	345.0	1.0
3	6.6	340.0	1.0
4	6.0	330.0	1.2
5	5.4	325.0	1.4
6	5.4	320.0	1.8
7	5.4	320.0	2.0
8	5.4	315.0	-0.6
9	5.1	315.0	-1.0
10	5.1	315.0	-1.2
11	4.8	315.0	-1.6
12	4.5	330.0	-1.6
13	3.3	350.0	-1.7
14	3.0	5.0	-1.8
15	3.0	55.0	-1.6
16	3.0	100.0	-1.6
17	3.0	145.0	-1.6
18	3.0	145.0	-0.6
19	3.0	145.0	1.0
20	3.3	145.0	1.5
21	3.3	145.0	1.5
22	4.2	145.0	2.5
23	4.8	150.0	2.5
24	5.4	150.0	2.5
1	6.0	155.0	-0.8
2	6.9	155.0	-0.6
3	8.1	155.0	-0.6
4	9.0	155.0	-0.5
5	8.4	150.0	0.5
6	7.8	150.0	1.4
7	7.2	145.0	-0.6
8	7.8	150.0	-0.8
9	8.4	160.0	-0.8
10	9.0	165.0	-1.0
11	8.1	170.0	-1.2
12	6.9	170.0	-1.5
13	6.0	175.0	-1.8

14	5.7	180.0	-1.7
15	5.1	180.0	-1.6
16	4.8	165.0	-1.0
17	5.1	215.0	-0.6
18	5.1	245.0	1.5
19	5.4	270.0	1.8
20	5.7	305.0	1.8
21	6.3	335.0	1.4
22	6.6	5.0	1.4
23	6.0	360.0	1.4
24	5.4	360.0	2.0
1	4.8	355.0	1.4
2	5.1	330.0	1.8
3	5.1	305.0	2.5
4	5.4	285.0	3.0
5	4.8	290.0	3.0
6	4.2	300.0	3.0
7	3.8	305.0	-0.5
8	4.5	300.0	-1.0
9	5.1	290.0	-1.0
10	6.0	285.0	-1.0
11	7.5	300.0	-1.2
12	9.0	310.0	-1.3
13	10.2	325.0	-1.4
14	10.8	320.0	-1.4
15	11.4	320.0	-1.4
16	12.0	315.0	-1.4
17	9.0	300.0	-1.0
18	6.0	290.0	-0.4
19	3.6	270.0	1.5
20	3.0	265.0	3.0
21	2.4	265.0	4.0
22	1.8	260.0	4.0
23	2.1	260.0	4.0
24	2.1	260.0	4.0
1	2.4	255.0	4.0
2	2.4	250.0	4.0
3	2.4	250.0	4.0
4	2.4	245.0	3.5
5	2.4	210.0	2.5
6	2.4	175.0	1.5

STOP TIME OCT 15,1990 HOUR 5 MINUTE 45

RELEASE NUMBER 90080 CONTAINMENT PURGE

STARTING TIME OCT 18,1990 HOUR 20 MINUTE 10

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	3.0	125.0	2.0
21	3.0	125.0	2.5
22	3.0	125.0	3.0
23	3.3	120.0	3.0
24	3.3	120.0	3.5
1	3.6	115.0	1.5

STOP TIME OCT 19,1990 HOUR 0 MINUTE 22

STARTING TIME OCT 19,1990 HOUR 0 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	3.6	115.0	1.5
2	3.9	130.0	1.5
3	4.5	145.0	2.0
4	4.8	155.0	2.5
5	4.8	150.0	3.0
6	4.8	150.0	3.5
7	4.8	145.0	1.8
8	5.7	145.0	-0.6
9	6.3	145.0	-0.8
10	7.8	145.0	-1.2
11	8.7	140.0	-1.5
12	9.3	140.0	-1.6
13	10.2	135.0	-1.5
14	10.5	140.0	-1.5
15	11.1	150.0	-1.4
16	11.4	155.0	-1.2
17	10.2	150.0	-1.0
18	9.0	140.0	-0.8
19	7.8	135.0	-0.4
20	7.8	135.0	0.5
21	7.8	135.0	1.0
22	7.8	135.0	1.0
23	7.2	140.0	1.4
24	6.5	150.0	1.4
1	6.0	155.0	-0.6

STOP TIME OCT 20,1990 HOUR 0 MINUTE 54

RELEASE NUMBER 90081 CONTAINMENT PURGE

STARTING TIME OCT 21,1990 HOUR 12 MINUTE 45

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
12	5.1	315.0	-1.5
13	6.0	315.0	-1.5
14	5.4	310.0	-1.6
15	4.8	310.0	-1.6
16	4.2	305.0	-1.7
17	3.6	240.0	-1.0
18	3.0	175.0	-0.4
19	1.5	125.0	1.5
20	2.0	130.0	2.0
21	2.5	130.0	2.5
22	3.5	135.0	3.5
23	3.5	145.0	3.5
24	3.5	155.0	3.5
1	4.8	165.0	1.5
2	4.5	165.0	2.0
3	4.5	165.0	2.5
4	4.2	165.0	3.0
5	4.8	165.0	3.5
6	5.4	165.0	3.5
7	6.0	165.0	1.4
8	6.3	175.0	-0.6
9	6.9	185.0	-0.8
10	7.2	195.0	-1.2
11	6.9	185.0	-1.6

STOP TIME OCT 22,1990 HOUR 10 MINUTE 28

RELEASE NUMBER 90082 CONTAINMENT PURGE

STARTING TIME OCT 24,1990 HOUR 20 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	2.0	325.0	3.0
21	2.0	315.0	4.0
22	2.0	305.0	4.0
23	2.0	295.0	4.0
24	2.0	285.0	4.0
1	2.0	265.0	4.0
2	2.0	255.0	4.0
3	2.1	245.0	4.0
4	2.4	235.0	4.0
5	3.0	225.0	4.0
6	3.0	215.0	4.0
7	3.6	205.0	3.5
8	4.2	195.0	-0.5
9	4.8	180.0	-1.0
10	5.4	165.0	-1.2
11	5.7	165.0	-1.4
12	5.7	165.0	-1.4
13	6.0	165.0	-1.5
14	5.1	160.0	-1.5
15	4.2	160.0	-1.6
16	3.6	155.0	-1.6
17	3.6	145.0	-1.0
18	3.6	135.0	-0.5
19	3.6	125.0	0.6
20	4.5	130.0	1.5
21	5.4	130.0	1.5
22	6.0	135.0	1.4
23	6.9	140.0	1.4
24	8.1	140.0	1.4
1	8.4	145.0	1.1
2	7.2	145.0	1.2
3	6.0	145.0	1.4
4	4.8	145.0	1.6
5	4.8	145.0	2.5
6	4.8	145.0	3.0
7	4.8	145.0	3.5
8	5.1	155.0	1.0
9	5.7	165.0	-0.6
10	6.0	175.0	-1.4
11	5.7	170.0	-1.5
12	5.1	170.0	-1.5
13	4.8	165.0	-1.6
14	5.4	165.0	-1.6
15	6.0	165.0	-1.6
16	6.6	165.0	-1.6
17	6.3	165.0	-1.2
18	5.7	165.0	-0.4
19	5.4	165.0	1.5
20	4.8	175.0	2.5

21	4.2	185.0	3.0
22	3.6	195.0	3.5
23	3.0	205.0	4.0
24	2.4	215.0	4.0
1	2.0	225.0	4.0
2	3.9	260.0	3.0
3	5.7	295.0	1.0
4	8.4	335.0	0.5
5	8.7	330.0	-0.4
6	9.3	320.0	-0.8
7	9.6	315.0	-0.8
8	10.5	320.0	-1.0
9	11.4	320.0	-1.0
10	12.0	325.0	-1.0
11	10.8	325.0	-1.0
12	9.6	325.0	-1.4
13	8.4	325.0	-1.5
14	8.4	325.0	-1.5
15	8.4	325.0	-1.4
16	8.4	325.0	-1.4
17	6.9	320.0	-1.0
18	5.1	310.0	-1.0
19	3.0	305.0	1.5
20	2.4	300.0	4.0
21	2.0	290.0	4.0
22	2.0	280.0	4.0
23	2.0	260.0	4.0
24	2.0	250.0	4.0
1	2.0	240.0	4.0
2	2.0	230.0	4.0
3	2.0	225.0	4.0
4	2.0	215.0	4.0
5	2.0	205.0	4.0
6	2.0	195.0	4.0
7	2.0	190.0	4.0
8	2.1	185.0	1.0
9	3.0	175.0	-0.5
10	4.2	165.0	-1.0
11	4.5	160.0	-1.5
12	4.5	150.0	-1.5
13	4.8	145.0	-1.6
14	5.1	150.0	-1.6
15	5.7	160.0	-1.6
16	6.0	165.0	-1.0
17	5.7	160.0	-0.6
18	5.7	160.0	-0.1
19	5.4	155.0	1.5
20	6.6	150.0	1.4
21	7.8	150.0	1.4
22	9.0	145.0	1.4
23	7.8	145.0	1.4
24	6.6	145.0	1.4
1	6.0	145.0	1.4
2	6.3	150.0	1.4
3	6.9	150.0	1.4

4	7.2	155.0	1.4
5	6.9	155.0	1.4
6	6.3	155.0	1.4
7	6.0	155.0	1.4

STOP TIME OCT 29,1990 HOUR 6 MINUTE 7

RELEASE NUMBER 90083 CONTAINMENT PURGE

STARTING TIME NOV 1,1990 HOUR 17 MINUTE 25

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
[illegible]	4.5	210.0	-0.5
6	3.3	195.0	1.0
9	2.4	185.0	1.5
20	3.3	180.0	1.3
21	4.2	170.0	1.1
22	4.8	165.0	0.5
23	3.9	205.0	0.5
24	3.0	255.0	-0.5
1	2.0	315.0	-1.0
2	2.4	5.0	-1.0
3	3.0	15.0	-1.0
4	3.6	25.0	-1.0
5	3.9	20.0	-1.0
6	3.9	20.0	-1.0
7	4.2	15.0	-1.0
8	4.8	5.0	-1.0
9	5.4	360.0	-1.1
10	6.0	355.0	-1.2
11	6.0	355.0	-1.3
12	6.0	355.0	-1.4
13	6.0	355.0	-1.5
14	6.3	345.0	-1.5

STOP TIME NOV 2,1990 HOUR 13 MINUTE 44

STARTING TIME NOV 2,1990 HOUR 14 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	6.3	345.0	-1.5
15	6.9	335.0	-1.4
16	7.2	325.0	-1.4
17	6.9	325.0	-1.2
18	6.9	325.0	-1.1
19	6.6	325.0	-1.0
20	6.6	335.0	-1.0
21	6.6	345.0	-1.0
22	6.6	355.0	-1.0
23	6.6	350.0	-1.0
24	6.6	350.0	-1.0
1	6.6	355.0	-1.0
2	6.3	5.0	-1.0
3	5.7	15.0	-1.0
4	5.4	25.0	-1.0
5	5.7	15.0	-1.0
6	6.3	5.0	-1.0

7	6.6	355.0	-1.0
8	6.9	360.0	-1.0
9	7.5	360.0	-1.0
10	7.8	5.0	-1.0
11	8.7	360.0	-1.0
12	9.9	360.0	-1.0
13	10.8	355.0	-1.0
14	10.2	360.0	-1.0
15	9.6	360.0	-1.0
16	9.0	5.0	-1.0
17	9.3	360.0	-1.0
18	9.3	360.0	-1.0
19	9.6	355.0	-1.0
20	8.1	355.0	-1.0
21	6.6	355.0	-1.0
22	5.4	355.0	-1.0
23	5.7	350.0	-1.0
24	5.7	350.0	-1.0
1	6.0	345.0	-1.0
2	5.7	340.0	-0.8
3	5.1	340.0	-0.8
4	4.8	335.0	-0.8
5	4.8	350.0	0.2
6	4.8	5.0	0.8
7	4.8	15.0	1.2
8	4.8	10.0	0.5
9	4.8	360.0	-0.5
10	4.8	355.0	-0.9
11	4.8	360.0	-1.2
12	4.8	10.0	-1.4
13	4.8	15.0	-1.4
14	4.5	10.0	-1.4
15	4.5	10.0	-1.5
16	4.2	5.0	-1.5
17	3.9	350.0	-0.5
18	3.3	340.0	0.5
19	3.0	325.0	1.4
20	2.7	335.0	1.0
21	2.7	345.0	0.5
22	2.4	355.0	0.5
23	2.4	360.0	-0.5
24	2.4	360.0	1.0
1	2.4	5.0	-0.5
2	2.1	355.0	2.5
3	2.1	345.0	3.5
4	2.0	335.0	4.0
5	2.0	350.0	4.0
6	2.0	5.0	4.0
7	2.0	15.0	4.0
8	2.0	350.0	0.5

STOP TIME NOV 5,1990 HOUR 7 MINUTE 35

RELEASE NUMBER 90084 CONTAINMENT PURGE

STARTING TIME NOV 8,1990 HOUR 19 MINUTE 3

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
19	3.6	165.0	-1.0
20	3.3	170.0	2.0
21	3.3	180.0	2.5
22	3.0	185.0	3.0
23	4.8	190.0	3.2
24	7.2	190.0	1.5
1	9.0	195.0	1.5
2	6.9	220.0	1.5
3	4.8	245.0	3.0
4	3.0	265.0	4.1
5	3.3	270.0	4.0
6	3.9	270.0	3.8
7	4.2	275.0	3.5
8	3.9	280.0	-0.5
9	3.3	300.0	-1.0
10	3.0	305.0	-1.7
11	3.0	300.0	-1.7
12	3.0	300.0	-1.7
13	3.0	295.0	-1.7
14	3.0	300.0	-1.5

STOP TIME NOV 9,1990 HOUR 13 MINUTE 28

STARTING TIME NOV 9,1990 HOUR 17 MINUTE 51

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	2.7	5.0	1.5
18	2.7	75.0	2.0
19	2.4	135.0	2.5
20	2.7	150.0	2.5
21	3.3	160.0	3.0
22	3.6	175.0	3.5
23	3.9	180.0	3.5
24	3.9	190.0	3.8
1	4.2	195.0	4.0
2	4.5	200.0	4.0
3	4.5	200.0	4.0
4	4.8	205.0	3.8
5	4.2	210.0	4.0
6	3.6	210.0	4.0
7	3.0	215.0	4.1
8	3.3	255.0	-0.5
9	3.3	305.0	-1.0
10	3.6	345.0	-1.5
11	3.9	355.0	-1.5

12	4.5	5.0	-1.5
13	4.8	15.0	-1.6
14	4.5	10.0	-1.5
15	3.9	10.0	-1.5
16	3.6	5.0	-1.0
17	3.0	15.0	2.0
18	2.4	25.0	4.1
19	2.0	35.0	4.1
20	2.1	35.0	4.1
21	2.7	90.0	4.1
22	3.0	105.0	4.1
23	3.0	110.0	4.1
24	3.0	110.0	4.1
1	3.0	115.0	4.1
2	3.9	130.0	3.5
3	4.5	140.0	3.5
4	5.4	155.0	3.5
5	5.1	160.0	3.5
6	4.5	160.0	3.8
7	4.2	165.0	3.5
8	4.5	175.0	-0.5
9	4.5	185.0	-1.0
10	4.8	195.0	-1.5
11	4.7	235.0	-1.5
12	6.3	275.0	-1.5
13	7.2	325.0	-1.6
14	7.2	330.0	-1.5
15	7.2	330.0	-1.5
16	7.2	335.0	-1.0
17	6.0	345.0	1.5
18	4.8	355.0	2.0
19	3.6	5.0	2.5
20	3.3	10.0	3.0
21	3.3	20.0	4.0
22	3.0	25.0	4.1
23	3.0	40.0	4.1
24	3.0	50.0	4.1
1	3.0	65.0	4.1
2	3.0	70.0	4.1
3	3.0	80.0	4.1
4	3.0	85.0	4.1
5	3.0	90.0	4.1
6	3.0	100.0	4.1
7	3.0	95.0	4.1

