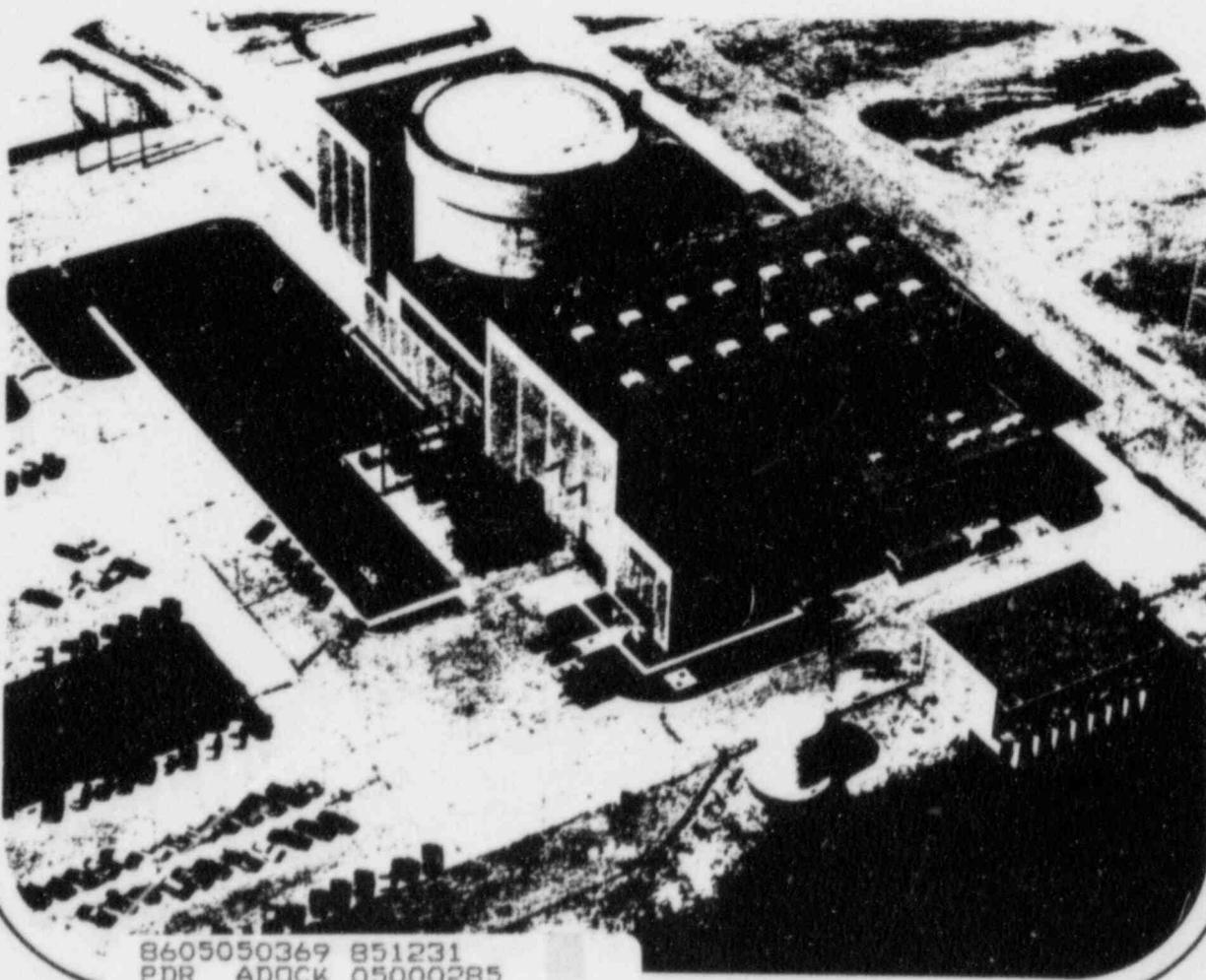


# Omaha Public Power District Fort Calhoun Station Unit No. 1

Annual Report  
for  
Technical Specification  
Section 5.9.1.b  
January 1, 1985 to  
December 31, 1985

Semi Annual Report  
for  
Technical Specification  
Section 5.9.4  
July 1, 1985 to  
December 31, 1985 inclusive



8605050369 851231  
PDR ADOCK 05000285  
R PDR

Docket No-285

Operating License No.Dpr-40

# Memorandum

Date: February 28, 1986

FC-218-86

From: W. G. Gates

To: Distribution

SUBJECT: Annual Report for Technical Specification 5.9.1.b  
January 1, 1985 to December 31, 1985

Semi-Annual Report for Technical Specification 5.9.4  
July 1, 1985 to December 31, 1985 inclusive

Attached you will find a copy of the 1985 Annual Report for January 1, 1985 through December 31, 1985 and Semi-Annual Report for July 1, 1985 through December 31, 1985 inclusive.

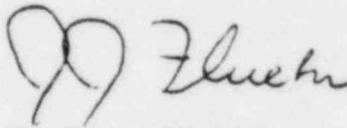
Due to the implementation of the Revised Effluent Technical Specifications (RETS) effective October 1985 for Environmental Radiological Monitoring (Technical Specification 3.11) several adjustments have been initiated for the Environmental Summary (5.9.4.b), July-December 1985.

As a result of the RETS amendments, revised analytical detection limits were introduced for several sample parameters within the program. Therefore, in compiling the combined data summaries for the third and fourth quarters of 1985 to meet the format of Technical Specification 5.9.4.b, two Sensitivity Requirement Tables were referenced for statistical evaluation of analysis results. Sample location changes were also made due to RETS requirements. Review of the combined data indicated an interpretation problem and it was determined at this time that it was not feasible to present the data in this form due to the possibility of a misinterpretation occurrence. Finally, it was ascertained that all data would be evaluated and submitted individually on a quarterly basis thus eliminating the possibility of data misinterpretation.

Part 1 Section I, Occupational Personnel Radiation Exposure Technical Specification (5.9.1.b) covering January 1, 1985 to December 31, 1985 is presented in both the third and fourth quarter reports because it was calculated on an annual basis only. Part 2 Section III, Radioactive Effluent Releases-Solid Radioactive Waste Technical Specification (5.9.4.a) covering

Distribution  
Page Two  
FC-218-86

July 1, 1985 to December 31, 1985 is also presented in both the third and fourth quarter reports because it was calculated on a semi-annual basis only.

  
for W. Gary Gates  
Manager  
Fort Calhoun Station

WGG:rge

Attachment

Distribution:

R. L. Andrews	K. L. Belek (2)
R. L. Jaworski	T. L. Patterson
P. M. Surber	G. L. Roach
J. K. Gasper	F. K. Smith
T. J. McIvor	J. M. Mattice
H. F. Sterba	

## INTRODUCTION

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

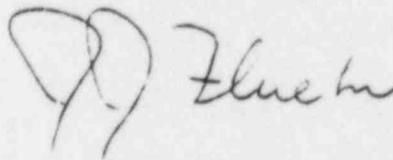
This report covers the period of January 1, 1985 through December 31, 1985 for the Annual Report for Technical Specification 5.9.1.b and the period of July 1, 1985 through December 31, 1985 for the Semi-Annual Report for Technical Specification 5.9.4.

Due to the implementation of the Revised Effluent Technical Specifications (RETS) effective October 1985 for Environmental Radiological Monitoring (Technical Specification 3.11) several adjustments have been initiated for the Environmental Summary (5.9.4.b), July-December 1985.

As a result of the RETS amendments, revised analytical detection limits were introduced for several sample parameters within the program. Therefore, in compiling the combined data summaries for the third and fourth quarters of 1985 to meet the format of Technical Specification 5.9.4.b, two Sensitivity Requirement Tables were referenced for statistical evaluation of analysis results. Sample location changes were also made due to RETS requirements. Review of the combined data indicated an interpretation problem and it was determined at this time that

it was not feasible to present the data in this form due to the possibility of a misinterpretation occurrence. Finally, it was ascertained that all data would be evaluated and submitted individually on a quarterly basis thus eliminating the possibility of data misinterpretation.

Part 1 Section I, Occupational Personnel Radiation Exposure Technical Specification (5.9.1.b) covering January 1, 1985 to December 31, 1985 is presented in both the third and fourth quarter reports because it was calculated on an annual basis only. Part 2 Section III, Radioactive Effluent Releases-Solid Radioactive Waste Technical Specification (5.9.4.a) covering July 1, 1985 to December 31, 1985 is also presented in both the third and fourth quarter reports because it was calculated on a semi-annual basis only.



for W. Gary Gates  
Manager  
Fort Calhoun Station

TABLE OF CONTENTS - THIRD QUARTER

SECTION

SECTION TITLE

I

Radioactive Effluent Releases - Gaseous Effluents  
Technical Specification (5.9.4.a.)

Table 1A      Summation of All Releases

Table 1B      Not Applicable

Table 1C      Summation of All Releases

II

Radioactive Effluent Releases - Liquid Effluents  
Technical Specification (5.9.4.a.)

Table 2A      Summation of All Releases

Table 2B      Summation of All Releases

III

Radioactive Effluent Releases - Solid Radioactive Waste  
Technical Specification (5.9.4.a.)

IV

Joint Frequency Distribution Wind Direction vs. Wind Speed  
by Stability Class and Meteorology Data Per Batch Release  
Technical Specification (5.9.4.a.)

V

Environmental Monitoring (5.9.4.b)

VI

Potential Doses to Individuals and Populations (As Required  
by Technical Specification (5.9.4.a.)

PART 1

SECTION I

OCCUPATIONAL PERSONNEL RADIATION EXPOSURE  
TECHNICAL SPECIFICATION (5.9.1.b)

January 1, 1985 to December 31, 1985

VI. OCCUPATIONAL PERSONNEL  
RADIATION EXPOSURE  
TECH SPEC 5.9.16(3)  
YEAR 1985

OMAHA PUBLIC POWER DISTRICT FORT CALIBORN MILLAR STATION  
PERSONNEL ACCUMULATIVE MREM RADIATION EXPOSURE  
TO DATE 12 31 1985 TIME 2400

NUMBER OF PERSONNEL AND MAN REM BY WORK & JOB FUNCTION

WORK & JOB FUNCTION	NUMBER OF PERSONNEL GREATER THAN 100 MREM		TOTAL MAN REM		TOTAL MAN REM
	STATION LML	OTHER LML	STATION LML	UTILITY LML	
*** REACTOR OPER. & SURV. ***	3	5	9	0.978	6.363
MAINTENANCE PERSONNEL	4	7	16	1.35	5.753
ENGINEERING PERSONNEL	3	0	3	0.016	0.606
SUPERVISORY PERSONNEL	30	0	31	0.289	13.175
OPERATING PERSONNEL	10	0	10	0.007	38.431
HEALTH PHYS. PERSONNEL	43	108	193	13.87	88.256
ROUTINE MAINTENANCE ***	5	16	21	0.694	7.994
ENGINEERING PERSONNEL	1	0	1	0.350	0.350
SUPERVISORY PERSONNEL	0	0	0	0.597	0.597
OPERATING PERSONNEL	1	0	1	0.433	21.263
HEALTH PHYS. PERSONNEL	1	0	1	0.365	29.218
INSPECTORIAL INSPECTION ***	1	45	47	0.330	0.975
MAINTENANCE PERSONNEL	0	1	1	0.061	0.065
ENGINEERING PERSONNEL	0	0	0	0.007	0.153
SUPERVISORY PERSONNEL	1	0	1	0.153	0.120
OPERATING PERSONNEL	0	0	0	0.007	0.120
HEALTH PHYS. PERSONNEL	33	144	222	19.061	127.766
SPECIAL MAINTENANCE ***	0	16	16	4.590	15.788
MAINTENANCE PERSONNEL	1	0	1	0.030	0.319
ENGINEERING PERSONNEL	5	0	5	0.008	1.831
SUPERVISORY PERSONNEL	6	0	6	0.008	4.449
OPERATING PERSONNEL	2	0	2	0.002	16.246
HEALTH PHYS. PERSONNEL	10	22	34	0.881	0.335
WASTE PROCESSING ***	0	0	0	0.062	3.570
MAINTENANCE PERSONNEL	3	0	3	0.240	0.964
ENGINEERING PERSONNEL	1	0	1	0.002	11.645
SUPERVISORY PERSONNEL	5	0	5	0.002	38.321
OPERATING PERSONNEL	16	38	85	17.570	4.375
HEALTH PHYS. PERSONNEL	3	10	14	1.665	1.113
MAINTENANCE PERSONNEL	5	0	5	0.088	0.025
ENGINEERING PERSONNEL	32	0	34	0.423	8.892
SUPERVISORY PERSONNEL	0	0	0	0.125	0.435
OPERATING PERSONNEL	106	355	590	45.325	306.170
HEALTH PHYS. PERSONNEL	22	50	89	7.228	35.220
MAINTENANCE PERSONNEL	13	0	13	4.814	4.963
ENGINEERING PERSONNEL	70	0	73	0.768	25.607
SUPERVISORY PERSONNEL	10	63	93	0.007	76.343
OPERATING PERSONNEL	241	468	858	208.403	88.256
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343
HEALTH PHYS. PERSONNEL	149	468	858	50.333	76.343
*** TOTAL ACCUMULATION ***					
TOTAL	106	355	590	45.325	306.170
MAINTENANCE PERSONNEL	22	50	89	7.228	35.220
ENGINEERING PERSONNEL	13	0	13	4.814	4.963
SUPERVISORY PERSONNEL	70	0	73	0.768	25.607
OPERATING PERSONNEL	10	63	93	0.007	76.343

OMAHA PUBLIC POWER DISTRICT FORT CALHOUN NUCLEAR STATION  
 PERSONNEL ACCUMULATIVE MREM RADIATION EXPOSURE  
 TO DATE 12-31-1985 TIME 2400  
 LAST ILL UPDATE 11-30-1985

TABLE ICC - EXPOSURE RANGE REPORT

ESTIMATED WHOLE BODY EXPOSURE RANGE (REM)**	NUMBER OF INDIVIDUALS IN EACH RANGE
NO MEASUREABLE EXPOSURE	195
MEASUREABLE EXPOSURE LESS THAN 0.1	419
0.10 TO 0.25	84
0.25 TO 0.50	112
0.50 TO 1.00	93
1.00 TO 2.00	70
2.00 TO 3.00	122
3.00 TO 4.00	48
4.00 TO 5.00	21
5.00 TO 6.00	13
6.00 TO 7.00	0
7.00 TO 8.00	0
8.00 TO 9.00	0
9.00 TO 10.00	0
10.00 TO 11.00	0
11.00 TO 12.00	0
GREATER THAN 12.00	0
TOTAL NUMBER OF PERSONNEL - 1985	1177

\*\* Individual values exactly equal to the values separating exposure ranges are reported in the higher range.

- 1 = ALL PERSONNEL GROUPED BY JOB FUNCT.
- 2 = INDIVIDUAL PERSONNEL
- 3 = PERSONNEL EXCEED A LIMIT
- 4 = PERSONNEL BY JOB FUNCTION
- 5 = PERSONNEL EXCEEDING RESPIRATORY LIMIT
- 6 = PERSONNEL WITH NO PRINT OPTION IN AFEC-
- 7 = EXIT TO MAIN PROGRAM

ENTER (1-7)??

LEAVE YLS OR NO FOR ANOTHER REPORTING

PROGRAM STOP AT 1470

HELP 1.5.2.5 UNITS

PART 2

SECTION I

RADIOACTIVE EFFLUENT RELEASES - GASEOUS EFFLUENTS  
TECHNICAL SPECIFICATION (5.9.4.a.)

Table 1A	Gaseous Effluents - Summation of All Releases
Table 1B	Not Applicable
Table 1C	Gaseous Effluents - Summation of All Releases

July 1, 1985 to September 30, 1985

## I. Radioactive Effluent Releases - Third Quarter

### A. GASEOUS EFFLUENTS

Radioactive gaseous releases for the third quarter reporting period totalled 304 Curies of inert gases. The highest release rate was  $1.07E+02$   $\mu\text{Ci}/\text{sec.}$  or 0.12% of the Technical Specification limit (83,000  $\mu\text{Ci}/\text{sec.}$ ). Averaged over the calendar quarter of the reporting period, the gross gaseous activity release rate was  $3.83E+01$   $\mu\text{Ci}/\text{sec.}$  or 0.05% the maximum release rate of the Technical Specifications (83,000  $\mu\text{Ci}/\text{sec.}$ ). This is 0.29% of the 16% value specified (13,280  $\mu\text{Ci}/\text{sec.}$ ).

Radioactive halogens and particulates with half-lives greater than eight days released during the reporting period totalled  $3.3E-04$  Curies. The highest release rate for halogens with half-lives greater than eight days for Waste Gas Decay Tanks released after 30 days of isolation or Containment Purge was  $9.56E-05$   $\mu\text{Ci}/\text{sec.}$  or .10% of the maximum release rate of the Technical Specifications (0.094  $\mu\text{Ci}/\text{sec.}$ ). The highest release rate for particulates with half-lives greater than eight days was  $4.60E-05$   $\mu\text{Ci}/\text{sec.}$  or 2.3% of the maximum release rate of the Technical Specifications (0.002  $\mu\text{Ci}/\text{sec.}$ ). Averaged over the calendar quarter of the reporting period, the halogen release rate was  $3.13E-05$   $\mu\text{Ci}/\text{sec.}$  or 0.03% of the maximum release rate of the Technical Specifications (0.094  $\mu\text{Ci}/\text{sec.}$ ). This is 0.4% of the 8%

value specified (0.0075  $\mu\text{Ci}/\text{sec.}$ ). Averaged over the calendar quarter of the reporting period, the particulate release rate was  $9.74\text{E-}06$   $\mu\text{Ci}/\text{sec.}$  or 0.49% of the maximum release rate of the Technical Specifications (0.002  $\mu\text{Ci}/\text{sec.}$ ). This is 6.1% of the 8% value specified ( $1.6\text{E-}04$   $\mu\text{Ci}/\text{sec.}$ ).

Radioactive tritium released during the reporting period totalled 0.714 Curies. Gross alpha radioactivity released during the reporting period totalled  $2.62\text{E-}07$  Curies.

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

QUARTER FOR JULY THRU SEPT 85  
3 QUARTER

NUCLIDES IN CURIES	CONT	DECAY	RM060	TOTAL	
<b>A. FISSION&amp;ACTIVATION GASES</b>					
TOTAL RELEASE	CI	3.04E+02	9.56E-02	0.00E+00	3.04E+02
AVG RELEASE RATE FOR PERIOD	UCI/SEC	3.83E+01	1.20E-02	0.00E+00	3.83E+01
PERCENT OF LIMIT TECH SPEC = 13280	%	2.88E-01	9.05E-05	0.00E+00	2.88E-01
<b>B. IODINES</b>					
TOTAL RELEASE IODINE - 131	CI	0.00E+00	0.00E+00	2.49E-04	2.49E-04
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	3.13E-05	3.13E-05
PERCENT OF LIMIT TECH SPEC = .00752	%	0.00E+00	0.00E+00	4.17E-01	4.17E-01
<b>C. PARTICULATES</b>					
PARTICULATES WITH HALF LIVES .GT. 8 DAYS	CI	0.00E+00	0.03E+00	7.75E-05	7.75E-05
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	9.74E-06	9.74E-06
PERCENT OF LIMIT TECH SPEC = .00016	%	0.00E+00	0.00E+00	6.09E+00	6.09E+00
GROSS ALPHA RADIOACTIVITY	CI	0.00E+00	0.00E+00	2.62E-07	2.62E-07
<b>D. TRITIUM</b>					
TOTAL RELEASE	CI	7.13E-01	1.25E-03	0.00E+00	7.14E-01
AVG RELEASE RATE FOR PERIOD	UCI/SEC	8.97E-02	1.57E-04	0.00E+00	8.99E-02
PERCENT OF LIMIT TECH SPEC = NONE	%				

TABLE 1C

## EFFLUENT AND WASTE DISPOSAL REPORT

## GASLOUS EFFLUENTS SUMMATION OF ALL RELEASES

QUARTER FOR JULY THRU SEPT 85

3 QUARTER

NUCLIDES IN CURIES	CONT	DECAY	RM060	TOTAL
FISSION GASES				
XENON-133	2.92E+02	9.46E-07	0.00E+00	2.92E+02
KRYPTON-85M	3.74E-02	4.77E-02	0.00E+00	8.51E-02
XENON-131M	4.20E+00	47.02E-05	0.00E+00	4.20E+00
KRYPTON-88	3.87E-02	5.55E-06	0.00E+00	3.88E-02
XENON-135M	2.88E+00	1.25E-05	0.00E+00	2.88E+00
XENON-135	2.45E+00	1.45E-06	0.00E+00	2.45E+00
KRYPTON-87	1.55E-02	2.70E-06	0.00E+00	1.55E-02
XENON-138	6.69E-02	1.12E-05	0.00E+00	6.69E-02
KRYPTON-85	2.33E+00	4.77E-02	0.00E+00	2.38E+00
XENON-135M	1.68E-02	1.88E-06	0.00E+00	1.68E-02
ARGON-41	8.06E-01	1.11E-06	0.00E+00	8.06E-01
TOTAL FOR PERIOD	3.04E+02	9.56E-02	0.00E+00	3.04E+02
IODINES				
IODINE-131 CTD.	0.00E+00	0.00E+00	2.49E-04	2.49E-04
IODINE-133 CTD.	0.00E+00	0.00E+00	1.01E-03	1.01E-03
IODINE-135 CTD.	0.00E+00	0.00E+00	4.25E-05	4.25E-05
TOTAL FOR PERIOD	0.00E+00	0.00E+00	1.30E-03	1.30E-03
PARTICULATES				
STRONTIUM-89	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
IODINE-131 PRF.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IODINE-133 PRF.	0.00E+00	0.00E+00	3.49E-05	3.49E-05
BARIUM-140	0.00E+00	0.00E+00	1.72E-05	1.72E-05
CESIUM-137	0.00E+00	0.00E+00	1.47E-05	1.47E-05
CESIUM-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00
COBALT-58	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MANGANESE-54	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
IODINE-135 PRF.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LANTHANUM-140	0.00E+00	0.00E+00	1.06E-05	1.06E-05
TOTAL FOR PERIOD	0.00E+00	0.00E+00	7.75E-05	7.75E-05
ALPHA, TRITIUM & OTHER				
ALPHA	0.00E+00	0.00E+00	2.62E-07	2.62E-07
TRITIUM	7.13E-01	1.25E-03	0.00E+00	7.14E-01
GROSS BETA/GAMMA	0.00E+00	0.00E+00	1.68E-06	1.68E-06

\*Results not available at time of initial report. Revision for Strontium 89-90 results will be provided upon receipt from vendor.

PART 2

SECTION II

RADIOACTIVE EFFLUENT RELEASES - LIQUID EFFLUENTS  
TECHNICAL SPECIFICATION (5.9.4.a.)

Table 2A      Liquid Effluents - Summation of All Releases  
Table 2B      Liquid Effluents - Summation of All Releases

July 1, 1985 to September 30, 1985

## II. Radioactive Effluent Releases - Third Quarter

### B. LIQUID EFFLUENTS

During the Third Quarter a total of  $3.32\text{E-}02$  Curies of radioactive liquid materials less tritium and dissolved noble gases were released to the Missouri River at an average concentration of  $2.01\text{E-}10$   $\mu\text{Ci/ml}$ . This represents 0.20% of the limits specified in Appendix B to 10CFR20 ( $1.0\text{E-}07$   $\mu\text{Ci/ml}$ ) for unrestricted areas. The maximum concentration of total activity (excluding tritium) released to the unrestricted area and averaged during the release  $2.59\text{E-}07$   $\mu\text{Ci/ml}$  primarily due to the inclusion of dissolved noble gases.

Dilution water during the period amounted to  $1.65\text{E+}11$  liters, while radioactive liquid waste volume was  $1.93\text{E+}07$  liters including 43 batch releases and steam generator blowdown.

Additionally, 72.8 Curies of tritium were discharged at an average concentration of  $4.42\text{E-}07$   $\mu\text{Ci/ml}$  or  $1.5\text{E-}02\%$  of MPC ( $3.0\text{E-}03$   $\mu\text{Ci/ml}$ ).

Gross alpha radioactivity released during the reporting period totalled  $4.7\text{E-}05$  Curies and was discharged at an average concentration of  $2.8\text{E-}13$   $\mu\text{Ci/ml}$  or  $9.5\text{E-}04\%$  of MPC ( $3.0\text{E-}08$   $\mu\text{Ci/ml}$ ).

During the Third Quarter,  $3.3\text{E-}02$  Curies of radioactive liquids were released. This represents 0.3% of the 10 Curies per calendar quarter specified as the Technical Specification limit.

TABLE 2A

## EFFLUENT AND WASTE DISPOSAL REPORT

## LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

QUARTER FOR JULY THRU SEPT 85

			3 QUARTER
A. FISSION&ACTIVATION PRODUCTS			
TOTAL RELEASE (NO TRITIUM,GAS,ALPHA)	CI		3.32E-02
AVG DILUTED CONCENTRATION	UCI/ML		2.01E-10
PERCENT OF LIMIT TECH SPEC = 3.0E-8	%		6.72E-01
B. TRITIUM			
TOTAL RELEASE	CI		7.28E+01
AVG DILUTED CONCENTRATION	UCI/ML		4.42E-07
PERCENT OF LIMIT TECH SPEC = 3.0E-3	%		1.47E-02
C. DISSOLVED&ENTRAINED GASES			
TOTAL RELEASE	CI		5.23E-01
AVG DILUTED CONCENTRATION	UCI/ML		3.17E-09
PERCENT OF LIMIT	%		
D. GROSS ALPHA RADIOACTIVITY			
TOTAL RELEASE	CI		4.70E-05
E. VOLUME OF WASTE RELEASE			
PRIOR TO DIL.	LITERS		1.93E+07
F. VOLUME OF DILUTION WATER			
THIS PERIOD	LITERS		1.65E+11

TABLE 2B  
EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

QUARTER FOR JULY THRU SEPT 85

3 QUARTER

NUCLIDES IN CURIES	CONT	BATCH
STRONTIUM-89	0.00E+00	0.00E+00 *
STRONTIUM-90	0.00E+00	0.00E+00 *
COBALT-57	≤ 6.63E-04	≤ 8.89E-05
MOLYBDENUM-99	≤ 4.01E-03	≤ 2.57E-04
TECHNETIUM-99M	≤ 4.41E-03	≤ 2.82E-04
CERIUM-141	≤ 1.04E-03	≤ 1.38E-04
TIN-117M	≤ 5.65E-04	≤ 8.16E-05
CHROMIUM-51	≤ 4.71E-03	4.75E-04
IODINE-131	≤ 5.83E-04	2.57E-04
IODINE-133	≤ 5.54E-04	≤ 6.10E-05
BARIUM-140	≤ 1.85E-03	≤ 1.91E-04
RUTHENIUM-103	≤ 5.42E-04	≤ 5.52E-05
CESIUM-137	≤ 9.84E-04	1.72E-03
ZIRCONIUM-95	≤ 9.47E-04	≤ 6.16E-05
NIOBIUM-95	≤ 5.55E-04	≤ 3.53E-05
CESIUM-134	≤ 7.97E-04	8.34E-04
COBALT-58	≤ 5.35E-04	≤ 4.38E-05
MANGANESE-54	≤ 5.27E-04	≤ 3.62E-05
CESIUM-136	≤ 6.78E-04	≤ 4.19E-05
IRON-59	≤ 1.02E-03	≤ 5.87E-05
ZINC-65	≤ 1.22E-03	≤ 6.76E-05
COBALT-60	≤ 6.70E-04	7.64E-05
LANTHANUM-140	≤ 5.46E-04	≤ 2.19E-05
ANTIMONY-124	≤ 8.66E-04	≤ 3.60E-05
TOTAL FOR PERIOD	≤ 2.83E-02	4.92E-03
DISSOLVED GASES		
ENTRAINED GASES		
XENON-133	≤ 2.87E-03	5.17E-01
XENON-135	≤ 5.39E-04	2.66E-03
TOTAL FOR PERIOD	3.40E-03	5.19E-01
OTHER, ALPHA & TRITIUM		
ALPHA	4.57E-05	1.31E-06
TRITIUM	5.32E-02	7.27E+01
GROSS BETA/GAMMA	0.00E+00	0.00E+00
TOTAL FOR PERIOD	5.33E-02	7.27E+01
AVG. CONC. IN UCI/ML		
ALPHA	5.88E-13	7.35E-13
TRITIUM	4.87E-10	3.99E-05

\*Results not available at time of initial report. Revision for Strontium 89-90 results will be provided upon receipt from vendor.

PART 2

SECTION III

RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE  
TECHNICAL SPECIFICATION (5.9.4.a.)

July 1, 1985 to December 31, 1985

III-1

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

July 1985 through December 1985

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	4	12.39	11.252	20%
	August	2	8.53	26.612	20%
	September	1	3.88	0.747	20%
	October	1	5.52	1.159	20%
	November	6	27.41	12.780	20%
	December	7	36.08	51.834	20%
	Six Month Total (Type A)		21 ==	93.81 =====	104.384 =====
b. Dry compressable, contaminated equipment, etc.	July	5	22.98	23.077	20%
	August	1	5.55	0.230	20%
	September	1	11.30	0.785	20%
	October	1	7.01	0.809	20%
	November	2	19.14	2.325	20%
	December	3	53.59	8.020	20%
	Six Month Total (Type B)		13 ==	119.57 =====	35.246 =====
c. Irradiated components and other categories	July	0	0	0	N/A
	August	0	0	0	N/A
	September	0	0	0	N/A
	October	0	0	0	N/A
	November	0	0	0	N/A
	December	0	0	0	N/A
	Six Month Total (Type C)		0 ==	0 =====	0 =====
d. Other	July	0	0	0	N/A
	August	0	0	0	N/A
	September	0	0	0	N/A
	October	0	0	0	N/A
	November	0	0	0	N/A
	December	0	0	0	N/A
	Six Month Total (Type D)		0 ==	0 =====	0 =====

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

	<u>Isotope</u>	<u>%</u>	<u>Curies</u>	
a.	Co-58	33.0%	33.601	All other nuclides constitute less than 1%.
	Cs-137	27.1%	27.627	
	Co-60	15.3%	15.555	
	Cs-134	13.5%	13.729	
	Ni-63	3.4%	3.446	
	H-3	2.1%	2.105	
	Sb-125	1.8%	1.900	
b.	Cs-137	68.1%	23.515	All other nuclides constitute less than 1%.
	Cs-134	24.2%	8.354	
	Co-58	3.2%	1.132	
	Co-60	2.9%	1.016	
	Bi-207	1.5%	.510	
c.	N/A	N/A	N/A	
d.	N/A	N/A	N/A	

C. SOLID WASTE (DISPOSITION)

<u>Number of Shipments</u>	<u>Transportation Mode</u>	<u>Destination</u>
11	Closed Sole Use Vehicle	Barnwell, South Carolina
16	Closed Sole Use Vehicle	Richland, Washington

D. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

<u>Number of Shipments</u>	<u>Transportation Mode</u>	<u>Destination</u>
N/A	N/A	N/A

PART 2

SECTION IV

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

Technical Specification (5.9.4.a.)

July 1, 1985 to September 30, 1985

IV. 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.

TABLE 15B - A

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO		
NNE	0.	0.	5.	5.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	1.7
NE	0.	2.	3.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.3	
ENE	0.	1.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	1.5	
E	0.	0.	0.	4.	2.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	2.2	
ESE	0.	0.	0.	0.	1.	5.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	2.3	
SE	0.	0.	0.	0.	1.	2.	0.	0.	1.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	3.4	
SSE	0.	0.	0.	0.	0.	1.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	4.4	
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	5.4	
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	4.5	
SW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	3.0	
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.9	
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.2	
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	2.0	
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.5	
NNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.5	
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	28.	2.1	
TOTAL	0.	0.	3.	15.	35.	36.	13.	14.	12.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	158.	2.8	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 7.2

TABLE 15B - B

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO		
NNE	0.	2.	1.	2.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.7
NE	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.2	
ENE	0.	1.	1.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.8	
E	0.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	2.7	
ESE	0.	0.	0.	2.	5.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	12.	2.4	
SE	0.	0.	0.	0.	2.	1.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	16.	2.9	
SSE	0.	0.	1.	5.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	26.	4.4	
S	0.	0.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	43.	4.2	
SSW	0.	0.	0.	0.	2.	3.	6.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	33.	4.1	
SW	0.	0.	1.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	16.	3.3	
WSW	0.	0.	0.	2.	1.	2.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	2.5	
W	0.	0.	0.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.8	
WNW	0.	1.	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.5	
NW	0.	0.	1.	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	2.5	
NNW	0.	1.	5.	3.	8.	2.	2.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	29.	2.6	
N	0.	2.	2.	3.	9.	5.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	3.	4.	29.	2.4	
TOTAL	0.	7.	21.	23.	40.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	25.	243.	3.2		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 11.1

TABLE 15B - C

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	INF																														
NNE	0.	0.	0.	0.	2.	0.	0.	0.	1.	0.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	2.2	
NE	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.2		
ENE	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.2		
E	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	2.1		
ESE	0.	0.	0.	0.	0.	0.	3.	1.	3.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	2.1		
SE	0.	0.	0.	0.	1.	7.	3.	7.	3.	3.	2.	2.	1.	1.	2.	3.	2.	3.	2.	2.	2.	1.	0.	0.	0.	0.	0.	0.	22.	2.8		
SSE	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	2.	1.	1.	1.	1.	1.	2.	2.	2.	6.	2.	6.	2.	0.	0.	0.	0.	0.	19.	4.7		
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	3.	9.	4.	3.	4.	4.	4.	0.	0.	0.	0.	0.	27.	4.7			
SSW	0.	0.	0.	0.	0.	0.	4.	4.	4.	4.	1.	1.	1.	1.	0.	0.	3.	1.	3.	1.	3.	1.	0.	0.	0.	0.	0.	22.	3.8			
SW	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.	1.	1.	0.	0.	1.	1.	1.	1.	3.	2.	2.	0.	0.	0.	0.	0.	0.	10.	4.0			
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	2.	3.3			
W	0.	0.	0.	0.	0.	0.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.1			
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.8			
NW	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	3.2			
NNW	0.	0.	0.	0.	1.	0.	1.	0.	1.	0.	1.	0.	1.	0.	2.	1.	2.	1.	2.	1.	1.	0.	0.	0.	0.	0.	0.	20.	3.4			
N	0.	0.	0.	0.	1.	2.	5.	3.	5.	1.	2.	1.	3.	2.	3.	2.	3.	3.	2.	4.	2.	4.	0.	0.	0.	0.	0.	15.	3.5			
TOTAL	0.	0.	3.	10.	23.	22.	14.	14.	11.	14.	19.	23.	18.	9.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	169.	3.4			

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 7.7

TABLE 158 - D

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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

SECTOR	DT100 = -0.5 TO -1.4 IN FREQUENCY										DATA USED -- WD10 , WS10 , DT100									
	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.	4.	1.	6.	3.	5.	7.	1.	0.	0.	0.	0.	1.	0.	0.	28.	2.4			
NE	0.	12.	7.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	22.	1.0			
ENE	0.	13.	13.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	29.	1.0			
E	0.	3.	12.	15.	12.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	46.	1.7			
ESE	0.	2.	3.	11.	11.	15.	2.	6.	2.	0.	0.	0.	0.	0.	0.	52.	2.4			
SE	0.	1.	7.	10.	6.	13.	13.	6.	8.	4.	0.	0.	0.	0.	0.	74.	2.9			
SSE	0.	0.	2.	5.	10.	7.	19.	14.	14.	18.	4.	1.	0.	0.	0.	112.	3.8			
S	0.	1.	3.	6.	4.	7.	12.	9.	11.	21.	42.	19.	5.	0.	0.	140.	4.5			
SSW	0.	2.	4.	5.	2.	7.	5.	10.	10.	3.	8.	2.	1.	0.	0.	59.	3.5			
SW	0.	4.	3.	4.	2.	0.	0.	2.	2.	1.	0.	0.	0.	0.	0.	20.	2.4			
WSW	0.	1.	3.	1.	1.	0.	3.	1.	1.	0.	0.	0.	0.	0.	0.	14.	2.5			
W	0.	2.	2.	0.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	6.	1.7			
WNW	1.	2.	6.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	1.4			
NW	0.	4.	5.	3.	3.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	19.	1.7			
NNW	2.	12.	16.	15.	24.	23.	12.	6.	8.	0.	7.	0.	0.	0.	0.	125.	2.4			
N	0.	10.	11.	15.	10.	13.	13.	6.	2.	1.	0.	0.	0.	0.	0.	81.	2.2			
TOTAL	3.	73.	98.	103.	90.	96.	88.	66.	59.	52.	80.	25.	8.	0.	841.	2.9				

NUMBER OF INVALID OBSERVATIONS= 2.