STOP TIME NOV 12,1990 HOUR 6 MINUTE 30

RELEASE NUMBER 90085 CONTAINMENT PURGE

STARTING TIME NOV 17,1990 HOUR 1 MINUTE 19

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	3.0	175.0	4.1
2	2.7	170.0	4.1
3	2.7	160.0	4.1
4	2.4	155.0	4.1
5	3.0	145.0	4.1
6	4.8	135.0	3.5
7	6.0	125.0	1.5
8	6.3	130.0	-0.5
9	6.3	140.0	-1.0
10	6.6	145.0	-1.5
11	6.9	150.0	-1.5
12	6.9	150.0	-1.5
13	7.2	155.0	-1.5
14	7.2	155.0	-1.5
15	7.2	155.0	-1.5
16	7.2	155.0	-0.5
17	7.5	150.0	0.5
18	7.5	150.0	-0.5
19	7.8	145.0	-0.5
20	7.5	140.0	-0.2
21	7.5	140.0	-0.2
22	7.2	135.0	-0.2
23	6.3	140.0	1.0
24	5.7	150.0	1.5
1	4.8	155.0	2.0
2	4.8	145.0	2.0
3	4.8	135.0	2.5
4	4.8	125.0	3.0
5	4.5	135.0	3.0
6	3.9	145.0	3.5
7	3.6	155.0	4.0
8	3.9	165.0	-0.5
9	3.9	175.0	-1.0
10	4.2	185.0	-1.0
11	3.6	180.0	-1.2
12	3.0	180.0	-1.5
13	2.4	175.0	-1.6
14	2.0	205.0	-1.6
15	2.0	235.0	-1.5
16	2.0	270.0	-1.5
17	2.0	270.0	-0.5
18	2.0	270.0	0.5
19	2.0	270.0	1.0
20	2.0	270.0	2.0
21	2.0	270.0	2.5
22	2.0	270.0	2.5
23	2.0	270.0	3.0
24	2.0	270.0	4.0
1	0.1	335.0	6.1

2	0.4	340.0	6.5
3	0.5	350.0	5.2
4	0.2	355.0	5.2
5	0.1	360.0	4.7
6	1.0	10.0	3.0
7	0.4	15.0	2.3
8	1.0	45.0	3.6
9	0.5	75.0	3.3
10	3.0	95.0	0.4
11	1.9	305.5	-0.7
12	6.9	48.5	-1.5
13	7.4	349.8	-1.6
14	8.4	21.0	-1.6
15	8.5	90.1	-1.5
16	8.3	152.9	-1.3
17	4.9	140.2	-0.8
18	3.7	132.5	0.3
19	4.0	122.7	1.1
20	5.4	128.1	1.0
21	6.6	132.6	1.0
22	5.6	113.8	1.3
23	6.7	113.7	1.7
24	7.6	118.7	1.1
1	7.6	114.2	0.3
2	8.7	109.6	-0.1
3	9.8	121.0	-0.4
4	9.6	118.7	-0.8
5	8.4	114.7	-0.6
6	7.6	115.6	-0.7
7	7.9	115.0	-0.6
8	10.5	123.9	-0.9
9	14.7	76.1	-1.7
10	2.6	122.8	-1.0

STOP TIME NOV 20,1990 HOUR 9 MINUTE 30

RELEASE NUMBER 90086 CONTAINMENT PURGE

STARTING TIME NOV 23,1990 HOUR 0 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	2.3	275.9	0.9
2	3.0	280.2	0.6

STOP TIME NOV 23,1990 HOUR 1 MI 12

RELEASE NUMBER 90087 CONTAINMENT PURGE

STARTING TIME NOV 23,1990 HOUR 21 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
21	10.2	207.0	3.8
22	11.5	207.5	4.5
23	9.9	209.9	6.0
24	10.4	202.1	5.1
1	10.6	206.3	6.5
2	3.2	205.4	4.4
3	1.6	113.5	-0.2
4	2.4	83.9	-0.3
5	3.5	173.0	0.5
6	1.6	232.4	0.3
7	1.2	192.6	0.6
8	3.0	207.4	0.3
9	2.6	154.7	-0.1
10	1.4	253.3	-1.2
11	2.6	251.9	-1.6
12	6.1	250.1	-1.8
13	3.9	259.0	-1.8
14	3.5	267.7	-1.8
15	3.2	273.7	-1.9
16	3.5	238.6	-1.5
17	2.4	212.9	-0.1
18	1.8	160.2	2.2
19	0.6	127.4	3.9
20	3.3	187.5	4.8
21	4.9	261.1	5.2
22	2.0	27.6	4.9
23	0.1	297.8	5.7
24	2.2	177.9	3.0
1	2.4	289.2	2.2
2	2.7	295.2	2.0
3	0.2	270.6	1.5
4	1.0	343.5	0.6
5	6.7	356.2	-1.0
6	3.8	356.6	-1.1
7	2.6	5.9	-0.7
8	3.5	352.2	-0.7
9	3.5	348.3	-1.3
10	4.4	359.4	-1.7
11	5.1	42.5	-2.1
12	5.4	56.3	-2.2
13	5.8	48.3	-2.4
14	4.5	56.0	-2.0
15	4.5	66.3	-2.0
16	4.3	60.5	-1.7
17	2.9	68.8	-1.3
18	0.2	6.6	-0.4
19	1.7	250.7	-0.2
20	1.5	96.8	-0.4
21	1.8	112.5	-0.2

22	1.4	196.9	0.3
23	3.2	108.0	0.2
24	3.5	109.5	-0.1
1	1.4	121.7	0.2
2	0.3	114.0	-0.1
[illegible]	2.4	262.9	0.7
[illegible]	1.6	80.4	1.0
5	1.2	332.7	0.7
6	3.6	106.0	1.0
7	3.0	109.2	-0.3
8	6.3	109.3	-0.7
9	4.1	89.3	-1.2
10	4.2	103.5	-0.4
11	23.1	339.8	-1.0
12	22.7	292.7	-1.0
13	22.7	351.2	-1.0
14	12.4	132.4	-1.2
15	26.4	136.8	-1.5
16	9.8	239.9	-1.5
17	9.5	301.6	-1.7
18	6.8	295.1	-1.6
19	8.2	291.8	-1.6
20	9.9	297.4	-1.7
[illegible]	10.2	298.4	-1.7
22	10.8	306.9	-1.6
23	9.9	313.6	-1.6
24	8.2	318.4	-1.6
1	7.0	319.9	-0.9
2	7.8	320.8	-0.6
3	8.6	326.2	-0.4
4	7.8	320.3	-0.4
5	6.7	322.9	-0.8
6	6.1	319.8	-0.9
7	7.4	323.2	-1.2
8	7.3	316.2	-0.9
9	4.1	339.0	-1.2

STOP TIME NOV 27,1990 HOUR 8 MINUTE 9

RELEASE NUMBER 90088 CONTAINMENT PURGE

STARTING TIME NOV 29,1990 HOUR 16 MINUTE 55

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
16	7.2	175.0	-1.4
17	12.4	173.3	-1.2
18	14.6	169.3	-0.8
19	16.5	176.2	-0.6
20	14.9	183.5	-0.4
21	15.8	174.9	-0.6
22	14.9	176.5	-0.7
23	15.9	173.4	-0.6
24	15.9	172.1	-0.7
1	13.2	165.5	-0.6
2	11.2	160.0	-0.6
3	12.9	165.4	-0.5
4	15.3	172.2	-0.5
5	15.7	171.8	-0.8
6	13.2	171.8	-0.8
7	16.0	180.3	-0.7
8	17.7	184.2	-0.7

STOP TIME NOV 30,1990 HOUR 7 MINUTE 59

STARTING TIME NOV 30,1990 HOUR 9 MINUTE 9

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	17.6	185.6	-1.1
10	20.0	191.6	-1.6
11	23.2	191.7	-1.7
12	22.3	190.5	-1.8
13	21.2	195.3	-1.9
14	19.7	231.4	-1.6
15	23.0	321.9	-1.4
16	15.6	225.0	-1.1
17	6.4	181.9	-1.2
18	5.1	167.3	-0.4
19	7.2	189.5	0.8
20	8.1	191.5	1.8
21	3.5	226.0	1.8
22	1.2	269.0	0.6
23	1.4	302.6	1.5
24	2.9	323.1	1.5
1	3.3	323.0	1.9
2	3.0	330.0	1.1
3	3.1	321.8	0.6
4	4.3	323.6	0.8
5	4.0	322.7	1.6
6	1.8	315.6	-0.6

7	3.0	314.2	-0.3
8	2.5	317.7	-0.7
9	1.7	311.7	-0.5
10	3.6	318.4	-0.9
11	4.4	327.9	-1.6
12	6.8	338.1	-1.4
13	8.7	344.7	-1.4
14	7.6	338.8	-1.0
15	7.1	342.3	-1.0
16	6.6	346.6	-0.8
17	4.8	350.4	-0.2
18	1.1	350.2	0.8
19	0.7	276.5	2.3
20	1.2	122.7	1.9
21	1.9	353.8	2.3
22	2.0	245.8	1.6
23	1.8	174.9	1.5
24	0.6	103.8	1.9
1	1.3	162.0	1.0
2	1.0	81.3	0.6
3	3.8	339.1	1.6
4	3.0	336.1	1.0
5	1.3	257.6	0.4
6	2.5	169.0	-0.3
7	3.6	79.8	-0.7
8	4.8	87.0	-0.8
9	5.9	102.8	-0.9
10	9.6	93.8	-1.5
11	7.3	82.9	-1.3
12	7.4	76.9	-1.6
13	6.6	124.8	-1.4
14	6.2	69.6	-1.1
15	10.4	83.0	-1.2
16	10.1	84.5	-1.0
17	5.5	16.4	0.3
18	6.3	50.0	0.4
19	4.5	22.2	0.5
20	4.6	9.0	0.5
21	4.9	7.4	0.8
22	5.7	4.1	0.6
23	6.1	4.5	0.1
24	6.5	1.6	-0.3
1	6.3	354.7	-1.4
2	7.0	347.3	-1.4
3	8.2	343.7	-1.4
4	7.5	337.7	-1.3
5	8.2	336.6	-1.4
6	8.5	331.6	-1.4
7	11.6	327.3	-1.5
8	12.3	322.2	-1.4
9	11.0	321.5	-1.4

STOP TIME DEC 3,1990 HOUR 8 MINUTE 20

RELEASE NUMBER 90089 CONTAINMENT PURGE

STARTING TIME DEC 6,1990 HOUR 18 MINUTE 25

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	1.9	253.6	1.1
19	3.7	236.2	1.0
20	6.5	226.7	1.7
21	8.4	228.4	2.6
22	8.7	231.0	3.3
23	10.2	230.8	2.8
24	11.0	223.4	3.2
1	11.5	227.5	2.6
2	13.0	226.0	3.0
3	12.5	225.0	4.5
4	11.4	222.2	4.6
5	9.7	229.7	3.5
6	10.6	233.2	2.0
7	10.0	218.5	5.7
8	8.2	229.1	4.6
9	4.5	223.4	1.3
10	8.9	240.2	0.1
11	7.2	241.2	-0.8
12	5.7	251.6	-1.5
13	3.0	257.6	-1.7
14	3.1	254.7	-1.7
15	2.1	265.8	-1.6
16	1.6	266.5	-1.3
17	1.3	219.6	-0.5
18	0.9	202.9	0.5
19	1.0	23.1	1.9
20	0.7	311.1	2.3
21	1.0	233.2	3.0
22	1.0	353.9	3.7
23	0.8	43.5	4.1
24	1.8	352.9	2.4
1	2.1	335.5	4.3
2	1.1	35.0	4.6
3	1.0	54.3	4.8
4	0.9	137.6	2.2
5	1.5	359.9	2.9
6	1.1	337.4	3.7
7	2.5	215.8	3.7
8	0.7	349.1	4.8
9	1.6	327.3	5.1
10	1.0	2.7	2.8
11	1.5	97.7	-0.4
12	1.8	260.6	-1.6
13	3.0	171.1	-1.6
14	1.5	184.9	-1.7
15	1.5	139.7	-1.7
16	2.9	127.3	-1.0
17	2.5	92.3	0.1
18	1.7	77.4	0.3

19	3.5	123.1	2.6
20	8.7	182.4	2.5
21	7.5	185.6	4.0
22	7.6	186.7	4.3
23	8.8	193.4	4.5
24	8.6	192.7	4.3
1	4.4	157.7	1.0
2	.7	105.4	1.0
3	2.5	164.7	1.2
4	1.5	119.5	0.1
5	2.0	156.1	0.3
6	2.6	185.7	1.1
7	2.5	170.4	3.4
8	0.8	180.6	3.7
9	0.6	315.4	0.7
10	0.8	288.3	-0.5
11	0.7	267.7	-0.8
12	0.2	329.1	-1.4
13	0.6	62.6	-1.4

STOP TIME DEC 9,1990 HOUR 12 MINUTE 13

STARTING TIME DEC 9,1990 HOUR 12 MINUTE 25

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
12	0.2	329.1	-1.4
13	0.6	62.6	-1.4
14	1.0	211.9	-1.2
15	1.5	254.6	-1.2
16	1.8	229.9	-1.1
17	1.1	193.8	-0.4
18	1.3	237.4	1.8
19	0.8	114.4	1.5
20	0.5	21.2	3.1
21	0.5	335.1	6.7
22	1.1	277.5	6.3
23	0.7	205.1	6.5
24	1.3	166.9	8.4
1	2.1	295.9	6.9
2	2.0	275.0	6.2
3	2.0	255.0	5.3
4	0.7	273.4	4.6
5	1.4	114.7	7.3
6	0.9	130.3	9.5
7	0.5	290.5	3.9
8	2.0	209.9	4.9
9	1.0	98.9	6.1

STOP TIME DEC 10,1990 HOUR 8 MINUTE 3

RELEASE NUMBER 90090 CONTAINMENT PURGE

STARTING TIME DEC 12,1990 HOUR 17 MINUTE 21

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
--	5.6	326.7	-1.3
18	4.9	318.0	-1.1
19	2.9	309.1	-0.8
20	1.5	299.5	-0.1
21	1.8	303.8	0.1
22	1.3	300.3	0.4
23	1.0	279.8	0.2
24	2.2	286.1	0.1
1	2.8	303.7	-0.2
2	2.9	306.6	-0.2
3	3.0	298.2	-0.3
4	3.4	301.8	-0.4
5	2.6	300.6	-0.1
6	3.1	306.3	-0.3
7	4.1	313.6	-1.0
8	1.7	296.5	-0.3
9	2.9	310.9	-0.7
10	4.5	333.8	-1.5

STOP TIME DEC 13,1990 HOUR 0 MINUTE 34

STARTING TIME DEC 13,1990 HOUR 11 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	3.6	334.3	-1.3
12	2.9	345.3	-1.4
13	2.1	338.8	-1.3
14	1.7	341.1	-1.0
15	1.4	347.1	-1.1
16	1.6	200.3	-1.4
17	1.4	344.7	-1.2
18	0.5	116.5	-0.5
19	1.2	127.9	-0.2
20	1.0	217.7	-0.3
21	1.6	81.2	-0.6
22	2.0	120.4	-1.0
23	4.7	24.3	-1.2
24	5.1	134.3	-1.0
1	5.2	140.3	-1.5
2	5.4	134.3	-1.5
3	4.1	127.4	-1.4
4	6.0	135.8	-1.4
5	6.9	138.9	-1.5
6	5.3	125.0	-1.4
7	5.5	123.8	-1.4

8	7.2	122.1	-1.5
9	8.4	121.8	-1.5
10	8.7	125.1	-1.6
11	10.0	123.9	-1.6
12	9.8	122.4	-1.6
13	9.5	120.0	-1.6
14	8.7	120.9	-1.5
15	9.5	112.7	-1.5
16	8.2	113.2	-1.5
17	7.1	119.2	-1.4
18	5.2	114.9	-1.2
19	5.5	107.3	-1.3
20	3.7	115.8	-1.2
21	2.1	108.2	-1.1
22	1.4	110.2	-1.1
23	0.6	162.2	-0.8

STOP TIME DEC 14,1990 HOUR 22 MINUTE 3

RELEASE NUMBER 90090 CONTAINMENT PURGE

STARTING TIME DEC 15,1990 HOUR 5 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
5	7.9	281.1	-1.3
6	7.9	283.0	-1.4
7	9.6	287.5	-1.1
8	9.8	296.4	-1.2
9	9.1	303.7	-1.5
10	10.0	308.8	-1.4

STOP TIME DEC 15,1990 HOUR 9 MINUTE 10

RELEASE NUMBER 90091 CONTAINMENT PURGE

STARTING TIME DEC 16,1990 HOUR 6 MINUTE 50

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
6	8.2	180.8	2.5
7	6.1	147.1	0.5
8	5.3	123.8	0.8
9	4.2	110.3	0.5
10	6.9	139.3	-0.8
11	10.6	155.5	-1.6
12	9.9	150.8	-1.5
13	7.3	142.0	-1.4
14	7.3	151.5	-1.4
15	7.2	151.6	-1.2
16	3.6	125.3	-0.9
17	1.3	119.4	-0.7
18	2.0	110.7	-0.5
19	3.4	112.3	-0.3
20	5.2	120.9	-0.6
21	5.6	124.4	-0.8
22	6.1	132.6	-1.0
23	7.5	139.8	-1.3
24	7.0	151.5	-1.3
1	7.4	166.5	-1.2
2	5.0	155.3	-1.3
3	4.8	157.7	-1.2
4	2.7	143.3	-1.2
5	0.6	111.0	-1.1
6	0.3	50.5	-1.1
7	0.3	159.9	-1.0
8	0.6	282.6	-1.1
9	1.6	313.1	-0.8