PERCENT OF VALID OBSERVATIONS= 38.3

TABLE 158 - E

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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

SECTOR		DT100 = -0.4 TO +1.5 IN FREQUENCY										DATA USED -- WD10 , WS10 , DT100									
		SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION										SECTOR IS WIND DIRECTION AFFECTED DIRECTION									
		0.0 TO 0.4	0.5 TO 1.0	1.0 TO 1.5	1.5 TO 2.0	2.0 TO 2.5	2.5 TO 3.0	3.0 TO 3.5	3.5 TO 4.0	4.0 TO 4.5	4.5 TO 5.0	5.0 TO 5.5	5.5 TO 6.0	6.0 TO 6.5	6.5 TO 7.0	7.0 TO 7.5	7.5 TO 8.0	8.0 TO 8.5	8.5 TO 9.0	TOTAL	UBAR
ENE		0.	3.	4.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.1
NE		0.	2.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.2
ENE		0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.8
E		0.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.2
ESE		0.	3.	6.	5.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	1.3
SE		1.	6.	12.	17.	3.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	63.	1.7
SSE		0.	5.	8.	12.	19.	15.	3.	7.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	76.	2.7
S		0.	4.	2.	7.	11.	15.	7.	9.	4.	2.	3.	0.	0.	0.	0.	0.	0.	0.	72.	3.1
SSW		0.	5.	1.	3.	2.	5.	5.	7.	5.	7.	1.	0.	0.	0.	0.	0.	0.	0.	44.	3.4
SW		0.	6.	2.	0.	1.	2.	1.	0.	0.	0.	4.	0.	0.	0.	0.	0.	0.	0.	15.	2.4
WSW		0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	2.9
W		1.	11.	1.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	0.7
WNW		0.	24.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	30.	0.7
NW		1.	31.	21.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	58.	1.0
NNW		1.	16.	14.	16.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	53.	1.3
N		1.	4.	0.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	1.2
TOTAL		5.	125.	78.	69.	47.	39.	42.	18.	23.	13.	14.	5.	5.	1.	0.	0.	0.	479.	2.0	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 21.8

TABLE 158 - F

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO		
NNE	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.6
NE	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.6
ENE	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.6
E	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	0.8
ESE	0.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.0
SE	0.	12.	5.	10.	11.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	44.	1.6
SSE	0.	9.	5.	5.	5.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	28.	1.5
S	0.	2.	1.	1.	3.	3.	6.	5.	2.	3.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	16.	2.3
SSW	3.	9.	1.	0.	5.	6.	5.	2.	2.	2.	5.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	37.	2.3
SW	4.	1.	2.	1.	0.	1.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	2.4
WSW	7.	2.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	16.	1.5
W	3.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	13.	0.7
WNW	5.	26.	4.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	36.	0.7
NW	0.	18.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	31.	0.9
NNW	0.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.6
N	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.5
TOTAL	23.	106.	40.	19.	24.	19.	14.	6.	3.	6.	14.	6.	6.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	263.	1.4	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 12.0

TABLE 15B - G  
 DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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 1.0		1.5 TO 2.0		2.5 TO 3.0		3.5 TO 4.0		4.5 TO 5.0		5.5 TO 6.0		6.5 TO 7.0		7.5 TO 8.0		TOTAL	UBAR
	TO	INF																		
NNE	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.7
NE	0.	0.	0.	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.	2.	0.8
E	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.9
ESE	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.3
SE	0.	0.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.6
SSE	2.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.9
S	1.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	1.9
SSW	3.	0.	2.	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.0
SW	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.4
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.4
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.3
WNW	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.0
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.2
NNW	1.	0.	0.	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.	0.	0.0
TOTAL	11.	15.	6.	1.	3.	1.	2.	2.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	42.	1.2

NUMBER OF INVALID OBSERVATIONS= 0.  
 PERCENT OF VALID OBSERVATIONS= 1.9

TABLE 158 - ALL

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT  
FORT CALHOUN NUCLEAR STATION

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

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

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	14.	13.	13.	9.	8.	11.	1.	0.	0.	0.	0.	1.	0.	0.	70.	1.9
NE	1.	17.	17.	5.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	43.	1.1
ENE	0.	18.	20.	7.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	50.	1.2
E	0.	9.	20.	19.	15.	6.	3.	2.	1.	0.	0.	0.	0.	0.	0.	75.	1.7
ESE	0.	7.	13.	22.	22.	22.	5.	8.	2.	0.	0.	0.	0.	0.	0.	101.	2.1
SE	1.	19.	27.	54.	42.	25.	20.	10.	13.	8.	9.	0.	0.	0.	0.	228.	2.3
SSE	2.	20.	10.	18.	30.	31.	39.	27.	24.	30.	35.	8.	5.	0.	0.	279.	3.3
S	1.	9.	8.	16.	16.	26.	36.	24.	38.	39.	64.	35.	6.	0.	0.	318.	4.1
SSW	6.	16.	10.	12.	19.	22.	24.	28.	27.	15.	22.	12.	5.	2.	0.	220.	3.4
SW	4.	11.	8.	8.	8.	4.	7.	9.	6.	9.	10.	0.	0.	0.	0.	84.	2.8
WSW	7.	8.	6.	5.	3.	3.	8.	5.	2.	3.	1.	1.	1.	0.	0.	53.	2.3
W	4.	23.	5.	4.	8.	1.	2.	1.	1.	0.	0.	0.	0.	0.	0.	49.	1.2
WNW	10.	55.	15.	8.	4.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	95.	0.9
NW	1.	53.	42.	11.	7.	4.	2.	2.	2.	1.	0.	0.	0.	0.	0.	125.	1.2
NNW	4.	36.	37.	37.	42.	26.	18.	13.	12.	2.	13.	1.	0.	0.	0.	241.	2.2
N	1.	17.	17.	34.	33.	24.	20.	13.	3.	2.	0.	0.	0.	0.	0.	164.	2.2
TOTAL	42.	332.	268.	273.	262.	207.	196.	144.	131.	109.	154.	57.	18.	2.	0.	2195.	2.6

NUMBER OF INVALID OBSERVATIONS= 13.

PERCENT OF VALID OBSERVATIONS= 99.4

TABLE 159 - A

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR	
	TO	INF	TO	0.4	TO	0.9	TO	1.4	TO	1.9	TO	2.4	TO	2.9	TO	3.4	TO	3.9	TO	4.4	TO	4.9	TO	5.9	TO	6.9	TO	7.9	TO	8.9			TO
NNE	0.00	0.00	0.00	0.23	0.23	0.14	0.09	0.05	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	1.7
NE	0.00	0.09	0.14	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	1.3	
ENE	0.00	0.05	0.14	0.14	0.04	0.04	0.04	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	1.5	
E	0.00	0.00	0.00	0.18	0.09	0.14	0.09	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	2.2	
ESE	0.00	0.00	0.00	0.05	0.05	0.09	0.05	0.05	0.04	0.09	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	2.3	
SE	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.27	3.4	
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	0.00	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	0.46	4.4	
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	0.00	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	0.68	5.4	
SSW	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	4.5	
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	0.00	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	0.27	3.0	
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	0.00	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	0.23	2.9	
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	0.00	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	0.23	2.2	
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	0.00	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	0.27	2.0	
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	0.00	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	0.27	1.5	
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	0.00	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	0.23	2.5	
NN	0.00	0.00	0.00	0.14	0.41	0.41	0.41	0.41	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	2.1	
TOTAL	0.00	0.14	0.70	1.61	1.65	0.57	0.64	0.54	0.32	0.00	0.00	0.49	0.50	0.00	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	7.20	2.8		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 7.2

TABLE 159 - B

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO																															
NNE	0.00	0.09	0.05	0.09	0.09	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.7
NE	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.14	1.2
ENE	0.00	0.05	0.05	0.04	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.27	1.8
E	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.18	2.7
ESE	0.00	0.00	0.00	0.00	0.09	0.23	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	2.4
SE	0.00	0.00	0.00	0.23	0.09	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	2.9
SSE	0.00	0.00	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.19	4.4
S	0.00	0.00	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.96	4.2
SSW	0.00	0.00	0.09	0.00	0.09	0.14	0.27	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.50	4.1
SW	0.00	0.00	0.05	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.73	3.3
WSW	0.00	0.00	0.00	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.27	2.5
W	0.00	0.00	0.05	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.23	1.8
WNW	0.00	0.05	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	1.5
NW	0.00	0.00	0.05	0.03	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	2.5
NNW	0.00	0.05	0.23	0.14	0.36	0.05	0.09	0.09	0.09	0.18	0.05	0.06	0.09	0.09	0.18	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.32	2.6
N	0.00	0.09	0.09	0.14	0.41	0.23	0.18	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.32	2.4
TOTAL	0.00	0.33	0.99	1.05	1.84	1.15	1.13	1.13	1.16	0.90	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	0.81	1.09	11.07	3.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 11.1

TABLE 159 - C  
 DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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	SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION										TOTAL	UBAR					
	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
NNE	0.00	0.00	0.09	0.00	0.05	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	2.2
NE	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.2
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	1.2
E	0.00	0.05	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	0.14	2.1
ESE	0.00	0.00	0.00	0.14	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.1
SE	0.00	0.00	0.05	0.32	0.14	0.09	0.04	0.09	0.14	0.09	0.04	0.00	0.00	0.00	0.00	1.00	2.8
SSE	0.00	0.00	0.00	0.00	0.05	0.09	0.05	0.05	0.05	0.09	0.27	0.09	0.09	0.00	0.00	0.87	4.7
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.14	0.14	0.18	0.18	0.00	0.00	0.00	1.23	4.7
SSW	0.00	0.00	0.00	0.18	0.18	0.05	0.05	0.00	0.18	0.14	0.04	0.14	0.04	0.00	0.00	1.00	3.8
SW	0.00	0.00	0.00	0.00	0.09	0.05	0.00	0.04	0.04	0.14	0.09	0.00	0.00	0.00	0.00	0.46	4.0
WSW	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.09	3.3
W	0.00	0.00	0.05	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.1
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	0.09	0.8
NW	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	3.2
NNW	0.00	0.00	0.05	0.00	0.05	0.00	0.04	0.00	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.91	3.4
N	0.00	0.00	0.05	0.18	0.14	0.09	0.14	0.09	0.14	0.09	0.18	0.00	0.00	0.00	0.00	0.68	2.5
TOTAL	0.00	0.14	0.48	1.05	1.02	0.64	0.50	0.63	0.86	1.04	0.80	0.41	0.13	0.00	7.70	3.4	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 7.7

TABLE 159 - D

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO																															
NNE	0.00	0.18	0.05	0.27	0.14	0.23	0.32	0.32	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	2.4
NE	0.00	0.55	0.32	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	0.00	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	1.00	1.0
ENE	0.00	0.59	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	0.00	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	1.32	1.0
E	0.00	0.14	0.55	0.68	0.55	0.09	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	1.7
ESE	0.00	0.09	0.14	0.50	0.50	0.69	0.09	0.27	0.27	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	2.4
SE	0.00	0.05	0.32	0.46	0.27	0.59	0.59	0.27	0.37	0.37	0.27	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	0.00	0.00	0.00	0.00	3.37	2.9
SSE	0.00	0.00	0.09	0.23	0.45	0.32	0.87	0.64	0.64	0.64	0.82	0.82	0.82	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	0.00	0.00	5.10	3.8
S	0.00	0.04	0.14	0.27	0.18	0.32	0.55	0.41	0.50	0.46	0.46	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	4.5
SSW	0.00	0.09	0.18	0.23	0.09	0.32	0.23	0.23	0.46	0.46	0.46	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.69	3.5
SW	0.00	0.18	0.14	0.18	0.09	0.00	0.00	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.91	2.4
WSW	0.00	0.05	0.14	0.05	0.04	0.00	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.64	2.5
W	0.00	0.09	0.09	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.27	1.7
WNW	0.05	0.09	0.27	0.09	0.09	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.64	1.4
NW	0.00	0.18	0.23	0.14	0.14	0.09	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.86	1.7
NNW	0.09	0.55	0.73	0.68	1.09	1.05	0.55	0.55	0.27	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	5.69	2.4
N	0.00	0.46	0.50	0.68	0.46	0.59	0.59	0.59	0.27	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	3.69	2.2
TOTAL	0.14	3.33	4.48	4.69	4.09	4.38	4.02	3.00	3.00	2.68	2.37	3.64	1.14	0.35	0.00	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	38.31	2.9

NUMBER OF INVALID OBSERVATIONS= 2.

PERCENT OF VALID OBSERVATIONS= 38.3

TABLE 159 - E  
 DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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

DATA USED -- WD10 ,WS10 ,DT100

DT100 = -0.4 TO +1.5 IN PERCENT

SECTOR	SECTOR 15 WIND DIRECTION NOT AFFECTED DIRECTION										TOTAL	UBAR					
	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
NNE	0.00	0.14	0.18	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.1
NE	0.00	0.09	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	0.27	1.2
ENE	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	0.00	0.00	0.14	0.8
E	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
ESE	0.00	0.14	0.27	0.23	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	1.3
SE	0.05	0.27	0.55	0.96	0.77	0.14	0.09	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.00	2.87	1.7
SSE	0.00	0.23	0.09	0.36	0.55	0.87	0.68	0.14	0.32	0.18	0.09	0.14	0.00	0.00	0.00	3.45	2.7
S	0.00	0.18	0.09	0.37	0.32	0.50	0.68	0.32	0.41	0.18	0.32	0.04	0.00	0.00	0.00	3.28	3.1
SSW	0.00	0.23	0.04	0.14	0.14	0.09	0.23	0.23	0.32	0.23	0.32	0.18	0.00	0.00	0.00	2.01	3.4
SW	0.00	0.27	0.09	0.00	0.05	0.05	0.00	0.04	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.68	2.4
WSW	0.00	0.14	0.05	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.36	2.9
W	0.05	0.50	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.7
WNW	0.00	1.09	0.23	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.7
NW	0.05	1.41	0.96	0.14	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.64	1.0
MNW	0.04	0.73	0.64	0.73	0.14	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.42	1.3
N	0.05	0.18	0.00	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	1.2
TOTAL	0.24	5.69	3.56	3.17	2.14	1.77	1.91	0.81	1.05	0.59	0.63	0.22	0.04	0.00	0.00	21.82	2.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 21.8

TABLE 159 - F

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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

SECTOR:	DATA USED -- WD10 , WS10 , DT100																		TOTAL	USAR
	DT100 = +1.6 TO +4.0 IN PERCENT									SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION										
	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					
NNE	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	0.00	0.00	0.00	0.18	0.6	
NE	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	0.00	0.00	0.00	0.14	0.6	
ENE	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	0.00	0.00	0.05	0.6	
E	0.00	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.8	
ESE	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	0.00	0.00	0.18	1.0	
SE	0.00	0.55	0.23	0.45	0.50	0.27	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	1.6	
SSE	0.00	0.41	0.23	0.23	0.23	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.5	
S	0.00	0.09	0.05	0.04	0.14	0.14	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	2.3	
SSW	0.14	0.41	0.05	0.00	0.23	0.27	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.69	2.3	
SW	0.18	0.05	0.09	0.05	0.00	0.04	0.00	0.09	0.04	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.68	2.4	
WSW	0.32	0.09	0.09	0.05	0.00	0.00	0.00	0.09	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.73	1.5	
W	0.14	0.41	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.7	
WNW	0.23	1.18	0.18	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	1.64	0.7	
NW	0.00	0.82	0.55	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	1.41	0.9	
NNW	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	0.00	0.00	0.00	0.36	0.6	
N	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	0.00	0.00	0.05	0.5	
TOTAL	1.06	4.84	1.82	0.86	1.10	0.86	0.63	0.27	0.13	0.14	0.27	0.00	0.00	0.00	0.00	0.00	0.00	11.98	1.4	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 12.0

TABLE 159 - G

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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

SECTOR		DATA USED -- WD10 , WS10 , DT100										TOTAL	UBAR					
		DT100 = +4.1 TO +INF IN PERCENT																
		SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION																
TO	TO	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0			
		TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	INF		
0.0	0.0	0.00	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	0.7
0.4	0.9	0.09	0.14	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.9	6.9	7.9	8.9	INF		0.00	0.0
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	0.09	0.8
E		0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.9
ESE		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	0.14	1.3
SE		0.00	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	0.36	0.6
SSE		0.09	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.23	1.9
S		0.05	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	0.46	1.9
SSW		0.14	0.00	0.09	0.00	0.00	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.0
SW		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	0.4
WSW		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	0.05	0.4
W		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	0.18	0.3
WNW		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	0.04	1.0
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	0.2
NNW		0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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		0.50	0.69	0.26	0.05	0.14	0.05	0.09	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	1.91	1.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 1.9

TABLE 159 - ALL

DATA PERIOD 07/01/1985 THROUGH 09/30/1985 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	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TOTAL	UBAR
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO		
	0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.9	6.9	7.9	8.9	INF		
NNE	0.00	0.64	0.59	0.59	0.41	0.36	0.50	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	3.19	1.9
NE	0.05	0.77	0.77	0.23	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96	1.1
ENE	0.00	0.82	0.91	0.32	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.28	1.2
E	0.00	0.41	0.91	0.87	0.68	0.27	0.14	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	3.42	1.7
ESE	0.00	0.32	0.59	1.00	1.00	1.00	0.23	0.37	0.09	0.00	0.00	0.00	0.00	0.00	0.00	4.60	2.1
SE	0.05	0.87	1.23	2.46	1.91	1.14	0.91	0.46	0.59	0.36	0.41	0.00	0.00	0.00	0.00	10.39	2.3
SSE	0.09	0.91	0.46	0.82	1.37	1.41	1.78	1.23	1.09	1.37	1.59	0.36	1.23	0.00	0.00	12.71	3.3
S	0.05	0.41	0.36	0.73	0.73	1.18	1.64	1.09	1.73	1.78	2.92	1.60	0.27	0.00	0.00	14.49	4.1
SSW	0.27	0.73	0.45	0.55	0.87	1.00	1.09	1.28	1.23	0.68	1.00	0.55	0.23	0.05	0.00	10.02	3.4
SW	0.18	0.50	0.37	0.37	0.36	0.18	0.32	0.41	0.27	0.41	0.46	0.00	0.00	0.00	0.00	3.83	2.8
WSW	0.32	0.36	0.27	0.14	0.14	0.14	0.36	0.23	0.09	0.14	0.05	0.04	0.04	0.00	0.00	2.41	2.3
W	0.18	1.05	0.23	0.18	0.36	0.05	0.09	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	2.23	1.2
WNW	0.46	2.51	0.68	0.18	2.18	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.33	0.9
NW	0.05	2.41	1.91	0.32	0.32	0.18	0.09	0.09	0.09	0.05	0.00	0.00	0.00	0.00	0.00	5.69	1.2
NNW	0.18	1.64	1.69	1.18	1.18	1.18	0.82	0.59	0.55	0.09	0.59	0.05	0.00	0.00	0.00	10.98	2.2
N	0.05	0.78	0.77	1.09	1.09	1.09	0.91	0.59	0.14	0.09	0.00	0.00	0.00	0.00	0.00	7.47	2.2
TOTAL	1.93	15.13	12.19	12.19	9.41	9.41	8.93	6.57	5.96	4.97	7.02	2.60	0.82	0.09	0.00	100.00	2.6

NUMBER OF INVALID OBSERVATIONS= 13.

PERCENT OF VALID OBSERVATIONS= 99.4

RELEASE NUMBER 85029

CONTAINMENT PURGE

STARTING TIME JULY 3, 1985 HOUR 18 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	9.5	236.5	-1.7
19	10.7	235.1	-1.7
20	10.8	247.4	-1.7
21	10.2	236.1	-1.4
22	7.7	238.9	-0.8
23	4.7	229.0	0.8
24	6.0	310.2	0.4
1	3.5	158.3	1.0
2	8.1	217.7	3.8
3	16.3	245.5	1.1
4	15.4	247.6	0.6
5	9.9	247.4	2.0
6	9.1	191.7	0.8
7	6.1	160.7	0.8
8	5.0	148.4	1.8
9	7.5	181.1	1.8
10	5.6	194.6	1.3
11	10.9	210.4	2.4
12	4.0	220.1	-0.9
13	8.8	249.8	-1.2
14	8.8	259.8	-1.4
15	5.9	323.1	-1.9
16	10.0	342.1	-1.6
17	12.2	347.0	-1.7
18	12.4	344.3	-1.8
19	13.2	338.6	-1.8
20	12.7	340.1	-1.8
21	12.5	342.8	-1.6
22	11.2	346.3	-1.3
23	8.9	346.0	-1.0
24	6.6	343.7	-0.4
1	1.7	313.6	1.5
2	1.3	297.3	2.9
3	1.3	310.4	3.4
4	0.6	252.5	3.8
5	0.8	248.7	2.9
6	1.5	327.9	3.8
7	2.3	339.9	2.4
8	2.1	323.8	2.1
9	1.1	331.0	1.8
10	0.7	359.4	1.4
11	1.6	342.2	-0.5
12	3.0	349.2	-1.4
13	4.4	344.6	-1.7
14	6.3	345.7	-1.8
15	7.6	347.9	-2.0
16	9.0	348.7	-2.0
17	7.8	355.6	-1.9
18	7.8	2.5	-2.0

19	8.0	357.8	-1.8
20	6.1	358.0	-1.7
21	5.7	352.3	-1.3
22	4.7	346.7	-0.8
23	3.0	347.4	-0.3

STOP TIME JULY 5, 1985 HOUR 22 MINUTE 40

STARTING TIME JULY 6, 1985 HOUR 10 MINUTE 43

TIME HOUR	WS10 MPH	WD10 DEG	OT100 DEG C
10	0.8	213.0	7.8
11	0.8	272.2	4.0
12	1.0	111.0	0.1
13	1.1	62.1	-1.7
14	2.5	276.8	-1.8
15	3.3	306.8	-2.1
16	4.5	264.9	-2.0
17	3.7	235.2	-1.8
18	3.8	239.9	-1.9
19	4.8	210.3	-1.6
20	3.9	203.7	-1.5
21	3.8	186.8	-1.4
22	4.0	174.7	-0.9
23	3.5	183.7	1.9
24	5.4	179.9	1.1
1	6.1	175.8	1.6
2	7.0	173.1	1.8
3	6.5	193.3	1.6
4	5.0	178.4	0.7
5	5.5	193.8	1.3
6	7.8	196.2	1.1
7	11.8	203.4	0.7
8	12.7	224.6	-0.1
9	11.9	213.7	-0.2
10	9.6	209.2	-0.3
11	9.8	214.5	-0.6
12	11.5	208.1	-1.0
13	11.5	213.7	-1.4
14	12.1	218.2	-1.6
15	12.3	225.4	-1.7
16	10.4	216.5	-1.6
17	10.3	222.2	-1.7
18	10.4	221.1	-1.7
19	10.6	222.8	-1.6
20	8.3	212.8	-1.3
21	7.3	206.7	-1.1

STOP TIME JULY 7, 1985 HOUR 20 MINUTE 42

STARTING TIME			
JULY 7, 1985			
HOUR 21 MINUTE 37			
TIME	WS10	WD10	DT100
HOUR	MPH	DEG	DEG C
21	7.3	206.7	-1.1
22	7.3	169.6	-0.7
23	4.5	212.8	3.0
24	2.3	250.1	2.7
1	5.9	211.3	2.4
2	5.7	197.3	3.0
3	9.3	208.6	2.0
4	10.6	211.2	0.8
5	7.5	198.4	1.3
6	5.7	189.1	1.4
7	2.5	103.1	1.6
8	2.2	97.5	1.6
9	2.0	96.0	1.6
10	2.7	101.0	0.6
STOP TIME			
JULY 8, 1985			
HOUR 9 MINUTE 37			

RELEASE NUMBER 85030 CONTAINMENT PURGE

STARTING TIME JULY 11, 1985 HOUR 12 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
12	3.5	333.9	-1.7
13	4.4	346.7	-1.9
14	3.1	0.8	-2.0
15	3.8	10.3	-2.0
16	3.6	54.7	-2.3
17	3.5	87.0	-2.2
18	4.9	102.5	-2.1
19	4.4	114.0	-1.9
20	6.0	138.5	-1.6
21	6.6	132.5	-1.5
22	8.7	149.2	-1.2
23	5.3	151.0	-0.4
24	4.3	146.0	1.1
1	3.8	141.4	1.5
2	4.4	139.0	1.8
3	4.4	154.4	1.5
4	3.6	177.8	1.3
5	4.6	180.6	1.9
6	2.7	107.2	2.0
7	3.9	153.4	2.8
8	4.4	136.4	4.2
9	13.2	175.4	4.4
10	7.7	119.5	0.3
11	7.3	128.7	-0.4
12	10.4	156.1	-0.7
13	10.0	147.6	-0.8
14	8.7	156.7	-1.1
15	7.8	160.9	-1.3
16	7.9	161.7	-1.3
17	8.4	169.9	-1.1
18	5.7	174.3	-1.8
19	6.0	213.0	-1.8
20	5.5	218.1	-1.7
21	4.7	234.4	-1.6
22	3.6	235.8	-1.4
23	2.4	292.1	-1.1

STOP TIME JULY 12, 1985 HOUR 22 MINUTE 5

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
8	1.4	153.5	2.4
9	1.8	126.1	2.1
10	2.2	131.2	2.8
11	2.3	100.8	3.0
12	5.0	168.3	0.5
13	5.2	179.2	0.4
14	7.1	182.9	-1.0
15	6.6	175.2	-1.0
16	1.5	178.4	-0.8
17	5.2	181.7	-1.4
18	3.8	208.9	-1.6
19	1.9	45.3	-2.1
20	3.0	112.5	-1.4
21	2.7	91.5	-1.5
22	1.7	2.7	-0.5
23	1.6	20.6	-0.2
24	5.6	49.2	1.0
1	5.9	18.1	0.1
2	3.3	328.1	1.2
3	3.7	37.7	0.2
4	5.1	200.8	1.6
5	2.9	119.5	1.3
6	1.7	309.6	0.8
7	1.0	293.7	0.8
8	1.8	321.5	0.6
9	1.7	303.8	0.9
10	2.4	312.2	0.7
11	1.8	346.1	-0.2
12	2.4	61.3	-1.6
13	3.4	49.0	-2.0
14	3.3	61.8	-2.3
15	-99.0	-99.0	-99.0
16	6.9	354.2	-1.6
17	9.9	356.6	-1.7
18	10.1	10.0	-1.4
19	3.8	352.5	-0.9
20	1.8	230.0	-0.6
21	2.0	342.1	0.1
22	3.5	335.5	0.3
23	6.1	342.8	-0.7
24	2.3	327.8	-0.3
1	2.0	327.9	0.3
2	2.3	320.7	0.6
3	1.5	310.0	0.3
4	1.2	298.1	0.8
5	0.9	304.1	0.8
6	0.9	295.4	1.3
7	1.0	289.8	1.5
8	1.6	344.3	-0.3

9	2.4	343.0	-1.5
10	3.0	346.0	-1.8

STOP TIME    JULY 15, 1985    HOUR 9 MINUTE 31

RELEASE NUMBER 85031 CONTAINMENT PURGE  
 STARTING TIME JULY 18, 1985 HOUR 14 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	11.4	192.9	-0.9
15	9.0	182.4	-1.6
16	7.8	204.1	-1.8
17	7.1	200.3	-1.9
18	5.2	210.1	-1.8
19	4.0	243.4	-1.6
20	2.0	315.3	-0.9
21	1.6	23.5	-0.5
22	1.0	35.8	-0.5
23	1.1	13.5	-0.6
24	1.2	3.3	-0.6
1	1.1	9.7	-0.6
2	3.4	294.5	-0.6
3	2.3	141.6	-0.3
4	3.0	184.7	-0.6
5	3.3	172.8	-0.6
6	3.2	179.4	-0.5
7	6.0	221.4	-0.8
8	4.1	149.9	-0.9
9	1.4	226.6	-0.9
10	2.1	204.2	-0.9
11	1.7	203.3	-0.9
12	4.3	183.3	-0.9
13	3.7	89.2	-1.0
14	3.3	100.6	-1.1
15	1.8	210.6	-1.4
16	1.5	282.6	-1.6
17	2.8	334.7	-2.0
18	3.8	354.7	-1.4
19	4.0	349.3	-1.3
20	3.4	4.4	-1.6
21	2.8	20.2	-1.5
22	1.7	80.3	-1.5
23	1.0	347.6	-0.7
24	2.9	348.1	-1.8
1	2.8	344.7	0.9
2	2.2	296.6	1.5
3	1.9	292.4	1.7
4	1.7	293.7	1.4
5	1.2	293.7	1.5
6	1.5	298.3	1.7
7	1.4	289.5	2.0
8	1.7	292.0	2.2

STOP TIME JULY 20, 1985 HOUR 7 MINUTE 37

STARTING TIME JULY 20, 1985 HOUR 10 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	1.5	292.3	1.6
11	1.8	304.0	1.1
12	1.8	329.3	-0.4
13	1.7	333.5	-1.0
14	3.0	41.9	-1.8
15	2.2	87.0	-1.9

STOP TIME JULY 20, 1985 HOUR 14 MINUTE 17

STARTING TIME JULY 20, 1985 HOUR 15 MINUTE 24

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
15	2.2	87.0	-1.9
16	2.3	4.9	-2.1
17	2.0	41.0	-1.8
18	1.5	5.6	-1.2
19	2.8	353.2	-1.9
20	2.4	347.5	-0.9
21	2.8	346.3	-1.1
22	1.8	2.3	-0.9
23	0.7	283.8	-0.6
24	0.8	330.7	-0.3
1	0.9	264.8	0.4
2	1.0	279.4	0.7
3	1.9	274.4	0.6
4	1.2	285.7	0.3
5	1.1	290.4	-0.2
6	1.6	301.0	-0.1
7	1.9	302.6	0.4
8	1.6	317.4	0.5

STOP TIME JULY 21, 1985 HOUR 7 MINUTE 49

JULY 21, 1985 HOUR 11 MINUTE 40

JULY 21, 1985

STARTING TIME

WS10  
MPH

WD10  
DEG

DT100  
DEG C

TIME  
HOUR

11	0.8	128.9	0.4
12	1.4	81.0	-1.1
13	2.6	168.2	-1.9
14	2.7	189.8	-1.8
15	3.4	68.4	-2.3
16	2.4	58.5	-2.2
17	2.7	73.3	-2.4
18	2.8	21.1	-2.1
19	3.3	349.5	-2.1
20	1.9	344.1	-1.9
21	1.2	0.1	-1.8
22	1.1	32.1	-1.8
23	0.9	90.1	-0.9
24	1.5	211.8	1.1
1	2.0	155.7	1.4
2	2.7	70.9	-0.3
3	2.7	341.3	-0.6
4	2.4	38.9	-0.5
5	2.7	84.2	-0.6
6	1.9	26.9	-0.2
7	1.2	39.6	-0.1
8	1.5	35.3	-0.4
9	2.0	26.4	-0.8
10	1.9	338.2	-0.7
11	1.8	335.4	-0.1
12	1.2	335.9	-0.4
13	3.1	48.6	-1.7
14	3.4	90.5	-2.1
15	5.0	110.8	-2.0
16	4.7	113.5	-2.1
17	4.4	123.8	-2.1
18	4.1	141.3	-2.0
19	4.0	131.6	-2.0
20	3.9	118.2	-2.0
21	4.0	128.6	-1.9
22	3.5	103.0	-1.7
23	3.1	97.7	-1.1
24	2.1	136.6	0.1
1	1.1	211.4	1.4
2	0.6	229.7	1.9
3	0.5	197.9	1.9
4	0.5	213.0	2.3
5	1.9	141.4	2.1
6	2.7	130.9	1.9
7	3.0	130.6	1.3
8	1.8	135.9	1.2

STOP TIME JULY 23, 1985 HOUR 7 MINUTE 30

RELEASE NUMBER 85032      CONTAINMENT PURGE

STARTING TIME      JULY 25, 1985      HOUR 22 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
22	4.4	1.7	-0.9
23	3.9	352.5	-0.6
24	3.7	335.9	0.6
1	2.4	321.5	2.4
2	1.1	297.4	2.6
3	1.3	293.2	1.9
4	1.4	286.3	2.0
5	0.9	271.3	2.5
6	1.5	271.3	1.7
7	1.4	280.8	2.1
8	1.2	304.8	2.2
9	1.1	169.2	2.3
10	1.7	303.5	2.4

STOP TIME      JULY 26, 1985      HOUR 9 MINUTE 20

STARTING TIME      JULY 26, 1985      HOUR 10 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	1.7	303.5	2.4
11	1.0	323.8	0.6
12	1.5	24.1	-1.5
13	1.4	36.9	-2.2
14	2.7	43.5	-2.2
15	2.8	38.7	-2.1
16	2.8	52.4	-2.2
17	2.5	68.8	-2.3
18	3.2	63.7	-2.3
19	3.2	171.3	-1.9

STOP TIME      JULY 26, 1985      HOUR 18 MINUTE 38

STARTING TIME      JULY 26, 1985      HOUR 19 MINUTE 9

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	3.2	171.3	-1.9
20	3.3	200.0	-1.5
21	3.4	142.8	-1.6
22	2.4	115.8	-1.5
23	2.3	131.5	-0.8
24	3.5	149.5	0.6
1	2.2	159.9	2.8
2	4.4	206.5	2.7
3	6.2	203.3	2.8
4	7.1	203.3	3.3
5	6.9	199.5	3.2
6	7.5	205.6	3.3
7	7.5	203.9	3.7
8	7.8	204.8	3.9
9	7.1	212.7	4.0
10	6.5	210.1	4.4
11	6.4	204.9	2.7
12	6.9	194.1	-0.5
13	7.9	185.4	-1.5
14	8.9	186.2	-1.7
15	8.8	177.4	-1.8
16	8.2	176.9	-1.7
17	9.0	171.3	-1.8
18	8.9	171.0	-1.7
19	8.3	178.8	-1.6
20	7.8	178.8	-1.6
21	7.8	173.4	-1.5
22	6.5	168.4	-1.3
23	5.0	167.3	-0.8
24	4.3	168.7	0.6
1	4.9	161.6	1.8
2	5.2	145.2	2.1
3	7.2	160.9	1.8
4	7.2	178.6	0.8
5	8.4	183.0	0.3
6	8.7	177.3	-0.2
7	7.8	181.8	0.8
8	5.2	174.5	0.2
9	4.4	164.6	0.4
10	5.9	184.1	0.9
11	7.1	191.5	0.2
12	9.4	193.0	-1.2
13	10.4	201.3	-1.6
14	9.1	209.8	-1.6
15	7.7	208.2	-1.4
16	5.7	199.4	-1.5
17	5.3	200.1	-1.6
18	5.3	229.7	-1.4
19	4.6	233.9	-1.3

20	2.4	257.8	-1.2
21	1.7	281.0	-1.4
22	1.5	293.1	-1.2
23	0.9	334.4	-1.0
24	1.4	143.5	0.5
1	3.7	145.1	0.1
2	1.5	230.8	0.5
3	1.7	329.9	2.7
4	0.9	345.1	2.0
5	1.1	311.2	1.9
6	1.8	306.8	1.0
7	2.5	310.5	1.4
8	2.3	300.2	0.7
9	2.4	309.9	0.7
10	1.7	340.4	0.2
11	1.7	38.3	-0.7
12	2.3	44.2	-1.1
13	2.9	61.9	-1.4
14	2.8	76.7	-1.5
15	3.4	72.9	-1.7
16	4.7	85.7	-1.8
17	4.9	75.6	-2.2
18	5.2	86.5	-2.1
19	5.6	97.3	-2.0
20	4.8	76.6	-1.8
21	3.2	75.1	-1.4
22	3.0	77.6	-0.8
23	2.5	97.3	-0.3
24	2.1	103.1	-0.2

STOP TIME JULY 29, 1985 HOUR 23 MINUTE 30

STARTING TIME JULY 29, 1985 HOUR 3 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
3	1.7	329.9	2.7
4	0.9	345.1	2.0
5	1.1	311.2	1.9
6	1.8	306.8	1.0
7	2.5	310.5	1.4
8	2.3	300.2	0.7

STOP TIME JULY 29, 1985 HOUR 7 MINUTE 43

RELEASE NUMBER 85033

CONTAINMENT PURGE

STARTING TIME AUG 1, 1985 HOUR 17 MINUTE 5

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	7.3	102.6	-2.1
18	6.3	106.9	-1.9
19	5.4	112.3	-1.8
20	7.0	130.1	-1.9
21	5.5	116.7	-1.4
22	5.3	128.0	-1.5
23	4.0	143.0	-1.0
24	1.3	156.5	0.4
1	1.0	125.3	1.6
2	1.8	131.8	1.8
3	2.3	137.7	1.8
4	1.2	131.1	2.1
5	1.6	137.7	2.4
6	3.4	127.5	2.8
7	2.0	132.6	2.0
8	2.9	131.7	1.8
9	3.6	130.6	2.3
10	4.3	131.2	2.2
11	3.4	127.4	0.5
12	5.7	130.3	-0.7
13	7.7	137.4	-1.6
14	11.5	161.5	-1.8
15	11.1	177.2	-1.6
16	12.3	168.3	-1.9
17	12.4	151.5	-1.8
18	10.9	164.7	-1.9
19	11.2	170.8	-1.7
20	10.3	160.9	-1.5
21	9.2	164.0	-1.3
22	6.7	159.7	-1.0
23	4.6	147.3	-0.7
24	5.3	142.5	0.4
1	4.4	155.9	-0.2
2	6.6	159.0	-0.1
3	9.1	161.1	0.4
4	9.2	154.6	0.3
5	9.3	158.3	-0.4
6	7.9	153.8	-0.5
7	6.1	158.7	-0.4
8	5.0	139.6	0.2
9	9.9	154.7	0.1
10	7.3	141.1	-0.4
11	4.3	141.1	-0.8
12	3.7	136.3	-0.9
13	7.5	135.0	-1.3
14	9.9	142.5	-1.6
15	11.7	145.4	-1.9
16	15.5	151.3	-1.8
17	15.7	158.2	-1.7

18	13.9	156.0	-1.6
19	12.2	160.7	-1.6
20	10.7	156.6	-1.4
21	12.3	150.7	-1.3
22	11.1	153.3	-1.3
23	10.6	157.8	-1.2
24	10.2	152.5	-1.2
1	8.9	138.6	-1.0
2	9.7	148.0	-1.0
3	8.0	155.9	-1.0
4	6.9	149.3	-0.9
5	5.5	157.0	-1.0
6	3.9	150.1	-1.1
7	3.3	131.1	-1.0
8	2.8	123.3	-1.0
9	2.7	127.8	-0.9
10	3.1	136.7	-1.0
11	3.2	145.1	-0.8
12	2.7	143.0	-1.0
13	3.8	123.8	-1.1
14	3.4	129.6	-1.5
15	4.9	162.1	-1.7
16	6.0	174.2	-1.7
17	6.1	176.5	-1.8
18	7.0	194.9	-1.7
19	7.9	195.2	-1.8
20	8.4	196.8	-1.7
21	9.9	195.4	-1.7
22	8.4	205.2	-1.4
23	5.8	210.5	-0.9
24	7.1	204.4	0.4
1	8.6	198.7	1.3
2	10.5	202.5	0.6
3	10.9	211.6	0.6
4	11.2	220.2	1.1
5	11.0	222.6	2.0
6	11.3	224.6	2.0
7	12.5	231.3	2.1
8	13.1	230.1	1.5
9	13.2	237.9	1.6
10	6.6	244.3	0.1

STOP TIME    AUG    5, 1985    HOUR 9 MINUTE 30

RELEASE NUMBER 85034

CONTAINMENT PURGE

STARTING TIME AUG 8, 1985 HOUR 18 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	13.7	173.6	-1.3
19	12.5	174.8	-1.2
20	11.1	171.1	-0.9
21	10.2	166.9	-0.4
22	8.8	161.9	-0.1
23	9.4	162.5	-0.1
24	9.0	165.0	-0.1
1	10.2	164.2	-0.4
2	11.1	167.2	-0.4
3	11.4	176.2	-0.5
4	11.6	172.4	-0.7
5	11.5	174.5	-0.6
6	8.9	174.2	-0.6
7	6.1	157.8	-0.1
8	4.4	164.7	-0.2
9	2.7	44.5	-0.5
10	3.8	251.6	-1.3
11	3.5	164.9	-1.4
12	2.8	269.8	-1.6
13	2.4	296.2	-1.0
14	4.5	329.7	-1.1
15	8.2	346.8	-1.7
16	8.6	348.7	-0.9
17	9.0	341.4	-1.0
18	7.7	343.4	-0.8
19	9.4	344.3	-0.6
20	11.1	345.8	-0.9
21	8.9	345.9	-0.9
22	4.1	357.7	-1.1
23	2.5	314.1	-0.6
24	2.2	313.6	-0.4
1	1.7	310.8	0.1
2	1.6	317.6	0.6
3	1.6	297.2	1.0
4	2.7	325.8	0.8
5	1.3	297.1	1.0
6	1.5	322.7	1.7
7	1.3	295.6	1.5
8	3.0	332.4	-0.3
9	5.5	341.7	-1.2
10	4.0	345.6	-1.9
11	4.3	351.3	-2.1
12	4.7	348.0	-2.1
13	4.5	11.5	-2.2
14	5.0	14.1	-2.2
15	5.1	12.9	-2.3
16	3.3	356.5	-2.0
17	3.3	323.8	-2.2
18	3.8	287.1	-1.9

19	4.1	134.4	-1.5
20	3.9	169.5	-0.5
21	2.5	152.4	2.1
22	3.4	146.0	2.2
23	3.8	138.2	2.8
24	3.4	141.0	3.0
1	4.1	133.0	3.0
2	2.4	148.0	3.8
3	1.7	106.6	3.9
4	1.2	152.1	3.3
5	0.8	252.9	2.8
6	1.1	195.0	2.8
7	3.5	136.9	2.4
8	3.8	130.4	1.4
9	4.8	130.4	-0.1
10	7.7	137.7	-1.5
11	11.1	147.0	-1.7
12	11.2	147.6	-1.9
13	12.0	144.5	-2.0
14	12.1	147.2	-1.9
15	11.6	145.3	-1.8
16	11.7	147.0	-1.8
17	11.6	149.6	-1.5
18	12.4	145.9	-1.2
19	12.0	149.3	-1.1
20	10.2	154.9	-0.8
21	8.6	152.8	-0.5
22	11.3	147.4	-0.5
23	12.6	153.8	-0.7
24	13.2	152.6	-0.8
1	13.0	157.9	-0.8
2	13.6	159.6	-0.7
3	14.4	164.1	-0.7
4	13.9	173.5	-0.7
5	14.3	176.0	-0.7
6	13.6	181.2	-0.7

STOP TIME    AUG 12, 1985    HOUR 5 MINUTE 40

RELEASE NUMBER 85035

CONTAINMENT PURGE

STARTING TIME AUG 15, 1985 HOUR 18 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	6.7	165.0	-1.2
19	6.7	160.8	-1.3
20	4.9	169.9	-1.0
21	4.4	168.6	-0.6
22	4.8	151.6	0.2
23	4.2	161.5	0.4
24	5.8	170.3	0.2
1	3.4	150.7	0.2
2	3.3	142.3	0.7
3	2.7	137.4	1.1
4	4.2	134.5	1.3
5	3.8	131.9	1.4
6	5.4	147.4	1.1
7	6.9	157.6	0.8
8	4.5	139.8	0.5
9	6.4	136.0	-0.9
10	8.4	161.7	-1.7
11	8.2	155.7	-1.8
12	9.0	146.0	-1.7
13	10.1	146.9	-1.8
14	13.2	148.5	-2.0
15	14.6	153.1	-2.0
16	12.2	155.2	-2.0
17	12.6	160.0	-1.6
18	13.7	157.6	-1.5
19	12.2	160.7	-1.2
20	11.9	161.2	-1.1
21	11.0	159.5	-0.6
22	8.7	162.6	-0.6
23	10.6	161.2	-0.6
24	10.2	162.5	-0.7
1	12.2	168.6	-1.0
2	8.1	286.2	-0.9
3	2.8	308.7	-0.7
4	2.0	227.1	-0.7
5	9.7	148.6	-0.8
6	11.5	146.7	-0.7
7	7.5	246.7	-0.1
8	6.4	231.8	0.3
9	5.4	260.2	-0.7
10	5.4	325.7	-1.3
11	5.0	297.0	-1.4
12	5.1	318.0	-1.7
13	7.6	338.8	-1.9
14	7.0	346.6	-2.1
15	6.5	349.9	-1.7
16	5.2	353.3	-1.5
17	4.2	349.6	-1.7
18	4.0	349.4	-1.2

19	1.7	357.2	-1.0
20	2.5	348.5	-0.6
21	1.6	300.7	1.5
22	1.7	286.4	2.8
23	2.3	313.0	2.6
24	2.3	307.2	2.6
1	2.5	321.3	3.0
2	2.4	301.5	3.0
3	2.3	314.6	4.5
4	1.8	301.2	4.0
5	1.3	266.6	3.8
6	2.3	213.6	3.0
7	1.8	281.6	3.1
8	1.1	210.1	2.6
9	2.0	334.3	-0.6
10	3.7	15.4	-1.9
11	3.8	15.0	-2.1
12	3.8	7.4	-1.9
13	3.8	27.5	-2.1
14	4.7	9.0	-2.2
15	4.0	3.5	-2.1
16	3.9	8.9	-2.1
17	2.6	5.3	-1.5
18	1.8	346.3	-0.7
19	2.3	344.4	-0.4
20	1.3	277.2	0.3
21	2.3	304.0	0.1
22	2.3	319.3	0.6
23	1.6	249.8	1.4
24	3.1	219.1	1.0
1	1.9	262.3	1.1
2	1.5	223.1	0.7
3	1.3	301.1	1.0
4	1.6	206.2	0.9
5	1.4	278.2	0.7
6	1.5	341.9	0.2
7	1.4	233.1	0.2
8	1.5	305.0	-0.5

STOP TIME      AUG      19, 1985      HOUR      7      MINUTE      15

RELEASE NUMBER 85036      CONTAINMENT PURGE

STARTING TIME      AUG 22, 1985      HOUR 14 MINUTE 26

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	10.6	166.2	-1.7
15	9.8	141.7	-1.5
16	9.7	129.2	-1.7
17	11.4	153.2	-1.5
18	11.7	158.1	-1.6
19	10.4	139.6	-1.3
20	7.1	142.0	-0.9
21	5.2	140.1	-0.3
22	4.6	152.0	-0.5
23	5.2	142.3	0.2
24	5.2	165.7	-0.2
1	7.3	181.9	-0.5
2	7.3	171.2	-1.0
3	6.1	193.2	-1.0
4	3.0	219.8	-1.0
5	5.9	5.6	-0.7
6	5.4	38.1	-0.9
7	5.3	161.4	-0.9
8	2.9	246.2	-0.3
9	8.0	139.1	-0.5
10	8.4	182.4	-0.9
11	8.9	211.9	-1.1

STOP TIME      AUG 23, 1985      HOUR 10 MINUTE 20

STARTING TIME      AUG 23, 1985      HOUR 10 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	8.4	182.4	-0.9
11	8.9	211.9	-1.1
12	3.5	268.2	-1.5

STOP TIME      AUG 23, 1985      HOUR 11 MINUTE 14

AUG 23, 1985 HOUR 20 MINUTE 26

STARTING TIME

WS10  
MPH

WD10  
DEG

DT100  
DEG C

TIME  
HOUR

20	2.0	311.8	0.2
21	1.1	224.2	2.6
22	1.2	178.6	3.8
23	1.2	191.1	4.4
24	3.7	322.3	3.7
1	5.3	306.5	-0.2
2	2.7	312.9	0.9
3	1.8	276.6	1.6
4	-99.0	-99.0	-99.0
5	-99.0	-99.0	-99.0
6	3.4	332.6	0.5
7	2.4	320.8	0.1
8	3.4	333.2	-0.5
9	6.5	341.1	-1.1
10	4.9	343.9	-1.3
11	5.9	340.3	-1.7
12	6.3	350.2	-1.8
13	7.1	352.8	-1.7
14	7.5	349.0	-1.8
15	8.0	342.9	-1.6
16	7.8	343.6	-2.0
17	7.2	334.8	-1.8
18	7.6	335.6	-1.4
19	6.4	344.0	-1.1
20	5.1	352.6	-0.4
21	5.5	342.6	-0.6
22	4.1	341.1	-0.2
23	5.3	339.3	-0.3
24	5.3	339.6	-0.9
1	5.7	338.2	-0.5
2	4.1	335.1	-0.2
3	3.9	332.5	0.2
4	4.1	334.8	0.3
5	2.7	330.8	0.1
6	2.6	324.5	0.2
7	2.6	335.0	-0.2
8	3.1	333.7	-0.9
9	4.6	341.0	-1.2
10	5.3	346.9	-1.9
11	5.8	355.1	-1.9
12	6.6	1.3	-1.7
13	5.6	3.9	-1.6
14	7.2	15.9	-1.8
15	6.5	13.2	-2.0
16	5.9	19.7	-2.1
17	5.3	2.1	-2.0
18	4.5	358.6	-2.0
19	3.6	359.0	-1.4
20	3.1	349.9	-0.7

21	2.0	295.6	1.0
22	1.5	283.5	1.6
23	1.5	326.1	2.0
24	1.4	310.8	2.3
1	1.5	312.7	2.6
2	1.1	15.4	2.9
3	1.0	336.6	3.1
4	1.6	282.7	2.5
5	1.5	344.8	2.3
6	1.2	31.5	2.1

STOP TIME    AUG 26, 1985    HOUR 5 MINUTE 43

RELEASE NUMBER 85037

CONTAINMENT PURGE

STARTING TIME AUG 29, 1985 HOUR 16 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	4.2	139.5	-1.9
17	3.7	145.8	-1.7
18	3.9	179.8	-1.2
19	1.3	236.1	0.4
20	1.1	97.5	2.8
21	1.7	262.6	2.5
22	1.3	314.1	1.6
23	1.5	202.3	2.6
24	1.7	305.2	2.7
1	1.5	259.1	1.9
2	1.9	300.4	0.9
3	2.4	308.5	1.3
4	2.9	304.2	1.1
5	2.1	301.1	1.5
6	1.8	312.7	1.4
7	1.9	324.6	1.3
8	2.4	58.8	-0.6
9	3.1	94.2	-0.7
10	2.3	79.9	-1.1
11	3.1	59.9	-1.4
12	4.2	81.8	-1.4
13	4.5	91.6	-1.5
14	5.6	108.4	-1.6
15	5.6	106.8	-1.6
16	5.6	99.2	-1.5
17	4.9	115.3	-1.4
18	4.7	112.0	-1.3
19	3.9	116.6	-1.1
20	4.1	136.9	-0.8
21	4.2	125.6	-0.4
22	5.6	113.2	-0.6
23	5.2	123.0	-0.5
24	6.8	142.2	-0.7
1	7.1	152.3	-0.9
2	6.4	145.3	-0.9
3	7.1	146.4	-0.8
4	8.7	146.8	-0.9
5	10.0	151.7	-0.9
6	11.1	150.3	-0.9
7	11.0	158.0	-0.8
8	13.1	165.4	-1.1
9	10.9	164.2	-1.6
10	12.4	175.7	-1.7
11	11.8	172.4	-2.0
12	12.8	179.6	-2.0
13	12.7	182.3	-2.0
14	12.5	196.6	-2.0
15	7.7	205.9	-1.9
16	8.7	189.2	-1.8

17	8.8	183.3	-0.8
18	6.1	170.5	-0.1
19	3.2	3.4	0.6
20	1.8	299.8	0.3
21	2.0	295.3	0.7
22	2.8	316.2	1.7
23	2.7	311.9	1.6
24	2.9	323.1	2.1
1	3.7	319.3	1.1
2	2.9	328.2	0.6
3	3.2	349.8	-0.3
4	4.1	355.1	-0.7
5	4.3	356.5	-0.6
6	3.1	11.6	-0.4
7	2.3	22.5	-0.4
8	5.1	18.7	-1.0
9	6.4	60.8	-1.8
10	7.4	109.1	-1.9
11	6.3	68.4	-2.0
12	5.0	39.3	-2.2
13	5.2	62.6	-1.7
14	6.8	83.5	-2.2
15	8.9	94.4	-2.0
16	8.2	91.6	-1.8
17	7.7	93.5	-1.5
18	6.6	100.8	-1.1
19	2.8	100.1	-0.3
20	1.1	0.9	0.1
21	1.1	30.5	0.2
22	1.5	59.3	-0.3
23	5.0	106.7	-0.6
24	5.0	100.5	-0.7
1	5.6	109.6	-0.6
2	6.4	122.5	-0.5
3	5.9	143.5	-0.2
4	9.3	149.5	-0.6
5	9.2	150.4	-0.6
6	8.6	150.6	-0.4
7	7.7	149.0	-0.6
8	8.3	158.9	-1.1
9	11.2	168.0	-1.6
10	11.9	174.7	-1.8

STOP TIME SEPT 2, 1985 HOUR 9 MINUTE 45

RELEASE NUMBER 85038

CONTAINMENT PURGE

STARTING TIME SEPT 5, 1985 HOUR 17 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	8.8	200.9	-1.6
18	7.0	186.9	-1.2
19	3.6	180.5	0.1
20	1.4	139.3	3.4
21	1.7	187.4	5.2
22	4.7	181.7	5.0
23	7.7	199.1	4.2
24	8.0	198.8	4.0
1	10.2	203.4	2.0
2	11.8	202.8	1.9
3	11.3	205.4	1.5
4	12.2	213.0	1.4
5	11.1	212.3	1.5
6	8.0	190.9	1.0
7	8.0	189.8	0.5
8	9.6	193.2	-0.9
9	6.7	209.3	-1.7
10	7.2	228.2	-1.8
11	7.7	230.3	-1.9
12	7.1	224.9	-2.2
13	8.0	214.8	-2.0
14	9.2	200.9	-2.2
15	9.2	191.7	-2.1
16	8.0	206.5	-1.8
17	6.4	201.1	-1.5
18	5.6	175.9	-0.8
19	6.1	167.9	0.4
20	6.6	166.4	1.4
21	6.6	165.4	1.1
22	8.7	175.5	1.1
23	9.1	175.8	-0.1
24	9.0	176.7	0.1
1	9.4	191.4	-0.1
2	11.3	196.6	-0.1
3	9.8	197.6	0.2
4	9.3	193.9	0.2
5	9.4	198.5	0.3
6	10.0	201.9	0.5
7	9.4	194.9	0.5
8	9.3	196.6	-0.8
9	9.4	195.1	-1.7
10	8.8	185.4	-2.0
11	8.9	178.6	-2.1
12	8.9	179.8	-2.1
13	9.3	170.1	-2.1
14	11.6	176.1	-2.2
15	12.1	178.1	-2.1
16	11.1	164.8	-1.8
17	9.7	158.5	-1.7

18	9.0	157.8	-1.1
19	6.6	163.6	0.1
20	5.4	149.2	0.8
21	5.3	140.4	1.6
22	5.6	140.2	1.9
23	5.6	144.5	1.7
24	5.9	151.0	1.6
1	7.0	161.8	0.8
2	6.9	162.0	0.8
3	7.1	164.6	-0.2
4	7.5	169.2	-0.3
5	7.2	166.6	-0.1
6	6.4	166.1	-0.1
7	4.1	123.4	-0.2
8	4.6	128.3	-0.3
9	7.5	178.0	-1.7
10	6.7	202.8	-2.0
11	5.6	237.1	-2.0
12	6.7	224.7	-2.1
13	6.6	257.1	-2.1
14	5.3	290.0	-2.8
15	6.5	289.8	-2.7
16	6.9	273.8	-2.7
17	6.9	317.7	-1.7
18	4.8	318.8	-1.5
19	5.1	311.9	-1.5
20	4.7	310.3	-1.3
21	3.9	301.3	-1.1
22	3.0	304.8	-1.2
23	4.5	324.7	-1.2
24	5.2	335.9	-1.2
1	4.0	331.8	-1.1
2	2.3	336.8	-1.1
3	3.4	334.8	-0.9
4	3.5	336.9	-0.8
5	5.7	339.6	-1.0
6	4.2	340.5	-1.1
7	6.3	339.9	-1.3
8	5.4	336.7	-1.3
9	5.4	342.1	-1.5
10	4.8	351.1	-1.6

STOP TIME    SEPT 9, 1985    HOUR 9 MINUTE 42

## RELEASE NUMBER 85039      CONTAINMENT PURGE

STARTING TIME      SEPT 12, 1985      HOUR 17 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	4.8	93.4	-0.7
18	5.5	101.8	-0.9
19	8.2	107.1	-1.0
20	8.3	109.7	-1.2
21	9.1	120.3	-0.9
22	9.8	124.2	-1.0
23	9.8	129.3	-0.7
24	9.4	127.0	-0.7
1	9.9	124.5	-1.2
2	10.0	125.7	-1.1
3	13.0	126.2	-0.9
4	11.1	125.4	-1.3
5	11.1	132.9	-0.9
6	10.0	135.2	-0.9
7	8.3	124.2	-1.1
8	8.5	122.6	-1.0
9	7.3	126.6	-0.9
10	6.2	123.9	-1.0
11	5.8	110.9	-1.1
12	8.1	117.1	-1.0
13	7.2	128.0	-1.0
14	7.0	145.9	-1.2
15	7.0	128.8	-1.2
16	7.1	129.5	-1.1
17	5.6	130.8	-1.2
18	5.1	112.1	-1.0
19	4.1	340.5	-1.0
20	4.7	100.5	-1.0
21	4.7	99.1	-0.9
22	3.6	94.2	-0.8
23	1.7	66.8	-0.7
24	1.5	76.9	-0.6
1	1.3	296.3	-0.6
2	4.0	134.4	-0.1
3	1.9	157.8	-0.4
4	1.7	183.9	-0.4
5	1.3	305.5	-0.2
6	1.1	161.3	0.1
7	1.9	155.4	-0.4
8	3.5	140.4	-0.3
9	5.4	146.3	-0.4
10	7.1	150.4	-1.1
11	7.2	162.8	-1.3
12	8.4	158.9	-1.7
13	8.6	149.8	-2.0
14	7.6	164.2	-2.1
15	8.5	166.2	-2.1
16	9.4	173.1	-2.1
17	8.5	166.8	-2.0

18	8.7	168.2	-1.7
19	5.4	178.9	-1.1
20	4.2	174.1	0.6
21	4.0	152.6	2.5
22	3.4	152.2	3.3
23	4.7	195.9	1.9
24	6.0	198.6	1.8
1	4.8	187.5	1.7
2	4.9	143.4	2.3
3	5.2	143.9	2.1
4	4.7	149.5	1.8
5	5.0	152.7	1.7
6	4.2	136.6	2.0
7	4.4	144.9	2.3
8	5.8	143.6	1.9
9	6.1	147.8	-0.1
10	9.8	168.4	-1.4
11	11.4	168.9	-1.9
12	12.3	168.7	-2.0
13	12.0	172.8	-2.2
14	13.5	175.8	-2.0
15	12.5	175.9	-2.2
16	12.0	172.4	-2.1
17	11.7	178.9	-1.8
18	11.3	180.1	-1.4
19	8.4	174.9	-0.9
20	7.3	163.3	-0.4
21	5.4	152.2	0.5
22	7.0	157.2	0.1
23	10.5	168.4	-0.4
24	11.6	171.3	-0.6
1	11.7	173.0	-0.6
2	11.0	178.7	-0.6
3	11.6	181.3	-0.6
4	11.9	180.3	-0.7
5	11.1	176.0	-0.6
6	10.2	177.3	-0.6
7	9.8	179.9	-0.6
8	10.2	176.5	-0.7

STOP TIME      SEPT 16, 1985      HOUR 7 MINUTE 51

RELEASE NUMBER 85040 CONTAINMENT PURGE

STARTING TIME SEPT 19, 1985 HOUR 18 MINUTE 5

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	12.6	208.3	-1.0
19	9.7	204.8	-1.1
20	7.0	189.0	-1.0
21	8.3	195.3	-0.5
22	5.1	203.7	-0.4
23	4.3	202.7	-0.4
24	7.8	312.7	-1.1
1	8.6	347.7	-1.1
2	7.1	348.6	-1.4
3	8.3	355.3	-1.2
4	7.9	343.1	-1.1
5	7.1	346.9	-1.2
6	9.2	345.7	-1.2
7	7.4	355.5	-1.0
8	7.6	353.1	-1.3
9	8.0	354.9	-1.5
10	7.7	351.5	-1.8
11	8.0	348.5	-1.7
12	8.2	355.7	-2.0
13	7.8	5.6	-2.0
14	6.8	0.9	-1.6
15	5.8	359.9	-1.2
16	4.0	356.0	-0.8
17	3.7	354.1	-0.8
18	3.3	347.2	-0.3
19	3.3	339.1	-0.2
20	2.8	339.4	-0.5
21	2.4	355.4	-0.5
22	1.9	355.6	-0.9
23	1.3	47.7	-0.8
24	2.0	76.6	-0.9
1	3.1	86.7	-0.9
2	5.0	107.0	-1.0
3	3.7	105.1	-1.0
4	3.2	94.4	-1.1
5	3.6	89.7	-1.1
6	2.6	59.5	-0.9
7	3.3	63.5	-1.0
8	4.0	89.3	-1.0
9	4.7	100.0	-1.1
10	5.1	97.5	-1.2
11	5.2	100.9	-1.2
12	6.1	112.3	-1.3
13	6.6	123.6	-1.1
14	5.8	119.0	-1.2
15	4.3	162.7	-1.1
16	2.2	137.0	-1.1
17	3.4	137.4	-1.1
18	4.3	155.3	-1.2

19	3.1	170.9	-0.9
20	2.5	201.7	-0.8
21	3.7	226.3	-0.8
22	4.3	236.9	-1.2
23	3.7	213.5	-0.9
24	2.8	213.9	-1.1
1	3.0	217.7	-1.0
2	4.0	212.4	-0.9
3	4.0	206.8	-1.1
4	3.5	207.2	-1.0
5	3.0	190.6	-0.9
6	6.0	199.4	-0.6
7	6.7	197.0	-0.6
8	5.8	180.9	-1.0
9	6.2	178.4	-1.2
10	3.8	149.9	-1.3
11	4.2	135.6	-1.7
12	5.4	131.6	-1.6
13	4.7	133.6	-1.7
14	3.0	143.2	-1.5
15	2.7	1.5	-1.3
16	3.9	340.7	-1.0
17	4.1	340.6	-0.9
18	4.8	4.5	-0.9
19	4.3	339.3	-0.8
20	4.4	-99.0	-99.0
21	-99.0	-99.0	-99.0

STOP TIME      SEPT 22, 1985      HOUR 20 MINUTE 55

RELEASE NUMBER 85041      CONTAINMENT PURGE

STARTING TIME      SEPT 26, 1985      HOUR 11 MINUTE 4

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	2.8	306.4	-1.9
12	4.9	262.4	-2.2
13	4.2	294.2	-2.4
14	6.9	256.8	-2.1
15	7.0	228.8	-1.9
16	7.4	232.2	-1.8
17	8.6	213.9	-1.6
18	6.8	201.6	-0.8
19	5.3	184.3	0.9
20	5.5	182.5	2.5
21	7.1	176.6	2.2
22	7.5	176.7	1.5
23	8.2	171.3	0.6
24	9.4	178.1	0.3
1	7.3	175.2	0.1
2	6.3	154.6	0.6
3	7.1	163.1	0.3
4	8.8	178.4	0.2
5	13.3	180.7	0.2
6	14.7	184.1	-0.1
7	12.5	180.5	-0.5
8	8.7	177.0	-1.1
9	8.1	177.8	-1.6
10	8.4	209.2	-1.9
11	7.7	215.6	-2.1
12	6.5	219.8	-2.0
13	6.0	211.6	-1.9
14	5.3	216.5	-1.9
15	4.9	252.3	-1.9
16	4.7	258.9	-1.7
17	4.0	324.4	-1.3
18	3.4	350.5	-1.1
19	4.1	341.6	-0.4
20	6.4	347.3	-0.5
21	6.5	344.4	-0.5
22	5.1	341.2	-0.4
23	4.0	336.9	-0.4
24	6.0	345.3	-0.5
1	7.5	355.3	-1.1
2	8.3	9.4	-1.2
3	6.8	10.4	-1.1
4	6.6	15.8	-0.8
5	8.1	16.1	-1.1
6	6.5	24.2	-0.9
7	6.1	19.3	-1.0
8	6.4	20.0	-1.1
9	5.7	26.3	-1.1
10	7.3	11.7	-1.5
11	7.3	14.4	-1.2

12	6.9	22.4	-1.1
13	5.5	18.1	-1.2
14	6.7	12.0	-1.1
15	6.2	19.2	-1.3
16	7.4	7.1	-0.8
17	7.2	19.3	-1.3
18	7.1	19.3	-1.0
19	6.1	9.1	-1.0
20	6.0	2.0	-1.0
21	7.7	4.0	-1.1
22	7.2	359.5	-1.0
23	7.5	4.2	-0.8
24	6.5	6.2	-1.0
1	6.6	6.0	-1.0
2	6.9	5.2	-1.0
3	6.3	358.3	-1.0
4	6.8	2.4	-1.0
5	6.3	357.7	-0.9
6	5.5	4.2	-1.1
7	5.5	357.6	-1.1
8	6.2	1.4	-1.1
9	6.2	3.4	-1.3
10	7.4	2.5	-1.0
11	7.8	4.6	-1.1
12	7.4	357.9	-1.0
13	8.0	356.0	-1.1
14	7.0	347.0	-0.8
15	6.5	346.0	-0.5
16	7.0	348.4	-0.7
17	6.4	346.2	-0.9
18	6.5	350.7	-1.0
19	6.8	345.5	-0.9
20	6.0	346.4	-0.7
21	5.2	347.1	-0.8
22	5.4	346.9	-0.7
23	5.2	345.9	-0.9
24	5.7	344.9	-0.9
1	4.9	342.5	-0.8
2	4.9	339.1	-0.7
3	5.0	340.3	-0.8
4	5.4	340.6	-0.8
5	5.8	343.7	-0.9
6	6.0	345.9	-0.9
7	5.3	338.9	-0.9

STOP TIME    SEPT 30, 1985    HOUR 6 MINUTE 1

RELEASE NUMBER 85014      DECAY TANK PURGE  
STARTING TIME      SEPT 25, 1985      HOUR 20 MINUTE 21

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	6.6	344.3	-0.5
21	5.7	347.8	-0.8
22	4.9	341.5	-0.6
23	3.6	342.8	-0.6
24	4.0	334.8	-0.6
1	3.6	332.2	-0.5
2	2.9	337.3	-0.2

STOP TIME      SEPT 26, 1985      HOUR 1 MINUTE 15

PART 2

SECTION V

ENVIRONMENTAL MONITORING  
TECHNICAL SPECIFICATION (5.9.4.b)

July 1, 1985 to September 30, 1985

5.9.4 (continued)

b. Environmental Monitoring

1. (a) The number of sample locations, sample collection and frequency and the number of samples collected this 3 - month period for each class of sample is delineated in Table 1.
- (b) Levels of radiation were not found to be significantly above local background at any of the sampling locations.
- (c) A complete summary of the program findings is presented in Table 2. For each type of analysis of each sampled medium, this table considers separately all indicator locations, all control locations, and the location with the highest 3 - month mean result. For each of these classes, the table specifies the following:
  - (1) The total number of analyses;
  - (2) The fraction of these yielding detectable results (i.e., results above the highest lower limit of detection for the period);
  - (3) The average, lowest, and highest results.

In addition, the distance and direction relative to the Reactor Containment Building are specified for the location with the highest 3 - month mean.

2. None of the levels of radioactivity found in the environmental radiological monitoring program indicate the likelihood of public intakes in excess of one per cent of those that would result from continuous exposure to the concentration values listed in Table II of Appendix B of 10 CFR 20.
3. No statistically significant variations at off-site environmental concentrations during the reporting period were observed.

Table 1. Sample collection program.

Sample Class	Collection Frequency	Sample Locations	Number of Samples Collected This Period
Background Radiation (T <sub>1/2</sub> )	Quarterly	Eleven (11) Four (4)	11 4
Background Radiation (G-M Survey)	Quarterly	Fifteen (15)	15
Air Particulate	Weekly	Five (5)	65
Airborne Iodine	Weekly	Five (5)	65
Well Water	Monthly Quarterly Composite	Five (5) Five (5)	15 5
Precipitation	Monthly or Quarterly	One (1) One (1)	3 0
Milk	Weekly, Monthly, & Quarterly	Three (3) Three (3) Three (3)	78 9 9
Cattlefeed	Quarterly	Five (5)	5
Surface Water	Weekly Monthly Composite	Five (5)	60 15
Fish (six species)	Annually	Three (3)	12
Mud and Silt	Annually	Two (2)	2

<sup>a</sup> Additional sampling locations not required by the technical specifications.

Table 2. Environmental Radiological Monitoring Program Summary.

Name of Facility Fort Calhoun Nuclear Power Station-Unit 1 Docket NO. 50-285

Location of Facility Washington, Nebraska Reporting period July-September 1985  
(County, State)

Sample Type (Units)	Type and Number of Analyses <sup>a</sup>	LLD <sup>b</sup>	Indicator Locations Mean (E) Range <sup>c</sup>	Location with Highest Annual Mean		Control Locations Mean (F) Range	Number of Non-routine Results <sup>e</sup>
				Location <sup>d</sup>	Mean (F) Range		
Background Radiation (TLD) (mR/week)	Gamma-11 <sup>f</sup>	0.5	1.0(10/10) (0.8-1.4)	0-4 Electric Bldg Omaha 22 mi @152 <sup>o</sup>	1.4(1/1) ---	1.4 (1/1) ---	0
Background Radiation G-M Survey (rem/hr)	Beta-Gamma 15	0.039	<LLD	---	---	<LLD	0
Airborne Particulates (pCi/m <sup>3</sup> )	GB - 65	0.02	0.033(52/52) (0.015-0.116)	OAB Blair Sub-station Blair, 3.1 mi @286 <sup>o</sup>	0.033(13/13) (0.017-0.052)	0.032(13/13) (0.018-0.047)	0
	GS - 30			OAC City Hall, Ft Cal, 4.8 mi @ 149 <sup>o</sup>	0.033(13/13) (0.017-0.050)		
	Cs-134	0.01	<LLD	---	---	<LLD	0
	Cs-137	0.01	<LLD	---	---	<LLD	0
	Other gammas	0.01	<LLD	---	---	<LLD	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 - 65	0.2	<LLD	---	---	<LLD	0
Precipitation	GB - 3	0.5	1.7 (3/3) (1.2-2.5)	0-30 AgriCo Plt, 1.8 mi @325 <sup>o</sup>	1.7 (3/3) (1.2-2.5)	NONE	0

Table 2. Environmental Radiological Monitoring Program Summary.  
 Name of Facility Fort Calhoun Nuclear Power Station-Unit 1 Docket NO. 50-285

Location of Facility Washington, Nebraska Reporting period July-September 1985  
 (County, State)

Sample Type (Units)	Type and Number of Analyses <sup>a</sup>	LLD <sup>b</sup>	Indicator Locations Mean (E) <sup>c</sup> Range	Location with Highest Annual Mean		Control Locations Mean (F) Range	Number of Non-routine Results <sup>e</sup>
				Location <sup>d</sup>	Mean (F) Range		
Milk, Fresh (pCi/l)	I-131 39 GS 3	0.5	< LLD	----	----	< LLD	0
	K-40	150	1350 (1/1) ----	0-27, Flynn Farm 3.4 mi @310	1350(1/1) ----	1285 (2/2) (1280-1290)	0
	Cs-134	2	< LLD	----	----	< LLD	0
	Cs-137	2	< LLD	----	----	< LLD	0
	Other gammas	2	< LLD	----	----	< LLD	0
Milk, Preserved (pCi/l)	GB 3	6	840 (1/1) ---	0-26, Japp Dairy 6.3 mi @219	1180 (1/1) ---	1085 (2/2) (990-1180)	0
	Sr-90 3	1.0	< LLD	0-44 Mohr Dairy 2.7 mi @187	1.4(1/1) ---	1.4 (1/1) --	0
Surface Water (pCi/l)	GB 15	0.5	5.8 (12/12) (4.0-7.3)	0-7, 125' Upstream 0.1 mi @345	6.1 (3/3) (5.1-6.9)	6.1 (3/3) (5.1-6.9)	0
	H-3 15	200	640 (4/12) (210-1770)	0-6, Downstream 0.5 mi @106	1770(1/3) ---	300(2/3) (280-320)	0

Table 2. Environmental Radiological Monitoring Program Summary.

Name of Facility Fort Calhoun Nuclear Power Station-Unit 1 Docket NO. 50-285

Location of Facility Washington, Nebraska Reporting period July - September 1985  
(County, State)

Sample Type (Units)	Type and Number of Analyses <sup>a</sup>	LLD <sup>b</sup>	Indicator Locations Mean (E) Range <sup>c</sup>	Location with Highest Annual Mean		Control Locations Mean (F) Range	Number of Non-routine Results <sup>e</sup>
				Location <sup>d</sup>	Mean (F) Range		
Cattlefeed (pCi/g wet)	Sr-90 5	0.03	0.08 (1/3)	0-31, Rogge Farm 2.1 mi @278	0.08 (1/3)	< LLD	0
	GS 5					< LLD	0
	Cs-134					< LLD	0
	Cs-137					< LLD	0
	Other gammas	0.2	< LLD	--	--	< LLD	0
Fish (pCi/g wet)	Sr-90 12	0.02	0.16 (8/8) (0.08-0.29)	0-45, On Site R.M. 666.0	0.16 (4/4) (0.08-0.29)	0.14 (4/4)	0
	GS 12					(0.07-0.24)	0
	Mn-54					< LLD	0
	Co-58					< LLD	0
	Co-60					< LLD	0
	Zn-65					< LLD	0
	Cs-134					< LLD	0
	Cs-137					< LLD	0
	Other gammas					0.2	< LLD

Table 2. Environmental Radiological Monitoring Program Summary.

Name of Facility Fort Calhoun Nuclear Power Station-Unit 1 Docket NO. 50-285

Location of Facility Washington, Nebraska Reporting period July - September 1985  
(County, State)

Sample Type (Units)	Type and Number of Analyses <sup>a</sup>	LLD <sup>b</sup>	Indicator Locations Mean ( $\bar{E}$ ) <sup>c</sup> Range	Location with Highest Annual Mean		Control Locations Mean (F) Range	Number of Non-routine Results <sup>e</sup>
				Location <sup>d</sup>	Mean (F) Range		
Mud and Silt (pCi/g dry)	GS 2						
	Cs-134	0.1	<LLD	--	--	<LLD	0
	Cs-137	0.1	<LLD	--	--	<LLD	0
	Other gammas	0.1	<LLD	--	--	<LLD	0
Well Water (pCi/l)	GB - 5	0.5	8.4 (5/5) (2.4-21.1)	0-16, Smith Farm 1.9 mi @133°	21.2 (1/1)	NONE	0
	H-3 - 5	200	<LLD	---	---	NONE	0

<sup>a</sup> GS = gross beta; G3 = gamma scan.

<sup>b</sup> LLD = lower limit of detection (based on 3 sigma error for background sample unless otherwise indicated).

<sup>c</sup> Mean and range are based on detectable measurements only (i.e., >LLD). Fraction of detectable measurements at specified locations is indicated in parentheses (F).