STOP TIME DEC 17,1990 HOUR 8 MINUTE 30

RELEASE NUMBER 80092 CONTAINMENT PURGE

STARTING TIME DEC 17,1990 HOUR 14 MINUTE 50

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
14	7.2	313.7	-1.6
15	6.1	314.3	-1.6
16	4.9	314.2	-1.6
17	6.0	312.0	-1.6
18	5.1	312.0	-1.4
19	3.5	311.6	-0.9
20	2.2	310.5	-0.4

STOP TIME DEC 17,1990 HOUR 19 MINUTE 17

STARTING TIME DEC 17,1990 HOUR 19 MINUTE 27

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
19	3.5	311.6	-0.9
20	2.2	310.5	-0.4

STOP TIME DEC 17,1990 HOUR 19 MINUTE 57

RELEASE NUMBER 90093 CONTAINMENT PURGE

STARTING TIME DEC 17,1990 HOUR 20 MINUTE 24

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
[illegible]	2.2	310.5	-0.4
[illegible]	1.5	300.2	-0.1

STOP TIME DEC 17,1990 HOUR 20 MINUTE 30

STARTING TIME DEC 17,1990 HOUR 20 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	2.2	310.5	-0.4
21	1.5	300.2	-0.1

STOP TIME DEC 17,1990 HOUR 20 MINUTE 34

RELEASE NUMBER 90093 CONTAINMENT PURGE

STARTING TIME DEC 17,1990 HOUR 20 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	2.2	310.5	-0.4
21	1.5	300.2	-0.1
22	2.3	306.2	-0.2
23	0.6	283.3	-0.5
24	0.2	276.4	-0.1
1	0.9	237.2	-0.3
2	1.0	250.0	0.7

STOP TIME DEC 18,1990 HOUR 1 MINUTE 15

RELEASE NUMBER 90094 CONTAINMENT PURGE

STARTING TIME DEC 18,1990 HOUR 1 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	0.9	237.2	-0.3
2	1.0	250.0	0.7

STOP TIME DEC 18,1990 HOUR 1 MINUTE 35

RELEASE NUMBER 90095 CONTAINMENT PURGE

STARTING TIME DEC 18,1990 HOUR 5 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
5	1.8	128.2	2.1
6	1.5	121.7	2.0
7	2.8	128.8	1.0
8	4.1	97.1	-0.1
9	4.9	98.2	0.4
10	4.5	115.4	-0.4

STOP TIME DEC 18,1990 HOUR 9 MINUTE 58

RELEASE NUMBER 90096 CONTAINMENT PURGE

STARTING TIME DEC 18,1990 HOUR 9 MINUTE 59

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	4.9	98.2	0.4
10	4.5	115.4	-0.4
11	4.4	136.7	-1.4
12	7.5	152.4	-1.5
13	8.6	161.3	-1.6
14	9.9	165.7	-1.6
15	8.3	150.7	-1.5
16	4.6	161.6	-1.4
17	2.2	215.9	-0.8
18	1.1	151.7	0.1
19	1.4	104.1	0.6
20	1.7	99.9	0.6
21	0.9	124.3	1.1
22	1.9	282.7	2.1
23	1.3	294.6	3.7
24	1.1	276.9	4.2
1	0.8	288.5	5.2
2	0.9	298.2	2.0
3	4.5	312.7	0.1
4	5.6	316.9	-0.2
5	5.5	319.7	-0.8

STOP TIME DEC 19,1990 HOUR 4 MINUTE 9

RELEASE NUMBER 90097 CONTAINMENT PURGE

STARTING TIME DEC 19,1990 HOUR 8 MINUTE 8

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	5.5	328.8	-1.2
9	5.7	309.8	-1.0
10	7.3	315.2	-1.2
11	7.3	314.1	-1.6

STOP TIME DEC 19,1990 HOUR 10 MINUTE 51

STARTING TIME DEC 19,1990 HOUR 11 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
11	7.3	314.1	-1.6
12	6.2	321.9	-1.5
13	5.7	317.7	-1.4
14	5.3	330.5	-1.6
15	6.1	329.3	-1.4
16	6.6	333.7	-1.3
17	6.7	329.7	-1.3
18	6.2	332.4	-1.4
19	6.0	333.0	-1.4
20	6.0	328.9	-1.4
21	8.4	321.9	-1.0
22	7.2	336.2	-1.6
23	8.1	317.5	-1.2
24	9.0	313.5	-1.1
1	9.7	316.1	-1.2
2	9.8	315.1	-1.2

STOP TIME DEC 20,1990 HOUR 1 MINUTE 7

RELEASE NUMBER 90097 CONTAINMENT PURGE

STARTING TIME DEC 20,1990 HOUR 1 MINUTE 12

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	9.7	316.1	-1.2
2	9.8	315.1	-1.2

STOP TIME DEC 20,1990 HOUR 1 MINUTE 55

STARTING TIME DEC 20,1990 HOUR 6 MINUTE 10

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
6	9.0	319.9	-1.5
7	8.8	317.5	-1.4
8	9.5	316.0	-1.4
9	8.6	317.0	-1.1
10	9.9	317.0	-1.6

STOP TIME DEC 20,1990 HOUR 9 MINUTE 56

RELEASE NUMBER 90098 CONTAINMENT PURGE

STARTING TIME DEC 20,1990 HOUR 9 MINUTE 56

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
[illegible]	8.6	317.0	-1.1
10	9.9	317.0	-1.6
11	9.0	319.9	-1.7
12	7.9	320.7	1.6
13	8.5	319.0	-1.8
14	10.2	315.2	-1.8
15	10.3	312.2	-1.5

STOP TIME DEC 20,1990 HOUR 14 MINUTE 49

STARTING TIME DEC 20,1990 HOUR 18 MINUTE 39

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	9.4	319.2	-1.1
19	9.2	319.1	-1.2
20	9.5	315.1	-1.2
21	9.3	317.8	-1.3

STOP TIME DEC 20,1990 HOUR 20 MINUTE 6

RELEASE NUMBER 90098 CONTAINMENT PURGE

STARTING TIME DEC 20,1990 HOUR 20 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
20	9.5	315.1	-1.2
21	9.3	317.8	-1.3
22	10.3	315.6	-1.4
23	7.9	322.4	-1.2
24	7.4	318.5	-0.9
1	8.2	319.8	-0.7

STOP TIME DEC 21,1990 HOUR 0 MINUTE 57

STARTING TIME DEC 21,1990 HOUR 1 MINUTE 4

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	8.2	319.8	-0.7
2	7.6	317.1	-0.6

STOP TIME DEC 21,1990 HOUR 1 MINUTE 5

RELEASE NUMBER A0098 CONTAINMENT PURGE

STARTING TIME DEC 21,1990 HOUR 1 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	8.2	319.8	-0.7
2	7.6	317.1	-0.6
3	8.3	312.3	0.2
4	8.1	323.3	1.5
5	7.6	335.8	2.1
6	6.9	330.9	0.7
7	5.6	321.1	-0.7
8	5.4	318.6	-0.3
9	7.2	312.6	-0.6
10	8.4	310.4	-0.7
11	8.4	308.6	-0.8
12	7.6	315.4	-1.1
13	8.2	311.3	-1.1
14	8.4	309.7	-1.0
15	8.4	310.8	-1.1
16	9.1	311.6	-1.1
17	8.3	314.1	-0.8

STOP TIME DEC 21,1990 HOUR 16 MINUTE 2

RELEASE NUMBER 90099 CONTAINMENT PURGE

STARTING TIME DEC 22,1990 HOUR 1 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	3.5	301.4	-1.1
2	5.0	297.6	-1.0
3	7.1	302.6	-0.6
4	6.6	304.2	-0.3
5	6.1	299.8	-1.0
6	6.1	306.2	-1.0
7	4.9	308.1	-1.1
8	3.4	304.6	-0.4
9	2.2	305.0	-0.9
10	2.7	301.3	-1.2
11	5.1	309.4	-1.5
12	4.1	308.6	-1.4
13	5.4	308.9	-1.3
14	5.5	306.9	-0.9
15	5.2	314.9	-0.7
16	5.5	314.2	-0.7
17	4.0	317.5	0.1

STOP TIME DEC 22,1990 HOUR 16 MINUTE 23

STARTING TIME DEC 22,1990 HOUR 16 MINUTE 34

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
16	5.5	314.2	-0.7
17	4.0	317.5	0.1
18	1.9	307.5	0.1

STOP TIME DEC 22,1990 HOUR 17 MINUTE 29

RELEASE NUMBER 9010C0 CONTAINMENT PURGE

STARTING TIME DEC 22,1990 HOUR 17 MINUTE 29

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	4.0	317.5	0.1
18	1.9	307.5	0.1
19	0.6	304.5	1.2
20	1.0	299.3	2.2
21	0.8	303.9	1.7
22	1.1	262.1	2.4
23	1.7	240.7	2.5
24	0.9	272.6	2.8
1	1.4	252.9	0.1
2	0.6	262.8	0.2
3	1.7	279.0	0.8
4	1.7	157.6	0.8
5	2.5	177.7	1.5
6	1.2	164.7	1.6
7	1.5	343.7	1.5
8	0.9	130.5	1.6
9	0.2	248.3	0.1
10	4.7	176.9	-0.5

STOP TIME DEC 23,1990 HOUR 9 MINUTE 35

RELEASE NUMBER 90101 CONTAINMENT PURGE

STARTING TIME DEC 23, 1990 HOUR 12 MINUTE 56

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
12	7.2	199.7	-1.5
13	5.8	232.1	-1.8
14	3.7	231.3	-1.3
15	2.6	198.1	-1.5
16	1.5	202.6	-1.4
17	4.8	222.1	-0.8
18	9.4	206.9	0.8
19	6.5	[illegible].2	0.8
20	3.6	270.5	-0.2
21	5.4	280.0	-0.5
22	3.0	280.0	-0.[illegible]
23	3.2	269.7	-0.3
24	5.2	259.4	0.1
1	6.7	249.9	0.4
2	9.0	23[illegible].5	0.[illegible]
3	9.2	237.[illegible]	0.[illegible]
4	8.9	234.4	1.4
5	8.0	240.7	1.5
6	6.4	238.6	1.7
[illegible]	4.8	222.1	4.3
8	7.0	214.7	5.4
9	3.0	128.2	0.6
10	4.6	161.2	-1.2
11	8.5	174.7	-1.2
12	7.3	181.5	-1.0
13	5.5	201.7	-1.[illegible]
14	7.1	193.6	-1.5
15	6.1	220.2	-1.[illegible]
16	7.1	217.0	-1.2
17	10.2	206.7	-0.8
18	10.9	206.[illegible]	0.2
19	11.1	208.6	1.5
20	11.4	218.4	3.3
21	9.7	216.3	4.1
22	9.0	228.8	1.9
23	6.5	236.2	1.5
24	6.1	238.4	1.9
1	3.5	252.8	1.2
2	2.9	249.7	1.[illegible]
3	3.3	261.8	0.2
4	4.1	281.6	-0.3
5	8.2	300.1	-0.8
6	11.1	316.3	-1.3
7	11.1	318.8	-1.4
8	10.4	315.8	-0.9
9	9.7	315.9	-1.3
10	7.6	322.3	-1.6
11	6.6	325.8	-1.7
12	6.8	322.2	-1.7

13	6.1	319.2	-1.7
14	5.2	309.8	-1.5
15	7.5	307.7	-1.6
16	4.2	308.1	-1.4
17	2.1	309.7	-0.8
18	1.3	299.7	-0.3
19	0.1	233.4	-0.5
20	1.5	155.8	1.0
21	1.2	188.5	1.9
22	0.7	128.2	2.4
23	0.9	125.2	3.4
24	0.1	101.4	3.6
1	0.6	238.7	4.0
2	0.9	110.7	4.2
3	2.5	98.5	1.8
4	3.9	95.9	0.8
5	4.2	103.5	0.6
6	4.3	108.5	-0.2
7	5.0	110.7	-0.5
8	6.9	117.7	-0.9
9	5.5	333.6	-1.3
10	8.7	121.8	-0.9

STOP TIME DEC 26,1990 HOUR 9 MINUTE 36

RELEASE NUMBER 90102 CONTAINMENT PURGE

STARTING TIME DEC 26,1990 HOUR 9 MINUTE 36

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	5.5	333.6	-1.3
10	8.7	121.8	-0.9
11	9.0	131.0	-1.0
12	8.1	140.7	-0.8
13	7.6	139.1	-0.9
14	8.3	126.2	-0.9
15	8.3	138.6	-0.9
16	6.4	138.1	-0.7
17	2.4	152.6	-0.7
18	2.9	130.2	-0.9

STOP TIME DEC 26,1990 HOUR 17 MINUTE 29

RELEASE NUMBER 90103 CONTAINMENT PURGE

STARTING TIME DEC 26,1990 HOUR 17 MINUTE 29

TIME HOUR	WS10 MPH	WD10 DEG	DT10 DEG C
17	2.4	154.6	-0.7
18	2.9	130.2	-0.9
19	7.6	143.0	-0.7
20	5.5	137.4	-0.6
21	3.7	132.4	-0.5
22	0.3	121.5	0.5

STOP TIME DEC 26,1990 HOUR 21 MINUTE 28

STARTING TIME DEC 26,1990 HOUR 21 MINUTE 48

TIME HOUR	WS10 MPH	WD10 DEG	DT10 DEG C
21	3.7	132.4	-0.5
22	0.3	121.5	0.5
23	0.4	114.0	1.5
24	1.3	108.5	1.8
1	1.8	101.4	1.8
2	0.1	21.9	2.2
3	0.1	246.8	1.8
4	0.8	128.9	1.4
5	1.8	126.5	1.6
6	2.1	130.9	2.1
7	3.9	129.1	1.5
8	1.0	102.0	0.7
9	4.4	114.7	-0.3

STOP TIME DEC 27,1990 HOUR 8 MINUTE 15

RELEASE NUMBER 90103 CONTAINMENT PURGE

STARTING TIME DEC 27,1990 HOUR 10 MINUTE 5

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
10	8.6	140.0	-1.4
11	11.9	158.1	-1.7

STOP TIME DEC 27,1990 HOUR 10 MINUTE 47

RELEASE NUMBER 90105 ABNORMAL RELEASE - 1

STARTING TIME DEC 9, 1990 HOUR 12 MINUTE [illegible]

TIME	WS10 MPH	WD10 DEG	DT110 DEG C
12	0.2	329.1	-1.4
13	0.6	62.6	-1.4

STOP TIME DEC 9, 1990 HOUR 12 MINUTE 14

RELEASE NUMBER 90011 DECAY TANK PURGE

STARTING TIME JULY 3,1990 HOUR 11 MINUTE 6

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
1	11.4	204.2	-1.5
12	11.1	194.4	-1.7
13	11.7	196.9	-1.8
14	12.7	189.2	-1.9
15	14.9	190.2	-1.7
16	14.1	196.5	-1.6
17	14.9	184.4	-1.6
18	12.9	168.5	-1.4

STOP TIME JULY 3,1990 HOUR 17 MINUTE 44

RELEASE NUMBER 90012 DECAY TANK PURGE

STARTING TIME AUG 27,1990 HOUR 18 MINUTE 35

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
18	4.5	184.0	-1.7
19	3.6	175.0	-1.0
20	3.9	174.0	0.5
21	3.9	165.0	1.6
22	4.2	175.0	1.6

STOP TIME AUG 27,1990 HOUR 21 MINUTE 50

STARTING TIME AUG 27,1990 HOUR 21 MINUTE 57

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
21	3.9	[illegible]	1.6
22	4.2	175.0	1.6
[illegible]	4.2	[illegible]	1.6

STOP TIME AUG 27,1990 HOUR 22 MINUTE 44

RELEASE NUMBER 90012 DECAY TANK PURGE

STARTING TIME AUG 27,1990 HOUR 22 MINUTE 46

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
..	4.2	175.0	1.6
.3	4.2	175.0	1.6
24	4.2	175.0	1.5
1	3.6	195.0	1.0
2	3.3	138.0	1.2

STOP TIME AUG 28,1990 HOUR 1 MINUTE 49

RELEASE NUMBER 90013 DECAY TANK PURGE

STARTING TIME OCT 2,1990 HOUR 17 MINUTE 28

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
17	10.2	170.0	-0.8
18	10.2	170.0	-1.0
19	10.2	175.0	-1.0
20	9.3	160.0	-1.0
21	8.4	145.0	-1.0
22	7.8	135.0	-1.0
23	9.0	145.0	-1.0

STOP TIME OCT 2,1990 HOUR 22 MINUTE 7

STARTING TIME OCT 2,1990 HOUR 22 MINUTE 9

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
22	7.8	135.0	-1.0
23	9.0	145.0	-1.0