<sup>d</sup> Locations are specified: (1) by code, (2) by name, and (3) by distance and direction relative to Reactor Containment Building.

<sup>e</sup> Non-routine results are those which exceed ten times the control station value. If no control station value is available, the result is considered non-routine if it exceeds ten times the typical pre-operational value for the medium or location.

<sup>f</sup> Results for sites not required by the technical specifications are excluded from this summary.

<sup>g</sup> The LLD specified for G-M survey results is three times the average value of the standard deviations obtained in a series of repeated measurements.

## Dairy Cattle Survey

In compliance with the requirements of the Fort Calhoun Station, a milk cow consensus was completed in 1985 to determine the status of the dairy cattle population within a one-mile radius of the reactor. In the event that dairy cattle are introduced into the one-mile radius, such locations would then become part of the District's milk sampling program.

Results of the 1985 dairy cattle survey indicate that none of the current residents out of the 14 within the survey radius presently utilize a producing milk cow.

Presented below is information from the Nebraska Department of Agriculture concerning milk cow populations at the Grade A milk dairy sample locations beyond the one-mile radius of the plant. Three of these seven locations are currently being sampled. The following is an update of these farms.

### 1985 Dairy Cow Survey

<u>NAME</u>	<u>NUMBER IN HERD</u>
R. P. Flynn & Sons Rural Route 1 Blair, NE 68008	205
Dale Goedeker Box 28, RR1 Bennington, NE 68007	36
Johannsen & Kruse RR1 Bennington, NE 68007	41
Walter Japp, Jr. Rural Route 1 Kennard, NE 68034	82
Wayne Drusen RR1, Box 93A Kennard, NE 68034	44
Kelly Tiedje Bennington, NE 68007	38
Mohrview Farm, Inc. Lyle Mohr RD 2 Omaha, NE	55

PART 2

SECTION VI

POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS  
(As Required by Technical Specification 5.9.4.a.)

July 1, 1985 to September 30, 1985

## VI. POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS

### A. Potential 3rd Qtr. 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 GASPAR program. Results to each receptor are shown in Tables VI-A-1 through VI-A-36. The doses to the same groups in units of millirads (mrad), due to gamma and beta radiation carried by air, were computed using GASPAR. In addition, the maximum quarterly dose in millirads due to gamma and beta radiation carried by air was calculated by GASPAR for the Unrestricted Area Boundary. The results are shown in Table VI-A-37. 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 3rd Qtr. 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 third quarter doses.

The inputs to GASPAR for the 3rd Qtr. period from July 1, 1985 to September 30, 1985 were as follows:

(1) All gaseous effluents were as described in Section I. The totals in curies of I-133 and I-135 include all actual and estimated activities. In most cases, I-133 and I-135 activities were estimated, if there was no measurable activity in a release, by exponentially back-calculating to a mid-week activity using the maximum instrument sensitivity (minimum detectable activity).

(2) Entrained gases (Xe-133 and Xe-135) from liquid effluents were as described in Section II.

(3) In the majority of the releases, I-133 and I-135 were back calculated even through there was no measurable activity.

B. Potential 3rd Qtr. Doses to Population from Gaseous Releases.

The GASPAR program in its annual configuration was also used to calculate the ALARA integrated population dose summary for the total body, skin and organ doses in manrems for all individuals within a 50-mile radius population. Results are shown in Table VI-B-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 a 1980 conservative estimate, was used to define the sector segments withing the 50-mile radius of the plant.

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

C. Potential 3rd Qtr. Doses to Individuals from Liquid Releases.

Total body, skin and organ mrem for liquid releases were calculated for all significant liquid pathways using the annual configuration of the LADTAP program. Results are shown in Tables VI-C-1 through VI-C-10.

(3) 3rd Qtr. "X/Q's" at the actual receptor locations, which were corrected for open terrain, plume depletion, and radioactive decay factors were calculated according to Regulatory Guide 1.111. Also included were 3rd Qtr. 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<sup>3</sup> for the air water concentration.

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

(6) Site specific information, within a five mile radius of the plant, on types of receptors located in each sector was used. That is, if a cow was not present in a sector, then the milk pathway for 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 3rd Qtr. "X/Q's" by a factor ranging between 1.0 and 4.0.

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

The inputs to LADTAP for the 3rd Qtr. period from July through September 1985 were as follows:

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

(2) A plant discharge rate of 802 cubic feet per second (CFS) 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 Tables VI-C-1 through VI-C-7 was used. For Tables VI-C-8 through VI-C-11, a transport time of 0.0 was used from the plant to the discharge site.

(5) A shorewidth factor of .2 was used.

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

The discharge site in Tables VI-C-8 through VI-C-11 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 3rd Qtr. 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 VI-D-1 through VI-D-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 Nation 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 or Geiger-Mueller sample locations for this 3rd Qtr. period.

Details of this sample system are given in Section V, Environmental monitoring.

TABLE VI-A-1

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 1 BEEF  
 AT 1.86 MILES N

SEMI-ANNUAL BETA AIR DOSE =  $1.12E-02$  MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE =  $3.94E-03$  MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$2.32E-03$	$2.32E-03$	$2.32E-03$	$2.32E-03$	$2.32E-03$	$2.32E-03$	$2.43E-03$	$6.60E-03$
MEAT								
ADULT	$1.24E-05$	$8.52E-06$	$3.61E-06$	$1.40E-05$	$1.04E-05$	$1.09E-04$	$8.64E-06$	$8.02E-06$
TEEN	$6.77E-06$	$5.09E-06$	$2.95E-06$	$9.56E-06$	$6.70E-06$	$7.76E-05$	$5.36E-06$	$4.78E-06$
CHILD	$7.01E-06$	$5.96E-06$	$5.36E-06$	$1.19E-05$	$8.16E-06$	$1.16E-04$	$6.44E-06$	$5.78E-06$

TABLE VI-A-2

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 2 BEEF, RES  
 AT 1.86 MILES NNE

SEMI-ANNUAL BETA AIR DOSE = 1.62E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 5.61E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.30E-03	3.30E-03	3.30E-03	3.30E-03	3.30E-03	3.30E-03	3.46E-03	9.44E-03
GROUND	3.44E-05	4.01E-05						
MEAT								
ADULT	1.47E-05	1.20E-05	2.51E-06	1.58E-05	1.33E-05	8.14E-05	1.21E-05	1.17E-05
TEEN	8.34E-06	7.17E-06	2.05E-06	1.03E-05	8.29E-06	5.75E-05	7.35E-06	6.95E-06
CHILD	9.26E-06	8.53E-06	3.73E-06	1.26E-05	1.01E-05	8.47E-05	8.86E-06	8.40E-06
INHAL								
ADULT	4.61E-05	4.57E-05	1.29E-06	4.69E-05	4.71E-05	2.75E-04	4.69E-05	4.49E-05
TEEN	4.63E-05	4.61E-05	1.81E-06	4.80E-05	4.82E-05	3.39E-04	4.83E-05	4.52E-05
CHILD	4.09E-05	4.04E-05	2.43E-06	4.26E-05	4.28E-05	3.93E-04	4.26E-05	4.00E-05
INFANT	2.35E-05	2.31E-05	1.73E-06	2.52E-05	2.48E-05	3.47E-04	2.54E-05	2.30E-05

TABLE VI-A-3

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 3 RES  
 AT 1.47 MILES NE

SEMI-ANNUAL BETA AIR DOSE =  $1.14E-02$  MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE =  $3.98E-03$  MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$2.34E-03$	$2.34E-03$	$2.34E-03$	$2.34E-03$	$2.34E-03$	$2.34E-03$	$2.45E-03$	$6.69E-03$
GROUND	$2.40E-05$	$2.80E-05$						
INHAL ADULT	$3.26E-05$	$3.23E-05$	$9.26E-07$	$3.32E-05$	$3.33E-05$	$1.96E-04$	$3.32E-05$	$3.18E-05$
TEEN	$3.28E-05$	$3.26E-05$	$1.29E-06$	$3.39E-05$	$3.41E-05$	$2.42E-04$	$3.42E-05$	$3.20E-05$
CHILD	$2.89E-05$	$2.86E-05$	$1.74E-06$	$3.02E-05$	$3.02E-05$	$2.80E-04$	$3.02E-05$	$2.83E-05$
INFANT	$1.66E-05$	$1.64E-05$	$1.24E-06$	$1.78E-05$	$1.75E-05$	$2.48E-04$	$1.80E-05$	$1.62E-05$

TABLE VI-A-4

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 4 VEG.RES  
 AT 4.76 MILES ENE

SEMI-ANNUAL BETA AIR DOSE = 1.37E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 4.60E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.69E-04	2.69E-04	2.69E-04	2.69E-04	2.69E-04	2.69E-04	2.83E-04	7.83E-04
GROUND	1.02E-06	1.19E-06						
VEGET								
ADULT	7.95E-06	7.15E-06	7.10E-07	8.27E-06	7.55E-06	2.46E-05	7.20E-06	7.07E-06
TEEN	8.84E-06	8.16E-06	1.08E-06	9.89E-06	8.76E-06	2.27E-05	8.32E-06	8.10E-06
CHILD	1.31E-05	1.26E-05	2.49E-06	1.55E-05	1.36E-05	3.48E-05	1.29E-05	1.25E-05
INHAL								
ADULT	4.01E-06	3.98E-06	1.01E-07	4.08E-06	4.09E-06	2.20E-05	4.07E-06	3.92E-06
TEEN	4.03E-06	4.01E-06	1.41E-07	4.16E-06	4.17E-06	2.70E-05	4.19E-06	3.94E-06
CHILD	3.56E-06	3.52E-06	1.90E-07	3.69E-06	3.70E-06	3.11E-05	3.70E-06	3.49E-06
INFANT	2.05E-06	2.02E-06	1.35E-07	2.18E-06	2.15E-06	2.73E-05	2.19E-06	2.01E-06

TABLE VI-A-5

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 5 MILK  
 AT 4.93 MILES ENE

SEMI-ANNUAL BETA AIR DOSE = 1.29E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 4.32E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.52E-04	2.52E-04	2.52E-04	2.52E-04	2.52E-04	2.52E-04	2.65E-04	7.35E-04
COW MILK ADULT	2.80E-06	2.29E-06	4.45E-07	3.01E-06	2.62E-06	2.90E-05	2.32E-06	2.25E-06
TEEN	3.49E-06	2.98E-06	7.96E-07	4.25E-06	3.57E-06	4.54E-05	3.08E-06	2.93E-06
CHILD	5.12E-06	4.67E-06	1.89E-06	6.85E-06	5.68E-06	8.88E-05	4.85E-06	4.63E-06
INFANT	7.61E-06	7.06E-06	3.16E-06	1.14E-05	8.74E-06	2.12E-04	7.42E-06	7.02E-06

TABLE VI-A-6

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 6 BEEF  
 AT 4.96 MILES ENE

SEMI-ANNUAL BETA AIR DOSE = 1.28E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 4.28E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.50E-04	2.50E-04	2.50E-04	2.50E-04	2.50E-04	2.50E-04	2.63E-04	7.29E-04
MEAT								
ADULT	1.03E-06	9.60E-07	6.84E-08	1.06E-06	9.96E-07	2.83E-06	9.62E-07	9.50E-07
TEEN	6.04E-07	5.73E-07	5.60E-08	6.57E-07	6.03E-07	1.93E-06	5.78E-07	5.67E-07
CHILD	7.08E-07	6.88E-07	1.02E-07	8.01E-07	7.30E-07	2.74E-06	6.97E-07	6.85E-07

TABLE VI-A-7

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 7 VEG, RES  
 AT 4.66 MILES E

SEMI-ANNUAL BETA AIR DOSE = 1.55E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 5.22E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.21E-04	8.87E-04
GROUND	9.73E-07	1.14E-06						
VEGET								
ADULT	8.84E-06	8.07E-06	6.78E-07	9.15E-06	8.46E-06	2.48E-05	8.12E-06	8.00E-06
TEEN	9.87E-06	9.22E-06	1.03E-06	1.09E-05	9.80E-06	2.31E-05	9.38E-06	9.16E-06
CHILD	1.47E-05	1.42E-05	2.38E-06	1.70E-05	1.52E-05	3.54E-05	1.45E-05	1.42E-05
INHAL								
ADULT	4.54E-06	4.50E-06	1.15E-07	4.61E-06	4.62E-06	2.50E-05	4.61E-06	4.43E-06
TEEN	4.56E-06	4.54E-06	1.60E-07	4.71E-06	4.72E-06	3.07E-05	4.74E-06	4.46E-06
CHILD	4.02E-06	3.98E-06	2.16E-07	4.18E-06	4.19E-06	3.53E-05	4.18E-06	3.95E-06
INFANT	2.32E-06	2.28E-06	1.53E-07	2.46E-06	2.43E-06	3.10E-05	2.48E-06	2.27E-06

TABLE VI-A-8

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 8 RES  
 AT 4.24 MILES ESE

SEMI-ANNUAL BETA AIR DOSE =  $4.40E-03$  MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE =  $1.49E-03$  MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$8.72E-04$	$8.72E-04$	$8.72E-04$	$8.72E-04$	$8.72E-04$	$8.72E-04$	$9.16E-04$	$2.53E-03$
GROUND	$2.29E-06$	$2.67E-06$						
INHAL ADULT	$1.28E-05$	$1.27E-05$	$3.29E-07$	$1.30E-05$	$1.30E-05$	$7.15E-05$	$1.30E-05$	$1.25E-05$
TEEN	$1.29E-05$	$1.28E-05$	$4.59E-07$	$1.33E-05$	$1.33E-05$	$8.80E-05$	$1.34E-05$	$1.26E-05$
CHILD	$1.14E-05$	$1.12E-05$	$6.18E-07$	$1.18E-05$	$1.18E-05$	$1.01E-04$	$1.18E-05$	$1.11E-05$
INFANT	$6.54E-06$	$6.44E-06$	$4.40E-07$	$6.96E-06$	$6.86E-06$	$8.92E-05$	$7.01E-06$	$6.40E-06$

TABLE VI-A-9

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 9 BEEF  
 AT 5.03 MILES ESE

SEMI-ANNUAL BETA AIR DOSE = 3.24E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.09E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.37E-04	6.37E-04	6.37E-04	6.37E-04	6.37E-04	6.37E-04	6.70E-04	1.85E-03
MEAT								
ADULT	2.55E-06	2.41E-06	1.21E-07	2.60E-06	2.48E-06	5.73E-06	2.42E-06	2.40E-06
TEEN	1.50E-06	1.44E-06	9.92E-08	1.59E-06	1.49E-06	3.84E-06	1.45E-06	1.43E-06
CHILD	1.77E-06	1.73E-06	1.80E-07	1.93E-06	1.81E-06	5.37E-06	1.75E-06	1.73E-06

TABLE VI-A-10

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 10 VEG  
 AT 3.71 MILES SE

SEMI-ANNUAL BETA AIR DOSE = 4.11E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.41E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.29E-04	8.29E-04	8.29E-04	8.29E-04	8.29E-04	8.29E-04	8.69E-04	2.38E-03
VEGET ADULT	2.39E-05	2.10E-05	2.56E-06	2.51E-05	2.25E-05	8.48E-05	2.12E-05	2.08E-05
TEEN	2.64E-05	2.40E-05	3.89E-06	3.02E-05	2.62E-05	7.69E-05	2.46E-05	2.38E-05
CHILD	3.88E-05	3.70E-05	8.95E-06	4.73E-05	4.05E-05	1.18E-04	3.80E-05	3.68E-05

TABLE VI-A-11

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 11 RES  
 AT 1.62 MILES SE

SEMI-ANNUAL BETA AIR DOSE = 2.22E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 7.77E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.57E-03	4.57E-03	4.57E-03	4.57E-03	4.57E-03	4.57E-03	4.79E-03	1.30E-02
GROUND	2.57E-05	3.00E-05						
INHAL ADULT	6.32E-05	6.26E-05	1.79E-06	6.43E-05	6.45E-05	3.79E-04	6.42E-05	6.15E-05
TEEN	6.35E-05	6.31E-05	2.50E-06	6.57E-05	6.60E-05	4.69E-04	6.62E-05	6.19E-05
CHILD	5.60E-05	5.53E-05	3.36E-06	5.84E-05	5.86E-05	5.44E-04	5.84E-05	5.47E-05
INFANT	3.22E-05	3.17E-05	2.34E-06	3.45E-05	3.40E-05	4.81E-04	3.48E-05	3.15E-05

TABLE VI-A-12

FORT CALHOUN 1 RECEPTORS 'N ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 12 PORK  
 AT 3.84 MILES SE

SEMI-ANNUAL BETA AIR DOSE = 4.11E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.41E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.29E-04	8.29E-04	8.29E-04	8.29E-04	8.29E-04	8.29E-04	8.69E-04	2.38E-03
MEAT								
ADULT	3.31E-06	3.02E-06	2.64E-07	3.42E-06	3.16E-06	1.03E-05	3.03E-06	2.98E-06
TEEN	1.93E-06	1.80E-06	2.16E-07	2.13E-06	1.92E-06	7.08E-06	1.82E-06	1.78E-06
CHILD	2.24E-06	2.16E-06	3.92E-07	2.60E-06	2.32E-06	1.02E-05	2.20E-06	2.15E-06

TABLE VI-A-13

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 13 VEG.RES  
 AT 0.89 MILES SSE

SEMI-ANNUAL BETA AIR DOSE = 6.88E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 2.44E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.51E-02	4.07E-02
GROUND	1.93E-04	2.25E-04						
VEGET								
ADULT	5.07E-04	3.56E-04	1.35E-04	5.69E-04	4.33E-04	3.75E-03	3.66E-04	3.42E-04
TEEN	5.31E-04	4.04E-04	2.05E-04	7.32E-04	5.18E-04	3.22E-03	4.33E-04	3.91E-04
CHILD	7.10E-04	6.14E-04	4.72E-04	1.16E-03	8.01E-04	4.93E-03	6.68E-04	6.06E-04
INHAL								
ADULT	1.95E-04	1.93E-04	5.72E-06	1.98E-04	1.99E-04	1.20E-03	1.98E-04	1.89E-04
TEEN	1.96E-04	1.94E-04	7.98E-06	2.03E-04	2.04E-04	1.48E-03	2.04E-04	1.91E-04
CHILD	1.72E-04	1.70E-04	1.08E-05	1.80E-04	1.81E-04	1.72E-03	1.80E-04	1.69E-04
INFANT	9.93E-05	9.76E-05	7.65E-06	1.07E-04	1.05E-04	1.52E-03	1.08E-04	9.69E-05

TABLE VI-A-14

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 14 PORK  
 AT 1.10 MILES SSE

SEMI-ANNUAL BETA AIR DOSE = 5.61E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.98E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.16E-02	1.16E-02	1.16E-02	1.16E-02	1.16E-02	1.16E-02	1.22E-02	3.31E-02
MEAT ADULT	5.30E-05	4.16E-05	1.06E-05	5.77E-05	4.72E-05	3.35E-04	4.20E-05	4.02E-05
TEEN	2.98E-05	2.49E-05	8.66E-06	3.80E-05	2.96E-05	2.38E-04	2.56E-05	2.40E-05
CHILD	3.26E-05	2.95E-05	1.57E-05	4.69E-05	3.59E-05	3.52E-04	3.09E-05	2.89E-05

TABLE VI-A-15

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 15 VEG.RES  
 AT 0.78 MILES S

SEMI-ANNUAL BETA AIR DOSE = 5.18E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.83E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.08E-02	1.08E-02	1.08E-02	1.08E-02	1.08E-02	1.08E-02	1.13E-02	3.06E-02
GROUND	2.32E-04	2.70E-04						
VEGET								
ADULT	4.56E-04	2.74E-04	1.62E-04	5.30E-04	3.66E-04	4.34E-03	2.86E-04	2.57E-04
TEEN	4.62E-04	3.09E-04	2.46E-04	7.03E-04	4.46E-04	3.69E-03	3.45E-04	2.94E-04
CHILD	5.81E-04	4.66E-04	5.66E-04	1.12E-03	6.89E-04	5.64E-03	5.30E-04	4.56E-04
INHAL								
ADULT	1.46E-04	1.45E-04	4.32E-06	1.49E-04	1.50E-04	9.02E-04	1.49E-04	1.42E-04
TEEN	1.47E-04	1.46E-04	6.02E-06	1.53E-04	1.53E-04	1.12E-03	1.54E-04	1.43E-04
CHILD	1.30E-04	1.28E-04	8.11E-06	1.36E-04	1.36E-04	1.30E-03	1.36E-04	1.27E-04
INFANT	7.47E-05	7.35E-05	5.77E-06	8.03E-05	7.89E-05	1.15E-03	8.10E-05	7.29E-05

TABLE VI-A-16

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 16 BEEF  
 AT 1.98 MILES S

SEMI-ANNUAL BETA AIR DOSE = 5.80E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 2.03E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.25E-03	3.41E-03
MEAT								
ADULT	6.16E-06	4.39E-06	1.63E-06	6.88E-06	5.26E-06	4.97E-05	4.45E-06	4.16E-06
TEEN	3.39E-06	2.62E-06	1.34E-06	4.65E-06	3.35E-06	3.55E-05	2.74E-06	2.48E-06
CHILD	3.56E-06	3.08E-06	2.43E-06	5.77E-06	4.08E-06	5.28E-05	3.30E-06	3.00E-06

TABLE VI-A-17

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 1 COW  
 AT 2.75 MILES S

SEMI-ANNUAL BETA AIR DOSE = 2.76E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 9.59E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.64E-04	5.64E-04	5.64E-04	5.64E-04	5.64E-04	5.64E-04	5.92E-04	1.61E-03
COW MILK ADULT	1.07E-05	5.13E-06	4.95E-06	1.31E-05	8.79E-06	3.07E-04	5.50E-06	4.67E-06
TEEN	1.23E-05	6.69E-06	8.85E-06	2.08E-05	1.33E-05	4.85E-04	7.74E-06	6.08E-06
CHILD	1.52E-05	1.01E-05	2.10E-05	3.43E-05	2.14E-05	9.61E-04	1.21E-05	9.61E-06
INFANT	2.12E-05	1.51E-05	3.52E-05	6.30E-05	3.39E-05	2.33E-03	1.90E-05	1.46E-05

TABLE VI-A-18

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 2 VEG.RES  
 AT 0.62 MILES SSW

SEMI-ANNUAL BETA AIR DOSE = 5.18E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.84E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.09E-02	1.09E-02	1.09E-02	1.09E-02	1.09E-02	1.09E-02	1.14E-02	3.08E-02
GROUND	1.56E-04	1.82E-04						
VEGET								
ADULT	3.90E-04	2.68E-04	1.09E-04	4.40E-04	3.30E-04	3.00E-03	2.76E-04	2.57E-04
TEEN	4.07E-04	3.04E-04	1.65E-04	5.69E-04	3.96E-04	2.58E-03	3.28E-04	2.94E-04
CHILD	5.40E-04	4.63E-04	3.80E-04	9.02E-04	6.13E-04	3.94E-03	5.06E-04	4.56E-04
INHAL								
ADULT	1.47E-04	1.45E-04	4.39E-06	1.49E-04	1.50E-04	9.11E-04	1.49E-04	1.42E-04
TEEN	1.47E-04	1.46E-04	6.12E-06	1.53E-04	1.53E-04	1.13E-03	1.54E-04	1.43E-04
CHILD	1.30E-04	1.28E-04	8.24E-06	1.36E-04	1.36E-04	1.31E-03	1.36E-04	1.27E-04
INFANT	7.48E-05	7.35E-05	5.86E-06	8.04E-05	7.90E-05	1.16E-03	8.12E-05	7.29E-05

TABLE VI-A-19

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 3 MILK  
 AT 0.67 MILES SSW

SEMI-ANNUAL BETA AIR DOSE = 4.48E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.59E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.40E-03	9.40E-03	9.40E-03	9.40E-03	9.40E-03	9.40E-03	9.84E-03	2.66E-02
COW MILK ADULT	1.54E-04	8.11E-05	6.45E-05	1.85E-04	1.29E-04	4.03E-03	8.59E-05	7.51E-05
TEEN	1.79E-04	1.06E-04	1.15E-04	2.90E-04	1.92E-04	6.37E-03	1.19E-04	9.79E-05
CHILD	2.27E-04	1.61E-04	2.74E-04	4.77E-04	3.08E-04	1.26E-02	1.87E-04	1.55E-04
INFANT	3.21E-04	2.41E-04	4.58E-04	8.66E-04	4.86E-04	3.05E-02	2.92E-04	2.35E-04

TABLE VI-A-20

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 4 BEEF  
 AT 2.01 MILES SSW

SEMI-ANNUAL BETA AIR DOSE = 3.79E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.32E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.78E-04	7.78E-04	7.78E-04	7.78E-04	7.78E-04	7.78E-04	8.16E-04	2.22E-03
MEAT								
ADULT	3.57E-06	2.83E-06	6.87E-07	3.87E-06	3.19E-06	2.19E-05	2.85E-06	2.73E-06
TEEN	2.01E-06	1.69E-06	5.62E-07	2.54E-06	1.99E-06	1.55E-05	1.74E-06	1.63E-06
CHILD	2.20E-06	2.00E-06	1.02E-06	3.13E-06	2.42E-06	2.29E-05	2.09E-06	1.97E-06

TABLE VI-A-21

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 5 VEG.RES  
 AT 0.79 MILES SW

SEMI-ANNUAL BETA AIR DOSE = 3.25E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.15E-02 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.75E-03	6.75E-03	6.75E-03	6.75E-03	6.75E-03	6.75E-03	7.07E-03	1.92E-02
GROUND	5.85E-05	6.83E-05						
VEGET								
ADULT	2.12E-04	1.66E-04	4.09E-05	2.31E-04	1.90E-04	1.19E-03	1.69E-04	1.62E-04
TEEN	2.28E-04	1.89E-04	6.21E-05	2.89E-04	2.24E-04	1.04E-03	1.98E-04	1.86E-04
CHILD	3.19E-04	2.90E-04	1.43E-04	4.56E-04	3.47E-04	1.60E-03	3.06E-04	2.88E-04
INHAL								
ADULT	9.23E-05	9.15E-05	2.72E-06	9.41E-05	9.44E-05	5.67E-04	9.40E-05	8.98E-05
TEEN	9.28E-05	9.22E-05	3.79E-06	9.62E-05	9.66E-05	7.02E-04	9.70E-05	9.04E-05
CHILD	8.18E-05	8.08E-05	5.11E-06	8.55E-05	8.58E-05	8.15E-04	8.56E-05	7.99E-05
INFANT	4.71E-05	4.63E-05	3.63E-06	5.06E-05	4.98E-05	7.21E-04	5.11E-05	4.60E-05

TABLE VI-A-22

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 6 BEEF  
 AT 0.81 MILES SW

SEMI-ANNUAL BETA AIR DOSE = 3.25E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.15E-02 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.75E-03	6.75E-03	6.75E-03	6.75E-03	6.75E-03	6.75E-03	7.07E-03	1.92E-02
MEAT								
ADULT	2.85E-05	2.39E-05	4.27E-06	3.04E-05	2.62E-05	1.42E-04	2.40E-05	2.33E-05
TEEN	1.63E-05	1.43E-05	3.50E-06	1.96E-05	1.62E-05	1.00E-04	1.46E-05	1.39E-05
CHILD	1.83E-05	1.70E-05	6.35E-06	2.40E-05	1.96E-05	1.47E-04	1.76E-05	1.68E-05

TABLE VI-A-23

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 7 VEG.RES  
 AT 1.01 MILES WSW

SEMI-ANNUAL BETA AIR DOSE = 1.51E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 5.32E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.14E-03	3.14E-03	3.14E-03	3.14E-03	3.14E-03	3.14E-03	3.29E-03	8.90E-03
GROUND	3.92E-05	4.57E-05						
VEGET								
ADULT	1.08E-04	7.77E-05	2.73E-05	1.21E-04	9.33E-05	7.66E-04	7.97E-05	7.49E-05
TEEN	1.14E-04	8.82E-05	4.16E-05	1.55E-04	1.11E-04	6.60E-04	9.42E-05	8.57E-05
CHILD	1.54E-04	1.34E-04	9.58E-05	2.45E-04	1.72E-04	1.01E-03	1.45E-04	1.33E-04
INHAL								
ADULT	4.26E-05	4.22E-05	1.25E-06	4.34E-05	4.36E-05	2.61E-04	4.34E-05	4.15E-05
TEEN	4.28E-05	4.26E-05	1.74E-06	4.44E-05	4.46E-05	3.24E-04	4.48E-05	4.17E-05
CHILD	3.78E-05	3.73E-05	2.34E-06	3.95E-05	3.96E-05	3.76E-04	3.95E-05	3.69E-05
INFANT	2.18E-05	2.14E-05	1.67E-06	2.34E-05	2.30E-05	3.33E-04	2.36E-05	2.12E-05

TABLE VI-A-24

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 8 BEEF, PORK  
 AT 4.71 MILES WSW

SEMI-ANNUAL BETA AIR DOSE = 4.96E-04 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.70E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.97E-05	9.97E-05	9.97E-05	9.97E-05	9.97E-05	9.97E-05	1.05E-04	2.87E-04
MEAT								
ADULT	4.46E-07	3.71E-07	7.03E-08	4.78E-07	4.08E-07	2.31E-06	3.73E-07	3.61E-07
TEEN	2.54E-07	2.21E-07	5.76E-08	3.08E-07	2.53E-07	1.63E-06	2.26E-07	2.15E-07
CHILD	2.84E-07	2.64E-07	1.05E-07	3.79E-07	3.06E-07	2.39E-06	2.73E-07	2.60E-07

TABLE VI-A-25

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 9 VEG, RES  
 AT 1.17 MILES W

SEMI-ANNUAL BETA AIR DOSE = 1.59E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 5.62E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.32E-03	3.32E-03	3.32E-03	3.32E-03	3.32E-03	3.32E-03	3.47E-03	9.40E-03
GROUND	3.78E-05	4.42E-05						
VEGET								
ADULT	1.11E-04	8.18E-05	2.64E-05	1.24E-04	9.68E-05	7.46E-04	8.37E-05	7.90E-05
TEEN	1.18E-04	9.28E-05	4.02E-05	1.57E-04	1.15E-04	6.45E-04	9.87E-05	9.05E-05
CHILD	1.60E-04	1.42E-04	9.25E-05	2.49E-04	1.78E-04	9.87E-04	1.52E-04	1.40E-04
INHAL								
ADULT	4.50E-05	4.46E-05	1.30E-06	4.58E-05	4.59E-05	2.74E-04	4.57E-05	4.38E-05
TEEN	4.52E-05	4.49E-05	1.81E-06	4.68E-05	4.70E-05	3.39E-04	4.72E-05	4.40E-05
CHILD	3.98E-05	3.94E-05	2.43E-06	4.16E-05	4.17E-05	3.93E-04	4.16E-05	3.90E-05
INFANT	2.30E-05	2.26E-05	1.73E-06	2.46E-05	2.42E-05	3.48E-04	2.48E-05	2.24E-05

TABLE VI-A-26

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 10 BEEF  
 AT 1.94 MILES W

SEMI-ANNUAL BETA AIR DOSE = 5.20E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.82E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.07E-03	1.07E-03	1.07E-03	1.07E-03	1.07E-03	1.07E-03	1.12E-03	3.05E-03
MEAT								
ADULT	4.69E-06	3.84E-06	7.85E-07	5.04E-06	4.26E-06	2.56E-05	3.87E-06	3.73E-06
TEEN	2.66E-06	2.29E-06	6.42E-07	3.27E-06	2.64E-06	1.81E-05	2.35E-06	2.23E-06
CHILD	2.96E-06	2.73E-06	1.17E-06	4.02E-06	3.21E-06	2.66E-05	2.83E-06	2.69E-06

TABLE VI-A-27

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 11 MILK  
 AT 3.65 MILES W

SEMI-ANNUAL BETA AIR DOSE = 1.30E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 4.50E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.65E-04	2.65E-04	2.65E-04	2.65E-04	2.65E-04	2.65E-04	2.78E-04	7.59E-04
COW MILK ADULT	3.51E-06	2.31E-06	1.05E-06	4.01E-06	3.09E-06	6.65E-05	2.39E-06	2.21E-06
TEEN	4.20E-06	3.01E-06	1.89E-06	6.02E-06	4.42E-06	1.05E-04	3.24E-06	2.88E-06
CHILD	5.74E-06	4.66E-06	4.48E-06	9.82E-06	7.06E-06	2.07E-04	5.09E-06	4.56E-06
INFANT	8.32E-06	7.01E-06	7.49E-06	1.72E-05	1.10E-05	4.99E-04	7.85E-06	6.91E-06

TABLE VI-A-28

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 12 RES, BEEF  
 AT 1.91 MILES WNW

SEMI-ANNUAL BETA AIR DOSE = 4.72E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.66E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.77E-04	9.77E-04	9.77E-04	9.77E-04	9.77E-04	9.77E-04	1.02E-03	2.78E-03
GROUND	1.36E-05	1.59E-05						
MEAT								
ADULT	4.59E-06	3.52E-06	9.94E-07	5.04E-06	4.05E-06	3.11E-05	3.56E-06	3.38E-06
TEEN	2.57E-06	2.10E-06	8.13E-07	3.34E-06	2.55E-06	2.21E-05	2.18E-06	2.02E-06
CHILD	2.78E-06	2.49E-06	1.48E-06	4.12E-06	3.10E-06	3.27E-05	2.62E-06	2.44E-06
INHAL								
ADULT	1.34E-05	1.33E-05	3.76E-07	1.36E-05	1.37E-05	8.02E-05	1.36E-05	1.30E-05
TEEN	1.35E-05	1.34E-05	5.25E-07	1.39E-05	1.40E-05	9.92E-05	1.40E-05	1.31E-05
CHILD	1.19E-05	1.17E-05	7.07E-07	1.24E-05	1.24E-05	1.15E-04	1.24E-05	1.16E-05
INFANT	6.84E-06	6.72E-06	5.04E-07	7.32E-06	7.21E-06	1.02E-04	7.37E-06	6.68E-06

TABLE VI-A-29

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 13 VEG  
 AT 1.93 MILES WNW

SEMI-ANNUAL BETA AIR DOSE = 4.72E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.66E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.77E-04	9.77E-04	9.77E-04	9.77E-04	9.77E-04	9.77E-04	1.02E-03	2.78E-03
VEGET								
ADULT	3.52E-05	2.45E-05	9.50E-06	3.96E-05	2.99E-05	2.63E-04	2.52E-05	2.35E-05
TEEN	3.68E-05	2.78E-05	1.44E-05	5.09E-05	3.59E-05	2.26E-04	2.99E-05	2.70E-05
CHILD	4.91E-05	4.23E-05	3.33E-05	8.08E-05	5.55E-05	3.46E-04	4.61E-05	4.18E-05

TABLE VI-A-30

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 14 MILK  
 AT 2.78 MILES WNW

SEMI-ANNUAL BETA AIR DOSE = 2.13E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 7.43E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.37E-04	4.37E-04	4.37E-04	4.37E-04	4.37E-04	4.37E-04	4.59E-04	1.25E-03
COW MILK ADULT	6.95E-06	3.84E-06	2.74E-06	8.27E-06	5.87E-06	1.71E-04	4.05E-06	3.59E-06
TEEN	8.11E-06	5.01E-06	4.90E-06	1.28E-05	8.67E-06	2.70E-04	5.59E-06	4.68E-06
CHILD	1.05E-05	7.66E-06	1.17E-05	2.11E-05	1.39E-05	5.35E-04	8.77E-06	7.39E-06
INFANT	1.49E-05	1.15E-05	1.95E-05	3.80E-05	2.19E-05	1.29E-03	1.37E-05	1.12E-05

TABLE VI-A-31

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 15 RES  
 AT 2.40 MILES NW

SEMI-ANNUAL BETA AIR DOSE = 9.52E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 3.33E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.96E-03	1.96E-03	1.96E-03	1.96E-03	1.96E-03	1.96E-03	2.06E-03	5.59E-03
GROUND	1.96E-05	2.29E-05						
INHAL								
ADULT	2.70E-05	2.68E-05	7.48E-07	2.75E-05	2.76E-05	1.60E-04	2.75E-05	2.63E-05
TEEN	2.72E-05	2.70E-05	1.04E-06	2.81E-05	2.83E-05	1.98E-04	2.83E-05	2.65E-05
CHILD	2.40E-05	2.37E-05	1.41E-06	2.50E-05	2.51E-05	2.30E-04	2.50E-05	2.34E-05
INFANT	1.38E-05	1.36E-05	1.00E-06	1.48E-05	1.45E-05	2.03E-04	1.49E-05	1.35E-05

TABLE VI-A-32

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 16 VEG  
 AT 2.32 MILES NW

SEMI-ANNUAL BETA AIR DOSE =  $9.71E-03$  MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE =  $3.40E-03$  MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$2.00E-03$	$2.00E-03$	$2.00E-03$	$2.00E-03$	$2.00E-03$	$2.00E-03$	$2.10E-03$	$5.70E-03$
VEGET ADULT	$6.60E-05$	$5.00E-05$	$1.43E-05$	$7.25E-05$	$5.81E-05$	$4.08E-04$	$5.10E-05$	$4.85E-05$
TEEN	$7.03E-05$	$5.68E-05$	$2.17E-05$	$9.15E-05$	$6.89E-05$	$3.54E-04$	$5.99E-05$	$5.55E-05$
CHILD	$9.70E-05$	$8.69E-05$	$4.99E-05$	$1.45E-04$	$1.07E-04$	$5.42E-04$	$9.25E-05$	$8.60E-05$

TABLE VI-A-33

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 1 MILK,PORK  
 AT 3.47 MILES NW

SEMI-ANNUAL BETA AIR DOSE = 4.59E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.60E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.86E-04	2.69E-03
MEAT								
ADULT	4.05E-06	3.40E-06	6.05E-07	4.32E-06	3.71E-06	2.01E-05	3.42E-06	3.31E-06
TEEN	2.31E-06	2.03E-06	4.95E-07	2.78E-06	2.30E-06	1.42E-05	2.07E-06	1.97E-06
CHILD	2.59E-06	2.42E-06	8.99E-07	3.41E-06	2.79E-06	2.08E-05	2.50E-06	2.39E-06
COW MILK								
ADULT	1.26E-05	8.14E-06	3.91E-06	1.44E-05	1.10E-05	2.47E-04	8.42E-06	7.77E-06
TEEN	1.50E-05	1.06E-05	6.99E-06	2.18E-05	1.58E-05	3.88E-04	1.14E-05	1.01E-05
CHILD	2.04E-05	1.64E-05	1.66E-05	3.55E-05	2.53E-05	7.67E-04	1.80E-05	1.60E-05
INFANT	2.95E-05	2.46E-05	2.78E-05	6.25E-05	3.95E-05	1.85E-03	2.78E-05	2.43E-05

TABLE VI-A-34

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 2 BEEF  
 AT 1.06 MILES NNW

SEMI-ANNUAL BETA AIR DOSE = 5.89E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 2.09E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.29E-02	3.49E-02
MEAT								
ADULT	5.90E-05	4.40E-05	1.40E-05	6.52E-05	5.13E-05	4.32E-04	4.44E-05	4.20E-05
TEEN	3.28E-05	2.63E-05	1.14E-05	4.36E-05	3.25E-05	3.07E-04	2.73E-05	2.51E-05
CHILD	3.51E-05	3.10E-05	2.08E-05	5.39E-05	3.95E-05	4.57E-04	3.28E-05	3.03E-05

TABLE VI-A-35

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 3 VEG, RES  
 AT 2.01 MILES NNW

SEMI-ANNUAL BETA AIR DOSE = 1.46E-02 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 5.09E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.00E-03	3.00E-03	3.00E-03	3.00E-03	3.00E-03	3.00E-03	3.14E-03	8.55E-03
GROUND	3.74E-05	4.36E-05						
VEGET ADULT	1.05E-04	7.55E-05	2.61E-05	1.17E-04	9.03E-05	7.30E-04	7.74E-05	7.28E-05
TEEN	1.10E-04	8.57E-05	3.97E-05	1.49E-04	1.08E-04	6.29E-04	9.15E-05	8.34E-05
CHILD	1.49E-04	1.31E-04	9.14E-05	2.36E-04	1.67E-04	9.63E-04	1.41E-04	1.29E-04
INHAL ADULT	4.14E-05	4.11E-05	1.16E-06	4.22E-05	4.23E-05	2.47E-04	4.21E-05	4.03E-05
TEEN	4.16E-05	4.14E-05	1.62E-06	4.31E-05	4.33E-05	3.05E-04	4.34E-05	4.06E-05
CHILD	3.67E-05	3.63E-05	2.18E-06	3.83E-05	3.84E-05	3.54E-04	3.83E-05	3.59E-05
INFANT	2.11E-05	2.08E-05	1.55E-06	2.26E-05	2.23E-05	3.13E-04	2.28E-05	2.06E-05

TABLE VI-A-36

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 12-10-85  
 SPECIAL LOCATION # 4 PORK  
 AT 3.70 MILES NNW  
 SEMI-ANNUAL BETA AIR DOSE = 4.24E-03 MILLRADS  
 SEMI-ANNUAL GAMMA AIR DOSE = 1.46E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.58E-04	8.58E-04	8.58E-04	8.58E-04	8.58E-04	8.58E-04	9.00E-04	2.47E-03
MEAT								
ADULT	3.84E-06	3.16E-06	6.30E-07	4.12E-06	3.49E-06	2.06E-05	3.18E-06	3.07E-06
TEEN	2.18E-06	1.89E-06	5.15E-07	2.67E-06	2.17E-06	1.45E-05	1.93E-06	1.83E-06
CHILD	2.43E-06	2.25E-06	9.36E-07	3.28E-06	2.63E-06	2.13E-05	2.33E-06	2.21E-06

TABLE VI-B-1

FORT CALHOUN 1 SEMI-ANNUAL 7/85-9/85 TRI-EX TOWER DATA 12-10-85  
 SEMI-ANNUAL ALARA INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.41E-02 91.79%	1.41E-02 92.72%	1.41E-02 97.22%	1.41E-02 90.70%	1.41E-02 91.85%	1.41E-02 52.63%	1.51E-02 93.05%	4.97E-02 97.83%
GROUND	1.42E-04 0.93%	1.42E-04 0.94%	1.42E-04 0.98%	1.42E-04 0.92%	1.42E-04 0.93%	1.42E-04 0.53%	1.42E-04 0.88%	1.66E-04 0.33%
INHAL	2.91E-04 1.90%	2.89E-04 1.90%	3.10E-06 0.06%	2.96E-04 1.91%	2.97E-04 1.94%	1.67E-03 6.25%	2.96E-04 1.83%	2.85E-04 0.56%
VEGET	5.46E-04 3.56%	4.56E-04 3.01%	1.56E-04 1.08%	6.54E-04 4.22%	5.36E-04 3.50%	6.90E-03 25.80%	4.61E-04 2.85%	4.38E-04 0.86%
COW MILK	1.61E-04 1.05%	1.16E-04 0.77%	7.48E-05 0.52%	2.19E-04 1.41%	1.61E-04 1.05%	3.34E-03 12.51%	1.24E-04 0.77%	1.13E-04 0.22%
MEAT	1.17E-04 0.76%	1.01E-04 0.67%	2.00E-05 0.14%	1.29E-04 0.83%	1.11E-04 0.72%	6.07E-04 2.27%	1.02E-04 0.63%	9.88E-05 0.19%
*TOTAL*	1.53E-02	1.52E-02	1.45E-02	1.55E-02	1.53E-02	2.67E-02	1.62E-02	5.08E-02

TABLE VI-C-1

FT. CALHOON 1 SEMI-ANNUAL RELEASES FOR JAN 1985 TO SEP 1985 12-05-85

DISCHARGE=8.02E+02 CFS

SOURCE TERM MULTIPLIER=1.00E+00

50-MILE POPULATION=8.71E+05

FRACTION --- ADULT=0.66  
TEENAGER=0.14  
CHILD=0.20

FRESHWATER SITE  
FT. CALHOON S. TERMS 7/85-09/85

NO RECONCENTRATION OF NUCLIDES

\* \* \* ADULT DOSE FACTORS \* \* \*

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)			RECON
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY		
27CO 57	7.52E-04	0.00E+00	1.75E-07	2.91E-07	0.00E+00	0.00E+00	0.00E+00	4.44E-06	1.00E-09	9.10E-10	1.00E+00	
42MO 99	4.27E-03	0.00E+00	4.31E-06	8.20E-07	0.00E+00	9.77E-08	0.00E+00	9.99E-06	2.20E-09	1.90E-09	1.00E+00	
43TC 99M	4.69E-03	2.47E-10	6.98E-10	8.90E-09	0.00E+00	1.06E-08	3.47E-10	4.13E-07	1.10E-09	9.60E-10	1.00E+00	
58CE 111	1.18E-03	9.37E-09	5.34E-09	7.18E-10	0.00E+00	2.94E-09	0.00E+00	2.42E-05	6.20E-10	5.50E-10	1.00E+00	
24CR 51	5.19E-03	0.00E+00	0.00E+00	2.66E-09	1.59E-09	5.87E-10	3.53E-09	6.69E-07	2.60E-10	2.20E-10	1.00E+00	
53I 131	8.40E-04	4.16E-06	5.96E-06	3.41E-06	1.95E-03	1.02E-05	0.00E+00	1.57E-06	3.40E-09	2.80E-09	1.00E+00	
53I 133	6.15E-04	1.43E-06	2.48E-06	7.57E-07	4.77E-04	4.33E-06	0.00E+00	2.18E-06	4.50E-09	3.70E-09	1.00E+00	
56BA 140	2.04E-03	2.03E-05	2.55E-08	1.34E-06	0.00E+00	8.68E-09	1.46E-08	4.18E-05	2.40E-09	2.10E-09	1.00E+00	
44RU 103	5.97E-04	1.85E-07	0.00E+00	7.98E-08	0.00E+00	7.07E-07	0.00E+00	2.16E-05	4.20E-09	3.60E-09	1.00E+00	
55CS 137	2.70E-03	7.98E-05	1.09E-04	7.15E-05	0.00E+00	3.71E-05	1.23E-05	2.10E-06	4.90E-09	4.20E-09	1.00E+00	
40ZR 95	1.01E-03	3.04E-08	9.76E-09	6.61E-09	0.00E+00	1.54E-08	0.00E+00	3.03E-05	5.80E-09	5.00E-09	1.00E+00	
41NB 95	5.90E-04	6.23E-09	3.46E-09	1.36E-09	0.00E+00	3.43E-09	0.00E+00	2.10E-05	8.00E-09	5.10E-09	1.00E+00	
55CS 134	1.83E-03	6.22E-05	1.48E-04	1.21E-04	0.00E+00	4.80E-05	1.59E-05	2.59E-06	1.40E-08	1.20E-08	1.00E+00	
27CO 58	5.79E-04	0.00E+00	7.48E-07	1.67E-06	0.00E+00	0.00E+00	0.00E+00	1.51E-05	8.80E-09	5.80E-09	1.00E+00	
25MN 54	5.83E-04	0.00E+00	4.57E-08	8.73E-07	0.00E+00	1.38E-06	0.00E+00	1.40E-05	8.80E-09	5.80E-09	1.00E+00	
55CS 136	7.20E-04	6.51E-06	2.57E-05	1.85E-05	0.00E+00	1.43E-05	1.96E-06	2.92E-06	1.70E-08	1.50E-08	1.00E+00	
26FE 59	1.08E-03	4.34E-06	1.03E-05	3.92E-06	0.00E+00	0.00E+00	2.86E-06	3.40E-05	9.40E-09	8.00E-09	1.00E+00	
30ZN 65	1.28E-03	4.85E-06	1.54E-05	6.97E-06	0.00E+00	1.03E-05	0.00E+00	9.70E-06	4.60E-09	4.00E-09	1.00E+00	
27CO 60	7.46E-04	0.00E+00	2.15E-06	4.72E-06	0.00E+00	0.00E+00	0.00E+00	4.02E-05	2.00E-08	1.70E-08	1.00E+00	
57LA 140	5.88E-04	2.50E-09	1.26E-09	3.34E-10	0.00E+00	0.00E+00	0.00E+00	9.25E-05	1.70E-08	1.50E-08	1.00E+00	
51SB 124	9.02E-04	2.81E-06	5.30E-08	1.11E-06	8.79E-09	0.00E+00	2.18E-06	7.95E-05	1.50E-08	1.30E-08	1.00E+00	
1H 3	7.27E+01	0.00E+00	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	0.00E+00	0.00E+00	1.00E+00	

TABLE VI-C-2

NUCLIDE	CURIE/5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)										SHORELINE (MREM/HR)/(PCI/M**2)	
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON		
58CE 141	1.18E-03	1.26E-08	8.46E-09	9.70E-10	0.00E+00	2.94E-09	0.00E+00	2.29E-05					
531 131	8.40E-04	5.57E-06	7.87E-06	4.69E-06	2.27E-03	1.02E-05	0.00E+00	1.49E-06					
531 133	6.15E-04	2.03E-06	3.44E-06	1.06E-06	6.25E-04	4.33E-06	0.00E+00	2.50E-06					
568A 140	2.04E-03	2.83E-05	3.48E-08	1.82E-06	0.00E+00	8.68E-09	2.33E-08	4.14E-06					
44RU 103	5.97E-04	2.37E-07	0.00E+00	1.06E-07	0.00E+00	7.07E-07	0.00E+00	1.85E-05					
55CS 137	2.70E-03	1.07E-04	1.44E-04	5.05E-05	0.00E+00	3.71E-05	1.91E-05	1.92E-06					
40ZR 95	1.01E-03	3.72E-08	1.24E-08	8.66E-09	0.00E+00	1.54E-08	0.00E+00	2.68E-05					
41NB 95	5.90E-04	7.24E-09	4.36E-09	2.46E-09	0.00E+00	3.43E-09	0.00E+00	1.78E-05					
55CS 134	1.63E-03	8.05E-05	1.94E-04	9.06E-05	0.00E+00	4.80E-05	2.35E-05	2.24E-06					
27CO 58	5.79E-04	0.00E+00	9.92E-07	2.76E-06	0.00E+00	0.00E+00	0.00E+00	1.34E-05					
27CO 60	7.46E-04	0.00E+00	2.76E-06	6.30E-06	0.00E+00	0.00E+00	0.00E+00	3.31E-05					
57LA 140	5.68E-04	3.48E-09	1.72E-09	4.55E-10	0.00E+00	0.00E+00	0.00E+00	9.48E-05					
1H 3	7.27E+01	0.00E+00	1.06E-07	1.06E-07	1.06E-07	1.34E-07	1.06E-07	1.06E-07					

NUCLIDE	CURIE/5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)										SHORELINE (MREM/HR)/(PCI/M**2)	
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON		
58CE 141	1.18E-03	3.76E-08	1.88E-08	2.80E-09	0.00E+00	2.94E-09	0.00E+00	2.36E-05					
531 131	8.40E-04	1.63E-05	1.67E-05	1.26E-05	5.43E-03	1.02E-05	0.00E+00	1.43E-06					
531 133	6.15E-04	5.98E-06	7.38E-06	2.90E-06	1.78E-03	4.33E-06	0.00E+00	2.99E-06					
568A 140	2.04E-03	8.26E-05	7.25E-08	4.85E-06	0.00E+00	8.68E-09	4.32E-08	4.21E-06					
44RU 103	5.97E-04	6.78E-07	0.00E+00	2.74E-07	0.00E+00	7.07E-07	0.00E+00	1.78E-05					
55CS 137	2.70E-03	3.12E-04	4.50E-05	0.00E+00	3.71E-05	3.54E-05	1.84E-05	1.84E-06					
40ZR 95	1.01E-03	1.04E-07	2.42E-08	2.20E-08	0.00E+00	1.54E-08	0.00E+00	2.50E-05					
41NB 95	5.90E-04	1.95E-08	8.32E-09	6.11E-09	0.00E+00	3.43E-09	0.00E+00	1.44E-05					
55CS 134	1.63E-03	2.24E-04	3.77E-04	8.02E-05	0.00E+00	4.80E-05	4.19E-05	2.04E-06					
27CO 58	5.79E-04	0.00E+00	1.85E-06	5.58E-06	0.00E+00	0.00E+00	0.00E+00	2.86E-05					
27CO 60	7.46E-04	0.00E+00	5.17E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	1.00E-04					
57LA 140	5.68E-04	1.01E-08	3.52E-09	1.19E-09	0.00E+00	0.00E+00	0.00E+00	1.00E-04					
1H 3	7.27E+01	0.00E+00	2.03E-07	2.03E-07	2.03E-07	1.34E-07	2.03E-07	2.03E-07					

NUCLIDE	CURIE/5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)										SHORELINE (MREM/HR)/(PCI/M**2)	
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON		
58CE 141	1.18E-03	8.00E-08	4.91E-08	5.75E-09	0.00E+00	2.94E-09	0.00E+00	2.38E-05					
531 131	8.40E-04	3.42E-05	4.07E-05	2.38E-05	1.31E-02	1.02E-05	0.00E+00	1.53E-06					
531 133	6.15E-04	1.26E-05	1.84E-05	5.58E-06	4.35E-03	4.33E-06	0.00E+00	3.27E-06					
568A 140	2.04E-03	1.74E-04	1.75E-07	8.99E-06	0.00E+00	8.68E-09	1.07E-07	4.43E-06					
44RU 103	5.97E-04	1.41E-06	0.00E+00	4.85E-07	0.00E+00	7.07E-07	0.00E+00	1.76E-05					
55CS 137	2.70E-03	6.53E-04	7.31E-04	4.20E-05	0.00E+00	3.71E-05	8.81E-05	1.89E-06					
40ZR 95	1.01E-03	2.11E-07	5.32E-08	3.78E-08	0.00E+00	1.54E-08	0.00E+00	2.38E-05					
41NB 95	5.90E-04	3.89E-08	1.75E-08	1.03E-08	0.00E+00	3.43E-09	0.00E+00	1.40E-05					
55CS 134	1.63E-03	4.58E-04	8.24E-04	6.97E-05	0.00E+00	4.80E-05	9.42E-05	1.96E-06					
27CO 58	5.79E-04	0.00E+00	3.78E-06	9.26E-06	0.00E+00	0.00E+00	0.00E+00	9.79E-06					
27CO 60	7.46E-04	0.00E+00	1.07E-05	2.56E-05	0.00E+00	0.00E+00	0.00E+00	2.64E-04					
57LA 140	5.68E-04	2.12E-08	8.37E-09	2.16E-09	0.00E+00	0.00E+00	0.00E+00	1.04E-04					
1H 3	7.27E+01	0.00E+00	3.07E-07	3.07E-07	3.07E-07	1.34E-07	3.07E-07	3.07E-07					

TOTAL NUMBER IN SOURCE TERM IS 22 TOTAL RELEASE IS 7.2733E+01 VI-45

TABLE VI-C-3

AS LOW AS REASONABLY ACHIEVABLE

A D U L T D O S E S

DOSE (MREM PER .5YR INTAKE)

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		2.63E-03	4.64E-03	3.34E-03	1.34E-04	1.65E-03	5.22E-04	1.74E-03
DRINKING		1.25E-05	3.42E-04	3.36E-04	3.78E-04	3.30E-04	3.24E-04	3.36E-04
SHORELINE	4.04E-06	3.45E-06	3.45E-06	3.45E-06	3.45E-06	3.45E-06	3.45E-06	3.45E-06
SWIMMING	0.00E+00	7.77E-08	7.77E-08	7.77E-08	7.77E-08	7.77E-08	7.77E-08	7.77E-08
BOATING	0.00E+00	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08
TOTAL	4.04E-06	2.65E-03	4.99E-03	3.68E-03	5.15E-04	1.99E-03	8.49E-04	2.08E-03

SHOREWIDTH FACTOR=0.2

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

ISOTOPE CONTRIBUTION

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
	ISOTOPE	%	ISOTOPE	%	ISOTOPE	%	ISOTOPE	%	ISOTOPE	%	ISOTOPE	%	ISOTOPE	%	ISOTOPE	%
FISH	CS 137	65%	CS 137	50%	CS 137	46%	I 131	67%	CS 137	48%	CS 137	51%	CS 137	2%		
	CS 134	30%	CS 134	41%	CS 134	47%	I 133	5%	CS 134	37%	CS 134	39%	CS 134	84%		
	CS 136	1%	CS 136	3%	CS 136	3%	H 3	26%	CS 136	4%	CS 136	2%	CS 134	1%		
	ZN 65	1%	ZN 65	3%	ZN 65	2%			ZN 65	6%	H 3	6%	ZN 65	5%		
DRINKING																
	BA 140	10%	CS 137	2%	CS 137	1%	I 131	13%	CS 137	1%			H 3	99%	H 3	95%
	CS 137	56%	CS 134	2%	CS 134	1%	I 133	1%	H 3	97%						
	CS 134	26%	H 3	94%	H 3	95%	H 3	85%								
	CS 136	1%														
	FE 59	1%														
ZN 65	1%															
SHORELINE	CS 137	47%	CS 137	47%												
	CS 134	18%	CS 134	19%												
	MN 54	1%	MN 54	1%												
	ZN 65	1%	ZN 65	1%												
CO 60	27%	CO 60	27%													
SWIM M F			MO 99	5%												
			TC 99M	3%												
			I 131	1%												
			I 133	1%												
			BA 140	2%												
			RU 13	1%												
			CS 137	7%												
			ZR 95	4%												
			NB 95	2%												
			CS 134	13%												
			CO 58	3%												
			MN 54	2%												
			CS 136	8%												
			FE 59	7%												
			ZN 55	4%												
			CO 60	10%												
		LA 140	6%													
		SB 124	9%													

TABLE VI-C-4

AS LOW AS REASONABLY ACHIEVABLE

TEENAGER DOSES

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		2.64E-03	4.57E-03	1.89E-03	1.09E-04	1.26E-03	5.80E-04	1.14E-03
DRINKING		1.15E-05	1.96E-04	1.86E-04	2.24E-04	2.31E-04	1.80E-04	1.86E-04
SHORELINE	2.25E-05	1.93E-05	1.93E-05	1.93E-05	1.93E-05	1.93E-05	1.93E-05	1.93E-05
SWIMMING	0.00E+00	4.34E-07	4.34E-07	4.34E-07	4.34E-07	4.34E-07	4.34E-07	4.34E-07
BOATING	0.00E+00	2.17E-07	2.17E-07	2.17E-07	2.17E-07	2.17E-07	2.17E-07	2.17E-07
TOTAL	2.25E-05	2.67E-03	4.78E-03	2.10E-03	3.53E-04	1.51E-03	7.80E-04	1.35E-03

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

PATHWAY	ISOTOPE CONTRIBUTION														
	SKIN	BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
FISH		CS 137	67%	CS 137	52%	CS 137	44%	I 131	73%	CS 137	48%	CS 137	54%	CS 137	2%
		CS 134	30%	CS 134	42%	CS 134	47%	I 133	7%	CS 134	37%	CS 134	40%	NB 95	82%
		CS 136	1%	CS 136	2%	CS 136	4%	H 3	19%	CS 136	4%	CS 136	1%	CS 134	1%
		ZN 65	1%	ZN 65	2%	ZN 65	2%			ZN 65	6%	H 3	3%	CS 136	1%
DRINKING															
		BA 140	11%	CS 137	4%	CS 137	1%	I 131	18%	CS 137	1%	H 3	98%	H 3	95%
		CS 137	57%	CS 134	3%	CS 134	1%	I 133	2%	H 3	97%				
		CS 134	26%	H 3	90%	H 3	95%	H 3	79%						
SHORELINE															
		CS 137	47%	CS 137	47%										
		CS 134	18%	CS 134	19%										
		MN 54	1%	MN 54	1%										
SWIM M F															
				MO 99	5%										
				TC 99M	3%										
				I 131	1%										
			I 133	1%											
			BA 140	2%											
			RU 1 3	1%											
			CS 137	7%											
			ZR 95	4%											
			NB 95	2%											
			CS 134	13%											
			CO 58	3%											
			MN 54	2%											
			CS 136	8%											
			FE 59	7%											
			ZN 65	4%											
			CO 60	10%											
			LA 140	6%											
			SB 124	9%											

TABLE VI-C-5

AS LOW AS REASONABLY ACHIEVABLE

CHILD DOSES

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.21E-03	3.89E-03	7.41E-04	1.10E-04	5.43E-04	4.54E-04	4.21E-04
DRINKING		3.24E-05	3.76E-04	3.48E-04	4.53E-04	2.31E-04	3.45E-04	3.49E-04
SHORELINE	4.71E-06	4.03E-06	4.03E-06	4.03E-06	4.03E-06	4.03E-06	4.03E-06	4.03E-06
SWIMMING	0.00E+00	9.07E-08	9.07E-08	9.07E-08	9.07E-08	9.07E-08	9.07E-08	9.07E-08
BOATING	0.00E+00	4.54E-08	4.54E-08	4.54E-08	4.54E-08	4.54E-08	4.54E-08	4.54E-08
TOTAL	4.71E-06	3.25E-03	4.27E-03	1.09E-03	5.67E-04	7.78E-04	8.03E-04	7.74E-04

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

ISOTOPE CONTRIBUTION

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 69%	CS 137 55%	CS 137 43%	I 131 75%	CS 137 48%	CS 137 55%	CS 137 3%
		CS 134 29%	CS 134 41%	CS 134 46%	I 133 8%	CS 134 37%	CS 134 39%	NB 95 78%
			CS 136 1%	CS 136 4%	H 3 15%	CS 136 4%	H 3 3%	CS 134 2%
			ZN 65 1%	ZN 65 3%		ZN 65 6%		CS 136 1%
DRINKING				H 3 97%	I 131 21%	CS 137 1%	H 3 98%	H 3 97%
		BA 140 11%	CS 137 5%		I 133 3%	H 3 97%		
		CS 137 60%	CS 134 3%		H 3 75%			
		CS 134 26%	H 3 90%					
SHORELINE	CS 137 47%	CS 137 47%						
	CS 134 18%	CS 134 19%						
	MN 54 1%	MN 54 1%						
	ZN 65 1%	ZN 65 1%						
	CO 60 27%	CO 60 27%						
SWIM M F		MO 99 5%						
		TC 99M 3%						
		I 131 1%						
		I 133 1%						
		BA 140 2%						
		RU 1 3 1%						
		CS 137 7%						
		ZR 95 4%						
		NB 95 2%						
		CS 134 13%						
		CO 58 3%						
		MN 54 2%						
		CS 136 8%						
		FE 59 7%						
		ZN 65 4%						
	CO 60 10%							
	LA 140 6%							
	CO 124 9%							

TABLE VI-C-6

\* \* \* AS LOW AS REASONABLY ACHIEVABLE \* \* \*

INFANT DOSES

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH DRINKING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SHORELINE	0.00E+00	4.33E-05	3.85E-04	3.38E-04	5.09E-04	1.49E-04	3.40E-04	3.39E-04
TOTAL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	0.00E+00	4.33E-05	3.85E-04	3.38E-04	5.09E-04	1.49E-04	3.40E-04	3.39E-04

PATHWAY	USAGE (KG/YR, HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
	330.0	30.8	18.60	

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
	BA	CS	CS	H	CS	H	H	I	I	H	CS	H	CS	H	H	I
DRINKING	140	137	137	134	137	3	3	131	133	3	137	3	137	3	3	3
	11%	60%	11%	5%	7%	86%	98%	30%	4%	65%	1%	97%	1%	98%	98%	98%

LOCATION IS SITE DISCHG.

TABLE VI-C-7

A D U L T D O S E S

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		1.92E-02	3.39E-02	2.44E-02	9.75E-04	1.21E-02	3.81E-03	1.27E-02
DRINKING		3.86E-04	1.05E-02	1.04E-02	1.17E-02	1.02E-02	9.99E-03	1.04E-02
SHORELINE	2.95E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05
SWIMMING	0.00E+00	5.68E-07	5.68E-07	5.68E-07	5.68E-07	5.68E-07	5.68E-07	5.68E-07
BOATING	0.00E+00	2.84E-07	2.84E-07	2.84E-07	2.84E-07	2.84E-07	2.84E-07	2.84E-07
TOTAL	2.95E-05	1.96E-02	4.44E-02	3.48E-02	1.27E-02	2.23E-02	1.38E-02	2.31E-02

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

ISOTOPE CONTRIBUTION

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
	CS 134 30%	CS 134 30%	CS 134 41%	CS 134 47%	I 133 5%	CS 134 37%	CS 134 39%	NB 95 84%
	CS 136 1%	CS 136 1%	CS 136 3%	CS 136 3%	H 3 26%	CS 136 4%	CS 136 2%	CS 134 1%
	ZN 65 1%	ZN 65 1%	ZN 65 3%	ZN 65 2%		ZN 65 6%	H 3 6%	ZN 65 5%
				H 3 1%		H 3 2%		H 3 2%
DRINKING		BA 140 10%	CS 137 2%	CS 137 1%	I 131 13%	CS 137 1%	H 3 99%	H 3 95%
		CS 137 56%	CS 134 2%	CS 134 1%	I 133 1%	H 3 97%		
		CS 134 26%	H 3 94%	H 3 95%	H 3 84%			
		CS 136 1%						
		FE 59 1%						
		ZN 65 1%						
SHORELINE	CS 137 47%	CS 137 47%						
	CS 134 18%	CS 134 19%						
	MN 54 1%	MN 54 1%						
	ZN 65 1%	ZN 65 1%						
	CO 80 27%	CO 60 27%						
SWIM M F		MO 99 5%						
		TC 99M 3%						
		I 131 1%						
		I 133 1%						
		BA 140 2%						
		RU 1 3 1%						
		CS 137 7%						
		ZR 95 4%						
		NB 95 2%						
		CS 134 13%						
		CO 58 3%						
		MN 54 2%						
		CS 136 8%						
		FE 59 7%						
		ZN 65 4%						
		CO 60 10%						
		LA 140 6%						
		CO 124						

LOCATION IS SITE DISCHG.

TABLE VI-C-8

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		1.92E-02	3.33E-02	1.38E-02	7.99E-04	9.20E-03	4.23E-03	8.33E-03
DRINKING		3.56E-04	6.04E-03	5.72E-03	6.97E-03	7.11E-03	5.55E-03	5.73E-03
SHORELINE	1.65E-04	1.41E-04	1.41E-04	1.41E-04	1.41E-04	1.41E-04	1.41E-04	1.41E-04
SWIMMING	0.00E+00	3.17E-06	3.17E-06	3.17E-06	3.17E-06	3.17E-06	3.17E-06	3.17E-06
BOATING	0.00E+00	1.58E-06	1.58E-06	1.58E-06	1.58E-06	1.58E-06	1.58E-06	1.58E-06
TOTAL	1.65E-04	1.97E-02	3.95E-02	1.97E-02	7.91E-03	1.65E-02	9.93E-03	1.42E-02

PATHWAY	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	67%	CS 137	52%	CS 137	44%	I 131	73%	CS 137	48%	CS 137	54%	CS 137	2%
	CS 134	30%	CS 134	42%	CS 134	47%	I 133	7%	CS 134	37%	CS 134	40%	NB 95	82%
	CS 136	1%	CS 136	2%	CS 136	4%	H 3	19%	CS 136	4%	CS 136	1%	CS 134	1%
	ZN 65	1%	ZN 65	2%	ZN 65	2%			ZN 65	6%	H 3	3%	CS 136	1%
DRINKING					H 3	1%			H 3	2%			ZN 65	6%
													H 3	1%
SHORELINE	BA 140	11%	CS 137	4%	CS 137	1%	I 131	18%	CS 137	1%	H 3	98%	H 3	95%
	CS 137	57%	CS 134	3%	CS 134	1%	I 133	2%	H 3	97%				
	CS 134	26%	H 3	90%	H 3	95%	H 3	78%						
	ZN 65	1%												
SWIMMING	CS 137	47%	CS 137	47%										
	CS 134	18%	CS 134	19%										
	MN 54	1%	MN 54	1%										
	ZN 65	1%	ZN 65	1%										
SWIMMING	CO 60	27%	CO 60	27%										
	MO 99	5%												
	TC 99M	3%												
	I 131	1%												
	I 133	1%												
	BA 140	2%												
	RU 13	1%												
	CS 137	7%												
	ZR 95	4%												
	NB 95	2%												
	CS 134	13%												
	CO 58	3%												
	MN 54	2%												
	CS 136	8%												
	FE 59	7%												
	ZN 65	4%												
CO 60	10%													
LA 140	6%													
SB 124	9%													

LOCATION IS SITE DISCHG.

TABLE VI-C-9

C H I L D D O S E S

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		2.35E-02	2.84E-02	5.41E-03	8.03E-04	3.97E-03	3.31E-03	3.07E-03
DRINKING		1.00E-03	1.16E-02	1.07E-02	1.41E-02	7.11E-03	1.06E-02	1.07E-02
SHORELINE	3.44E-05	2.94E-05	2.94E-05	2.94E-05	2.94E-05	2.94E-05	2.94E-05	2.94E-05
SWIMMING	0.00E+00	6.62E-07	6.62E-07	6.62E-07	6.62E-07	6.62E-07	6.62E-07	6.62E-07
BOATING	0.00E+00	3.31E-07	3.31E-07	3.31E-07	3.31E-07	3.31E-07	3.31E-07	3.31E-07
TOTAL	3.44E-05	2.45E-02	4.00E-02	1.62E-02	1.50E-02	1.11E-02	1.40E-02	1.38E-02

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

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 69%	CS 137 55%	CS 137 43%	I 131 75%	CS 137 48%	CS 137 55%	CS 137 3%
		CS 134 29%	CS 134 41%	CS 134 46%	I 133 8%	CS 134 37%	CS 134 39%	NB 95 78%
			CS 136 1%	CS 136 4%	H 3 15%	CS 136 4%	H 3 3%	CS 134 2%
			ZN 65 1%	ZN 65 3%		ZN 65 6%		CS 136 1%
				H 3 2%		H 3 2%		FE 59 1%
DRINKING		BA 140 11%	CS 137 5%	H 3 97%	I 131 21%	CS 137 1%	H 3 98%	H 3 97%
		CS 137 59%	CS 134 3%		I 133 3%	H 3 97%		
		CS 134 25%	H 3 90%		H 3 74%			
SHORELINE	CS 137 47%	CS 137 47%						
	CS 134 18%	CS 134 19%						
	MN 54 1%	MN 54 1%						
	ZN 65 1%	ZN 65 1%						
	CO 60 27%	CO 60 27%						
SWIM M f		MO 99 5%						
		TC 99M 3%						
		I 131 1%						
		I 133 1%						
		BA 140 2%						
		RU 1 3 1%						
		CS 137 7%						
		ZR 95 4%						
		NB 95 2%						
		CS 134 13%						
		CO 58 3%						
		MN 54 2%						
		CS 136 8%						
		FE 59 7%						
		ZN 65 4%						
	CO 60 10%							
	LA 140 6%							
	SB 124 9%							

TABLE VI-C-10

\* \* \* SELECTED LOCATION \* \* \*

LOCATION IS SITE DISCHG.