STOP TIME OCT 2,1990 HOUR 22 MINUTE 51

RELEASE NUMBER 90014 DECAY TANK PURGE

STARTING TIME OCT 15,1990 HOUR 14 MINUTE 52

TIME HOUR	WS10 MPH	WD10 DEG	DT10 DEG C
[illegible]	5.7	150.0	-1.6
[illegible]	6.3	150.0	-1.5
16	7.2	155.0	-1.4
17	7.2	150.0	-0.5
18	7.2	150.0	0.5
19	7.2	145.0	0.5
20	7.5	145.0	1.0
21	8.1	145.0	1.0
22	8.4	145.0	1.0

STOP TIME OCT 16,1990 HOUR 21 MINUTE 24

RELEASE NUMBER 90015 DECAY TANK PURGE

STARTING TIME NOV 27,1990 HOUR 17 MINUTE 52

TIME HOUR	WS10 MPH	WD10 DEG	DT10 DEG C
17	6.7	306.8	-1.6
18	6.9	307.4	-1.1
19	6.4	305.3	-1.2
20	5.1	295.2	-1.5
21	5.2	295.7	-1.4
22	6.3	288.4	-0.9
23	4.7	286.0	-0.8
24	3.5	287.0	-0.9
1	1.9	264.7	-0.7

STOP TIME NOV 28,1990 HOUR 0 MINUTE 16

RELEASE NUMBER 90016 DECAY TANK PURGE

STARTING TIME DEC 14,1990 HOUR 22 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
22	1.4	110.2	-1.1
23	0.6	162.2	-0.8
24	2.8	195.7	-0.4
1	6.4	233.6	-1.2
2	6.4	257.8	-0.3
3	6.2	275.1	-0.4
4	6.8	280.0	-0.6

STOP TIME DEC 15,1990 HOUR 3 MINUTE 30

STARTING TIME DEC 15,1990 HOUR 3 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
2	6.2	275.1	-0.4
4	6.8	280.0	-0.6

STOP TIME DEC 15,1990 HOUR 3 MINUTE 40

RELEASE NUMBER 90016 DECAY TANK PURGE

STARTING TIME DEC 15,1990 HOUR 3 MINUTE 43

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
4	6.2	275.1	-0.4
4	6.8	280.0	-0.6
5	7.9	281.1	-1.3

STOP TIME DEC 15,1990 HOUR 4 MINUTE 1

STARTING TIME DEC 15,1990 HOUR 4 MINUTE 1

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
4	6.8	280.0	-0.6
5	7.9	281.1	-1.3

STOP TIME DEC 15,1990 HOUR 4 MINUTE 33

RELEASE NUMBER 90016 DECAV TANK PURGE

STARTING TIME DEC 15,1990 HOUR 4 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
4	6.8	280.0	-0.6
5	7.9	281.1	-1.3

STOP TIME DEC 15,1990 HOUR 4 MINUTE 46

STARTING TIME DEC 15,1990 HOUR 4 MINUTE 46

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
4	6.8	280.0	-0.6
5	7.9	281.1	-1.3
6	7.9	283.0	-1.4

STOP TIME DEC 15,1990 HOUR 5 MINUTE 27

RELEASE NUMBER 90017 DECAY TANK PURGE

STARTING TIME DEC 15,1990 HOUR 9 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT110 DEG C
9	9.1	303.7	-1.5
10	10.0	308.8	-1.4
11	9.0	306.5	-1.6
12	9.6	310.0	-1.5
13	8.7	317.1	-1.6
14	6.9	299.9	-1.8
15	7.1	290.7	-1.7
16	6.4	292.7	-1.4
17	5.5	294.6	-1.4
18	1.2	306.2	-0.6

STOP TIME DEC 15,1990 HOUR 17 MINUTE 52

SECTION VII

POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS

(Regulatory Guide 1.21.)

JuLy 1, 1990 - December 31, 1990

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 VII-A-1 through VII-A-34. Also, the doses to the same groups, Table VII-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 July 1, 1990 through December 31, 1990 were as follows:

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

(2) Entrained gases (Xe-131M, Xe-133M, Xe-133, and Xe-135) from Liquid effluents were described in Section IV.

(3) Semi-Annual "X/Qs" at the actual receptor locations, which were corrected for open terrain, plume depletion, and radioactive decay factor 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 concentrations.

Potential Semiannual Doses to Individuals from Gaseous Releases (Con't)

(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 that 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 semiannual "X/Qs" 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. Results are shown in Table VII-C-1. The population integrated dose is the summation of the dose received by all individuals and has units of man-thyroid-rem when applied to the summation of thyroid doses. The same inputs were 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.

Potential Semiannual Doses to Population from Gaseous Releases (Con't)

(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

The 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 VII-D-1. Results are shown in Tables VII-D-2 through VII-D-9.

The inputs to LADTAP for the semiannual period from July through December 1990 were as follows:

(1) All liquid effluents were as described in Section IV, except for the entrained gases (Xe-131M, Xe-133, Xe-133m and Xe-135).

(2) A plant discharge rate of 791 cubic feet per second (CFS) or 7.91E+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 VII-D-2 through VII-D-5 was used. For Tables VII-D-6 through VII-D-9, a transport time of 0.0 was used from the plant to the discharge site.

(5) A shorewidth factor of 0.2 was used.

Potential Semiannual Doses to Individuals from Liquid Releases (Con't)

(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 VII-D-6 through VII-D-9 was 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 VII-E-1 through VII-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.

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 1 RES
AT 4.53 MILES N

BETA AIR DOSE = 1.42E-03 MILLRADS
GAMMA AIR DOSE = 5.08E-04 MILLRADS

TABLE VII-A-1

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
P[illegible]E	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	3.13E-04	8.34E-04
G[illegible]NE	3.50E-07	3.50E-07	3.50E-07	3.50E-07	3.50E-07	3.50E-07	3.50E-07	4.20E-07
INHAL								
ADULT	3.64E-05	3.63E-05	2.67E-07	3.66E-05	3.69E-05	1.49E-04	3.63E-05	3.62E-05
TEEN	3.67E-05	3.65E-05	3.76E-07	3.70E-05	3.73E-05	1.77E-04	3.65E-05	3.64E-05
CHILD	3.25E-05	3.23E-05	5.11E-07	3.27E-05	3.31E-05	1.92E-04	3.23E-05	3.22E-05
INFANT	1.87E-05	1.85E-05	4.02E-07	1.90E-05	1.91E-05	1.65E-04	1.86E-05	1.85E-05

FORT CALHO[redacted] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[redacted]ON # 2 RES
AT 1.86 MILES NNE

BETA AIR DOSE = 5.26E-03 MILLRADS
GAMMA AIR DOSE = 1.90E-03 MILLRADS

TABLE VII-A-2

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
[illegible]	1.13E-03	1.13E-03	1.13E-03	1.13E-03	1.13E-03	1.13E-03	1.18E-03	3.11E-03
[illegible]	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.30E-06	1.56E-06
INHAL								
ADULT	1.33E-04	1.33E-04	1.04E-06	1.34E-04	1.35E-04	5.70E-04	1.33E-04	1.33E-04
TEEN	1.34E-04	1.34E-04	1.46E-06	1.35E-04	1.37E-04	6.77E-04	1.34E-04	1.33E-04
CHILD	1.19E-04	1.18E-04	1.98E-06	1.20E-04	1.21E-04	7.36E-04	1.18E-04	1.18E-04
INFANT	6.86E-05	6.79E-05	1.56E-06	6.97E-05	7.00E-05	6.34E-04	6.81E-05	6.78E-05

FORT CALH[illegible] RECEPTORS IN ALL SECTOR. 0[illegible]-15-91
SPECIAL LO[illegible].ON # 3 VEG
AT 3.78 MILES NNE

BETA AIR DOSE = 1.25E-03 MILLRADS
GAMMA AIR DOSE = 4.43E-04 MILLRADS

TABLE VII-A-3

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.61E-04	2.61E-04	2.61E-04	2.61E-04	2.61E-04	2.61E-04	2.73E-04	7.29E-04
GROUND	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.51E-07	3.02E-07
VEGET								
ADULT	5.80E-05	5.78E-05	7.85E-07	5.84E-05	5.92E-05	4.00E-04	5.74E-05	5.73E-05
TEEN	6.62E-05	6.60E-05	7.75E-07	6.67E-05	6.74E-05	3.50E-04	6.57E-05	6.57E-05
CHILD	1.03E-04	1.02E-04	1.49E-06	1.03E-04	1.04E-04	5.33E-04	1.02E-04	1.02E-04

FORT CALHO[redacted] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[redacted]ON # 4 PORK
AT 4.69 MILES NNE

BETA AIR DOSE = 8.22E-04 MILLRADS
GAMMA AIR DOSE = 2.93E-04 MILLRADS

TABLE VII-A-4

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
P[illegible]	1.72E-04	1.72E-04	1.72E-04	1.72E-04	1.72E-04	1.72E-04	1.81E-04	4.81E-04
G[illegible]	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.63E-07	1.96E-07
MEAT								
ADULT	5.48E-08	5.50E-06	9.00E-08	5.53E-06	5.56E-06	3.22E-05	5.43E-06	5.42E-06
TEEN	3.28E-06	3.28E-06	7.42E-08	3.32E-06	3.35E-06	2.26E-05	3.25E-06	3.23E-06
CHILD	3.97E-06	3.93E-06	1.39E-07	4.02E-06	4.05E-06	3.32E-05	3.92E-06	3.91E-06

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ON # 5 RES
AT 1.47 MILES NE

BETA AIR DOSE = 7.59E-03 MILLRADS
GAMMA AIR DOSE = 2.73E-03 MILLRADS

TABLE VII-A-5

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.61E-03	1.61E-03	1.61E-03	1.61E-03	1.61E-03	1.61E-03	1.68E-03	4.47E-03
GR[illegible]ND	1.57E-06	1.57E-06	1.57E-06	1.57E-06	1.57E-06	1.57E-06	1.57E-06	1.89E-06
INHAL								
ADULT	1.93E-04	1.93E-04	1.51E-06	1.94E-04	1.96E-04	8.29E-04	1.92E-04	1.92E-04
TEEN	1.95E-04	1.94E-04	2.12E-06	1.96E-04	1.98E-04	9.85E-04	1.94E-04	1.93E-04
CHILD	1.72E-04	1.71E-04	2.88E-06	1.74E-04	1.76E-04	1.07E-03	1.71E-04	1.71E-04
INFANT	9.94E-05	9.84E-05	2.27E-06	1.01E-04	1.01E-04	9.23E-04	9.87E-05	9.82E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ON # 6 VEG
AT 3.32 MILES NE

BETA AIR DOSE = 1.38E-03 MILLRADS
GAMMA AIR DOSE = 4.86E-04 MILLRADS

TABLE VII-A-6

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.86E-04	2.86E-04	2.86E-04	2.86E-04	2.86E-04	2.86E-04	3.00E-04	8.02E-04
GROUND	2.27E-07	2.27E-07	2.27E-07	2.27E-07	2.27E-07	2.27E-07	2.27E-07	2.73E-07
VEGET								
ADULT	6.43E-05	6.42E-05	7.10E-07	6.48E-05	6.54E-05	3.74E-04	6.38E-05	6.38E-05
TEEN	7.35E-05	7.33E-05	7.01E-07	7.40E-05	7.46E-05	3.30E-04	7.31E-05	7.30E-05
CHILD	1.14E-04	1.13E-04	1.34E-06	1.14E-04	1.15E-04	5.03E-04	1.13E-04	1.13E-04

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 7 RES,VEG
AT 4.79 MILES ENE

BETA AIR DOSE = 8.14E-04 MILLRADS
GAMMA AIR DOSE = 2.80E-04 MILLRADS

TABLE VII-A-7

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.64E-04	1.64E-04	1.64E-04	1.64E-04	1.64E-04	1.64E-04	1.72E-04	4.66E-04
GROUND	7.56E-08	7.56E-08	7.56E-08	7.56E-08	7.56E-08	7.56E-08	7.56E-08	9.07E-08
VEGET								
ADULT	3.85E-05	3.85E-05	2.38E-07	3.87E-05	3.89E-05	1.42E-04	3.83E-05	3.83E-05
TEEN	4.41E-05	4.40E-05	2.34E-07	4.42E-05	4.44E-05	1.29E-04	4.39E-05	4.39E-05
CHILD	6.82E-05	6.80E-05	4.48E-07	6.84E-05	6.86E-05	1.98E-04	6.80E-05	6.80E-05
INHAL								
ADULT	2.14E-05	2.13E-05	1.53E-07	2.15E-05	2.16E-05	8.63E-05	2.13E-05	2.12E-05
TEEN	2.15E-05	2.14E-05	2.15E-07	2.17E-05	2.19E-05	1.02E-04	2.14E-05	2.14E-05
CHILD	1.91E-05	1.89E-05	2.92E-07	1.92E-05	1.94E-05	1.11E-04	1.90E-05	1.89E-05
INFANT	1.10E-05	1.09E-05	2.30E-07	1.11E-05	1.12E-05	9.48E-05	1.09E-05	1.09E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ON # 8 RES
AT 4.67 MILES E

BETA AIR DOSE = 1.36E-03 MILLRADS
GAMMA AIR DOSE = 4.70E-04 MILLRADS

TABLE VII-A-8

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.75E-04	2.75E-04	2.75E-04	2.75E-04	2.75E-04	2.75E-04	2.89E-04	7.80E-04
GROUND	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.09E-07	1.31E-07
INHAL								
ADULT	3.57E-05	3.56E-05	2.56E-07	3.59E-05	3.62E-05	1.45E-04	3.56E-05	3.55E-05
TEEN	3.60E-05	3.59E-05	3.60E-07	3.62E-05	3.64E-05	1.71E-04	3.59E-05	3.57E-05
CHILD	3.19E-05	3.17E-05	4.89E-07	3.21E-05	3.24E-05	1.85E-04	3.17E-05	3.16E-05
INFANT	1.84E-05	1.82E-05	3.85E-07	1.86E-05	1.87E-05	1.59E-04	1.82E-05	1.82E-05

FORT CALHOUN RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION / 9 VEG
AT 4.92 MILES E

BETA AIR DOSE = 1.25E-03 MILLRADS
GAMMA AIR DOSE = 4.29E-04 MILLRADS

TABLE VII-3-9

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDN	THYROID	LUNG	SKIN
PLUME	2.51E-04	2.51E-04	2.51E-04	2.51E-04	2.51E-04	2.51E-04	2.5[illegible]	[illegible]E-04
GROUND	9.82E-08	9.82E-08	9.82E-08	9.82E-08	[illegible]	9.82E-08	9.82E-08	1.18E-07
VEGET								
ADULT	5.91E-05	5.91E-05	3.07E-07	5.93E-05	5.96E-05	1.93E-04	5.89E-05	5.89E-05
TEEN	6.76E-05	6.76E-05	3.04E-07	6.76E-05	6.81E-05	1.79E-04	6.74E-05	6.74E-05
CHILD	1.05E-04	1.04E-04	5.62E-07	1.05E-04	1.05E-04	2.73E-04	1.04E-04	1.04E-04

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 10 RES
AT 4.19 MILES ESE

BETA AIR DOSE = 1.69E-03 MILLRADS
GAMMA AIR DOSE = 5.86E-04 MILLRADS

TABLE VII-A-10

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.44E-04	3.44E-04	3.44E-04	3.44E-04	3.44E-04	3.44E-04	3.61E-04	9.71E-04
GROUND	1.86E-07	1.86E-07	1.86E-07	1.86E-07	1.86E-07	1.86E-07	1.86E-07	2.23E-07
INHAL								
ADULT	4.39E-05	4.38E-05	3.19E-07	4.41E-05	4.45E-05	1.79E-04	4.38E-05	4.37E-05
TEEN	4.43E-05	4.41E-05	4.49E-07	4.46E-05	4.50E-05	2.13E-04	4.41E-05	4.39E-05
CHILD	3.92E-05	3.89E-05	6.10E-07	3.95E-05	3.99E-05	2.30E-04	3.90E-05	3.89E-05
INFANT	2.26E-05	2.24E-05	4.80E-07	2.29E-05	2.30E-05	1.98E-04	2.24E-05	2.23E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 11 RES,VEG
AT 1.68 MILES SE

BETA AIR DOSE = 1.02E-02 MILLRADS
GAMMA AIR DOSE = 3.68E-03 MILLRADS

TABLE VII-A-11

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.18E-03	2.28E-03	6.02E-03
GROUND	3.10E-06	3.10E-06	3.10E-06	3.10E-06	3.10E-06	3.10E-06	3.10E-06	3.72E-06
VEGET								
ADULT	4.71E-04	4.58E-04	9.66E-06	4.77E-04	4.85E-04	4.68E-03	4.63E-04	4.63E-04
TEEN	5.37E-04	5.35E-04	9.54E-06	5.43E-04	5.51E-04	4.03E-03	5.31E-04	5.30E-04
CHILD	8.31E-04	8.24E-04	1.83E-05	8.39E-04	8.48E-04	6.13E-03	8.22E-04	8.21E-04
INHAL								
ADULT	2.58E-04	2.57E-04	2.01E-06	2.60E-04	2.62E-04	1.11E-03	2.57E-04	2.57E-04
TEEN	2.60E-04	2.59E-04	2.83E-06	2.62E-04	2.65E-04	1.31E-03	2.59E-04	2.58E-04
CHILD	2.30E-04	2.29E-04	3.34E-06	2.32E-04	2.35E-04	1.43E-03	2.29E-04	2.28E-04
INFANT	1.33E-04	1.31E-04	3.03E-06	1.35E-04	1.36E-04	1.23E-03	1.32E-04	1.21E-04