I N F A N T D O S E S

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	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		1.34E-03	1.19E-02	1.04E-02	1.60E-02	4.60E-03	1.05E-02	1.04E-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	1.34E-03	1.19E-02	1.04E-02	1.60E-02	4.60E-03	1.05E-02	1.04E-02

PATHWAY	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)	SHOREWIDTH FACTOR=0.2	
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		BA 140 11%	CS 137 7%	H 3 98%	I 131 30%	CS 137 1%	CS 137 1%	H 3 98%
		CS 137 60%	CS 134 5%		I 133 5%	H 3 97%	H 3 98%	
		CS 134 25%	H 3 86%		H 3 64%			

TABLE VI-D-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	7.11E-03	1.25E-02	8.99E-03	2.42E-04	4.42E-03	1.41E-03	4.25E-03	
FISH	TEENAGER	9.29E+03	1.50E-03	2.58E-03	1.06E-03	3.94E-05	7.07E-04	3.29E-04	3.04E-04	
FISH	CHILD	5.61E+03	2.56E-03	3.09E-03	5.84E-04	5.34E-05	4.27E-04	3.61E-04	3.04E-04	
FISH	TOTAL	7.30E+04	1.12E-02	1.81E-02	1.06E-02	3.35E-04	5.55E-03	2.10E-03	5.13E-03	

DILUTION 7.30E+00 CATCH 7.30E+04 TIME(HR)-INCLUDES FOOD PROCESSING TIME OF 1.68E+02 HR POPULATION=1.28E+04  
 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 66%	CS 137 51%	CS 137 46%	I 131 60%	CS 137 49%	CS 137 51%	CS 137 2%
	CS 134 30%	CS 134 41%	CS 134 47%	H 3 39%	CS 134 38%	CS 134 39%	NB 95 83%
	ZN 65 1%	CS 136 2%	CS 136 2%		CS 136 3%	CS 136 1%	CS 134 2%
		ZN 65 3%	ZN 65 2%		ZN 65 6%	H 3 6%	ZN 65 6%
TEENAGER	CS 137 67%	CS 137 52%	CS 137 44%	I 131 69%	CS 137 49%	CS 137 54%	CS 137 3%
	CS 134 30%	CS 134 42%	CS 134 48%	H 3 30%	CS 134 38%	CS 134 40%	NB 95 81%
	ZN 65 1%	CS 136 1%	CS 136 3%		CS 136 3%	CS 136 1%	CS 134 2%
		ZN 65 2%	ZN 65 2%		ZN 65 6%	H 3 3%	ZN 65 7%
CHILD	CS 137 69%	CS 137 55%	CS 137 43%	I 131 73%	CS 137 49%	CS 137 55%	CS 137 3%
	CS 134 29%	CS 134 41%	CS 134 46%	H 3 26%	CS 134 38%	CS 134 39%	NB 95 77%
		ZN 65 1%	CS 136 3%		CS 136 3%	H 3 3%	CS 134 2%
			ZN 65 3%		ZN 65 6%		MN 54 1%
		H 3 2%		H 3 2%		CS 136 1%	
						FE 59 1%	
						ZN 65 8%	
						H 3 4%	

TABLE VI-D-2

FISH CONSUMPTION POPULATION DOSES  
MAN-REM

COMMERCIAL HARVEST

PATHWAY	AGE GROUP	USAGE	DOSE (MAN-REM)						
			BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	3.97E+06	8.03E-04	1.41E-03	1.01E-03	2.36E-05	4.97E-04	1.59E-04	4.57E-04
FISH	TEENAGER	6.34E+05	1.69E-04	2.91E-04	1.20E-04	3.75E-06	7.95E-05	3.71E-05	6.29E-05
FISH	CHILD	3.83E+05	2.90E-04	3.49E-04	6.57E-05	5.03E-06	4.80E-05	4.08E-05	3.27E-05
FISH	TOTAL	4.98E+06	1.26E-03	2.05E-03	1.20E-03	3.24E-05	6.25E-04	2.37E-04	5.52E-04

DILUTION 7.30E+00 CATCH 7.30E+04 TIME(HR)-INCLUDES FOOD PROCESSING TIME OF 2.40E+02 HR POPULATION=8.71E+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 66%	CS 137 51%	CS 137 47%	I 131 54%	CS 137 49%	CS 137 51%	CS 137 3%
	CS 134 30%	CS 134 42%	CS 134 47%	H 3 45%	CS 134 38%	CS 134 39%	NB 95 82%
	ZN 65 1%	CS 136 1%	CS 136 1%		CS 136 3%	CS 136 1%	CS 134 2%
		ZN 65 3%	ZN 65 2%		ZN 65 6%	H 3 6%	ZN 65 6%
TEENAGER	CS 137 67%	CS 137 52%	CS 137 44%	I 131 63%	CS 137 49%	CS 137 54%	CS 137 3%
	CS 134 30%	CS 134 42%	CS 134 48%	H 3 36%	CS 134 38%	CS 134 40%	NB 95 81%
	ZN 65 1%	CS 136 1%	CS 136 2%		CS 136 3%	H 3 3%	CS 134 2%
		ZN 65 2%	ZN 65 2%		ZN 65 6%	H 3 2%	ZN 65 7%
CHILD	CS 137 69%	CS 137 55%	CS 137 44%	I 131 68%	CS 137 49%	CS 137 55%	CS 137 3%
	CS 134 29%	CS 134 41%	CS 134 47%	H 3 31%	CS 134 38%	CS 134 39%	NB 95 76%
		ZN 65 1%	CS 136 2%		CS 136 3%	H 3 3%	CS 134 2%
		ZN 65 3%	ZN 65 3%		ZN 65 6%	H 3 2%	MN 54 1%
	H 3 2%	H 3 2%				FE 59 1%	
						ZN 65 8%	
						H 3 4%	

NEPA DOSES

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

PATHWAY	AGE GROUP	USAGE	DOSE (MAN-REM)						
			BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	5.81E+04	7.09E-03	1.24E-02	8.94E-03	2.09E-04	4.39E-03	1.40E-03	4.03E-03
FISH	TEENAGER	9.29E+03	1.49E-03	2.57E-03	1.06E-03	3.31E-05	7.02E-04	3.28E-04	5.55E-04
FISH	CHILD	5.61E+03	2.56E-03	3.08E-03	5.80E-04	4.44E-05	4.24E-04	3.60E-04	2.89E-04
FISH	TOTAL	7.30E+04	1.11E-02	1.81E-02	1.06E-02	2.86E-04	5.52E-03	2.09E-03	4.87E-03

POPULATION WATER CONSUMPTION DOSES  
TABLE VI-D-3

-----DOSE (MAN-REM)-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	1.29E+08	2.20E-03	6.05E-02	5.95E-02	6.62E-02	5.84E-02	5.74E-02	5.94E-02
DRINKING	TEENAGER	1.93E+07	4.33E-04	7.40E-03	7.01E-03	8.33E-03	8.71E-03	6.80E-03	7.00E-03
DRINKING	CHILD	2.75E+07	1.74E-03	2.03E-02	1.88E-02	2.40E-02	1.24E-02	1.86E-02	1.88E-02
DRINKING	TOTAL	1.76E+08	4.38E-03	8.82E-02	8.53E-02	9.85E-02	7.96E-02	8.28E-02	8.52E-02
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	BA 140 10%	CS 137 2%	CS 137 1%	I 131 12%	CS 137 1%	H 3 99%	H 3 95%		
	CS 137 57%	CS 134 2%	CS 134 1%	H 3 86%	H 3 97%				
	CS 134 26%	H 3 94%	H 3 95%						
	CS 136 1%								
	FE 59 1%								
	ZN 65 1%								
TEENAGER	BA 140 10%	CS 137 4%	CS 137 1%	I 131 17%	CS 137 1%	H 3 98%	H 3 95%		
	CS 137 58%	CS 134 3%	CS 134 1%	I 133 1%	H 3 97%				
	CS 134 26%	H 3 90%	H 3 95%	H 3 80%					
	ZN 65 1%								
CHILD	BA 140 11%	CS 137 5%	H 3 97%	I 131 21%	CS 137 1%	H 3 98%	H 3 97%		
	CS 137 60%	CS 134 3%	H 3 97%	I 133 2%	H 3 97%				
	CS 134 26%	H 3 90%	H 3 97%	H 3 76%					

-----DOSE (MAN-REM)-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	2.12E+07	3.57E-04	9.80E-03	9.63E-03	1.07E-02	9.45E-03	9.29E-03	9.61E-03
DRINKING	TEENAGER	3.17E+06	7.01E-05	1.20E-03	1.13E-03	1.35E-03	1.41E-03	1.10E-03	1.13E-03
DRINKING	CHILD	4.52E+06	2.82E-04	3.28E-03	3.04E-03	3.88E-03	2.01E-03	3.01E-03	3.04E-03
DRINKING	TOTAL	2.89E+07	7.08E-04	1.43E-02	1.38E-02	1.59E-02	1.29E-02	1.34E-02	1.38E-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	BA 140 10%	CS 137 2%	CS 137 1%	I 131 12%	CS 137 1%	H 3 99%	H 3 95%		
	CS 137 57%	CS 134 2%	CS 134 1%	H 3 86%	H 3 97%				
	CS 134 26%	H 3 94%	H 3 95%						
	CS 136 1%								
	FE 59 1%								
	ZN 65 1%								

TABLE VI-D-4

	ZN 65	1%												
TEENAGER	BA 140	10%	CS 137	4%	CS 137	1%	I 131	17%	CS 137	1%	H 3	98%	H 3	95%
	CS 137	58%	CS 134	3%	CS 131	1%	I 133	1%	H 3	97%				
	CS 134	26%	H 3	90%	H 3	95%	H 3	80%						
	ZN 65	1%												
CHILD	BA 140	11%	CS 137	5%	H 3	97%	I 131	21%	CS 137	1%	H 3	98%	H 3	97%
	CS 137	60%	CS 134	3%			I 133	2%	H 3	97%				
	CS 134	26%	H 3	90%			H 3	76%						

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

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	CUMUL TOTAL	2.05E+08	5.08E-03	1.02E-01	9.91E-02	1.14E-01	9.24E-02	9.62E-02	9.90E-02

-----HYDROSPHERE TRITIUM DOSE-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
WATER	TOTAL	2.20E+00	7.87E-09	7.87E-09	7.87E-09	7.87E-09	7.87E-09	7.87E-09	7.87E-09

RECREATION POPULATION DOSES

TABLE VI-D-5

DOSE (MAN-REM)

PATHWAY BOATLINE	AGE GROUP TOTAL POPUL	USAGE 4.10E+07	SKIN 1.38E-02	TOTAL BODY 1.18E-02	THYROID 1.18E-02
---------------------	--------------------------	-------------------	------------------	------------------------	---------------------

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 47%	CS 137 47%
	CS 134 18%	CS 134 19%
	MN 54 1%	MN 54 1%
	ZN 65 1%	ZN 65 1%
	CO 60 27%	CO 60 27%

DOSE (MAN-REM)

PATHWAY SWIMMING	AGE GROUP TOTAL POPUL	USAGE 4.10E+07	SKIN 0.00E+00	TOTAL BODY 2.64E-04	THYROID 2.64E-04
---------------------	--------------------------	-------------------	------------------	------------------------	---------------------

LOCATION- DOWN STREAM  
DILUTION=0.73E+01      TRANSIT TIME=0.67E+00 HR

ISOTOPE CONTRIBUTION

AGE GROUP	SKIN	TOTAL BODY
ADULT		
		MO 99 5%
		TC 99M 3%
		I 131 1%
		I 133 1%
		BA 140 2%
		RU 1 3 1%
		CS 137 8%
		ZR 95 4%
		NB 95 2%
		CS 134 14%
		CO 58 3%
		MN 54 2%
		CS 136 8%
		FE 59 7%
		ZN 65 4%
		CO 60 10%
		LA 140 6%
		SB 124 9%

DOSE (MAN-REM)

PATHWAY BOATING	AGE GROUP TOTAL POPUL	USAGE 4.10E+07	SKIN 0.00E+00	TOTAL BODY 1.32E-04	THYROID 1.32E-04
--------------------	--------------------------	-------------------	------------------	------------------------	---------------------

LOCATION- DOWN STREAM

DOSE TO BIOTA

MRADS PER .5YR

TABLE VI-D-6

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

	INTERNAL	EXTERNAL	TOTAL
FISH	1.27E-01	9.24E-02	2.20E-01
INVERTEBRATE	1.35E-01	1.84E-01	3.20E-01
ALGAE	2.31E-01	4.14E-04	2.32E-01
MUSKRAT	6.21E-01	6.15E-02	6.82E-01
RACCOON	5.73E-02	4.60E-02	1.03E-01
HERON	2.28E+00	6.15E-02	2.34E+00
DUCK	5.19E-01	9.22E-02	6.11E-01

## ISOTOPE CONTRIBUTION

PATHWAY	BODY	
FISH	CS 137	29%
	NB 95	33%
	CS 134	17%
	CS 136	8%
	ZN 65	2%
	H 3	7%
INVERTEBRATE	CE 141	3%
	BA 140	2%
	CS 137	1%
	MN 54	50%
	FE 59	12%
	ZN 65	9%
	LA 140	8%
H 3	7%	
ALGAE	MO 99	20%
	CE 141	9%
	BA 140	3%
	RU 13	1%
	CS 137	4%
	ZR 95	2%
	CS 134	2%
	MN 54	3%
	CS 136	1%
	FE 59	2%
	ZN 65	11%
	LA 140	23%
	SB 124	7%
H 3	4%	
MUSKRAT	MO 99	1%
	CS 137	32%
	CS 134	23%
	CS 136	1%
	FE 59	1%
	ZN 65	33%
H 3	2%	
RACCOON	CS 137	13%
	CS 134	10%
	MN 54	20%
	FE 59	7%
	ZN 65	41%
	H 3	5%

HERON		
CS 137	52%	
CS 134	42%	
CS 136	2%	
ZN 65	1%	
H 3	1%	

DUCK		
MO 99	1%	
CS 137	36%	
CS 134	23%	
CS 136	1%	
FE 59	1%	
ZN 65	30%	
H 3	3%	

## INTRODUCTION

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

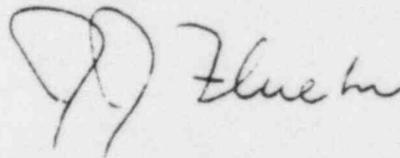
This report covers the period of January 1, 1985 through December 31, 1985 for the Annual Report for Technical Specification 5.9.1.b and the period of July 1, 1985 through December 31, 1985 for the Semi-Annual Report for Technical Specification 5.9.4.

Due to the implementation of the Revised Effluent Technical Specifications (RETS) effective October 1985 for Environmental Radiological Monitoring (Technical Specification 3.11) several adjustments have been initiated for the Environmental Summary (5.9.4.b), July-December 1985.

As a result of the RETS amendments, revised analytical detection limits were introduced for several sample parameters within the program. Therefore, in compiling the combined data summaries for the third and fourth quarters of 1985 to meet the format of Technical Specification 5.9.4.b, two Sensitivity Requirement Tables were referenced for statistical evaluation of analysis results. Sample location changes were also made due to RETS requirements. Review of the combined data indicated an interpretation problem and it was determined at this time that

it was not feasible to present the data in this form due to the possibility of a misinterpretation occurrence. Finally, it was ascertained that all data would be evaluated and submitted individually on a quarterly basis thus eliminating the possibility of data misinterpretation.

Part 1 Section I, Occupational Personnel Radiation Exposure Technical Specification (5.9.1.b) covering January 1, 1985 to December 31, 1985 is presented in both the third and fourth quarter reports because it was calculated on an annual basis only. Part 2 Section III, Radioactive Effluent Releases-Solid Radioactive Waste Technical Specification (5.9.4.a) covering July 1, 1985 to December 31, 1985 is also presented in both the third and fourth quarter reports because it was calculated on a semi-annual basis only.



for W. Gary Gates  
Manager  
Fort Calhoun Station

TABLE OF CONTENTS - FOURTH QUARTER

SECTION

SECTION TITLE

I

Radioactive Effluent Releases - Gaseous Effluents  
Technical Specification (5.9.4.a)

Table 1A      Summation of All Releases

Table 1B      Not Applicable

Table 1C      Summation of All Releases

II

Radioactive Effluent Releases - Liquid Effluents  
Technical Specification (5.9.4.a.)

Table 2A      Summation of All Releases

Table 2B      Summation of All Releases

III

Radioactive Effluent Releases - Solid Radioactive Waste  
Technical Specification (5.9.4.a.)

IV

Joint Frequency Distribution Wind Direction vs. Wind Speed  
by Stability Class and Meteorology Data Per Batch Release  
Technical Specification (5.9.4.a)

V

Environmental Monitoring (5.9.4.b)

VI

Potential Doses to Individuals and Populations (As Required  
by Technical Specification (5.9.4.a)

PART 1

SECTION I

OCCUPATIONAL PERSONNEL RADIATION EXPOSURE  
TECHNICAL SPECIFICATION (5.9.1.b)

January 1, 1985 to December 31, 1985

VI. OCCUPATIONAL PERSONNEL  
RADIATION EXPOSURE  
TECH SPEC 5.9.16(3)  
YEAR 1985

OMAHA 100 MC FOMER DISTRICT FORT CALHOUN NUCLEAR STATION  
PERSONNEL ACCUMULATIVE MREM RADIATION EXPOSURE  
TO DATE 12 31 1985 TIME 2400

JOB & JOB FUNCTION	NUMBER OF PERSONNEL GREATER THAN 100 MREM		TOTAL STATION EMPL.	TOTAL MAN REM UTILITY EMPL.	OTHER EMPL.	TOTAL MAN REM
	STATION EMPL.	OTHER EMPL.				
*** REACTOR O.P.R. & SURV. ***	3	1	9	1.614	0.978	6.363
MAINTENANCE PERSONNEL	4	3	16	2.064	1.35	5.753
ENGINEERING PERSONNEL	3	0	3	0.590	0.016	0.606
SUPERVISORY PERSONNEL	10	1	31	12.006	0.289	13.175
OPERATING PERSONNEL	18	0	45	15.114	0.007	38.431
HEALTH PHYS. PERSONNEL	43	42	193	20.801	13.87	88.256
*** ROUTINE MAINTENANCE ***	2	0	21	1.828	0.694	7.994
MAINTENANCE PERSONNEL	1	0	1	0.350	0.	0.350
ENGINEERING PERSONNEL	0	0	0	0.597	0.	0.597
SUPERVISORY PERSONNEL	0	0	0	0.433	0.	21.263
OPERATING PERSONNEL	1	0	1	0.	0.	29.218
HEALTH PHYS. PERSONNEL	1	1	47	0.330	0.265	0.975
*** INSERVICE INSPECTION ***	0	1	2	0.061	0.707	0.005
MAINTENANCE PERSONNEL	0	0	0	0.007	0.	0.153
ENGINEERING PERSONNEL	0	0	1	0.153	0.	0.120
SUPERVISORY PERSONNEL	1	0	1	0.	0.	127.766
OPERATING PERSONNEL	0	0	1	0.	0.	15.788
HEALTH PHYS. PERSONNEL	33	45	222	12.338	19.061	0.319
*** SPECIAL MAINTENANCE ***	0	12	36	2.815	4.590	1.831
MAINTENANCE PERSONNEL	0	0	1	0.211	0.030	4.449
ENGINEERING PERSONNEL	1	0	6	1.831	0.008	16.246
SUPERVISORY PERSONNEL	2	0	13	2.376	0.	0.335
OPERATING PERSONNEL	6	0	7	0.	0.	2.570
HEALTH PHYS. PERSONNEL	10	2	34	3.670	0.001	0.964
*** WASTE PROCESSING ***	0	0	0	0.265	0.062	11.645
MAINTENANCE PERSONNEL	3	0	3	5.70	0.	38.321
ENGINEERING PERSONNEL	1	0	1	0.967	0.002	4.375
SUPERVISORY PERSONNEL	1	0	12	7.955	0.	1.113
OPERATING PERSONNEL	5	0	7	0.	0.	8.892
HEALTH PHYS. PERSONNEL	16	38	85	6.572	17.570	0.435
*** REFUELING ***	3	1	14	1.665	0.240	306.170
MAINTENANCE PERSONNEL	0	0	5	1.008	0.	35.220
ENGINEERING PERSONNEL	2	0	34	8.423	0.69	4.923
SUPERVISORY PERSONNEL	32	2	1	0.125	0.	25.607
OPERATING PERSONNEL	0	0	1	0.	0.	76.343
HEALTH PHYS. PERSONNEL	106	129	590	45.325	52.442	306.170
*** TOTAL ***	22	17	89	8.698	7.28	35.220
MAINTENANCE PERSONNEL	13	0	13	4.814	0.446	4.923
ENGINEERING PERSONNEL	70	3	73	24.039	0.768	25.607
SUPERVISORY PERSONNEL	50	0	93	26.003	0.007	76.343
OPERATING PERSONNEL	241	149	468	85.8	50.333	306.170
HEALTH PHYS. PERSONNEL	468	468	858	208.403	18.794	35.220
*** TOTAL ACCUMULATION ***	106	129	590	45.325	52.442	306.170
MAINTENANCE PERSONNEL	22	17	89	8.698	7.28	35.220
ENGINEERING PERSONNEL	70	3	73	24.039	0.768	25.607
SUPERVISORY PERSONNEL	50	0	93	26.003	0.007	76.343
OPERATING PERSONNEL	241	149	468	85.8	50.333	306.170
HEALTH PHYS. PERSONNEL	468	468	858	208.403	18.794	35.220
*** TOTAL ACCUMULATION ***	106	129	590	45.325	52.442	306.170

Total Man-Rem = 448,303 (Pencil)  
Total Man-Rem = 373,375 (TLD)

NOTE: PERSONNEL MAY BE ACCOUNTED FOR MORE THAN ONE TIME BY RECEIVING 100 MREM  
ON EACH OF TWO OR MORE WORK AND JOB FUNCTIONS.

TOTAL NUMBER OF PERSONNEL RECEIVING GREATER THAN 100 MREM AT FORT CALHOUN NUCLEAR STATION DURING 1985  
UTILITY EMPLOYEES CONTRACT AND OTHERS 330

OMAHA PUBLIC POWER DISTRICT FORT CALHOUN NUCLEAR STATION  
 PERSONNEL ACCUMULATIVE MREM RADIATION EXPOSURE  
 TO DATE 12-31-1985 TIME 2400  
 LAST TLU UPDATE 11-30-1985

TABLE ICC - EXPOSURE RANGE REPORT

ESTIMATED WHOLE BODY EXPOSURE RANGE (REM)**	** NUMBER OF INDIVIDUALS IN EACH RANGE
NO MEASURABLE EXPOSURE	195
MEASURABLE EXPOSURE LESS THAN 0.1	419
0.10 TO 0.25	84
0.25 TO 0.50	112
0.50 TO 0.75	93
0.75 TO 1.00	70
1.00 TO 2.00	122
2.00 TO 3.00	48
3.00 TO 4.00	21
4.00 TO 5.00	13
5.00 TO 6.00	0
6.00 TO 7.00	0
7.00 TO 8.00	0
8.00 TO 9.00	0
9.00 TO 10.00	0
10.00 TO 11.00	0
11.00 TO 12.00	0
GREATER THAN 12.00	0
TOTAL NUMBER OF PERSONNEL - 1985	1177

\*\* Individual values exactly equal to the values separating exposure ranges are reported in the higher range.

- 1 = ALL PERSONNEL GROUPED BY JOB FUNCT.  
 2 = INDIVIDUAL PERSONNEL  
 3 = PERSONNEL EXCEED A LIMIT  
 4 = PERSONNEL BY JOB FUNCTION  
 5 = PERSONNEL EXCEEDING RESPIRATORY LIMIT  
 6 = PERSONNEL WITH NO PRINT OPTION IN EFFECT  
 7 = EXIT TO MAIN PROGRAM  
 ENTER (1-7)??

LINK YES OR NO FOR ANOTHER SLIP 0612ND

PROGRAM STOP AT 1470

UCLD 125.23 UNITS

PART 2

SECTION I

RADIOACTIVE EFFLUENT RELEASES - GASEOUS EFFLUENTS  
TECHNICAL SPECIFICATION (5.9.4.a.)

Table 1A	Gaseous Effluents - Summation of All Releases
Table 1B	Not Applicable
Table 1C	Gaseous Effluents - Summation of All Releases

October 1, 1985 to December 31, 1985

I. Radioactive Effluent Releases - Fourth Quarter

A. GASEOUS EFFLUENTS

Radioactive gaseous releases for the fourth quarter reporting period totalled 231 Curies of inert gases. Averaged over the calendar quarter of the reporting period, the gross gaseous activity release rate was  $2.91E+01$   $\mu\text{Ci}/\text{sec}$ .

Radioactive halogens and particulates with half-lives greater than eight days released during the reporting period totalled  $5.85E-03$  Curies. Averaged over the reporting period, the halogen release rate was  $7.36E-04$   $\mu\text{Ci}/\text{sec}$ . Averaged over the reporting period, the particulate release rate was  $3.10E-07$   $\mu\text{Ci}/\text{sec}$ .

Radioactive tritium released during the reporting period totalled 22.7 Curies. Gross alpha radioactivity released during the reporting period fell below the analytical Lower Limit of Detection (LLD) and is reported as "0".

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

QUARTER FOR OCT THRU DEC 85

4 QUARTER

NUCLIDES IN CURIES	CONT	DECAY	RM060	TOTAL	
<b>A. FISSION&amp;ACTIVATION GASES</b>					
TOTAL RELEASE	CI	1.99E+02	3.26E+01	0.00E+00	2.31E+02
AVG RELEASE RATE FOR PERIOD	UCI/SEC	2.50E+01	4.10E+00	0.00E+00	2.91E+01
PERCENT OF LIMIT TECH SPEC = NONE	%				
<b>B. IODINES</b>					
TOTAL RELEASE IODINE - 131	CI	0.00E+00	0.00E+00	5.85E-03	5.85E-03
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	7.36E-04	7.36E-04
PERCENT OF LIMIT TECH SPEC = NONE	%				
<b>C. PARTICULATES</b>					
PARTICULATES WITH HALF LIVES .GT. 8 DAYS	CI	0.00E+00	0.00E+00	2.47E-06	2.47E-06
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.00E+00	0.00E+00	3.10E-07	3.10E-07
PERCENT OF LIMIT TECH SPEC = NONE	%				
GROSS ALPHA RADIOACTIVITY	CI	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>D. TRITIUM</b>					
TGTAL RELEASE	CI	2.27E+01	0.00E+00	0.00E+00	2.27E+01
AVG RELEASE RATE FOR PERIOD	UCI/SEC	2.86E+00	0.00E+00	0.00E+00	2.86E+00
PERCENT OF LIMIT TECH SPEC = NONE	%				

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

NUCLIDES IN CURIES	QUARTER FOR OCT THRU DEC 85				TOTAL
	CONT	DECAY	RM060	TOTAL	
4 QUARTER					
FISSION GASES					
XENON-133	1.96E+02	2.86E+01	0.00E+00	2.25E+02	0.00E+00
KRYPTON-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E+00
XENON-131M	2.05E+00	1.23E+00	0.00E+00	0.00E+00	0.00E+00
KRYPTON-88	0.00E+00	0.00E+00	0.00E+00	4.77E-01	1.64E-03
XENON-133M	4.61E-01	1.54E-02	0.00E+00	0.00E+00	0.00E+00
XENON-135	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KRYPTON-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XENON-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E+00
KRYPTON-85	9.03E-02	2.67E+00	0.00E+00	0.00E+00	0.00E+00
XENON-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ARGON-41	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	1.99E+02	3.26E+01	0.00E+00	2.31E+02	5.85E-03
IODINES					
IODINE-131 CTD.	0.00E+00	0.00E+00	5.85E-03	0.00E+00	0.00E+00
IODINE-133 CTD.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IODINE-135 CTD.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL FOR PERIOD	0.00E+00	0.00E+00	5.85E-03	0.00E+00	5.85E-03
PARTICULATES					
STRONTIUM-89	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
IODINE-131 PRF.	0.00E+00	0.00E+00	2.47E-06	0.00E+00	2.47E-06
IODINE-133 PRF.	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
CESIUM-137	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
COBALT-58	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MANGANESE-54	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
COBALT-60	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
LANTHANUM-140	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
CERIUM-141	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
IRON-59	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
TOTAL FOR PERIOD	0.00E+00	0.00E+00	2.47E-06	0.00E+00	2.47E-06
ALPHA, TRITIUM & OTHER					
ALPHA	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRITIUM	2.27E+01	0.00E+00	0.00E+00	2.27E+01	0.00E+00
GROSS BETA/GAMMA	0.00E+00	0.00E+00	4.54E-07	4.54E-07	4.54E-07

\*Results not available at time of initial report. Revision for Strontium 89-90 results will be provided upon receipt from vendor.

PART 2

SECTION II

RADIOACTIVE EFFLUENT RELEASES - LIQUID EFFLUENTS  
TECHNICAL SPECIFICATION (5.9.4.a.)

Table 2A	Liquid Effluents - Summation of All Releases
Table 2B	Liquid Effluents - Summation of All Releases

October 1, 1985 to December 31, 1985

## II. Radioactive Effluent Releases - Fourth Quarter

### B. LIQUID EFFLUENTS

During the Fourth Quarter a total of  $1.67\text{E}-01$  Curies of radioactive liquid materials less tritium and dissolved noble gases were released to the Missouri River at an average concentration of  $7.49\text{E}-09$   $\mu\text{Ci}/\text{ml}$ . This represents 7.49% of the limits specified in Appendix B to 10CFR20 ( $1.0\text{E}-07$   $\mu\text{Ci}/\text{ml}$ ) for unrestricted areas.

Dilution water during the period amounted to  $2.22\text{E}+10$  liters, while radioactive liquid waste volume was  $2.42\text{E}+06$  liters.

Additionally, 15.2 Curies of tritium were discharged at an average concentration of  $6.84\text{E}-07$   $\mu\text{Ci}/\text{ml}$  or  $2.82\text{E}-02\%$  of MPC ( $3.0\text{E}-03$   $\mu\text{Ci}/\text{ml}$ ).

Gross alpha radioactivity released during the reporting period totalled  $4.54\text{E}-06$  Curies.

During the reporting period,  $1.67\text{E}-01$  Curies of radioactive liquids were released.

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

QUARTER FOR OCT THRU DEC 85			4 QUARTER
A. FISSION&ACTIVATION PRODUCTS			
TOTAL RELEASE (NO TRITIUM,GAS,ALPHA)	CI		1.67E-01
AVG DILUTED CONCENTRATION	UCI/ML		7.49E-09
PERCENT OF LIMIT 10 CFR 20, APP. B = 1.0E-07	%		7.49E+00
B. TRITIUM			
TOTAL RELEASE	CI		1.52E+01
AVG DILUTED CONCENTRATION	UCI/ML		6.84E-07
PERCENT OF LIMIT 10 CFR 20, APP. B = 3.0E-03	%		2.28E-02
C. DISSOLVED&ENTRAINED GASES			
TOTAL RELEASE	CI		7.53E-01
AVG DILUTED CONCENTRATION	UCI/ML		3.39E-08
PERCENT OF LIMIT TECH SPEC = 2.0E-04	UCI/ML %		1.69E-02
D. GROSS ALPHA RADIOACTIVITY			
TOTAL RELEASE	CI		4.54E-06
E. VOLUME OF WASTE RELEASE			
PRIOR TO DIL.	LITERS		2.42E+06
F. VOLUME OF DILUTION WATER			
THIS PERIOD	LITERS		2.22E+10

TABLE 2B  
EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

QUARTER FOR OCT THRU DEC 85

4 QUARTER

NUCLIDES IN CURIES	CONT	BATCH
STRONTIUM-89	0.00E+00	0.00E+00
STRONTIUM-90	0.00E+00	0.00E+00
COBALT-57	0.00E+00	9.09E-07
MOLYBDENUM-99	0.00E+00	0.00E+00
TECHNETIUM-99M	0.00E+00	0.00E+00
CERIUM-141	0.00E+00	0.00E+00
TIN-117M	0.00E+00	0.00E+00
CHROMIUM-51	0.00E+00	0.00E+00
IODINE-131	0.00E+00	6.23E-03
IODINE-133	0.00E+00	0.00E+00
BARBIUM-140	0.00E+00	5.59E-05
RUTHENIUM-103	0.00E+00	0.00E+00
CESIUM-137	5.18E-05	3.59E-02
ZIRCONIUM-95	0.00E+00	0.00E+00
NIOBIUM-95	0.00E+00	2.80E-05
CESIUM-134	0.00E+00	2.33E-02
COBALT-58	0.00E+00	9.41E-02
MANGANESE-54	0.00E+00	1.02E-03
CESIUM-136	0.00E+00	1.96E-04
IRON-59	0.00E+00	0.00E+00
ZINC-65	0.00E+00	0.00E+00
COBALT-60	0.00E+00	1.64E-03
LANTHANUM-140	0.00E+00	8.21E-05
ANTIMONY-124	0.00E+00	8.72E-05
CERIUM-144	0.00E+00	0.00E+00
ANTIMONY-125	9.15E-04	6.79E-05
SILVER-110M	0.00E+00	3.07E-03
TOTAL FOR PERIOD	9.67E-04	1.66E-01
DISSOLVED GASES		
ENTRAINED GASES		
XENON-133	7.19E-05	7.53E-01
XENON-135	0.00E+00	0.00E+00
TOTAL FOR PERIOD	7.19E-05	7.53E-01
OTHER, ALPHA & TRITIUM		
ALPHA	1.84E-06	2.70E-06
TRITIUM	8.81E-04	1.52E+01
GROSS BETA/GAMMA	0.00E+00	0.00E+00
TOTAL FOR PERIOD	8.83E-04	1.52E+01
AVG. CONC. IN UCI/ML		
ALPHA	5.50E-12	6.02E-13
TRITIUM	2.06E-09	4.91E-06

\*Results not available at time of initial report. Revision for Strontium 89-90 results will be provided upon receipt from vendor.

PART 2

SECTION III

RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE  
TECHNICAL SPECIFICATION (5.9.4.a.)

July 1, 1985 to December 31, 1985

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

July 1985 through December 1985

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	4	12.39	11.252	20%
	August	2	8.53	26.612	20%
	September	1	3.88	0.747	20%
	October	1	5.52	1.159	20%
	November	6	27.41	12.780	20%
	December	7	36.08	51.834	20%
	Six Month Total (Type A)		21 ==	93.81 =====	104.384 =====
b. Dry compressable, contaminated equipment, etc.	July	5	22.98	23.077	20%
	August	1	5.55	0.230	20%
	September	1	11.30	0.785	20%
	October	1	7.01	0.809	20%
	November	2	19.14	2.325	20%
	December	3	53.59	8.020	20%
	Six Month Total (Type B)		13 ==	119.57 =====	35.246 =====
c. Irradiated components and other categories	July	0	0	0	N/A
	August	0	0	0	N/A
	September	0	0	0	N/A
	October	0	0	0	N/A
	November	0	0	0	N/A
	December	0	0	0	N/A
	Six Month Total (Type C)		0 ==	0 =====	0 =====
d. Other	July	0	0	0	N/A
	August	0	0	0	N/A
	September	0	0	0	N/A
	October	0	0	0	N/A
	November	0	0	0	N/A
	December	0	0	0	N/A
	Six Month Total (Type D)		0 ==	0 =====	0 =====

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

	<u>Isotope</u>	<u>%</u>	<u>Curies</u>	
a.	Co-58	33.0%	33.601	All other nuclides constitute less than 1%.
	Cs-137	27.1%	27.627	
	Co-60	15.3%	15.555	
	Cs-134	13.5%	13.729	
	Ni-63	3.4%	3.446	
	H-3	2.1%	2.105	
	Sb-125	1.8%	1.900	
b.	Cs-137	68.1%	23.515	All other nuclides constitute less than 1%.
	Cs-134	24.2%	8.354	
	Co-58	3.2%	1.132	
	Co-60	2.9%	1.016	
	Bi-207	1.5%	.510	
c.	N/A	N/A	N/A	
d.	N/A	N/A	N/A	

C. SOLID WASTE (DISPOSITION)

<u>Number of Shipments</u>	<u>Transportation Mode</u>	<u>Destination</u>
11	Closed Sole Use Vehicle	Barnwell, South Carolina
16	Closed Sole Use Vehicle	Richland, Washington

D. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

<u>Number of Shipments</u>	<u>Transportation Mode</u>	<u>Destination</u>
N/A	N/A	N/A

PART 2

SECTION IV

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

Technical Specification (5.9.4.a.)