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[illegible]ION # 12 SHEEP
AT 4.74 MILES SE

BETA AIR DOSE = 1.19E-03 MILLRADS
GAMMA AIR DOSE = 4.20E-04 MILLRADS

TABLE VII-A-12

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.48E-04	2.48E-04	2.48E-04	2.48E-04	2.48E-04	2.48E-04	2.59E-04	6.92E-04
GROUND	2.86E-07	2.86E-07	2.86E-07	2.86E-07	2.86E-07	2.86E-07	2.85E-07	3.43E-07
MEAT								
ADULT	7.94E-05	7.98E-06	1.58E-07	8.03E-06	8.09E-06	5.49E-05	7.87E-06	7.85E-06
TEEN	4.76E-06	4.75E-06	1.30E-07	4.83E-06	4.88E-06	3.88E-05	4.70E-06	4.68E-06
CHILD	5.77E-06	5.69E-06	2.45E-07	5.86E-06	5.91E-06	5.71E-05	5.68E-06	5.65E-06

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ION # 13 RES,VEG
AT 0.88 MILES SSE

BETA AIR DOSE = 4.28E-02 MILLRADS
GAMMA AIR DOSE = 1.56E-02 MILLRADS

TABLE VII-A-13

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.22E-03	9.22E-03	9.22E-03	9.22E-03	9.22E-03	9.22E-03	9.65E-03	2.54E-02
GROUND	1.21E-05	1.21E-05	1.21E-05	1.21E-05	1.21E-05	1.21E-05	1.21E-05	1.45E-05
VEGET								
ADULT	1.97E-03	1.96E-03	3.77E-05	1.99E-03	2.03E-03	1.84E-02	1.94E-03	1.94E-03
TEEN	2.25E-03	2.24E-03	3.72E-05	2.27E-03	2.30E-03	1.59E-02	2.22E-03	2.22E-03
CHILD	3.48E-03	3.45E-03	7.13E-05	3.51E-03	3.55E-03	2.41E-02	3.44E-03	3.44E-03
INHAL								
ADULT	1.08E-03	1.08E-03	8.64E-06	1.09E-03	1.10E-03	4.72E-03	1.08E-03	1.08E-03
TEEN	1.09E-03	1.09E-03	1.21E-05	1.10E-03	1.11E-03	5.61E-03	1.09E-03	1.08E-03
CHILD	9.66E-04	9.59E-04	1.65E-05	9.74E-04	9.85E-04	6.11E-03	9.61E-04	9.57E-04
INFANT	5.57E-04	5.51E-04	1.30E-05	5.66E-04	5.69E-04	5.27E-03	5.53E-04	5.50E-04

FORT CALHO[redacted] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[redacted]ION # 14 BEEF
AT 1.81 MILES SSE

BETA AIR DOSE = 8.14E-03 MILLRADS
GAMMA AIR DOSE = 2.93E-03 MILLRADS

TABLE VII-A-14

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.73E-03	1.73E-03	1.73E-03	1.73E-03	1.73E-03	1.73E-03	1.81E-03	4.79E-03
GROUND	1.79E-06	1.79E-06	1.79E-06	1.79E-06	1.79E-06	1.79E-06	1.79E-06	2.15E-06
MEAT								
ADULT	5.40E-05	5.41E-05	9.90E-07	5.45E-05	5.49E-05	3.48E-04	5.35E-05	5.33E-05
TEEN	3.23E-05	3.23E-05	8.16E-07	3.28E-05	3.31E-05	2.46E-04	3.19E-05	3.18E-05
CHILD	3.91E-05	3.87E-05	1.53E-06	3.97E-05	4.00E-05	3.61E-04	3.86E-05	3.84E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ION # 15 RES
AT 0.72 MILES S

BETA AIR DOSE = 8.32E-02 MILLRADS
GAMMA AIR DOSE = 3.09E-02 MILLRADS

TABLE VII-A-15

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.92E-02	5.01E-02
GROUND	2.25E-05	2.25E-05	2.25E-05	2.25E-05	2.25E-05	2.25E-05	2.25E-05	2.70E-05
INHAL								
ADULT	2.09E-03	2.08E-03	1.69E-05	2.10E-03	2.12E-03	9.17E-03	2.08E-03	2.07E-03
TEEN	2.10E-03	2.09E-03	2.37E-05	2.12E-03	2.14E-03	1.09E-02	2.09E-03	2.09E-03
CHILD	1.86E-03	1.85E-03	3.22E-05	1.88E-03	1.90E-03	1.19E-02	1.85E-03	1.84E-03
INFANT	1.07E-03	1.06E-03	2.54E-05	1.09E-03	1.10E-03	1.03E-02	1.07E-03	1.06E-03

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 16 BEEF,VEG
AT 1.98 MILES S

BETA AIR DOSE = 8.27E-03 MILLRADS
GAMMA AIR DOSE = 2.98E-03 MILLRADS

TABLE VII-A-16

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.76E-03	1.76E-03	1.76E-03	1.76E-03	1.76E-03	1.76E-03	1.84E-03	4.88E-03
GROUND	1.74E-06	1.74E-06	1.74E-06	1.74E-06	1.74E-06	1.74E-06	1.74E-06	2.09E-06
VEGET								
ADULT	3.81E-04	3.80E-04	5.42E-06	3.85E-04	3.90E-04	2.74E-03	3.77E-04	3.77E-04
TEEN	4.36E-04	4.34E-04	5.38E-06	4.39E-04	4.44E-04	2.40E-03	4.32E-04	4.32E-04
CHILD	6.74E-04	6.70E-04	1.03E-05	6.79E-04	6.84E-04	3.65E-03	6.69E-04	6.69E-04
MEAT								
ADULT	5.48E-05	5.50E-05	9.59E-07	5.53E-05	5.57E-05	3.40E-04	5.43E-05	5.42E-05
TEEN	3.28E-05	3.28E-05	7.90E-07	3.33E-05	3.36E-05	2.39E-04	3.25E-05	3.23E-05
CHILD	3.97E-05	3.93E-05	1.48E-06	4.03E-05	4.06E-05	3.51E-04	3.92E-05	3.91E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[illegible]ION # 1 COW
AT 2.74 MILES S

BETA AIR DOSE = 4.12E-03 MILLRADS
GAMMA AIR DOSE = 1.46E-03 MILLRADS

TABLE VII-A-17

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.59E-04	8.59E-04	8.59E-04	8.59E-04	8.59E-04	8.59E-04	9.00E-04	2.40E-03
GROUND	8.14E-07	8.14E-07	8.14E-07	8.14E-07	8.14E-07	8.14E-07	8.14E-07	9.78E-07
COW MILK								
ADULT	6.71E-05	6.54E-05	3.99E-06	6.96E-05	7.37E-05	1.92E-03	6.39E-05	6.39E-05
TEEN	8.86E-05	8.53E-05	7.25E-06	9.33E-05	1.01E-04	3.02E-03	8.32E-05	8.32E-05
CHILD	1.41E-04	1.33E-04	1.76E-05	1.49E-04	1.60E-04	5.94E-03	1.31E-04	1.31E-04
INFANT	2.18E-04	2.01E-04	3.67E-05	2.43E-04	2.50E-04	1.43E-02	1.99E-04	1.99E-04

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ON # 2 RES
AT 0.63 MILES SSW

BETA AIR DOSE = 4.82E-02 MILLRADS
GAMMA AIR DOSE = 1.77E-02 MILLRADS

TABLE VII-A-18

PATHWAY	BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.04E-02	1.04E-02	1.04E-02	1.04E-02	1.04E-02	1.04E-02	1.09E-02	2.87E-02
GROUND	5.40E-07	5.40E-07	5.40E-07	5.40E-07	5.40E-07	5.40E-07	5.40E-07	6.48E-07
INHAL								
ADULT	1.22E-03	1.21E-03	9.84E-06	1.22E-03	1.23E-03	5.35E-03	1.21E-03	1.21E-03
TEEN	1.23E-03	1.22E-03	1.38E-05	1.24E-03	1.25E-03	6.37E-03	1.22E-03	1.22E-03
CHILD	1.09E-03	1.08E-03	1.88E-05	1.10E-03	1.11E-03	6.94E-03	1.08E-03	1.08E-03
INFANT	6.26E-04	6.20E-04	1.48E-05	6.37E-04	6.4[illegible]E-04	5.99E-03	6.22E-04	6.19E-04

FORT CALHO[redacted] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 3 VEG
AT 0.64 MILES SSW

BETA AIR DOSE = 4.69E-02 MILLRADS
GAMMA AIR DOSE = 1.72E-02 MILLRADS

TABLE VII-A-19

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.01E-02	1.06E-02	2.79E-02
GROUND	5.29E-07	5.29E-07	5.29E-07	5.29E-07	5.29E-07	5.29E-07	5.29E-07	6.35E-07
VEGET								
ADULT	2.12E-03	2.12E-03	1.65E-06	2.12E-03	2.13E-03	2.84E-03	2.12E-03	2.12E-03
TEEN	2.43E-03	2.43E-03	1.64E-06	2.43E-03	2.43E-03	3.03E-03	2.43E-03	2.43E-03
CHILD	3.76E-03	3.76E-03	3.14E-06	3.77E-03	3.77E-03	4.67E-03	3.76E-03	3.76E-03

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[illegible]ION # 4 BEEF
AT 2.00 MILES SSW

BETA AIR DOSE = 3.93E-03 MILLRADS
GAMMA AIR DOSE = 1.40E-03 MILLRADS

TABLE VII-A-20

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
P[illegible]IME	8.27E-04	8.27E-04	8.27E-04	8.27E-04	8.27E-04	8.27E-04	8.66E-04	2.30E-03
[illegible]NE	5.91E-07	5.91E-07	5.91E-07	5.91E-07	5.91E-07	5.91E-07	5.91E-07	7.10E-07
MEAT								
ADULT	2.61E-05	2.61E-05	3.27E-07	2.63E-05	2.64E-05	1.23E-04	2.59E-05	2.59E-05
TEEN	1.56E-05	1.56E-05	2.69E-07	1.57E-05	1.58E-05	8.59E-05	1.55E-05	1.54E-05
CHILD	1.89E-05	1.87E-05	5.05E-07	1.91E-05	1.92E-05	1.25E-04	1.87E-05	1.86E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 5 RES
AT 0.72 MILES SW

BETA AIR DOSE = 3.68E-02 MILLRADS
GAMMA AIR DOSE = 1.35E-02 MILLRADS

TABLE VII-A-21

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.96E-03	7.96E-03	7.96E-03	7.96E-03	7.96E-03	7.96E-03	8.33E-03	2.19E-02
GROUND	1.28E-06	1.28E-06	1.28E-06	1.28E-06	1.28E-06	1.28E-06	1.28E-06	1.53E-06
INHAL								
ADULT	9.28E-04	9.26E-04	7.46E-06	9.34E-04	9.41E-04	4.06E-03	9.25E-04	9.23E-04
TEEN	9.36E-04	9.32E-04	1.05E-05	9.43E-04	9.54E-04	4.84E-03	9.32E-04	9.28E-04
CHILD	8.29E-04	8.23E-04	1.42E-05	8.36E-04	8.45E-04	5.27E-03	8.24E-04	8.21E-04
INFANT	4.78E-04	4.73E-04	1.12E-05	4.86E-04	4.88E-04	4.54E-03	4.74E-04	4.72E-04

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[illegible]ON # 6 BEEF
AT 0.82 MILES SW

BETA AIR DOSE = 2.77E-02 MILLRADS
GAMMA AIR DOSE = 1.01E-02 MILLRADS

TABLE VII-A-22

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.00E-03	6.00E-03	6.00E-03	6.00E-03	6.00E-03	6.00E-03	6.27E-03	1.65E-02
GROUND	5.35E-06	5.35E-06	5.35E-06	5.35E-06	5.35E-06	5.35E-06	5.35E-06	6.43E-06
MEAT								
ADULT	1.82E-04	1.83E-04	2.95E-06	1.84E-04	1.85E-04	1.06E-03	1.81E-04	1.80E-04
TEEN	1.09E-04	1.09E-04	2.43E-06	1.10E-04	1.11E-04	7.45E-04	1.08E-04	1.08E-04
CHILD	1.32E-04	1.31E-04	4.57E-06	1.34E-04	1.35E-04	1.09E-03	1.30E-04	1.30E-04

FORT CALHOUN RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 7 VEG
AT 1.39 MILES SW

BETA AIR DOSE = 8.20E-03 MILLRADS
GAMMA AIR DOSE = 2.95E-03 MILLRADS

TABLE VII-A-23

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.74E-03	1.74E-03	1.74E-03	1.74E-03	1.74E-03	1.74E-03	1.82E-03	4.84E-03
GROUND	5.20E-08	5.20E-08	5.20E-08	5.20E-08	5.20E-08	5.20E-08	5.20E-08	6.24E-08
VEGET								
ADULT	3.74E-04	3.74E-04	1.63E-07	3.74E-04	3.74E-04	4.45E-04	3.74E-04	3.74E-04
TEEN	4.28E-04	4.28E-04	1.61E-07	4.29E-04	4.29E-04	4.87E-04	4.28E-04	4.28E-04
CHILD	6.64E-04	6.63E-04	3.09E-07	6.64E-04	6.64E-04	7.53E-04	6.63E-04	6.63E-04

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ON # 8 RES,VEG
AT 1.01 MILES WSW

BETA AIR DOSE = 1.21E-02 MILLRADS
GAMMA AIR DOSE = 4.39E-03 MILLRADS

TABLE VII-A-24

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.59E-03	2.59E-03	2.59E-03	2.59E-03	2.59E-03	2.59E-03	2.71E-03	7.16E-03
GROUND	2.56E-06	2.56E-06	2.56E-06	2.56E-06	2.56E-06	2.56E-06	2.56E-06	3.07E-06
VEGET								
ADULT	5.55E-04	5.53E-04	7.99E-06	5.60E-04	5.67E-04	4.04E-03	5.49E-04	5.49E-04
TEEN	6.3[illegible]E-04	6.32E-04	7.89E-06	6.39E-04	6.46E-04	3.52E-03	6.29E-04	6.28E-04
CHILD	9.82E-04	9.76E-04	1.51E-05	9.88E-04	9.95E-04	5.36E-03	9.74E-04	9.73E-04
INHAL								
ADULT	3.06E-04	3.05E-04	2.43E-06	3.08E-04	3.10E-04	1.33E-03	3.05E-04	3.04E-04
TEEN	3.08E-04	3.07E-04	3.41E-06	3.11E-04	3.14E-04	1.58E-03	3.07E-04	3.06E-04
CHILD	2.73E-04	2.71E-04	4.64E-06	2.75E-04	2.79E-04	1.72E-03	2.72E-04	2.71E-04
INFANT	1.57E-04	1.56E-04	3.65E-06	1.60E-04	1.61E-04	1.48E-03	1.5[illegible]E-04	1.56E-04

FORT CALHOUN RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 9 BEEF
AT 3.45 MILES WSW

BETA AIR DOSE = 8.43E-04 MILLRADS
GAMMA AIR DOSE = 3.00E-04 MILLRADS

TABLE VII-A-25

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.77E-04	1.77E-04	1.77E-04	1.77E-04	1.77E-04	1.77E-04	1.85E-04	4.93E-04
GROUND	1.24E-07	1.24E-07	1.24E-07	1.24E-07	1.24E-07	1.24E-07	1.24E-07	1.49E-07
MEAT								
ADULT	5.60E-06	5.61E-06	6.84E-08	5.63E-06	5.66E-06	2.59E-05	5.56E-06	5.55E-06
TEEN	3.35E-06	3.34E-06	5.84E-08	3.38E-06	3.40E-06	1.81E-05	3.32E-06	3.31E-06
CHILD	4.05E-06	4.02E-06	1.06E-07	4.09E-06	4.11E-06	2.63E-05	4.01E-06	4.00E-06

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 10 RES,VEG
AT 1.17 MILES W

BETA AIR DOSE = 1.19E-02 MILLRADS
GAMMA AIR DOSE = 4.36E-03 MILLRADS

TABLE VII-A-26

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.58E-03	2.70E-03	7.08E-03
GROUND	2.25E-06	2.25E-06	2.25E-06	2.25E-06	2.25E-06	2.25E-06	2.25E-06	2.70E-06
VEGET ADULT	5.42E-04	5.41E-04	7.02E-06	5.46E-04	5.53E-04	3.60E-03	5.37E-04	5.37E-04
TEEN	6.19E-04	6.18E-04	6.93E-06	6.24E-04	6.30E-04	3.16E-03	6.15E-04	6.14E-04
CHILD	9.59E-04	9.54E-04	1.33E-05	9.64E-04	9.71E-04	4.81E-03	9.52E-04	9.52E-04
INHAL ADULT	2.99E-04	2.98E-04	2.37E-06	3.01E-04	3.03E-04	1.30E-03	2.98E-04	2.97E-04
TEEN	3.01E-04	3.00E-04	3.33E-06	3.04E-04	3.07E-04	1.54E-03	3.00E-04	2.99E-04
CHILD	2.67E-04	2.65E-04	4.53E-06	2.69E-04	2.72E-04	1.68E-03	2.66E-04	2.65E-04
INFANT	1.54E-04	1.52E-04	3.57E-06	1.57E-04	1.57E-04	1.45E-03	1.53E-04	1.52E-04

FORT CALHOUN RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 11 BEEF
AT 2.06 MILES W

BETA AIR DOSE = 3.44E-03 MILLRADS
GAMMA AIR DOSE = 1.25E-03 MILLRADS

TABLE VII-A-27

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.38E-04	7.38E-04	7.38E-04	7.30E-04	7.38E-04	7.38E-04	7.72E-04	2.04E-03
GROUND	5.54E-07	5.54E-07	5.54E-07	5.54E-07	5.54E-07	5.54E-07	5.54E-07	6.65E-07
MEAT								
ADULT	2.27E-05	2.27E-05	3.05E-07	2.28E-05	2.30E-05	1.13E-04	2.25E-05	2.25E-05
TEEN	1.36E-05	1.36E-05	2.52E-07	1.37E-05	1.38E-05	7.93E-05	1.34E-05	1.34E-05
CHILD	1.64E-05	1.63E-05	4.72E-07	1.66E-05	1.67E-05	1.16E-04	1.62E-05	1.62E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ON # 12 RES,VEG
AT 2.04 MILES WNW

BETA AIR DOSE = 7.18E-03 MILLRADS
GAMMA AIR DOSE = 2.58E-03 MILLRADS

TABLE VII-A-28

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.52E-03	1.59E-03	4.22E-03
GROUND	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.21E-06
VEGET								
ADULT	3.31E-04	3.30E-04	3.15E-06	3.33E-04	3.35E-04	1.71E-03	3.28E-04	3.28E-04
TEEN	3.78E-04	3.77E-04	3.12E-06	3.80E-04	3.83E-04	1.52E-03	3.76E-04	3.76E-04
CHILD	5.85E-04	5.83E-04	5.97E-06	5.88E-04	5.91E-04	2.32E-03	5.82E-04	5.82E-04
INHAL								
ADULT	1.83E-04	1.82E-04	1.41E-06	1.84E-04	1.85E-04	7.79E-04	1.82E-04	1.82E-04
TEEN	1.84E-04	1.84E-04	1.99E-06	1.86E-04	1.88E-04	9.25E-04	1.84E-04	1.83E-04
CHILD	1.63E-04	1.62E-04	2.70E-06	1.65E-04	1.66E-04	1.01E-03	1.62E-04	1.62E-04
INFANT	9.41E-05	9.31E-05	2.13E-06	9.56E-05	9.61E-05	8.66E-04	9.34E-05	9.30E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 13 PORK
AT 2.74 MILES WNW

BETA AIR DOSE = 3.88E-03 MILLRADS
GAMMA AIR DOSE = 1.37E-03 MILLRADS

TABLE VII-A-29

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.05E-04	8.05E-04	8.05E-04	8.05E-04	8.05E-04	8.05E-04	8.44E-04	2.26E-03
GROUND	5.16E-07	5.16E-07	5.16E-07	5.16E-07	5.16E-07	5.16E-07	5.16E-07	6.20E-07
MEAT								
ADULT	2.59E-05	2.60E-05	2.06E-07	2.61E-05	2.62E-05	1.11E-04	2.58E-05	2.57E-05
TEEN	1.55E-05	1.55E-05	2.35E-07	1.56E-05	1.57E-05	7.69E-05	1.54E-05	1.54E-05
CHILD	1.89E-05	1.86E-05	4.42E-07	1.89E-05	1.90E-05	1.11E-04	1.86E-05	1.85E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOC[illegible]ION # 14 RES,VEG
AT 2.43 MILES NW

BETA AIR DOSE = 8.82E-03 MILLRADS
GAMMA AIR DOSE = 3.18E-03 MILLRADS

TABLE VII-A-30

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.96E-03	5.20E-03
GROUND	1.90E-06	1.90E-06	1.90E-06	1.90E-06	1.90E-06	1.90E-06	1.90E-06	2.28E-06
VEGET								
ADULT	4.06E-04	4.05E-04	5.92E-06	4.10E-04	4.15E-04	2.98E-03	4.02E-04	4.02E-04
TEEN	4.64E-04	4.63E-04	5.84E-06	4.68E-04	4.73E-04	2.60E-03	4.60E-04	4.60E-04
CHILD	7.19E-04	7.14E-04	1.12E-05	7.23E-04	7.29E-04	3.96E-03	7.13E-04	7.12E-04
INHAL								
ADULT	2.24E-04	2.23E-04	1.72E-06	2.25E-04	2.27E-04	9.49E-04	2.23E-04	2.23E-04
TEEN	2.26E-04	2.25E-04	2.42E-06	2.27E-04	2.30E-04	1.13E-03	2.25E-04	2.24E-04
CHILD	2.00E-04	1.98E-04	3.29E-06	2.01E-04	2.04E-04	1.23E-03	1.99E-04	1.98E-04
INFANT	1.15E-04	1.14E-04	2.59E-06	1.17E-04	1.18E-04	1.05E-03	1.14E-04	1.14E-04

FORT CALHOUN RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 15 COW,PORK,BEEF
AT 3.47 MILES NW

BETA AIR DOSE = 4.29E-03 MILLRADS
GAMMA AIR DOSE = 1.53E-03 MILLRADS

TABLE VII-A-31

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.99E-04	8.99E-04	8.99E-04	8.99E-04	8.99E-04	8.99E-04	9.42E-04	2.51E-03
GROUND	8.08E-07	8.08E-07	8.08E-07	8.08E-07	8.08E-07	8.08E-07	8.08E-07	9.70E-07
MEAT								
ADULT	2.86E-05	2.87E-05	4.47E-07	2.88E-05	2.90E-05	1.61E-04	2.84E-05	2.83E-05
TEEN	1.71E-05	1.71E-05	3.68E-07	1.73E-05	1.74E-05	1.12E-04	1.69E-05	1.69E-05
CHILD	2.07E-05	2.06E-05	6.91E-07	2.10E-05	2.11E-05	1.66E-04	2.05E-05	2.04E-05
COW MILK								
ADULT	6.97E-05	6.80E-05	3.96E-06	7.21E-05	7.62E-05	1.91E-03	6.65E-05	6.65E-05
TEEN	9.19E-05	8.87E-05	7.19E-06	9.66E-05	1.04E-04	3.00E-03	8.66E-05	8.66E-05
CHILD	1.47E-04	1.38E-04	1.74E-05	1.54E-04	1.66E-04	5.90E-03	1.37E-04	1.37E-04
INFANT	2.26E-04	2.09E-04	3.64E-05	2.50E-04	2.58E-04	1.42E-02	2.08E-04	2.08E-04

FORT CALHO[redacted] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[redacted]ION # 16 RES
AT 2.02 MILES NNW

BETA AIR DOSE = 9.96E-03 MILLRADS
GAMMA AIR DOSE = 3.65E-03 MILLRADS

TABLE VII-A-32

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.16E-03	2.16E-03	2.16E-03	2.16E-03	2.16E-03	2.16E-03	2.26E-03	5.94E-03
GROUND	2.93E-06	2.93E-06	2.93E-06	2.93E-06	2.93E-06	2.93E-06	2.93E-06	3.52E-06
INHAL								
ADULT	2.51E-04	2.51E-04	1.95E-06	2.53E-04	2.55E-04	1.07E-03	2.50E-04	2.50E-04
TEEN	2.53E-04	2.52E-04	2.75E-06	2.55E-04	2.58E-04	1.28E-03	2.52E-04	2.51E-04
CHILD	2.24E-04	2.23E-04	3.74E-06	2.26E-04	2.29E-04	1.39E-03	2.23E-04	2.22E-04
INFANT	1.29E-04	1.28E-04	2.94E-06	1.31E-04	1.32E-04	1.20E-03	1.28E-04	1.28E-04

FORT CALH[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LOCATION # 1 PORK
AT 3.70 MILES NNW

BETA AIR DOSE = 2.80E-03 MILLRADS
GAMMA AIR DOSE = 1.00E-03 MILLRADS

TABLE VII-A-33

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.92E-04	5.92E-04	5.92E-04	5.92E-04	5.92E-04	5.92E-04	6.19E-04	1.64E-03
GROUND	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	6.76E-07	8.11E-07
MEAT								
ADULT	1.86E-05	1.87E-05	3.73E-07	1.88E-05	1.90E-05	1.30E-04	1.84E-05	1.84E-05
TEEN	1.11E-05	1.11E-05	3.08E-07	1.13E-05	1.14E-05	9.15E-05	1.10E-05	1.10E-05
CHILD	1.35E-05	1.33E-05	5.78E-07	1.37E-05	1.38E-05	1.35E-04	1.33E-05	1.32E-05

FORT CALHO[illegible] RECEPTORS IN ALL SECTORS 01-15-91
SPECIAL LO[illegible]ION # 2 VEG
AT 4.06 MILES NNW

BETA AIR DOSE = 2.34E-03 MILLRADS
GAMMA AIR DOSE = 8.38E-04 MILLRADS

TABLE VII-A-34

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.94E-04	4.94E-04	4.94E-04	4.94E-04	4.94E-04	4.94E-04	5.17E-04	1.37E-03
GROUND	5.70E-07	5.70E-07	5.70E-07	5.70E-07	5.70E-07	5.70E-07	5.70E-07	6.84E-07
VEGET ADULT	1.08E-04	1.08E-04	1.78E-06	1.10E-04	1.11E-04	8.83E-04	1.07E-04	1.07E-04
TEEN	1.24E-04	1.23E-04	1.76E-06	1.25E-04	1.26E-04	7.67E-04	1.23E-04	1.23E-04
CHILD	1.92E-04	1.90E-04	3.37E-06	1.93E-04	1.95E-04	1.17E-03	1.90E-04	1.90E-04

TABLE VII-B-1

PORT CALHOUN 1 DOSE CONTRIBUTIONS FROM GASEOUS EFFLUENTS
UNRESTRICTED AREA BOUNDARY

REQUIRED BY TECHNICAL SPECIFICATION 5.6.4.a.

SEMIANNUAL PCR JUL TO DEC 90

MAXIMUM SITE BOUNDARY GAMMA AIR DOSE = 1.25E-02 MILLIRAD

MAXIMUM SITE BOUNDARY BETA AIR DOSE = 3.37E-02 MILLIRAD

TABLE VII-C-1

FORT CALHOUN SEMIANNUAL 07/90-12/90 TOWER DATA 02-11-90
ALARA INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.55E-02 68.53%	1.55E-02 68.73%	1.55E-02 98.81%	1.55E-02 68.24%	1.55E-02 67.83%	1.55E-02 12.31%	1.66E-02 70.30%	1.36E-02 88.42%
GROUND	1.11E-05 0.05%	1.11E-05 0.05%	1.11E-05 0.07%	1.11E-05 0.05%	1.11E-05 0.05%	1.11E-05 0.01%	1.11E-05 0.05%	1.33E-05 0.02%
INHAL	2.98E-03 13.07%	2.98E-03 13.07%	2.31E-05 0.15%	2.98E-03 13.08%	3.00E-03 13.10%	1.26E-02 13.42%	2.95E-03 12.49%	2.55E-03 4.86%
VEGET	2.80E-03 12.35%	2.78E-03 12.22%	8.53E-05 0.61%	2.85E-03 12.52%	2.93E-03 12.78%	3.98E-02 33.13%	2.74E-03 11.57%	2.74E-03 4.51%
COW MILK	7.37E-04 3.25%	7.15E-04 3.16%	4.75E-05 0.30%	7.81E-04 3.44%	8.00E-04 3.49%	1.90E-02 21.21%	7.05E-04 2.96%	7.04E-04 1.16%
MEAT	6.23E-04 2.75%	6.24E-04 2.76%	1.07E-05 0.07%	6.28E-04 2.76%	6.32E-04 2.76%	3.52E-03 3.92%	6.18E-04 2.61%	6.17E-04 1.02%
TOTAL	2.27E-02	2.26E-02	1.57E-02	2.28E-02	2.29E-02	8.98E-02	2.37E-02	6.06E-02

TABLE VII-B-1

FT. CALHOUN SEMIANNUAL RELEASES FOR JUL 1990 TO DEC 1990 02-08-91 RETS

DISCHARGE=7.91E+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	1.33E-03	3.08E-04	0.00E+00	8.84E-06	0.00E+00	0.00E+00	0.00E+00	4.0[illegible]E-05	6.50E-13	5.60E-13	1.00E+00
38SR 90	1.95E-04	7.58E-03	0.00E+00	1.86E-03	0.00E+00	0.00E+00	0.00E+00	7.19E-04	0.00E+00	0.00E+00	1.00E+00
39Y 90	1.98E-04	9.62E-09	0.00E+00	2.58E-10	0.00E+00	0.00E+00	0.00E+00	1.02E-04	2.60E-12	2.20E-12	1.00E+00
24CR 51	7.13E-03	0.00E+00	0.00E+00	2.66E-09	1.59E-09	5.86E-10	3.53E-09	6.89E-07	2.60E-10	2.20E-10	1.00E+00
53I 131	2.61E-02	4.16E-06	5.95E-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
44RU 103	1.72E-04	1.85E-07	0.00E+00	7.97E-08	0.00E+00	7.06E-07	0.00E+00	2.1[illegible]E-05	2.20E-09	3.60E-09	1.00E+00
44RU 106	1.02E-04	2.75E-06	0.00E+00	3.48E-07	0.00E+00	5.31E-08	0.00E+00	1.7[illegible]E-04	1.80E-09	1.50E-09	1.00E+00
55CS 137	9.21E-02	7.97E-05	1.09E-04	7.14E-05	0.00E+00	3.70E-05	1.23E-[illegible]	2.1[illegible]E-06	4.90E-09	4.20E-09	1.00E+00
40ZR 95	5.38E-04	3.04E-08	9.75E-09	6.60E-09	0.00E+00	1.53E-08	0.00E+00	3.00E-05	5.80E-09	5.00E-09	1.00E+00
41NB 95	1.49E-03	6.22E-09	3.46E-09	1.86E-09	0.00E+00	3.42E-09	0.00E+00	2.10E-05	6.00E-09	5.10E-09	1.00E+00
55CS 134	1.96E-02	6.22E-05	1.48E-04	1.21E-04	0.00E+00	4.79E-05	1.59E-05	2.59E-06	1.40E-08	1.20E-08	1.00E+00
27CO 58	9.16E-02	0.00E+00	7.45E-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	1.30E-04	0.00E+00	4.57E-06	8.72E-07	0.00E+00	1.36E-06	0.00E+00	1.80E-05	6.80E-09	5.80E-09	1.00E+00
27CO 60	1.11E-02	0.00E+00	2.14E-06	4.72E-05	0.00E+00	0.00E+00	0.00E+00	4.02E-05	3.00E-08	1.70E-08	1.00E+00
57LA 140	3.65E-03	2.50E-09	1.26E-09	3.33E-10	0.00E+00	0.00E+00	0.00E+00	9.25E-[illegible]	1.70E-08	1.30E-08	1.00E+00
51SB 124	9.16E-04	2.90E-06	5.29E-08	1.11E-06	6.79E-09	0.00E+00	2.18E-06	7.95E-05	1.50E-08	1.10E-09	1.00E+00
51SB 125	3.53E-02	1.79E-06	2.00E-08	4.26E-07	1.82E-09	0.00E+00	1.38E-06	1.[illegible]E-05	3.50E-09	3.10E-09	1.00E+00
47AG 110M	1.79E-03	1.60E-07	1.48E-07	8.79E-08	0.00E+00	2.91E-07	0.00E+00	6.04E-05	2.10E-08	1.80E-08	1.00E+00
1H 3	1.20E+02	0.00E+00	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	0.00E+00	0.00E+00	1.00E+00
53I 129	7.94E-05	3.27E-06	2.81E-06	9.21E-05	7.23E-03	6.04E-06	0.00E+00	4.44E-07	7.50E-10	4.50E-10	1.00E+00
6C 14	1.04E-04	2.84E-06	5.68E-07	5.68E-07	5.68E-07	5.68E-07	5.68E-07	5.68E-07	0.00E+00	0.00E+00	1.00E+00
26FE 55	1.09E-01	2.75E-06	1.90E-06	4.43E-07	0.00E+00	0.00E+00	1.06E-06	1.0[illegible]E-06	0.00E+00	0.00E+00	1.00E+00
56BA 140	4.42E-04	2.03E-05	2.55E-08	1.33E-06	0.00E+00	8.67E-09	1.46E-08	4.18E-05	2.[illegible]E-09	2.10E-09	1.00E+00