October 1, 1985 to December 31, 1985

IV. 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.

TABLE 158 - A

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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	DATA USED -- WD10 , WS10 , DT100										TOTAL	UBAR					
	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
NNE	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.3
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.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.7
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.	5.	4.6
SSW	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	6.	3.5
SW	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	3.	3.2
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	3.0
W	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	3.	3.5
WNW	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.6
NW	0.	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	7.	2.7
NNW	0.	0.	0.	0.	0.	1.	0.	2.	1.	0.	0.	0.	0.	0.	0.	6.	3.3
N	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	1.	2.9
TOTAL	0.	0.	1.	1.	5.	3.	11.	8.	6.	0.	2.	0.	0.	0.	37.	3.2	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 1.8

TABLE 15B - B

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TCTAL	UBAR
	TO																
	0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.9	6.9	7.9	8.9	INF		
NNE	0.	0.	2.	3.	0.	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	9.	2.5
NE	0.	0.	3.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.3
ENE	0.	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.2
E	0.	0.	0.	0.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	2.2
ESE	0.	0.	0.	1.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	4.7
SE	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.	0.	0.	0.	0.	5.	5.1
SSE	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	2.	1.	0.	0.	0.	7.	4.9
S	0.	0.	0.	0.	0.	0.	2.	1.	0.	0.	2.	1.	0.	0.	0.	7.	3.4
SSW	0.	0.	0.	0.	0.	0.	1.	1.	0.	3.	0.	0.	0.	0.	0.	5.	3.4
SW	0.	0.	1.	1.	0.	0.	1.	1.	1.	1.	0.	0.	0.	0.	0.	2.	3.9
WSW	0.	0.	0.	1.	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	7.	2.5
W	0.	0.	0.	0.	4.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	4.	2.4
WNW	0.	0.	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	20.	3.7
NW	0.	0.	0.	0.	4.	5.	2.	1.	4.	0.	2.	1.	1.	0.	0.	10.	3.0
NNW	0.	0.	0.	0.	3.	0.	0.	3.	1.	1.	0.	0.	0.	0.	0.	93.	3.3
N	0.	0.	1.	1.	3.	0.	0.	3.	1.	1.	0.	3.	2.	0.	0.		
TOTAL	0.	0.	8.	7.	19.	11.	9.	10.	9.	8.	7.	3.	2.	0.	0.		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 4.4

TABLE 158 - C

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT  
FORT CALHOUN NUCLEAR STATION

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

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

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	2.	3.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	1.9
NE	0.	2.	2.	2.	0.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	9.	1.8
ENE	0.	0.	2.	1.	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	7.	2.2
E	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.3
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.8
SE	0.	0.	1.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	3.9
SSE	0.	0.	0.	0.	1.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	3.	4.1
S	0.	0.	0.	0.	0.	1.	0.	0.	1.	0.	1.	0.	0.	0.	0.	4.	4.3
SSW	0.	0.	0.	0.	0.	0.	1.	0.	1.	1.	1.	0.	0.	0.	0.	13.	4.9
SW	0.	0.	1.	0.	0.	1.	1.	0.	3.	0.	4.	2.	0.	0.	0.	5.	4.2
WSW	0.	0.	0.	0.	2.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	2.	3.0
W	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	2.9
WNW	0.	0.	1.	0.	3.	1.	2.	0.	0.	0.	0.	1.	0.	0.	0.	9.	2.3
W	0.	0.	1.	3.	1.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	12.	3.1
WNW	0.	0.	1.	0.	3.	2.	3.	1.	0.	1.	0.	1.	0.	0.	0.	31.	4.3
W	0.	0.	1.	0.	3.	2.	3.	1.	0.	5.	4.	3.	3.	6.	1.	17.	3.3
WNW	0.	0.	0.	4.	2.	2.	0.	5.	4.	3.	3.	6.	1.	1.	0.	17.	3.3
W	0.	1.	1.	3.	1.	0.	2.	4.	0.	2.	3.	0.	0.	0.	0.	137.	3.4
TOTAL	0.	3.	12.	17.	18.	14.	14.	12.	10.	10.	12.	12.	1.	2.	0.		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 6.5

TABLE 158 - D

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT  
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR  
DT100 = -0.5 TO -1.4 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	1.	14.	15.	33.	30.	29.	5.	4.	1.	0.	0.	0.	0.	0.	132.	2.4
NE	0.	3.	4.	10.	16.	13.	5.	12.	6.	5.	2.	0.	0.	0.	0.	76.	2.7
ENE	0.	7.	4.	11.	12.	13.	6.	5.	2.	1.	0.	0.	0.	0.	0.	61.	2.3
E	0.	6.	8.	5.	1.	5.	4.	0.	2.	1.	1.	2.	0.	0.	0.	34.	2.3
ESE	0.	6.	8.	5.	1.	5.	4.	0.	2.	1.	1.	2.	0.	0.	0.	42.	2.7
SE	0.	1.	6.	10.	5.	7.	3.	1.	2.	3.	2.	2.	0.	0.	0.	75.	2.8
SSE	1.	1.	7.	7.	12.	18.	7.	10.	5.	2.	5.	0.	0.	0.	0.	107.	3.6
S	0.	1.	8.	11.	13.	11.	9.	9.	11.	10.	11.	6.	5.	2.	0.	87.	5.2
SSW	0.	1.	1.	1.	6.	6.	8.	7.	5.	4.	14.	12.	10.	9.	3.	43.	5.1
SW	0.	2.	1.	2.	1.	4.	3.	1.	3.	2.	8.	5.	5.	5.	0.	13.	4.1
WSW	0.	0.	1.	0.	0.	2.	0.	3.	3.	0.	3.	5.	1.	0.	0.	25.	3.0
W	0.	1.	4.	0.	6.	3.	3.	1.	3.	1.	2.	0.	1.	0.	0.	23.	2.0
WNW	0.	1.	4.	0.	6.	3.	3.	1.	3.	1.	2.	0.	1.	0.	0.	24.	1.7
NNW	7.	1.	2.	4.	3.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	80.	4.3
NW	4.	5.	1.	5.	3.	2.	1.	1.	7.	12.	6.	7.	9.	5.	0.	195.	3.8
NNW	0.	3.	6.	4.	5.	4.	5.	7.	7.	12.	26.	22.	15.	4.	0.	128.	2.7
N	0.	10.	16.	16.	22.	19.	10.	15.	8.	12.	26.	22.	15.	4.	0.	1145.	3.3
TOTAL	0.	4.	17.	14.	22.	23.	16.	12.	10.	2.	5.	2.	1.	0.	4.		
TOTAL	12.	47.	100.	114.	160.	161.	110.	89.	72.	58.	86.	60.	47.	25.	4.		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 54.2

TABLE 15B - E

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO																	
NNE	0.	4.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.0
NE	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.8
ENE	0.	4.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.0	
E	0.	2.	2.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.2	
ESE	0.	4.	7.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	17.	1.2	
SE	0.	1.	7.	13.	7.	5.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	39.	2.0	
SSE	1.	5.	3.	3.	5.	11.	6.	11.	3.	5.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	52.	2.8	
S	0.	3.	2.	4.	5.	2.	4.	5.	2.	6.	8.	7.	6.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	54.	3.5	
SSW	0.	2.	1.	1.	2.	0.	2.	0.	0.	2.	0.	0.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	36.	4.2	
SW	0.	5.	1.	2.	1.	1.	0.	1.	1.	0.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	3.0	
WSW	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	33.	2.6	
W	0.	0.	4.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	53.	2.4
WNW	0.	12.	4.	4.	4.	8.	6.	4.	4.	8.	2.	8.	2.	8.	3.	2.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	70.	3.5	
NW	0.	8.	11.	5.	4.	4.	9.	4.	4.	9.	4.	4.	4.	3.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	50.	2.3	
NNW	0.	5.	8.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	11.	5.	7.	1.5	
N	1.	1.	2.	1.	1.	0.	1.	0.	1.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.5
TOTAL	2.	69.	58.	53.	40.	43.	49.	32.	41.	19.	26.	16.	8.	3.	2.	461.	21.8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	21.8

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 21.8

TABLE 158 - F  
 DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO										
NNE	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.6
NE	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.6	
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.9	
ESE	0.	1.	2.	3.	3.	3.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	1.7	
SE	0.	6.	5.	5.	5.	4.	6.	4.	6.	1.	6.	1.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	27.	1.7	
SSE	0.	7.	3.	1.	0.	0.	1.	0.	0.	1.	1.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	2.2	
S	0.	4.	0.	1.	0.	0.	1.	0.	0.	1.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	2.9	
SSW	0.	2.	1.	1.	0.	0.	1.	0.	0.	1.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	4.4	
SW	0.	3.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.	2.3	
WSW	2.	3.	1.	1.	1.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	12.	2.3	
W	1.	3.	1.	2.	1.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	0.7	
WNW	0.	13.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	36.	0.9	
NW	0.	23.	11.	1.	1.	0.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	1.2	
NNW	0.	6.	4.	3.	2.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	15.	1.2	
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	3.	76.	32.	20.	10.	10.	10.	11.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	186.	1.8		

NUMBER OF INVALID OBSERVATIONS= 0.  
 PERCENT OF VALID OBSERVATIONS= 8.8

TABLE 15B - G

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TOTAL	UBAR
	TO 0.4	TO 0.9	TO 1.4	TO 1.9	TO 2.4	TO 2.9	TO 3.4	TO 3.9	TO 4.4	TO 4.9	TO 5.9	TO 6.9	TO 7.9	TO 8.9	TO INF		
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NE	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.2
ENE	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.7
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.9
ESE	0.	2.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.9
SE	0.	5.	4.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	1.0
SSE	0.	6.	1.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	1.3
S	0.	4.	0.	1.	1.	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.	3.	4.1
SSW	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	1.	2.1
SW	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	1.9
WSW	0.	2.	1.	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	3.	1.4
W	0.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	1.5
WNW	0.	1.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.7
NW	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	1.8
NNW	0.	1.	0.	0.	1.	1.	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.	55.	1.4
TOTAL	0.	27.	9.	6.	7.	2.	0.	2.	0.	0.	2.	0.	0.	0.	0.		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 2.5

TABLE 15B - ALL

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TOTAL	UBAR
	TO 0.4	TO 0.9	TO 1.4	TO 1.9	TO 2.4	TO 2.9	TO 3.4	TO 3.9	TO 4.4	TO 4.9	TO 5.9	TO 6.9	TO 7.9	TO 8.9	TO INF		
NNE	0.	7.	20.	21.	37.	32.	29.	8.	5.	1.	0.	0.	0.	0.	0.	160.	2.3
NE	0.	9.	11.	13.	17.	14.	6.	13.	6.	5.	2.	0.	0.	0.	0.	96.	2.5
ENE	0.	12.	10.	12.	12.	15.	9.	5.	2.	1.	0.	0.	0.	0.	0.	78.	2.1
E	0.	10.	11.	8.	5.	6.	5.	0.	2.	1.	0.	2.	0.	0.	0.	51.	2.1
ESE	0.	8.	19.	19.	11.	10.	3.	1.	2.	3.	2.	2.	0.	0.	0.	80.	2.1
SE	1.	13.	23.	25.	24.	29.	14.	10.	5.	4.	5.	0.	0.	0.	0.	153.	2.3
SSE	1.	19.	15.	15.	20.	24.	25.	13.	17.	13.	15.	8.	5.	2.	0.	192.	3.1
S	0.	12.	3.	7.	12.	9.	16.	15.	19.	13.	26.	16.	10.	9.	3.	170.	4.3
SSW	0.	6.	5.	4.	3.	8.	10.	11.	19.	9.	22.	9.	9.	6.	1.	122.	4.4
SW	0.	8.	4.	4.	4.	3.	3.	6.	6.	4.	8.	4.	0.	2.	3.	59.	3.9
WSW	2.	9.	6.	3.	7.	6.	7.	2.	7.	2.	7.	1.	1.	0.	0.	60.	2.8
W	8.	13.	8.	8.	8.	3.	8.	10.	8.	4.	2.	3.	1.	0.	0.	84.	2.5
WNW	4.	31.	7.	16.	17.	11.	13.	4.	4.	3.	4.	0.	0.	0.	0.	114.	2.0
NW	0.	37.	29.	10.	18.	13.	19.	13.	11.	13.	11.	16.	14.	8.	0.	212.	3.3
NNW	0.	22.	28.	34.	37.	38.	17.	26.	17.	17.	32.	30.	17.	5.	0.	320.	3.5
N	1.	6.	21.	19.	27.	23.	20.	19.	11.	5.	8.	2.	1.	0.	0.	163.	2.7
TOTAL	17.	222.	220.	218.	259.	244.	204.	156.	141.	98.	145.	93.	58.	32.	7.	2114.	3.0

NUMBER OF INVALID OBSERVATIONS= 94.

PERCENT OF VALID OBSERVATIONS= 95.7

TABLE 159 - A

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO																															
NNE	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.3
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	0.00	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	0.00	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	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.7
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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.24	4.6
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	0.00	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	0.28	3.5
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	0.00	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	0.14	3.2
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	0.00	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	0.10	3.0
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	0.00	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	0.14	3.5
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	0.00	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	2.6
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	0.00	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	0.33	2.7
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	0.00	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	0.28	3.3
TOTAL	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.75	3.2

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 1.8

TABLE 159 - B  
 DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	INF																														
NNE	0.00	0.00	0.00	0.00	0.10	0.14	0.00	0.00	0.14	0.00	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	0.00	0.00	0.00	0.00	0.00	0.43	2.5
NE	0.00	0.00	0.00	0.00	0.14	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	1.3
ENE	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	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	0.00	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	0.19	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	0.00	0.00	0.00	0.00	0.00	0.00	0.24	2.2
ESE	0.00	0.00	0.00	0.00	0.00	0.05	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	2.4
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	0.00	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
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	0.00	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	0.14	4.7
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	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	0.24	5.1
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	0.09	0.05	0.00	0.00	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	0.33	4.9
SW	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	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	0.00	0.00	0.00	0.33	3.4
WSW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	3.4
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	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.9
WNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	2.5
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	0.00	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	0.19	2.4
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	3.7
N	0.00	0.00	0.00	0.00	0.05	0.05	0.14	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	3.0
TOTAL	0.00	0.00	0.39	0.34	0.90	0.90	0.53	0.41	0.47	0.44	0.35	0.32	0.15	0.10	0.00	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	4.40	3.3		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 4.4



TABLE 159 - D

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TOTAL	UBAR
	TO																
	0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.9	6.9	7.9	8.9	INF		
NNE	0.00	0.05	0.66	0.71	1.56	1.42	1.37	0.23	0.19	0.05	0.00	0.00	0.00	0.00	0.00	6.24	2.4
NE	0.00	0.14	0.19	0.47	0.76	0.62	0.24	0.57	0.28	0.24	0.09	0.00	0.00	0.00	0.00	3.60	2.7
ENE	0.00	0.33	0.19	0.52	0.7	0.62	0.28	0.24	0.09	0.05	0.00	0.00	0.00	0.00	0.00	2.89	2.3
E	0.00	0.28	0.38	0.19	0.05	0.24	0.19	0.00	0.09	0.05	0.05	0.09	0.00	0.00	0.00	1.61	2.3
ESE	0.00	0.05	0.28	0.47	0.24	0.33	0.14	0.05	0.10	0.14	0.10	0.09	0.00	0.00	0.00	1.99	2.7
SE	0.05	0.05	0.33	0.33	0.57	0.85	0.33	0.47	0.24	0.09	0.24	0.00	0.00	0.00	0.00	3.55	2.8
SSE	0.00	0.05	0.38	0.52	0.61	0.52	0.43	0.43	0.52	0.47	0.52	0.28	0.24	0.09	0.00	5.06	3.6
S	0.00	0.05	0.05	0.05	0.28	0.28	0.38	0.33	0.24	0.19	0.66	0.57	0.47	0.43	0.14	4.12	5.2
SSW	0.00	0.09	0.05	0.09	0.05	0.19	0.14	0.05	0.14	0.09	0.38	0.24	0.24	0.23	0.05	2.03	5.1
SW	0.00	0.00	0.05	0.00	0.00	0.09	0.00	0.14	0.14	0.00	0.14	0.05	0.00	0.00	0.00	0.61	4.1
WSW	0.00	0.05	0.19	0.00	0.28	0.14	0.14	0.05	0.14	0.05	0.09	0.00	0.05	0.00	0.00	1.18	3.0
W	0.33	0.05	0.09	0.19	0.14	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.04	0.00	0.00	1.09	2.0
WNW	0.19	0.24	0.05	0.23	0.14	0.09	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	1.14	1.7
NW	0.00	0.14	0.28	0.19	0.24	0.19	0.24	0.33	0.33	0.57	0.28	0.33	0.42	0.24	0.00	3.78	4.3
NNW	0.00	0.47	0.76	0.75	1.04	0.90	0.47	0.71	0.38	0.57	1.23	1.04	0.71	0.19	0.00	9.22	3.8
N	0.00	0.19	0.80	0.66	1.04	1.09	0.76	0.57	0.47	0.09	0.24	0.09	0.05	0.00	0.00	6.05	2.7
TOTAL	0.57	2.23	4.73	5.37	7.57	7.62	5.21	4.22	3.40	2.75	4.07	2.83	2.22	1.18	0.19	54.16	3.3

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 54.2

TABLE 159 - E

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	TO																														
NNE	0.00	0.19	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	1.0	
NE	0.00	0.10	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.8		
ENE	0.00	0.19	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.0		
E	0.00	0.10	0.09	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.2		
ESE	0.00	0.19	0.33	0.23	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	1.2		
SE	0.00	0.05	0.33	0.62	0.33	0.24	0.52	0.24	0.33	0.24	0.52	0.24	0.33	0.24	0.52	0.24	0.33	0.24	0.52	0.24	0.33	0.24	0.52	0.24	0.33	0.24	0.52	0.24	1.85	2.0		
SSE	0.05	0.24	0.14	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	0.24	0.14	2.46	2.8		
S	0.00	0.14	0.10	0.19	0.24	0.10	0.28	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	2.56	3.5		
SSW	0.00	0.10	0.05	0.05	0.09	0.00	0.09	0.14	0.47	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	1.70	4.2		
SW	0.00	0.23	0.05	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.76	3.6		
WSW	0.00	0.14	0.00	0.00	0.00	0.10	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	3.0		
W	0.00	0.38	0.19	0.05	0.00	0.05	0.09	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	1.56	2.6		
WNW	0.00	0.57	0.19	0.19	0.38	0.28	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	2.51	2.4		
NW	0.00	0.38	0.52	0.24	0.19	0.19	0.42	0.19	0.19	0.42	0.19	0.19	0.42	0.19	0.19	0.42	0.19	0.19	0.42	0.19	0.19	0.42	0.19	0.19	0.42	0.19	0.19	0.42	3.31	3.5		
NNW	0.00	0.24	0.38	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	0.24	0.52	2.37	2.3		
N	0.05	0.05	0.09	0.05	0.05	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.5		
TOTAL	0.10	3.29	2.74	2.51	1.90	2.05	2.29	1.52	1.94	0.88	1.23	0.76	0.37	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	0.00	0.00	21.81	2.8		

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 21.8

TABLE 159 - F

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	FROM																														
NNE	0.00	0.10	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.6
NE	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.6	
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	0.00	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
E	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	0.00	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	0.14	0.9	
ESE	0.00	0.05	0.09	0.14	0.14	0.19	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.47	1.7
SE	0.00	0.28	0.24	0.24	0.24	0.19	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	1.28	1.7
SSE	0.00	0.33	0.14	0.14	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.85	1.7	
S	0.00	0.19	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	2.2	
SSW	0.00	0.10	0.09	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.66	2.9	
SW	0.00	0.14	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	4.4	
WSW	0.09	0.14	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	2.3	
W	0.05	0.14	0.05	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	2.3	
WNW	0.00	0.61	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.7	
NW	0.00	1.09	0.52	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.9	
NNW	0.00	0.28	0.19	0.14	0.10	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	1.2	
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	0.00	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
TOTAL	0.14	3.59	1.52	0.96	0.48	0.47	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	8.80	1.8	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 8.8

TABLE 159 - G

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 RUN FROM TAPE SERIES TRI-LX  
 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		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO																															
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	0.00	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
NE	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	0.00	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	0.00	0.00
ENE	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	0.00	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	0.00
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	0.00	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
ESE	0.00	0.10	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
SE	0.00	0.4	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
SSE	0.00	0.28	0.05	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00
S	0.00	0.19	0.00	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	0.00	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
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	0.00	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
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	0.00	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
WSW	0.00	0.09	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
W	0.00	0.05	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	0.00	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
WNW	0.00	0.05	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
NW	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00
NNW	0.00	0.05	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	0.00	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
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	0.00	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
TOTAL	0.00	1.29	0.43	0.28	0.33	0.08	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 2.5

TABLE 159 - ALL

DATA PERIOD 10/01/1985 THROUGH 12/31/1985 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	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TOTAL	UBAR
	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO		
	0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.9	6.9	7.9	8.9	INF		
NNE	0.00	0.33	0.95	0.99	1.75	1.51	1.37	0.38	0.24	0.05	0.00	0.00	0.00	0.00	0.00	7.57	2.3
NE	0.00	0.43	0.52	0.62	0.80	0.66	0.28	0.62	0.28	0.24	0.09	0.00	0.00	0.00	0.00	4.54	2.5
ENE	0.00	0.57	0.47	0.57	0.57	0.71	0.42	0.24	0.09	0.05	0.00	0.00	0.00	0.00	0.00	3.69	2.1
E	0.00	0.47	0.52	0.38	0.24	0.28	0.24	0.00	0.09	0.05	0.05	0.09	0.00	0.00	0.00	2.41	2.1
ESE	0.00	0.38	0.90	0.90	0.52	0.47	0.14	0.05	0.10	0.14	0.10	0.09	0.00	0.00	0.00	3.79	2.1
SE	0.05	0.61	1.05	1.18	1.14	1.37	0.66	0.47	0.24	0.19	0.24	0.00	0.00	0.00	0.00	7.24	2.3
SSE	0.05	0.90	0.71	0.71	0.95	1.14	1.18	0.61	0.80	0.61	0.71	0.38	0.24	0.09	0.00	9.08	3.1
S	0.00	0.57	0.14	0.33	0.57	0.43	0.76	0.71	0.90	0.61	1.23	0.76	0.47	0.42	0.14	8.04	4.3
SSW	0.00	0.28	0.24	0.19	0.14	0.38	0.47	0.52	0.90	0.43	1.04	0.43	0.42	0.28	0.05	5.77	4.4
SW	0.00	0.38	0.19	0.19	0.19	0.14	0.14	0.28	0.28	0.19	0.38	0.19	0.00	0.10	0.14	2.79	3.9
WSW	0.10	0.43	0.28	0.14	0.33	0.28	0.33	0.10	0.33	0.09	0.33	0.05	0.05	0.00	0.00	2.84	2.8
W	0.38	0.61	0.38	0.38	0.38	0.14	0.38	0.47	0.38	0.19	0.09	0.14	0.05	0.00	0.00	3.97	2.5
WNW	0.19	1.47	0.33	0.76	0.80	0.52	0.61	0.19	0.19	0.14	0.19	0.00	0.00	0.00	0.00	5.39	2.0
NW	0.00	1.75	1.37	0.47	0.85	0.62	0.90	0.62	0.52	0.61	0.52	0.76	0.66	0.38	0.00	10.03	3.3
NNW	0.00	1.04	1.33	1.61	1.75	1.80	0.81	1.23	0.80	0.80	1.51	1.42	0.80	0.24	0.00	15.14	3.5
N	0.05	0.28	0.99	0.90	1.28	1.09	0.94	0.90	0.52	0.24	0.38	0.09	0.05	0.00	0.00	7.71	2.7
TOTAL	0.82	10.50	10.41	10.32	12.26	11.54	9.63	7.39	6.66	4.63	6.86	4.40	2.74	1.51	0.33	100.00	3.0

NUMBER OF INVALID OBSERVATIONS= 94.

PERCENT OF VALID OBSERVATIONS= 95.7

RELEASE NUMBER 85044 CONTAINMENT PURGE

STARTING TIME OCT 2, 1985 HOUR 14 MINUTE 58

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	13.0	212.2	-1.5
15	13.6	208.8	-1.4
16	11.7	205.8	-1.2
17	10.0	208.6	-1.0
18	6.0	174.0	-0.6
19	5.6	160.3	-0.6
20	6.2	167.3	0.2
21	6.1	186.7	0.3
22	4.8	188.0	0.5
23	8.0	201.1	1.2

STOP TIME OCT 2, 1985 HOUR 22 MINUTE 18

STARTING TIME OCT 3, 1985 HOUR 0 MINUTE 37

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	9.6	210.1	1.2
2	3.2	143.9	0.2
3	2.3	180.8	0.4
4	1.3	148.2	1.1
5	2.7	149.9	2.1

STOP TIME OCT 3, 1985 HOUR 4 MINUTE 5

RELEASE NUMBER 85045      CONTAINMENT PURGE

STARTING TIME      OCT    3, 1985      HOUR 14 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	12.4	194.4	-1.2
15	12.0	206.5	-1.2
16	11.6	240.8	-1.2
17	10.2	243.7	-0.9

STOP TIME      OCT    3, 1985      HOUR 16 MINUTE 54

STARTING TIME      OCT    3, 1985      HOUR 19 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	6.1	333.2	-0.2
20	6.3	332.9	-0.5
21	8.3	331.1	-0.7
22	5.2	319.8	-0.5
23	2.8	290.8	-0.2
24	8.6	261.6	-0.3

STOP TIME      OCT    3, 1985      HOUR 23 MINUTE 41

RELEASE NUMBER 85045      CONTAINMENT PURGE

STARTING TIME      OCT    3, 1985      HOUR 23 MINUTE 59

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
23	2.8	290.8	-0.2
24	8.6	261.6	-0.3
1	10.0	267.1	-0.4
2	9.6	267.0	-0.2
3	7.8	268.4	0.1

STOP TIME      OCT    4, 1985      HOUR 2 MINUTE 27

STARTING TIME      OCT    4, 1985      HOUR 6 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
6	5.5	318.6	-0.5
7	5.3	302.8	-0.4
8	5.0	298.6	-0.7
9	7.9	326.2	-1.4
10	13.8	338.4	-1.4
11	14.6	336.8	-1.0
12	16.2	339.5	-1.2

STOP TIME      OCT    4, 1985      HOUR 11 MINUTE 15

RELEASE NUMBER 85045      CONTAINMENT PURGE

STARTING TIME      OCT    4, 1985      HOUR 11 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	14.6	336.8	-1.0
12	16.2	339.5	-1.2
13	17.8	339.5	-1.3
14	19.6	339.5	-1.6

STOP TIME      OCT    4, 1985      HOUR 13 MINUTE 46

STARTING TIME      OCT    4, 1985      HOUR 14 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	19.6	339.5	-1.6
15	16.7	344.4	-1.2
16	15.7	343.8	-1.2
17	13.4	335.5	-1.2

STOP TIME      OCT    4, 1985      HOUR 16 MINUTE 0

RELEASE NUMBER 85046      CONTAINMENT PURGE

STARTING TIME      OCT 5, 1985      HOUR 9 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
9	8.0	340.0	-1.8
10	9.1	345.4	-1.8
11	9.1	335.8	-2.3
12	8.2	324.9	-2.4
13	8.2	330.1	-2.1
14	7.1	314.7	-2.3
15	7.0	328.7	-2.2
16	6.4	341.6	-2.0
17	5.1	345.4	-1.6
18	2.2	323.6	-0.2
19	1.0	190.1	1.5
20	1.4	159.0	2.3
21	1.9	146.1	2.8
22	3.8	140.8	3.3

STOP TIME      OCT 5, 1985      HOUR 21 MINUTE 45

RELEASE NUMBER 85047      CONTAINMENT PURGE

STARTING TIME    OCT    6, 1985    HOUR 10 MINUTE 59

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	2.8	121.8	-1.7
11	3.6	34.4	-1.7
12	2.7	35.5	-1.8
13	2.5	48.7	-2.0

STOP TIME    OCT    6, 1985    HOUR 12 MINUTE 14

STARTING TIME    OCT    6, 1985    HOUR 12 MINUTE 25

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
12	2.7	35.5	-1.8
13	2.5	48.7	-2.0
14	3.2	22.1	-1.9
15	2.9	29.3	-1.8
16	2.8	18.5	-1.1
17	1.6	135.0	-1.1

STOP TIME    OCT    6, 1985    HOUR 16 MINUTE 5

RELEASE NUMBER 85048      CONTAINMENT PURGE

STARTING TIME    OCT 9, 1985    HOUR 4 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
4	5.3	21.1	-0.6
5	6.0	19.4	-0.6
6	4.0	10.9	-0.8
7	4.5	9.5	-0.9
8	5.8	10.8	-1.2
9	6.5	21.8	-1.1
10	7.5	17.1	-1.3
11	7.3	23.5	-1.4
12	6.0	22.8	-1.2
13	7.0	19.0	-1.3
14	5.9	28.5	-1.4
15	5.3	28.7	-1.5
16	4.7	17.4	-1.5
17	5.7	18.8	-1.2
18	4.4	14.8	-1.6

STOP TIME    OCT 9, 1985    HOUR 17 MINUTE 48

STARTING TIME    OCT 10, 1985    HOUR 2 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
2	4.0	11.5	-1.2
3	4.9	16.8	-1.1
4	3.8	13.5	-1.6
5	4.0	27.2	-1.1
6	3.1	16.4	-1.3
7	2.6	26.2	-1.1
8	3.4	41.4	-1.3
9	3.5	51.0	-1.3

STOP TIME    OCT 10, 1985    HOUR 8 MINUTE 15

RELEASE NUMBER 85048      CONTAINMENT PURGE

STARTING TIME      OCT 10, 1985      HOUR 11 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	2.9	68.1	-1.5
12	3.5	64.7	-1.5
13	4.5	41.5	-1.8
14	3.6	19.3	-1.6
15	3.7	12.7	-1.8
16	3.0	67.7	-1.5
17	3.0	29.7	-1.3
18	2.0	4.3	-1.3

STOP TIME      OCT 10, 1985      HOUR 17 MINUTE 32

RELEASE NUMBER 85049      CONTAINMENT PURGE

STARTING TIME      OCT 10, 1985      HOUR 21 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
21	1.2	300.6	0.5
22	1.6	337.5	-0.8
23	0.9	357.9	-0.7
24	1.0	339.5	-0.8
1	1.0	7.2	-0.9
2	1.0	329.1	-1.1
3	1.0	287.5	-0.8
4	0.9	287.2	-0.5
5	0.9	326.3	-0.8
6	0.8	127.0	-1.0
7	1.9	99.0	-1.1
8	2.9	102.1	-1.0

STOP TIME      OCT 11, 1985      HOUR 7 MINUTE 23

RELEASE NUMBER 85050      CONTAINMENT PURGE

STARTING TIME      OCT 11, 1985      HOUR 10 MINUTE 42

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	6.5	134.2	-1.4
11	8.1	131.7	-1.4
12	6.9	139.4	-1.3
13	7.8	129.8	-1.4
14	9.2	132.9	-1.4
15	7.1	163.3	-1.0
16	6.7	159.8	-0.8
17	8.2	143.5	-1.1
18	12.2	125.9	-0.7
19	12.4	184.2	-1.1
20	5.6	192.9	-1.5
21	7.1	169.1	-0.7

STOP TIME      OCT 11, 1985      HOUR 20 MINUTE 3

RELEASE NUMBER B5051      CONTAINMENT PURGE

STARTING TIME      OCT 11, 1985      HOUR 20 MINUTE 45

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	5.6	192.9	-1.5
21	7.1	169.1	-0.7
22	7.9	171.1	-1.2
23	6.8	166.6	-0.9
24	7.2	172.9	-0.8
1	7.3	178.4	-0.8
2	6.4	177.4	-0.6
3	6.8	190.2	-0.6
4	6.5	195.2	-0.7
5	5.7	213.6	-1.0
6	6.3	245.4	-1.0
7	6.1	238.1	-0.7
8	5.1	265.9	-0.8
9	4.2	314.7	-1.2
10	4.8	326.2	-1.8
11	4.6	316.1	-1.9
12	4.7	311.4	-2.1
13	4.8	303.8	-2.2
14	5.7	322.4	-2.0
15	5.0	330.1	-1.9
16	4.6	320.9	-2.1
17	2.6	306.8	-1.5

STOP TIME      OCT 12, 1985      HOUR 16 MINUTE 40

RELEASE NUMBER 85052      CONTAINMENT PURGE

STARTING TIME      OCT 12, 1985      HOUR 16 MINUTE 53

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	4.6	320.9	-2.1
17	2.6	306.8	-1.5
18	1.2	212.1	0.5

STOP TIME      OCT 12, 1985      HOUR 17 MINUTE 4

STARTING TIME      OCT 12, 1985      HOUR 17 MINUTE 24

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	2.6	306.8	-1.5
18	1.2	212.1	0.5
19	1.5	194.6	3.8
20	1.5	126.6	5.4
21	1.1	152.9	6.5
22	1.4	36.4	5.9

STOP TIME      OCT 12, 1985      HOUR 21 MINUTE 40

RELEASE NUMBER 85053      CONTAINMENT PURGE

STARTING TIME      OCT 14, 1985      HOUR 10 MINUTE 50

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	1.8	324.7	-0.9
11	1.8	296.1	-1.2
12	1.9	209.0	-1.2
13	2.6	191.6	-1.3
14	3.1	216.0	-1.4
15	3.0	272.7	-1.5
16	3.5	331.6	-1.7
17	2.4	272.5	-1.4

STOP TIME      OCT 14, 1985      HOUR 16 MINUTE 10

STARTING TIME      OCT 14, 1985      HOUR 16 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	3.5	331.6	-1.7
17	2.4	272.5	-1.4
18	2.1	229.3	0.4
19	1.3	246.5	3.3
20	1.6	136.7	3.7

STOP TIME      OCT 14, 1985      HOUR 19 MINUTE 4

RELEASE NUMBER 85053      CONTAINMENT PURGE

STARTING TIME      OCT 14, 1985      HOUR 19 MINUTE 28

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	1.3	246.5	3.3
20	1.6	136.7	3.7
21	3.4	181.5	4.3
22	9.3	235.7	3.3
23	6.9	258.8	3.3
24	2.7	321.9	2.0
1	1.3	329.1	2.7
2	2.1	149.9	4.8
3	1.9	179.7	6.5
4	1.1	337.8	6.2
5	1.6	69.4	6.3
6	1.8	149.7	2.0
7	8.0	207.2	5.5
8	12.2	217.2	3.1
9	13.2	223.9	0.4
10	16.6	237.2	-1.1
11	15.0	262.8	-1.6
12	10.3	269.0	-1.9
13	7.8	277.7	-2.2
14	8.6	268.5	-2.1
15	7.1	305.7	-2.0

STOP TIME      OCT 15, 1985      HOUR 14 MINUTE 0

RELEASE NUMBER 85054      CONTAINMENT PURGE

STARTING TIME      OCT 15, 1985      HOUR 18 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	1.7	331.6	0.9
19	1.4	342.6	2.3
20	1.7	308.5	2.8
21	1.4	267.9	2.8
22	1.5	305.0	4.1
23	2.0	110.3	4.3
24	1.4	33.1	4.0
1	1.3	22.8	1.9
2	2.0	61.0	1.1
3	1.2	118.0	0.9
4	1.8	79.8	0.2
5	2.9	90.7	-0.2
6	3.5	94.0	0.3
7	3.4	99.5	0.2
8	5.4	124.5	-0.7
9	9.0	135.3	-1.4
10	10.7	140.8	-1.6
11	10.6	141.0	-1.6
12	9.9	151.2	-1.8
13	10.7	167.9	-1.8
14	10.1	171.0	-1.7
15	11.4	180.2	-1.5
16	12.4	178.1	-1.3
17	13.0	199.7	-0.8
18	10.6	191.9	-0.4
19	9.8	192.0	0.1
20	6.6	184.6	0.4
21	6.4	177.8	0.9
22	10.3	179.1	0.1
23	10.7	186.2	-0.3
24	7.6	180.8	-0.5
1	8.9	178.1	-0.3
2	11.1	184.1	-0.3
3	12.6	186.1	-0.4
4	12.2	181.0	-0.4
5	12.8	183.2	-0.5
6	13.0	179.5	-0.5
7	13.0	178.9	-0.7
8	15.1	189.0	-0.8
9	17.4	193.6	-0.8
10	17.8	202.2	-1.0
11	16.0	208.3	-0.8
12	11.8	219.3	-0.7
13	12.2	219.6	-1.0
14	14.6	217.2	-0.8
15	12.4	222.5	-1.0

STOP TIME      OCT 17, 1985      HOUR 14 MINUTE 46

IV-33

RELEASE NUMBER B5056 CONTINMENT PURGE

STARTING TIME OCT 18, 1985 HOUR 14 MINUTE 50

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	4.6	56.7	-1.1
15	4.6	47.2	-1.1
16	5.0	37.6	-1.0
17	5.2	28.6	-1.0
18	5.5	28.7	-0.9
19	5.3	24.4	-0.9
20	3.7	12.3	-0.6
21	3.3	8.5	-0.7
22	3.4	17.8	-0.5
23	3.4	15.8	-0.8
24	2.8	14.5	-0.6
1	2.6	345.4	-0.5
2	2.7	343.7	-0.5
3	5.0	341.7	-0.6
4	3.0	9.2	-0.6

STOP TIME OCT 19, 1985 HOUR 3 MINUTE 40

STARTING TIME OCT 19, 1985 HOUR 3 MINUTE 45

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
3	5.0	341.7	-0.6
4	3.0	9.2	-0.6
5	4.3	340.0	-0.6
6	2.6	349.4	-0.5
7	3.4	348.2	0.1
8	2.4	336.9	-0.5
9	3.1	330.5	-0.3
10	4.4	15.3	-1.2

STOP TIME OCT 19, 1985 HOUR 9 MINUTE 45

RELEASE NUMBER B5057 CONTAINMENT PURGE  
 STARTING TIME OCT 19, 1985 HOUR 13 MINUTE 3

TIME HOUR	WS10 MPH	W010 DEG	DT100 DEG C
13	6.1	73.2	-1.6
14	5.6	65.2	-1.4
15	5.9	68.4	-1.5
16	4.7	63.4	-1.4
17	1.5	41.7	-0.5
18	2.6	133.2	-0.2
19	4.3	142.6	-0.6
20	3.9	123.1	-0.4
21	3.0	112.2	-0.5
22	3.0	104.9	-0.8
23	2.5	104.5	-0.7
24	3.0	93.6	-0.6
1	3.7	105.2	-0.9
2	2.7	106.3	-0.8
3	1.8	91.5	-0.7
4	2.7	90.5	-0.8
5	2.5	101.8	-0.9
6	1.1	80.5	-0.9
7	1.6	75.4	-0.8
8	3.8	108.7	-1.0
9	3.7	99.3	-1.3
10	3.7	104.1	-1.4
11	4.1	128.3	-1.4
12	2.7	148.1	-1.2
13	2.1	79.0	-1.5
14	3.3	112.6	-1.4
15	4.7	126.4	-1.3
16	4.0	128.4	-1.4
17	4.5	165.2	-1.1
18	4.2	158.2	-1.0
19	3.8	157.6	-0.8
20	4.0	153.1	-1.0
21	4.0	158.0	-1.0
22	4.1	143.3	-1.0
23	4.0	143.6	-0.8
24	3.7	146.0	-0.9
1	3.3	146.1	-1.0
2	2.6	157.1	-0.5
3	2.4	152.3	-1.0
4	3.2	147.7	-0.8
5	4.9	142.4	-0.9
6	4.6	139.9	-0.8
7	4.3	140.7	-0.9
8	4.6	139.3	-0.8
9	4.4	150.4	-0.8
10	5.4	154.8	-1.0
11	5.8	144.6	-1.4
12	6.4	151.7	-1.6
13	8.2	158.1	-1.5

14	8.9	162.0	-1.4
15	8.4	155.7	-1.3
16	9.4	156.6	-1.2
17	9.0	157.1	-0.9
18	7.4	151.4	-0.9
19	7.4	151.2	-0.9
20	8.5	148.2	-0.9
21	10.3	151.9	-0.7
22	10.1	152.5	-0.6
23	11.0	155.3	-0.7
24	10.8	154.2	-0.6
1	9.9	155.3	-0.5
2	11.6	160.4	-0.7
3	11.7	159.1	-0.8
4	12.5	162.1	-0.8
5	15.0	161.9	-0.8
6	14.1	159.4	-0.6
7	12.9	155.9	-0.7
8	13.4	158.4	-0.9
9	14.4	159.9	-1.1
10	17.3	166.7	-1.2
11	18.7	171.8	-1.3
12	19.4	169.3	-1.3
13	21.4	174.6	-1.4
14	20.1	180.0	-1.2
15	20.3	175.5	-1.1
16	19.1	174.3	-0.9
17	19.7	172.1	-1.0

STOP TIME    OCT 22, 1985    HOUR 16 MINUTE 53

RELEASE NUMBER 05058      CONTAINMENT PURGE

STARTING TIME      OCT 23, 1985      HOUR 19 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	5.7	203.1	2.2
20	8.9	205.5	3.7
21	11.8	204.4	4.3
22	11.6	217.4	2.4
23	13.1	231.7	2.9
24	13.5	245.1	1.7
1	12.3	259.8	2.9
2	5.2	302.3	1.3
3	3.7	320.6	1.0
4	3.5	326.7	0.8
5	2.1	320.8	1.6
6	2.3	319.9	2.3
7	2.6	338.9	1.6
8	1.8	316.4	1.5
9	4.9	343.0	-1.1
10	5.6	355.6	-1.5
11	5.9	348.0	-1.7
12	4.4	345.6	-1.8
13	6.0	338.4	-1.9
14	5.6	332.9	-2.0
15	6.1	326.6	-1.9
16	5.4	333.1	-1.7
17	3.3	335.5	-1.2
18	1.3	257.3	1.0
19	1.0	236.2	3.5
20	1.1	242.9	4.4