TABLE VII-D-1
(continued)

* * * TEENAGER 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	1.33E-03	4.40E-04	0.00E+00	1.26E-05	0.00E+00	0.00E+00	0.00E+00	5.24E-05			
38SR	90	1.98E-04	8.30E-03	0.00E+00	2.05E-03	0.00E+00	0.00E+00	0.00E+00	2.33E-04			
39Y	90	1.98E-04	1.37E-08	0.00E+00	3.69E-10	0.00E+00	0.00E+00	0.00E+00	1.13E-04			
53I	131	2.61E-02	5.85E-06	8.19E-06	4.40E-06	2.39E-03	1.02E-05	0.00E+00	1.62E-06			
44RU	103	1.72E-04	2.55E-07	0.00E+00	1.09E-07	0.00E+00	7.06E-07	0.00E+00	2.13E-05			
44RU	106	1.02E-04	3.92E-06	0.00E+00	4.94E-07	0.00E+00	5.31E-06	0.00E+00	1.88E-04			
55CS	137	9.21E-02	1.12E-04	1.49E-04	5.19E-05	0.00E+00	3.70E-05	1.97E-05	2.12E-06			
40ZR	95	5.38E-04	4.12E-06	1.30E-08	8.94E-09	0.00E+00	1.53E-08	0.00E+00	3.00E-05			
41NB	95	1.49E-03	8.22E-06	4.56E-09	2.51E-09	0.00E+00	3.42E-09	0.00E+00	1.95E-05			
55CS	134	1.96E-02	8.37E-05	1.97E-04	9.14E-05	0.00E+00	4.79E-05	2.39E-05	2.45E-06			
27CO	58	9.16E-02	0.00E+00	9.72E-07	2.24E-06	0.00E+00	0.00E+00	0.00E+00	1.34E-05			
27CO	60	1.11E-02	0.00E+00	2.81E-06	6.33E-06	0.00E+00	0.00E+00	0.00E+00	3.66E-05			
57LA	140	3.65E-03	3.48E-09	1.71E-09	4.55E-10	0.00E+00	0.00E+00	0.00E+00	9.82E-05			
47AG	110M	1.79E-03	2.05E-06	7.94E-07	1.18E-07	0.00E+00	2.91E-07	0.00E+00	5.45E-05			
1H	3	1.20E+02	0.00E+00	1.06E-07	1.06E-07	1.06E-07	1.05E-07	1.06E-07	1.06E-07			
53I	129	7.94E-05	4.66E-06	3.92E-06	6.54E-06	4.77E-03	6.04E-06	0.00E+00	4.57E-07			
6C	14	1.04E-04	4.06E-06	8.12E-07	8.12E-07	8.12E-07	5.68E-07	8.12E-07	8.12E-07			
56BA	140	4.42E-04	2.84E-05	3.48E-08	1.83E-06	0.00E+00	8.67E-09	2.34E-08	4.38E-05			

* * * CHILD 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	1.33E-03	1.32E-03	0.00E+00	3.77E-05	0.00E+00	0.00E+00	0.00E+00	5.11E-05			
38SR	90	1.98E-04	1.70E-02	0.00E+00	4.31E-03	0.00E+00	0.00E+00	0.00E+00	2.29E-04			
39Y	90	1.98E-04	4.11E-08	0.00E+00	1.10E-09	0.00E+00	0.00E+00	0.00E+00	1.17E-04			
53I	131	2.61E-02	1.72E-05	1.73E-05	9.83E-06	5.72E-03	1.02E-05	0.00E+00	1.54E-06			
44RU	103	1.72E-04	7.31E-07	0.00E+00	2.81E-07	0.00E+00	7.06E-07	0.00E+00	1.89E-05			
44RU	106	1.02E-04	1.17E-05	0.00E+00	1.46E-06	0.00E+00	5.31E-06	0.00E+00	1.82E-04			
55CS	137	9.21E-02	3.27E-04	3.13E-04	4.62E-05	0.00E+00	3.70E-05	3.67E-05	1.96E-06			
40ZR	95	5.38E-04	1.16E-07	2.55E-08	2.27E-08	0.00E+00	1.53E-08	0.00E+00	2.66E-05			
41NB	95	1.49E-03	2.25E-08	8.76E-09	6.26E-09	0.00E+00	3.42E-09	0.00E+00	1.62E-05			
55CS	134	1.96E-02	2.34E-04	3.84E-04	8.10E-05	0.00E+00	4.79E-05	4.27E-05	2.07E-06			
27CO	58	9.16E-02	0.00E+00	1.80E-06	5.[illegible]E-06	0.00E+00	0.00E+00	0.00E+00	1.05E-05			
27CO	60	1.11E-02	0.00E+00	5.29E-06	1.[illegible]E-05	0.00E+00	0.00E+00	0.00E+00	2.93E-05			
57LA	140	3.65E-03	1.01E-08	3.53E-09	1.19E-09	0.00E+00	0.00E+00	0.00E+00	9.84E-05			
47AG	110M	1.79E-03	5.39E-07	3.64E-07	2.91E-07	0.00E+00	2.91E-07	0.00E+00	4.33E-05			
1H	3	1.20E+02	0.00E+00	2.03E-07	2.03E-07	2.03E-07	1.05E-07	2.03E-07	2.03E-07			
53I	129	7.94E-05	1.39E-05	8.53E-06	7.62E-06	5.58E-03	6.04E-06	0.00E+00	4.29E-07			
6C	14	1.04E-04	1.21E-05	2.42E-06	2.42E-06	2.42E-06	5.68E-07	2.42E-06	2.42E-06			
56BA	140	4.42E-04	8.31E-05	7.28E-08	4.85E-06	0.00E+00	8.67E-09	4.34E-08	4.21E-05			

TABLE VII-D-1
(continued)

* * * 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	1.33E-03	2.51E-03	0.00E+00	7.20E-05	0.00E+00	0.00E+00	0.00E+00	5.16E-05			
38SR	90	1.98E-04	1.85E-02	0.00E+00	4.71E-03	0.00E+00	0.00E+00	0.00E+00	2.31E-04			
39Y	90	1.98E-04	8.69E-08	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	1.20E-04			
53I	131	2.61E-02	3.59E-05	4.23E-05	1.86E-05	1.39E-02	1.02E-05	0.00E+00	1.51E-06			
44RU	103	1.72E-04	1.48E-06	0.00E+00	4.95E-07	0.00E+00	7.06E-07	0.00E+00	1.80E-05			
44RU	106	1.02E-04	2.41E-05	0.00E+00	3.01E-06	0.00E+00	5.31E-06	0.00E+00	1.83E-04			
55CS	137	9.21E-02	5.22E-04	6.11E-04	4.33E-05	0.00E+00	3.70E-05	6.54E-05	1.91E-06			
40ZR	95	5.38E-04	2.06E-07	5.32E-08	3.56E-08	0.00E+00	1.53E-08	0.00E+00	2.50E-05			
41NB	95	1.49E-03	4.20E-08	1.73E-08	1.00E-08	0.00E+00	3.42E-09	0.00E+00	1.46E-05			
55CS	134	1.96E-02	3.77E-04	7.03E-04	7.10E-05	0.00E+00	4.79E-05	7.42E-05	1.91E-06			
27CO	58	9.16E-02	0.00E+00	3.60E-06	8.98E-06	0.00E+00	0.00E+00	0.00E+00	8.97E-06			
27CO	60	1.11E-02	0.00E+00	1.08E-05	2.55E-05	0.00E+00	0.00E+00	0.00E+00	2.57E-05			
57LA	140	3.65E-03	2.11E-08	8.32E-09	2.14E-09	0.00E+00	0.00E+00	0.00E+00	9.77E-05			
47AG	110M	1.79E-03	9.96E-07	7.27E-07	4.81E-07	0.00E+00	2.91E-07	0.00E+00	3.77E-05			
1H	3	1.20E+02	0.00E+00	3.08E-07	3.08E-07	3.08E-07	1.05E-07	3.08E-07	3.08E-07			
53I	129	7.94E-05	2.86E-05	2.12E-05	1.55E-05	1.36E-02	5.04E-06	0.00E+00	4.24E-07			
6C	14	1.04E-04	2.07E-05	5.06E-06	5.06E-06	5.06E-06	5.68E-07	5.06E-06	5.06E-06			
56BA	140	4.42E-04	1.71E-04	1.71E-07	8.81E-06	0.00E+00	8.67E-09	1.05E-07	4.20E-05			

TABLE VII-D-2

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

ADULT DOSES

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		7.00E-02	1.05E-01	7.30E-02	2.93E-03	3.54E-02	1.18E-02	6.26E-03
DRINKING		3.67E-04	8.71E-04	7.47E-04	2.04E-03	5.77E-04	4.76E-04	5.41E-04
SHORELINE	1.01E-04	8.65E-05	8.65E-05	8.65E-05	8.65E-05	8.65E-05	8.65E-05	8.65E-05
SWIMMING	0.00E+00	1.03E-06	1.03E-06	1.03E-06	1.03E-06	1.03E-06	1.03E-06	1.03E-06
BOATING	0.00E+00	5.16E-07	5.16E-07	5.16E-07	5.16E-07	5.16E-07	5.16E-07	5.16E-07
TOTAL	1.01E-04	7.05E-02	1.06E-01	7.38E-02	5.05E-03	3.61E-02	1.24E-02	6.88E-03

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)
FISH	21.0	7.3	24.00
DRINKING	730.0	36.5	18.80
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 86% CS 134 14%	CS 137 77% CS 134 22%	CS 137 73% CS 134 26%	I 131 97% H 3 1% I 129 1%	CS 137 78% CS 134 21%	CS 137 77% CS 134 21%	CS 137 25% NB 95 59% CS 134 6% CO 58 4% CO 60 1%
DRINKING		SR 89 3% SR 90 13% CS 137 67% CS 134 11% FE 55 2%	CS 137 38% CS 134 11% H 3 48%	SR 90 1% CS 137 29% CS 134 10% H 3 58%	I 131 78% H 3 20%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 7% CS 134 2% H 3 88%	CS 137 1% CO 58 8% CO 60 2% LA 140 1% SB 125 4% H 3 78%
SHORELINE	CS 137 65% CS 134 9% CO 58 2% CO 60 16% SB 125 5%	CS 137 65% CS 134 9% CO 58 2% CO 60 16% SB 125 5%						
SWIMc * %&		I 131 4% CS 137 20% CS 134 12% CO 58 37% CO 60 11% LA 140 3% SB 125 6% AG 110M 1%						

TABLE VII-D-3

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		7.44E-02	1.09E-01	4.09E-02	2.72E-03	2.70E-02	1.42E-02	4.52E-03
DRINKING		3.44E-04	7.22E-04	4.72E-04	1.67E-03	4.03E-04	3.55E-04	3.77E-04
SHORELINE	5.63E-04	4.83E-04	4.83E-04	4.83E-04	4.83E-04	4.83E-04	4.83E-04	4.83E-04
SWIMMING	0.00E+00	5.76E-06	5.76E-06	5.76E-06	5.76E-06	5.76E-06	5.76E-06	5.76E-06
BOATING	0.00E+00	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06	2.88E-06
TOTAL	5.63E-04	7.53E-02	1.10E-01	4.18E-02	4.88E-03	2.79E-02	1.51E-02	5.39E-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

SPREADTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 65% CS 134 13%	CS 137 77% CS 134 21%	CS 137 72% CS 134 27%	I 131 88% H 3 1%	CS 137 78% CS 134 21%	CS 137 79% CS 134 20%	CS 137 26% NB 95 58% CS 134 6% CO 58 4% CO 60 1%
DRINKING		SR 89 3% SR 90 11% CS 137 76% CS 134 1% FE 55 2%	CS 137 44% CS 134 12% H 3 41%	SR 90 2% CS 137 23% CS 134 8% CO 58 1% H 3 63%	I 131 91% H 3 7%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 11% CS 134 3% H 3 83%	CS 137 1% CO 58 7% CO 60 2% LA 140 1% SB 125 4% H 3 79%
SHORELINE	CS 137 65% CS 134 9% CO 58 2% CO 60 16% SB 125 5%	CS 137 65% CS 134 9% CO 58 2% CO 60 16% SB 125 5%						
SWIMMING	%8	I 131 4% CS 137 20% CS 134 12% CO 58 37% CO 60 11% LA 140 3% SB 125 6% AG 110M 1%						

TABLE VII-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		9.31E-02	9.73E-02	1.57E-02	2.79E-03	1.16E-02	1.13E-02	1.69E-03
DRINKING		9.52E-04	1.44E-03	7.52E-04	3.85E-03	4.03E-04	6.73E-04	6.40E-04
SHORELINE	1.18E-04	1.01E-04	1.01E-04	1.01E-04	1.01E-04	1.01E-04	1.01E-04	1.01E-04
SWIMMING	0.00E+00	1.20E-06	1.20E-06	1.20E-06	1.20E-06	1.20E-06	1.20E-06	1.20E-06
BOATING	0.00E+00	6.02E-07	6.02E-07	6.02E-07	6.02E-07	6.02E-07	6.02E-07	6.02E-07
TOTAL	1.18E-04	9.41E-02	9.88E-02	1.66E-02	6.75E-03	1.21E-02	1.21E-02	2.43E-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 86% CS 134 13%	CS 137 79% CS 134 20%	CS 137 72% CS 134 26%	I 131 98% H 3 1%	CS 137 78% CS 134 21%	CS 137 79% CS 134 19%	CS 137 28% NB 95 56% CS 134 6% CO 58 3% CO 60 1% H 3 1%
DRINKING		SR 89 4% SR 90 8% I 131 1% CS 137 74% CS 134 11%	CS 137 46% CS 134 12% H 3 39%	SR 90 2% CS 137 13% CS 134 4% CO 58 1% H 3 75%	I 131 84% H 3 14%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 11% CS 134 2% H 3 84%	CO 58 3% CO 60 1% SB 125 2% H 3 89%
SHORELINE	CS 137 85% CS 134 9% CO 58 2% CO 60 16% SB 125 5%	CS 137 85% CS 134 9% CO 58 2% CO 60 16% SB 125 5%						
SWIMC ø %&		I 131 4% CS 137 20% CS 134 12% CO 58 37% CO 60 11% LA 140 3% SB 125 6% AG 110M 1%						

TABLE VII-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		9.66E-04	1.65E-03	6.82E-04	5.72E-03	2.61E-04	6.77E-04	6.02E-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	9.66E-04	1.65E-03	6.82E-04	5.72E-03	2.61E-04	6.77E-04	6.02E-04

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

SHOREWIDTH FACTOR=0.2

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING		SR 89 5%	CS 137 51%	SR 90 2%	I 131 89%	I 131 1%	CS 137 13%	CO 58 2%
		SR 90 5%	CS 134 12%	I 131 1%	H 3 9%	CS 137 19%	CS 134 3%	SB 125 1%
		I 131 1%	H 3 34%	CS 137 8%		CS 134 5%	H 3 82%	H 3 93%
		CS 137 75%		CS 134 3%		H 3 73%		
		CS 134 11%		CO 58 1%				
				H 3 82%				

TABLE VII-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		5.11E-01	7.70E-01	5.33E-01	2.14E-02	2.59E-01	8.65E-02	4.57E-02
DRINKING		1.13E-02	2.68E-02	2.30E-02	6.40E-02	1.78E-02	1.43E-02	1.67E-02
SHORELINE	7.36E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04	6.31E-04
SWIMMING	0.00E+00	7.53E-06	7.53E-06	7.53E-06	7.53E-06	7.53E-06	7.53E-06	7.53E-06
BOATING	0.00E+00	3.77E-06	3.77E-06	3.77E-06	3.77E-06	3.77E-06	3.77E-06	3.77E-06
TOTAL	7.36E-04	5.23E-01	7.97E-01	5.56E-01	8.61E-02	2.77E-01	1.02E-01	6.30E-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 85%	CS 137 77%	CS 137 73%	I 131 97%	CS 137 78%	CS 137 77%	CS 137 25%
		CS 134 14%	CS 134 22%	CS 134 26%	H 3 1%	CS 134 21%	CS 134 21%	NB 95 59%
					I 129 1%			CS 134 6%
								CO 58 4%
								CO 60 1%
DRINKING		SR 89 3%	CS 137 38%	SR 90 1%	I 131 78%	I 131 1%	CS 137 7%	CS 137 1%
		SR 90 13%	CS 134 11%	CS 137 29%	H 3 20%	CS 137 19%	CS 134 2%	CO 58 8%
		CS 137 67%	H 3 48%	CS 134 10%		CS 134 5%	H 3 88%	CO 60 2%
		CS 134 11%		H 3 56%		H 3 73%		LA 140 1%
		FE 55 2%						SB 125 4%
								H 3 77%
SHORELINE	CS 137 65%	CS 137 65%						
	CS 134 9%	CS 134 9%						
	CO 58 2%	CO 58 2%						
	CO 60 16%	CO 60 16%						
	SB 125 5%	SB 125 5%						
SWIMc e %&		I 131 4%						
		CS 137 20%						
		CS 134 12%						
		CO 58 37%						
		CO 60 11%						
		LA 140 3%						
		SB 125 6%						
		AG 110M 1%						

TABLE VII-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		5.43E-01	7.97E-01	2.98E-01	1.98E-02	1.87E-01	1.04E-01	3.30E-02
DRINKING		1.06E-02	2.22E-02	1.45E-02	5.26E-02	1.34E-02	1.09E-02	1.16E-02
SHORELINE	4.11E-03	3.52E-03	3.52E-03	3.52E-03	3.52E-03	3.52E-03	3.52E-03	3.52E-03
SWIMMING	0.00E+00	4.21E-05	4.21E-05	4.21E-05	4.21E-05	4.21E-05	4.21E-05	4.21E-05
BOATING	0.00E+00	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.10E-05
TOTAL	4.11E-03	5.58E-01	8.23E-01	3.17E-01	7.60E-02	2.13E-01	1.18E-01	4.82E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)	SHOREWIDTH FACTOR=0.2
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	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 85% CS 134 13%	CS 137 77% CS 134 21%	CS 137 72% CS 134 27%	I 131 98% H 3 1%	CS 137 78% CS 134 21%	CS 137 79% CS 134 20%	CS 137 26% NB 95 58% CS 134 6% CO 58 4% CO 60 1%
DRINKING		SR 89 3% SR 90 11% CS 137 70% CS 134 11% FE 55 2%	CS 137 44% CS 134 12% H 3 41%	SR 90 2% CS 137 23% CS 134 8% CO 58 1% H 3 63%	I 131 82% H 3 17%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 11% CS 134 3% H 3 83%	CS 137 1% CO 58 7% CO 60 2% LA 140 1% SB 125 4% H 3 78%
SHORELINE	CS 137 65% CS 134 9% CO 58 2% CO 60 16% SB 125 5%	CS 137 65% CS 134 9% CO 58 2% CO 60 16% SB 125 5%						
SWIMMING	%8	I 131 4% CS 137 20% CS 134 12% CO 58 37% CO 60 11% LA 140 3% SB 125 6% AG 110M 1%						

TABLE VII-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		6.79E-01	7.10E-01	1.15E-01	2.04E-02	8.50E-02	8.26E-02	1.23E-02
DRINKING		2.93E-02	4.44E-02	2.32E-02	1.21E-01	1.24E-02	2.07E-02	1.97E-02
SHORELINE	8.59E-04	7.36E-04	7.36E-04	7.36E-04	7.36E-04	7.36E-04	7.36E-04	7.36E-04
SWIMMING	0.00E+00	8.79E-06	8.79E-06	8.79E-06	8.79E-06	8.79E-06	8.79E-06	8.79E-06
BOATING	0.00E+00	4.39E-06	4.39E-06	4.39E-06	4.39E-06	4.39E-06	4.39E-06	4.39E-06
TOTAL	8.59E-04	7.09E-01	7.55E-01	1.39E-01	1.42E-01	9.81E-02	1.04E-01	3.28E-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 86%	CS 137 79%	CS 137 72%	I 131 98%	CS 137 78%	CS 137 79%	CS 137 28%
		CS 134 13%	CS 134 20%	CS 134 26%	H 3 1%	CS 134 21%	CS 134 19%	NB 95 56%
								CS 134 6%
								CO 58 3%
								CO 60 1%
								H 3 1%
DRINKING		SR 89 4%	CS 137 46%	SR 90 2%	I 131 85%	I 131 1%	CS 137 11%	CO 58 3%
		SR 90 8%	CS 134 12%	CS 137 13%	H 3 14%	CS 137 19%	CS 134 2%	CO 60 1%
		I 131 1%	H 3 39%	CS 134 4%		CS 134 5%	H 3 84%	LA 140 1%
		CS 137 74%		CO 58 1%		H 3 73%		SB 125 2%
		CS 134 11%		H 3 75%				H 3 89%
SHORELINE	CS 137 65%	CS 137 65%						
	CS 134 9%	CS 134 9%						
	CO 58 2%	CO 58 2%						
	CO 60 16%	CO 60 16%						
	SB 125 5%	SB 125 5%						
SWIMc e %&		I 131 4%						
		CS 137 20%						
		CS 134 12%						
		CO 58 37%						
		CO 60 11%						
		LA 140 3%						
		SB 125 6%						
		AG 110M 1%						

TABLE VII-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		2.98E-02	5.08E-02	2.10E-02	1.80E-01	8.03E-03	2.09E-02	1.86E-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	2.98E-02	5.08E-02	2.10E-02	1.80E-01	8.03E-03	2.09E-02	1.86E-02

SHOREWIDTH FACTOR=0.2

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

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING		SR 89 5%	CS 137 51%	SR 90 2%	I 131 90%	I 131 1%	CS 137 13%	CO 58 2%
		SR 90 5%	CS 134 12%	I 131 1%	H 3 9%	CS 137 10%	CS 134 3%	SB 125 1%
		I 131 1%	H 3 33%	CS 137 8%		CS 134 5%	H 3 82%	H 3 92%
		CS 137 75%		CS 134 3%		H 3 73%		
		CS 134 11%		CO 58 1%				
				H 3 82%				

TABLE VII-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	1.90E-01	2.86E-01	1.98E-01	4.84E-03	9.62E-02	3.22E-02	1.58E-02
FISH	TEENAGER	9.29E+03	4.24E-02	6.22E-02	2.33E-02	9.35E-04	1.54E-02	8.51E-03	2.39E-03
FISH	CHILD	5.61E+03	7.43E-02	7.77E-02	1.26E-02	1.54E-03	9.29E-03	9.04E-03	1.26E-03
FISH	TOTAL	7.30E+04	3.07E-01	4.26E-01	2.34E-01	7.11E-03	1.21E-01	4.93E-02	1.94E-02

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

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 85%	CS 137 77%	CS 137 73%	I 131 95%	CS 137 78%	CS 137 77%	CS 137 27%
	CS 134 14%	CS 134 22%	CS 134 26%	H 3 2%	CS 134 21%	CS 134 21%	NP 95 57%
				I 129 1%			CS 134 7%
							CO 58 4%
							CO 60 1%
TEENAGER	CS 137 85%	CS 137 78%	CS 137 72%	I 131 96%	CS 137 78%	CS 137 79%	CS 137 28%
	CS 134 13%	CS 134 21%	CS 134 27%	H 3 2%	CS 134 21%	CS 134 20%	NB 95 56%
				I 129 1%			CS 134 7%
							CO 58 4%
							CO 60 1%
CHILD	CS 137 86%	CS 137 79%	CS 137 72%	I 131 97%	CS 137 78%	CS 137 79%	CS 137 30%
	CS 134 13%	CS 134 20%	CS 134 26%	H 3 1%	CS 134 21%	CS 134 19%	NB 95 53%
							CS 134 6%
							CO 58 3%
							CO 60 1%
							H 3 1%
							FE 55 1%

TABLE VII-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	1.82E-02	2.73E-02	1.89E-02	3.62E-04	9.18E-03	3.07E-03	1.45E-03
FISH	TEENAGER	5.35E+05	4.05E-03	5.94E-03	2.21E-03	6.97E-05	1.47E-03	7.74E-04	2.21E-04
FISH	CHILD	3.23E+05	7.10E-03	7.42E-03	1.20E-03	9.96E-05	8.87E-04	8.63E-04	1.16E-04
FISH	TOTAL	4.20E+06	2.93E-02	4.07E-02	2.23E-02	5.31E-04	1.15E-02	4.71E-03	1.79E-02

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 85% CS 134 14%	CS 137 77% CS 134 22%	CS 137 73% CS 134 26%	I 131 94% H 3 3% I 129 2%	CS 137 78% CS 134 21%	CS 137 77% CS 134 21%	CS 137 28% NB 95 56% CS 134 7% CO 58 4% CO 60 1%
TEENAGER	CS 137 86% CS 134 13%	CS 137 78% CS 134 21%	CS 137 72% CS 134 27%	I 131 95% H 3 2% I 129 1%	CS 137 78% CS 134 21%	CS 137 79% CS 134 20%	CS 137 29% NB 95 54% CS 134 7% CO 58 4% CO 60 1%
CHILD	CS 137 86% CS 134 13%	CS 137 79% CS 134 20%	CS 137 72% CS 134 26%	I 131 96% H 3 2%	CS 137 78% CS 134 21%	CS 137 79% CS 134 19%	CS 137 31% NB 95 52% CS 134 7% CO 58 3% CO 60 1% H 3 1% FE 55 1%

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	1.90E-01	2.86E-01	1.98E-01	3.79E-03	9.61E-02	3.22E-02	1.52E-02
FISH	TEENAGER	9.29E+03	4.24E-02	6.21E-02	2.33E-02	7.29E-04	1.54E-02	8.10E-03	2.31E-03
FISH	CHILD	5.61E+03	7.43E-02	7.76E-02	1.26E-02	1.04E-03	9.29E-03	9.03E-03	1.21E-03
FISH	TOTAL	7.30E+04	3.07E-01	4.26E-01	2.34E-01	5.56E-03	1.21E-01	4.93E-02	1.87E-02

TABLE VII-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	8.49E-02	1.54E-01	1.32E-01	3.09E-01	1.02E-01	8.43E-02	9.54E-02
DRINKING	TEENAGER	1.93E+07	1.30E-02	2.73E-02	1.78E-02	6.11E-02	1.52E-02	1.34E-02	1.42E-02
DRINKING	CHILD	2.75E+07	5.13E-02	7.77E-02	4.05E-02	2.00E-01	2.17E-02	3.63E-02	3.44E-02
DRINKING	TOTAL	1.76E+08	1.29E-01	2.59E-01	1.90E-01	6.10E-01	1.39E-01	1.34E-01	1.44E-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 38%	SR 90 1%	I 131 77%	I 131 1%	CS 137 7%	CS 137 1%
	SR 90 13%	CS 134 11%	CS 137 29%	H 3 21%	CS 137 19%	CS 134 2%	CO 58 8%
	CS 137 67%	H 3 48%	CS 134 10%		CS 134 5%	H 3 88%	CO 60 2%
	CS 134 11%		H 3 56%		H 3 73%		LA 140 1%
	FE 55 2%						SB 125 4%
							H 3 78%
TEENAGER	SR 89 3%	CS 137 44%	SR 90 2%	I 131 81%	I 131 1%	CS 137 11%	CS 137 1%
	SR 90 11%	CS 134 12%	CS 137 23%	H 3 18%	CS 137 19%	CS 134 3%	CO 58 7%
	CS 137 70%	H 3 41%	CS 134 8%		CS 134 5%	H 3 83%	CO 60 2%
	CS 134 11%		CO 58 1%		H 3 73%		LA 140 1%
	FE 55 2%		H 3 63%				SB 125 4%
							H 3 79%
CHILD	SR 89 4%	CS 137 46%	SR 90 2%	I 131 84%	I 131 1%	CS 137 11%	CO 58 3%
	SR 90 8%	CS 134 12%	CS 137 13%	H 3 15%	CS 137 19%	CS 134 2%	CO 60 1%
	CS 137 74%	H 3 39%	CS 134 4%		CS 134 5%	H 3 84%	SB 125 2%
	CS 134 11%		CO 58 1%		H 3 73%		H 3 89%
			H 3 75%				

TABLE VII-E-4

DOSE (MAN-REM)

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	2.12E+07	1.05E-02	2.49E-02	2.14E-02	5.64E-02	1.65E-02	1.38E-02	1.54E-02
DRINKING	TEENAGER	3.17E+06	2.10E-03	4.41E-03	2.88E-03	9.87E-03	2.46E-03	2.17E-03	2.29E-03
DRINKING	CHILD	4.52E+06	8.30E-03	1.26E-02	6.56E-03	3.24E-02	3.51E-03	5.88E-03	5.57E-03
DRINKING	TOTAL	2.89E+07	2.09E-02	4.19E-02	3.08E-02	9.87E-02	2.25E-02	2.17E-02	2.33E-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% SR 90 13% CS 137 67% CS 134 11% FE 55 2%	CS 137 38% CS 13[illegible] H [illegible]	SR 90 1% CS 137 29% CS 134 10% H 3 56%	I 131 77% H 3 21%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 7% CS 134 2% H 3 88%	CS 137 1% CO 58 8% CO 60 2% LA 140 1% SB 125 4% H 3 78%
TEENAGER	SR 89 3% SR 90 11% CS 137 70% CS 134 11% FE 55 2%	CS 137 44% CS 134 12% H 3 41%	SR 90 2% CS 137 23% CS 134 8% CO 58 1% H 3 63%	I 131 81% H 3 18%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 11% CS 134 3% H 3 83%	CS 137 1% CO 58 7% CO 60 2% LA 140 1% SB 125 4% H 3 79%
CHILD	SR 89 4% SR 90 8% CS 137 74% CS 134 11%	CS 137 48% CS 134 12% H 3 39%	SR 90 2% CS 137 13% CS 134 4% CO 58 1% H 3 75%	I 131 84% H 3 15%	I 131 1% CS 137 19% CS 134 5% H 3 73%	CS 137 11% CS 134 2% H 3 84%	CO 58 3% CO 60 1% SB 125 2% H 3 89%

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

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	CUMUL TOTAL	2.05E+08	1.50E-01	3.01E-01	2.21E-01	7.09E-01	1.61E-01	1.56E-01	1.67E-01

HYDROSPHERE TRITIUM DOSE

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
WATER	TOTAL	2.20E+00	1.09E-08	1.09E-08	1.09E-08	1.09E-08	1.09E-08	1.09E-08	1.09E-08

TABLE VII-E-5

* * * RECREATION POPULATION DOSES * * *

			DOSE(MAN-REM)		
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SHORELINE	TOTAL POPUL	4.10E+07	3.45E-01	2.95E-01	2.95E-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	65%	CS 137	65%
	CS 134	9%	CS 134	9%
	CO 58	2%	CO 58	2%
	CO 60	16%	CO 60	16%
	SB 125	5%	SB 125	5%

			DOSE(MAN-REM)		
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SWIMMING	TOTAL POPUL	4.10E+07	0.00E+00	3.52E-03	3.52E-03

LOCATION- DOWN STREAM

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

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	SKIN		TOTAL BODY	
ADULT				
			I 131	4%
			CS 137	20%
			CS 134	12%
			CO 58	37%
			CO 60	11%
			LA 140	3%
			SB 125	6%
			AG 110M	1%

			DOSE(MAN-REM)		
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
BOATING	TOTAL POPUL	4.10E+07	0.00E+00	1.76E-03	1.76E-03

LOCATION- DOWN STREAM

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

* * * DOSE TO BIOTA * * *

MRADS PER .5YR

TABLE VII-E-6

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

	INTERNAL	EXTERNAL	TOTAL
FISH	1.72E+00	2.31E+00	4.03E+00
INVERTEBRATE	3.26E-01	4.61E+00	4.94E+00
ALGAE	1.06E+00	5.50E-03	1.07E+00
MUSKRAT	9.87E+00	1.54E+00	1.14E+01
RACCOON	4.74E-01	1.15E+00	1.63E+00
HERON	5.32E+01	1.54E+00	5.47E+01
DUCK	8.92E+00	2.31E+00	1.12E+01

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY		BODY
FISH	CS 137	75%
	NB 95	6%
	CS 134	15%
INVERTEBRATE	CS 137	20%
	CS 134	4%
	CO 58	13%
	MN 54	4%
	CO 60	4%
	LA 140	21%
	AG 110M	2%
	H 3	5%
	FE 55	20%
ALGAE	CS 137	30%
	CS 134	6%
	CO 58	4%
	CO 60	1%
	LA 140	33%
	SB 124	1%
	SB 125	14%
	H 3	1%
	FE 55	1%
MUSKRAT	SR 90	6%
	CS 137	71%
	CS 134	18%
	FE 55	1%
RACCOON	SR 90	4%
	CS 137	55%
	CS 134	15%
	CO 58	1%
	FE 55	10%
HERON	CS 137	77%
	CS 134	21%
DUCK	SR 90	7%
	CS 137	72%
	CS 134	16%
	FE 55	1%