STOP TIME      OCT 24, 1985      HOUR 19 MINUTE 55

STARTING TIME      OCT 25, 1985      HOUR 4 MINUTE 10

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
4	7.5	196.7	3.3
5	6.6	186.2	2.6
6	7.0	195.7	2.5
7	8.2	194.0	2.6
8	10.9	198.5	1.4
9	13.1	202.3	-0.5
10	13.0	203.4	-1.2
11	19.3	202.5	-1.3
12	19.5	202.1	-1.4
13	18.0	202.3	-1.5

RELEASE NUMBER 85058      CONTAINMENT PURGE

STARTING TIME      OCT 25, 1985      HOUR 13 MINUTE 3

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
13	18.0	202.3	-1.5
14	17.9	200.8	-1.5
15	17.5	195.3	-1.4

STOP TIME      OCT 25, 1985      HOUR 14 MINUTE 15

STARTING TIME      OCT 26, 1985      HOUR 0 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	14.9	197.5	-0.4
2	12.6	190.3	-0.2
3	11.9	187.7	-0.6
4	11.0	185.6	-0.3
5	13.3	186.7	-0.1
6	11.2	185.7	-0.3
7	11.9	188.6	-0.2
8	15.7	197.9	-0.3
9	12.6	200.6	-0.8
10	11.1	206.4	-1.2
11	8.8	222.3	-1.4
12	9.3	242.7	-1.4
13	9.2	236.8	-1.4
14	4.9	252.5	-1.4
15	4.7	253.1	-1.4
16	2.8	349.8	-1.1
17	2.7	1.1	-0.7
18	3.0	8.1	-0.7
19	4.6	14.9	-0.5
20	6.2	9.0	-0.8
21	6.3	27.5	-0.8
22	6.6	26.1	-0.7
23	6.0	20.8	-0.9
24	5.9	19.1	-0.9
1	6.1	22.1	-0.8
2	5.7	22.4	-0.8

STOP TIME      OCT 27, 1985

HOUR 1 MINUTE 44

RELEASE NUMBER 85059      CONTAINMENT PURGE

STARTING TIME      OCT 28, 1985      HOUR 10 MINUTE 22

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	9.1	150.0	-1.2
11	11.6	153.0	-1.3

STOP TIME      OCT 28, 1985      HOUR 10 MINUTE 41

STARTING TIME      OCT 28, 1985      HOUR 11 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	11.6	153.0	-1.3
12	10.8	154.4	-1.3
13	11.4	154.1	-1.4
14	10.5	155.7	-1.4
15	10.9	149.2	-1.4
16	11.5	145.4	-1.1
17	8.0	148.4	-0.8
18	5.9	148.8	0.2
19	5.5	149.1	0.8
20	5.2	154.5	0.5
21	6.1	157.1	0.4
22	5.2	150.9	0.4
23	5.5	150.0	0.7
24	6.2	147.5	0.6
1	6.9	145.4	0.5
2	6.8	140.6	0.9
3	2.5	132.8	0.6
4	2.8	138.1	1.1
5	2.1	141.0	1.6
6	2.5	311.9	1.7
7	1.5	327.5	2.3
8	3.0	144.6	2.4
9	2.5	117.8	1.0
10	1.3	38.0	-0.6
11	1.6	83.7	-1.3
12	2.2	46.6	-1.8
13	3.6	337.8	-1.5
14	6.8	356.7	-1.5
15	6.4	8.2	-1.4
16	6.5	6.0	-1.2
17	5.6	0.0	-0.9
18	7.7	356.8	-1.1
19	9.1	5.2	-1.0
20	6.7	13.5	-1.0
21	7.0	13.4	-0.8
22	6.4	8.6	-0.7
23	4.9	8.3	-0.7

24	4.7	351.0	-0.5
1	5.2	334.6	0.4
2	5.7	337.8	0.5
3	5.5	342.7	0.4
4	6.2	341.8	-0.1
5	5.2	342.0	-0.6
6	4.7	346.9	-1.1
7	4.0	346.9	-0.8
8	3.7	350.0	-1.2
9	5.8	2.3	-1.1
10	6.0	3.0	-1.2
11	4.4	0.6	-1.3
12	4.3	4.5	-1.3
13	4.2	14.5	-1.5
14	4.2	16.9	-1.9
15	3.0	360.0	-1.6
16	2.4	326.7	-1.4
17	1.4	291.2	-1.1
18	1.7	294.0	0.2
19	1.0	285.0	1.3
20	1.1	308.6	2.9
21	1.4	311.0	3.4
22	1.4	295.0	3.2
23	1.1	219.0	2.9
24	3.4	241.9	3.9
1	0.9	267.0	4.0
2	1.1	296.2	3.6
3	1.6	306.0	2.6
4	1.3	312.8	2.0
5	1.4	310.1	2.3
6	2.0	323.1	2.7
7	1.6	315.6	2.2
8	1.4	310.9	2.7

STOP TIME OCT 31, 1985 HOUR 7 MINUTE 41

RELEASE NUMBER 85059 CONTAINMENT PURGE  
 STARTING TIME OCT 31, 1985 HOUR 10 MINUTE 55

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	0.8	350.4	0.1
11	1.6	64.3	-1.1
12	2.0	52.1	-1.7
13	2.6	34.5	-1.6
14	2.4	12.2	-1.5
15	3.3	46.1	-1.5
16	4.6	85.2	-1.4
17	4.2	77.7	-1.4
18	1.8	32.1	0.2
19	1.4	86.9	1.3
20	1.1	76.0	1.5
21	1.3	329.3	1.7
22	2.5	312.3	2.0
23	2.3	308.3	3.2
24	2.3	302.2	2.5
1	2.5	316.1	2.2
2	3.0	328.5	2.2
3	2.3	325.4	1.6
4	3.7	334.1	1.5
5	3.5	331.8	0.7
6	6.8	338.7	0.1
7	6.5	341.2	1.0
8	5.6	341.7	-0.4
9	8.5	340.8	-1.1
10	9.3	348.0	-1.2
11	11.3	2.8	-1.3
12	11.6	0.3	-1.5
13	12.1	353.8	-1.5
14	11.9	350.7	-1.6
15	11.9	347.0	-1.7
16	10.5	354.7	-1.5
17	9.5	350.5	-1.0
18	6.2	344.2	0.3
19	4.9	336.3	1.2
20	4.2	331.6	1.3
21	3.7	326.9	2.3
22	4.5	335.9	2.5
23	3.5	337.9	2.0
24	2.7	339.0	1.0
1	1.3	304.4	1.1
2	1.3	293.4	1.5
3	1.2	281.0	1.0
4	1.7	296.7	1.2
5	1.6	328.3	3.1
6	1.4	153.1	3.0
7	0.6	255.3	3.4
8	1.1	300.7	3.1
9	1.2	245.5	1.8
10	2.3	44.7	-1.6

	STARTING TIME			NOV 2, 1985	HOUR 10 MINUTE 49
TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C		
10	2.3	44.7	-1.6		
11	2.4	60.5	-1.8		
12	2.6	325.0	-1.7		
13	2.8	11.4	-2.0		
14	2.7	283.1	-1.7		
15	2.6	239.3	-1.3		
16	3.5	195.3	-1.2		
17	2.4	154.5	-1.1		
	STOP TIME			NOV 2, 1985	HOUR 16 MINUTE 24

RELEASE NUMBER 85059      CONTAINMENT PURGE

STARTING TIME      NOV    2, 1985      HOUR 16 MINUTE 46

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	3.5	195.3	-1.2
17	2.4	154.5	-1.1
18	2.9	161.0	-0.5
19	3.7	154.2	-0.4
20	2.6	90.1	-0.6
21	2.2	157.2	-0.7
22	2.0	124.6	-0.2
23	0.8	168.6	0.1
24	1.9	118.0	-0.3
1	1.1	164.5	0.6
2	3.2	145.1	0.2
3	3.3	135.0	0.2
4	1.9	115.8	1.1
5	1.3	51.2	1.5
6	1.9	57.9	1.5
7	1.4	319.9	2.3
8	1.3	279.7	2.2
9	1.2	19.9	0.3
10	1.7	48.4	-1.6
11	4.5	233.7	-1.6
12	4.4	234.7	-1.5
13	3.7	248.8	-1.7
14	2.6	201.8	-1.6
15	3.1	351.9	-1.8
16	2.5	335.5	-1.5
17	3.9	350.7	-1.3

STOP TIME      NOV    3, 1985      HOUR 16 MINUTE 7

STARTING TIME      NOV    3, 1985      HOUR 18 MINUTE 30

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	3.0	345.4	0.5
19	1.4	302.0	1.1
20	1.4	292.6	1.2
21	1.9	306.4	1.9
22	1.5	292.9	2.1
23	1.6	302.7	2.1
24	1.6	298.0	2.3
1	1.2	292.0	2.5
2	1.2	302.6	2.8
3	1.8	309.5	3.0
4	1.8	306.3	2.7
5	1.2	314.2	2.9
6	1.1	288.1	2.5

7	1.4	316.6	2.9
8	0.7	238.7	2.7
9	1.0	280.9	0.9
10	1.6	93.0	-1.2

STOP TIME NOV 4, 1985 HOUR 9 MINUTE 15

RELEASE NUMBER 85060      CONTAINMENT PURGE

STARTING TIME      NOV      4, 1985      HOUR 10 MINUTE 43

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	1.6	93.0	-1.2
11	4.2	115.1	-1.5
12	4.3	103.3	-1.7
13	4.7	97.3	-1.9
14	4.5	89.6	-1.8
15	4.2	119.1	-1.8
16	5.3	188.3	-1.2
17	4.6	184.9	-1.1

STOP TIME      NOV      4, 1985      HOUR 16 MINUTE 36

STARTING TIME      NOV      4, 1985      HOUR 21 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
21	3.2	123.1	3.8
22	3.5	124.5	3.7

STOP TIME      NOV      4, 1985      HOUR 21 MINUTE 55

RELEASE NUMBER B5061 CONTAINMENT PURGE

NOV 5, 1985 HOUR 14 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	17.9	168.1	-1.4
15	17.6	164.6	-1.1
16	16.8	161.8	-1.1
17	14.9	163.1	-0.6
18	12.6	167.2	-0.7
19	8.2	151.4	0.1
20	9.0	150.9	-0.1
21	8.1	149.1	-0.1
22	5.0	161.1	-0.2
23	4.9	337.7	0.1
24	14.5	349.3	-0.8
1	15.5	349.3	-1.0
2	13.5	350.4	-0.9
3	9.0	350.8	-1.2
4	7.8	352.6	-1.2
5	5.6	346.3	-0.9
6	4.6	340.7	-0.6
7	5.9	343.3	-0.6
8	6.2	341.6	-0.8
9	7.8	343.9	-0.8
10	8.3	350.7	-1.5
11	8.4	1.6	-1.8
12	8.2	359.3	-1.8
13	8.3	350.9	-1.7
14	9.1	345.1	-1.8
15	8.4	349.4	-1.6
16	5.9	344.4	-1.3
17	5.3	341.6	-1.0
18	1.8	323.6	1.1
19	1.5	305.0	1.7
20	1.3	307.3	2.1
21	1.2	257.0	1.8
22	1.8	186.4	2.9
23	2.0	242.3	2.5
24	2.4	214.6	2.1
1	2.7	159.1	1.1
2	6.9	239.9	4.0
3	11.2	254.7	5.1
4	12.9	254.8	3.8
5	10.1	269.6	2.5
6	3.8	338.6	1.5
7	2.1	319.1	1.3
8	1.3	310.3	1.9
9	1.1	150.0	0.4
10	1.9	357.2	-1.6
11	4.0	194.6	-1.3
12	6.6	196.1	-1.3
13	9.4	205.7	-1.5
14	11.3	229.0	-1.5

15	10.9	268.5	-1.5
16	9.8	311.1	-1.1
17	7.3	320.0	-0.7
18	2.4	309.2	0.7
19	2.0	317.7	1.6
20	5.0	343.6	1.5
21	3.7	310.2	1.9
22	1.6	257.6	1.3
23	1.5	317.3	0.9
24	2.2	328.3	1.1
1	2.7	305.9	1.4
2	2.6	317.5	1.8
3	1.9	308.1	1.6
4	1.4	52.1	1.2
5	2.7	67.4	0.2
6	3.7	91.4	-0.9
7	3.2	71.9	-0.8
8	6.3	94.5	-1.2
9	7.5	98.9	-1.5
10	10.1	105.8	-1.2
11	10.1	98.4	-1.4
12	12.8	97.6	-1.4
13	14.4	101.6	-0.7
14	14.2	104.0	-1.1
15	14.1	100.8	-1.1
16	13.4	97.4	-0.9
17	9.1	88.5	-1.2
18	7.8	63.4	-1.0
19	8.5	45.0	-1.2
20	9.0	49.8	-0.9
21	8.5	47.7	-1.1
22	7.5	35.9	-1.2
23	8.0	51.0	-1.1
24	6.8	29.9	-1.3
1	8.8	6.7	-1.2
2	9.9	35.8	-1.1
3	7.8	35.5	-1.3
4	9.2	26.7	-1.2
5	8.5	26.4	-0.8
6	7.9	24.4	-1.2
7	7.9	34.4	-0.8
8	8.5	22.5	-1.1
9	9.0	30.3	-1.5
10	9.1	18.3	-1.1
11	10.5	20.2	-1.4
12	11.8	40.5	-1.3
13	11.6	46.9	-1.3
14	10.0	38.4	-1.2
15	10.3	34.4	-1.2
16	10.9	40.0	-1.2
17	10.6	45.1	-1.0
18	9.8	45.1	-0.9

STOP TIME NOV 9, 1985 HOUR 17 MINUTE 0

IV-47

STARTING TIME NOV 10, 1985 HOUR 12 MINUTE 45

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
12	8.5	68.9	-1.3
13	8.8	40.6	-1.4
14	7.8	49.1	-1.5
15	7.8	60.1	-1.4
16	8.8	48.4	-1.2
17	8.6	63.2	-1.4
18	7.7	65.9	-1.3
19	6.2	66.3	-1.2
20	5.6	52.4	-0.7
21	4.7	48.1	-1.3
22	4.7	41.0	-0.8
23	4.5	48.3	-1.0
24	4.8	67.5	-1.2
1	3.8	66.3	-1.0
2	3.7	65.1	-0.9
3	3.6	57.0	-1.0
4	3.7	50.7	-1.0
5	3.6	54.9	-1.3
6	3.2	69.9	-1.0
7	3.0	84.1	-0.8
8	2.5	88.7	-0.9
9	2.8	74.4	-0.5
10	3.2	101.5	-0.8
11	5.4	136.7	-1.1
12	6.2	142.3	-1.1
13	5.9	139.8	-1.0
14	5.6	143.6	-1.3
15	6.2	141.7	-1.1
16	5.6	133.7	-0.8
17	6.0	135.3	-1.0
18	5.1	141.5	-1.1
19	4.3	148.2	-0.9
20	4.5	147.3	-0.7
21	4.4	116.7	-1.1
22	5.5	145.0	-0.7
23	5.4	140.4	-0.8
24	3.0	155.9	-1.0
1	2.1	132.8	-1.3
2	1.6	85.7	-0.9
3	1.8	71.0	-0.8
4	2.0	68.9	-0.9
5	2.3	46.4	-0.7
6	2.6	23.3	-1.0
7	2.3	26.5	-0.8
8	2.7	15.8	-0.6
9	2.4	6.5	-1.3
10	3.0	9.1	-1.3

STOP TIME NOV 12, 1985

HOUR 9 MINUTE 30 IV-48

RELEASE NUMBER 85012      DECAY TANK PURGE

STARTING TIME      OCT 13, 1985      HOUR 19 MINUTE 49

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	5.1	5.3	-0.8
20	4.9	2.4	-0.8
21	4.8	2.8	-1.0
22	4.5	10.1	-1.3
23	3.4	12.0	-1.0
24	3.2	19.2	-1.1
1	2.1	351.6	-0.9
2	2.5	336.6	-0.5
3	4.3	340.7	-1.0

STOP TIME      OCT 14, 1985      HOUR 2 MINUTE 43

RELEASE NUMBER 85013      DECAY TANK PURGE

STARTING TIME      OCT 23, 1985      HOUR 0 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	9.8	234.9	-0.4
2	7.3	260.8	-0.3
3	3.1	294.6	0.8
4	2.7	277.3	2.7
5	4.3	268.8	2.5

STOP TIME      OCT 23, 1985      HOUR 4 MINUTE 2

STARTING TIME      OCT 23, 1985      HOUR 10 MINUTE 16

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	3.9	209.3	-0.4
11	5.3	242.9	-1.4
12	7.0	254.5	-1.4
13	7.0	248.1	-1.4
14	6.0	251.2	-1.4

STOP TIME      OCT 23, 1985      HOUR 13 MINUTE 46

RELEASE NUMBER 85014      DECAY TANK PURGE

STARTING TIME      DEC    6, 1985      HOUR 11 MINUTE 15

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	8.0	170.5	-1.0
12	9.2	171.7	-1.6
13	9.3	174.8	-1.7
14	8.0	187.6	-1.1

STOP TIME      DEC    6, 1985      HOUR 13 MINUTE 3

STARTING TIME      DEC    6, 1985      HOUR 14 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	8.0	187.6	-1.1
15	8.1	177.9	-1.0
16	8.3	154.2	-0.9
17	7.0	142.6	-0.5
18	6.5	144.8	-0.1
19	4.4	131.3	-0.2
20	4.1	139.9	0.2

STOP TIME      DEC    6, 1985      HOUR 19 MINUTE 15

RELEASE NUMBER 85015      DECAY TANK PURGE

STARTING TIME      DEC 26, 1985      HOUR 18 MINUTE 36

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	12.6	338.2	-1.0
19	13.3	338.2	-0.5
20	13.0	340.5	-1.0

STOP TIME      DEC 26, 1985      HOUR 19 MINUTE 55

STARTING TIME      DEC 26, 1985      HOUR 20 MINUTE 52

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	13.0	340.5	-1.0
21	12.2	336.0	-0.7
22	10.4	329.9	-0.4
23	10.3	334.0	-1.0
24	9.0	331.7	-1.9
1	14.9	309.5	-0.6
2	16.1	315.5	-0.6

STOP TIME      DEC 27, 1985      HOUR 1 MINUTE 56

RELEASE NUMBER 85016      DECAY TANK PURGE

STARTING TIME      DEC 29, 1985      HOUR 21 MINUTE 4

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
21	4.4	118.4	3.0
22	4.9	140.8	2.8
23	5.1	119.0	2.9
24	6.0	145.2	3.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0

STOP TIME      DEC 30, 1985      HOUR 3 MINUTE 31

PART 2

SECTION V

ENVIRONMENTAL MONITORING  
TECHNICAL SPECIFICATION (5.9.4.b)

October 1, 1985 to December 31, 1985

5.9.4 (continued)

b. Environmental Monitoring

1. (a) The number of sample locations, sample collection and frequency and the number of samples collected this (b) 3 month period for each class of sample is delineated in Table 1.
- (c) Levels of radiation were not found to be significantly above local background at any of the sampling locations.
- (d) A complete summary of the program findings is presented in Table 2. For each type of analysis of each sampled medium, this table considers separately all indicator locations, all control locations, and the location with the highest 3 month mean result. For each of these classes, the table specifies the following:
  - (1)- The total number of analyses;
  - (2) The fraction of these yielding detectable results (i.e., results above the highest lower limit of detection for the period);
  - (3) The average, lowest, and highest results.

In addition, the distance and direction relative to the Reactor Containment Building are specified for the location with the highest 3 month mean.

2. None of the levels of radioactivity found in the environmental radiological monitoring program indicate the likelihood of public intakes in excess of one per cent of those that would result from continuous exposure to the concentration values listed in Table II of Appendix B of 10 CFR 20.
3. No statistically significant variations at off-site environmental concentrations during the reporting period were observed.

Table 1. Sample collection program.

Sample Class	Collection Frequency	Sample Locations	Number of Samples Collected This Period
Background Radiation (TLD)	Quarterly	Eleven (11) Four (4) <sup>a</sup>	11 4
Air Particulate	Weekly	Five (5)	65
Airborne Iodine	Weekly	Five (5)	65
Milk	Semimonthly May to October	Three (3)	0
Surface Water	Monthly Comp.	Three (3)	9
	Monthly Comp.	Three (3)	9

<sup>a</sup> Additional sampling locations not required by the technical specifications.

Table 2. Environmental Radiological Monitoring Program Summary.

Name of Facility Fort Calhoun Nuclear Power Station-Unit 1 Docket NO. 50-285

Location of Facility Washington/Nebraska Reporting period October-December 1985  
(County, State)

Sample Type (Units)	Type and Number of Analyses <sup>a</sup>	LLD <sup>b</sup>	Indicator Locations Mean (E) <sup>c</sup> Range	Location with Highest Annual Mean		Control Locations Mean (F) Range	Number of Non-routine Results <sup>e</sup>
				Location <sup>d</sup>	Mean (F) Range		
Background Radiation (TLD) (mR/week)	Gamma-11 <sup>f</sup>	0.5	1.0 (11/11) (0.9-1.1)	0-10 WSW of Plant On Site 0.7 mi @250 <sup>o</sup>	1.1(1/1) ---	1.2(1/1) ---	0
Airborne Particulates (pCi/m <sup>3</sup> )	GB - 65	0.01	0.041 (52/52) (0.012-0.245)	OAG On Site #2 0.6 mi SW	0.045(13/13) (0.012-0.099)	0.040(13/13) (0.021-0.091)	0
	GS 15	0.01	<LLD	---	---	<LLD	0
	Cs-134	0.01	<LLD	---	---	<LLD	0
	Cs-137	0.01	<LLD	---	---	<LLD	0
	Other gammas	0.01	<LLD	---	---	<LLD	0
Airborne Iodine <sub>3</sub> (pCi/m <sup>3</sup> )	I-131 - 65	0.07	<LLD	---	---	<LLD	0
Surface Water (pCi/l)	H-3 - 9	300	560 (1/6)	0-6, Downstream 0.5 mi at 106 <sup>o</sup>	560 (1/3)	510 (1/3)	0
	GS-9	15	<LLD	---	---	NONE	0
	Cs-134	18	<LLD	---	---	NONE	0
	Cs-137	15	<LLD	---	---	NONE	0
	Other gammas	15	<LLD	---	---	NONE	0

<sup>a</sup> GB = gross beta; GS = gamma scan.

<sup>b</sup> LLD = lower limit of detection (based on 3 sigma error for background sample unless otherwise indicated).

<sup>c</sup> Mean and range are based on detectable measurements only (i.e., >LLD). Fraction of detectable measurements at specified locations is indicated in parentheses (F).

<sup>d</sup> Locations are specified: (1) by code, (2) by name, and (3) by distance and direction relative to Reactor Containment Building.

<sup>e</sup> Non-routine results are those which exceed ten times the control station value. If no control station value is available, the result is considered non-routine if it exceeds ten times the typical pre-operational value for the medium or location.

<sup>f</sup> Results for sites not required by the technical specifications are excluded from this summary.

Dairy Cattle Survey

In compliance with the requirements of the Fort Calhoun Station, a milk cow consensus was completed in 1985 to determine the status of the dairy cattle population within a one-mile radius of the reactor. In the event that dairy cattle are introduced into the one-mile radius, such locations would then become part of the District's milk sampling program.

Results of the 1985 dairy cattle survey indicate that none of the current residents out of the 14 within the survey radius presently utilize a producing milk cow.

Presented below is information from the Nebraska Department of Agriculture concerning milk cow populations at the Grade A milk dairy sample locations beyond the one-mile radius of the plant. Three of these seven locations are currently being sampled. The following is an update of these farms.

1985 Dairy Cow Survey

<u>NAME</u>	<u>NUMBER IN HERD</u>
R. P. Flynn & Sons Rural Route 1 Blair, NE 68008	205
Dale Goedeker Box 28, RR1 Bennington, NE 68007	36
Johannsen & Kruse RR1 Bennington, NE 68007	41
Walter Japp, Jr. Rural Route 1 Kennard, NE 68034	82
Wayne Drusen RR1, Box 93A Kennard, NE 68034	44
Kelly Tiedje Bennington, NE 68007	38
Mohrview Farm, Inc. Lyle Mohr RD 2 Omaha, NE	55

PART 2

SECTION VI

POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS  
(As Required by Technical Specification 5.9.4.a.)

October 1, 1985 to December 31, 1985

## VI. POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS

### A. Potential 4th Qtr. 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 GASPAR program. Results to each receptor are shown in Tables VI-A-1 through VI-A-36. The doses to the same groups in units of millirads (mrad), due to gamma and beta radiation carried by air, were computed using GASPAR. In addition, the maximum quarterly dose in millirads due to gamma and beta radiation carried by air was calculated by GASPAR for the Unrestricted Area Boundary. The results are shown in Table VI-A-37. 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 4th Qtr. 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 4th Qtr. doses.

The inputs to GASPAR for the 4th Qtr. period from October 1, 1985 through December 31, 1985 were as follows:

(1) All gaseous effluents were as described in Section I. The totals in curies of I-133 and I-135 include all actual and estimated activities. In most cases, I-133 and I-135 activities were estimated, if there was no measurable activity in a release, by exponentially back-calculating to a mid-week activity using the maximum instrument sensitivity (minimum detectable activity).

(2) Entrained gases (Xe-133 and Xe-135) from liquid effluents were as described in Section II.

(3) 4th Qtr. "X/Q's" at the actual receptor locations, which were corrected for open terrain, plume depletion, and radioactive decay factors were calculated according to Regulatory Guide 1.111. Also included were 4th Qtr. 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<sup>3</sup> for the air water concentration.

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

(6) Site specific information, within a five mile radius of the plant, on types of receptors located in each sector was used. That is, if a cow was not present in a sector, then the milk pathway for 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 4th Qtr. "X/Q's" by a factor ranging between 1.0 and 4.0.

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

(3) In the majority of the releases, I-133 and I-135 were back calculated even through there was no measurable activity.

B. Potential 4th Qtr. Doses to Population from Gaseous Releases.

The GASPAR program in its annual configuration was also used to calculate the ALARA integrated population dose summary for the total body, skin and organ doses in manrems for all individuals within a 50-mile radius population. Results are shown in Table VI-B-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 a 1980 conservative estimate, was used to define the sector segments withing the 50-mile radius of the plant.

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

C. Potential 4th Qtr. Doses to Individuals from Liquid Releases.

Total body, skin and organ mrem for liquid releases were calculated for all significant liquid pathways using the annual configuration of the LADTAP program. Results are shown in Tables VI-C-1 through VI-C-10.

The inputs to LADTAP for the 4th Qtr. period from October through December 1985 were as follows:

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

(2) A plant discharge rate of 802 cubic feet per second (CFS) 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 Tables VI-C-1 through VI-C-7 was used. For Tables VI-C-8 through VI-C-11, a transport time of 0.0 was used from the plant to the discharge site.

(5) A shorewidth factor of .2 was used.

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

The discharge site in Tables VI-C-8 through VI-C-11 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 4th Qtr. 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 VI-D-1 through VI-D-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 Nation 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 or Geiger-Mueller sample locations for this semiannual period.

Details of this sample system are given in Section V, Environmental monitoring.

TABLE VI-A-1

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 1 BEEF  
 AT 1.86 MILES N

4TH QUARTER BETA AIR DOSE = 6.37E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.07E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.27E-03	3.54E-03
MEAT ADULT	1.96E-04	1.95E-04	2.89E-06	1.98E-04	2.00E-04	1.51E-03	1.93E-04	1.93E-04
TEEN	1.17E-04	1.16E-04	2.40E-06	1.19E-04	1.21E-04	1.07E-03	1.15E-04	1.15E-04
CHILD	1.42E-04	1.40E-04	4.45E-06	1.44E-04	1.47E-04	1.58E-03	1.39E-04	1.39E-04

TABLE VI- A-2

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 2 BEEF,RES  
 AT 1.86 MILES NNE

4TH QUARTER BETA AIR DOSE = 3.73E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.22E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.07E-04	7.07E-04	7.07E-04	7.07E-04	7.07E-04	7.07E-04	7.44E-04	2.08E-03
GROUND	3.58E-06	4.34E-06						
MEAT								
ADULT	1.15E-04	1.14E-04	2.08E-06	1.16E-04	1.18E-04	1.06E-03	1.13E-04	1.13E-04
TEEN	6.88E-05	6.81E-05	1.73E-06	6.99E-05	7.16E-05	7.53E-04	6.76E-05	6.76E-05
CHILD	8.34E-05	8.19E-05	3.21E-06	8.47E-05	8.68E-05	1.12E-03	8.16E-05	8.16E-05
INHAL								
ADULT	4.38E-04	4.37E-04	2.07E-06	4.40E-04	4.42E-04	1.41E-03	4.37E-04	4.37E-04
TEEN	4.42E-04	4.40E-04	2.92E-06	4.43E-04	4.46E-04	1.63E-03	4.40E-04	4.39E-04
CHILD	3.91E-04	3.89E-04	3.96E-06	3.92E-04	3.95E-04	1.71E-03	3.89E-04	3.89E-04
INFANT	2.25E-04	2.24E-04	3.12E-06	2.27E-04	2.28E-04	1.43E-03	2.24E-04	2.23E-04

TABLE VI-A-3

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 3 RES  
 AT 1.47 MILES NE

4TH QUARTER BETA AIR DOSE = 4.55E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.48E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.62E-04	8.62E-04	8.62E-04	8.62E-04	8.62E-04	8.62E-04	9.07E-04	2.53E-03
GROUND	3.14E-06	3.81E-06						
INHAL								
ADULT	5.35E-04	5.34E-04	2.55E-06	5.37E-04	5.39E-04	1.73E-03	5.34E-04	5.33E-04
TEEN	5.39E-04	5.37E-04	3.59E-06	5.41E-04	5.45E-04	2.01E-03	5.37E-04	5.36E-04
CHILD	4.77E-04	4.75E-04	4.87E-06	4.79E-04	4.82E-04	2.10E-03	4.75E-04	4.74E-04
INFANT	2.75E-04	2.73E-04	3.84E-06	2.77E-04	2.78E-04	1.76E-03	2.74E-04	2.73E-04

TABLE VI-A-4

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 4 VEG.RES  
 AT 4.76 MILES ENE

4TH QUARTER BETA AIR DOSE = 7.05E-04 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.30E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.34E-04	1.34E-04	1.34E-04	1.34E-04	1.34E-04	1.34E-04	1.41E-04	3.92E-04
GROUND	2.14E-07	2.59E-07						
VEGET								
ADULT	1.53E-04	1.52E-04	1.01E-06	1.53E-04	1.54E-04	6.15E-04	1.52E-04	1.52E-04
TEEN	1.74E-04	1.74E-04	9.60E-07	1.75E-04	1.76E-04	5.58E-04	1.74E-04	1.74E-04
CHILD	2.70E-04	2.69E-04	1.79E-06	2.71E-04	2.72E-04	8.51E-04	2.69E-04	2.69E-04
INHAL								
ADULT	8.43E-05	8.42E-05	3.77E-07	8.46E-05	8.50E-05	2.61E-04	8.41E-05	8.40E-05
TEEN	8.50E-05	8.47E-05	5.30E-07	8.53E-05	8.58E-05	3.02E-04	8.47E-05	8.46E-05
CHILD	7.52E-05	7.48E-05	7.19E-07	7.55E-05	7.60E-05	3.16E-04	7.49E-05	7.48E-05
INFANT	4.33E-05	4.30E-05	5.67E-07	4.37E-05	4.38E-05	2.63E-04	4.31E-05	4.30E-05

TABLE VI-A-5

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 5 MILK  
 AT 4.93 MILES ENE

4TH QUARTER BETA AIR DOSE = 6.64E-04 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.16E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.26E-04	1.26E-04	1.26E-04	1.26E-04	1.26E-04	1.26E-04	1.32E-04	3.69E-04
COW MILK ADULT	4.95E-05	4.88E-05	1.54E-06	5.04E-05	5.20E-05	7.68E-04	4.82E-05	4.82E-05
TEEN	6.49E-05	6.36E-05	2.79E-06	6.67E-05	6.95E-05	1.20E-03	6.28E-05	6.28E-05
CHILD	1.03E-04	9.98E-05	6.77E-06	1.06E-04	1.10E-04	2.35E-03	9.92E-05	9.92E-05
INFANT	1.58E-04	1.51E-04	1.41E-05	1.67E-04	1.70E-04	5.62E-03	1.51E-04	1.51E-04

TABLE VI-A-6

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 6 BEEF  
 AT 4.96 MILES ENE

4TH QUARTER BETA AIR DOSE = 6.58E-04 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.14E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.25E-04	1.31E-04	3.66E-04
MEAT								
ADULT	2.04E-05	2.04E-05	1.15E-07	2.05E-05	2.06E-05	7.26E-05	2.03E-05	2.03E-05
TEEN	1.22E-05	1.22E-05	9.55E-08	1.23E-05	1.24E-05	5.00E-05	1.21E-05	1.21E-05
CHILD	1.48E-05	1.47E-05	1.77E-07	1.48E-05	1.49E-05	7.18E-05	1.47E-05	1.47E-05

TABLE VI-A-7

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 7 VEG.RES  
 AT 4.66 MILES E

4TH QUARTER BETA AIR DOSE = 1.15E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 3.74E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.17E-04	2.17E-04	2.17E-04	2.17E-04	2.17E-04	2.17E-04	2.29E-04	6.38E-04
GROUND	3.09E-07	3.75E-07						
VEGET								
ADULT	2.49E-04	2.49E-04	1.46E-06	2.50E-04	2.51E-04	9.18E-04	2.48E-04	2.48E-04
TEEN	2.85E-04	2.84E-04	1.39E-06	2.86E-04	2.87E-04	8.40E-04	2.84E-04	2.84E-04
CHILD	4.41E-04	4.40E-04	2.59E-06	4.42E-04	4.44E-04	1.28E-03	4.40E-04	4.40E-04
INHAL								
ADULT	1.38E-04	1.38E-04	6.16E-07	1.38E-04	1.39E-04	4.26E-04	1.38E-04	1.37E-04
TEEN	1.39E-04	1.38E-04	8.66E-07	1.39E-04	1.40E-04	4.93E-04	1.38E-04	1.38E-04
CHILD	1.23E-04	1.22E-04	1.18E-06	1.23E-04	1.24E-04	5.16E-04	1.22E-04	1.22E-04
INFANT	7.08E-05	7.03E-05	9.27E-07	7.14E-05	7.15E-05	4.30E-04	7.05E-05	7.03E-05

TABLE VI A-8

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 8 RES  
 AT 4.24 MILES ESE

4TH QUARTER BETA AIR DOSE = 1.87E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 6.08E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.54E-04	3.54E-04	3.54E-04	3.54E-04	3.54E-04	3.54E-04	3.72E-04	1.04E-03
GROUND	5.11E-07	6.20E-07						
INHAL ADULT	2.23E-04	2.22E-04	1.00E-06	2.23E-04	2.24E-04	6.93E-04	2.22E-04	2.22E-04
TEEN	2.24E-04	2.24E-04	1.41E-06	2.25E-04	2.27E-04	8.01E-04	2.24E-04	2.23E-04
CHILD	1.99E-04	1.98E-04	1.91E-06	1.99E-04	2.01E-04	8.39E-04	1.98E-04	1.97E-04
INFANT	1.14E-04	1.14E-04	1.51E-06	1.15E-04	1.16E-04	7.00E-04	1.14E-04	1.14E-04

TABLE VI-A-9

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 9 BEEF  
 AT 5.03 MILES ESE

4TH QUARTER BETA AIR DOSE = 1.36E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 4.42E-04 MILLRADS

PATHWAY	1. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.57E-04	2.57E-04	2.57E-04	2.57E-04	2.57E-04	2.57E-04	2.71E-04	7.56E-04
MEAT								
ADULT	4.22E-05	4.21E-05	2.15E-07	4.23E-05	4.25E-05	1.40E-04	4.20E-05	4.20E-05
TEEN	2.52E-05	2.51E-05	1.78E-07	2.53E-05	2.55E-05	9.57E-05	2.51E-05	2.51E-05
CHILD	3.05E-05	3.03E-05	3.31E-07	3.06E-05	3.08E-05	1.37E-04	3.03E-05	3.03E-05

TABLE VI-A-10

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 10 VEG  
 AT 3.71 MILES SE

4TH QUARTER BETA AIR DOSE = 3.15E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.03E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.97E-04	5.97E-04	5.97E-04	5.97E-04	5.97E-04	5.97E-04	6.28E-04	1.75E-03
VEGET								
ADULT	6.74E-04	6.72E-04	5.47E-06	6.78E-04	6.83E-04	3.19E-03	6.70E-04	6.70E-04
TEEN	7.71E-04	7.69E-04	5.22E-06	7.74E-04	7.79E-04	2.85E-03	7.67E-04	7.67E-04
CHILD	1.19E-03	1.19E-03	9.72E-06	1.20E-03	1.20E-03	4.35E-03	1.19E-03	1.19E-03

TABLE VI-A-11

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 11 RES  
 AT 1.62 MILES SE

4TH QUARTER BETA AIR DOSE = 1.68E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 5.47E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.18E-03	3.18E-03	3.18E-03	3.18E-03	3.18E-03	3.18E-03	3.35E-03	9.33E-03
GROUND	8.17E-06	9.91E-06						
INHAL ADULT	1.97E-03	1.97E-03	9.37E-06	1.98E-03	1.99E-03	6.36E-03	1.97E-03	1.96E-03
TEEN	1.99E-03	1.98E-03	1.32E-05	2.00E-03	2.01E-03	7.37E-03	1.98E-03	1.98E-03
CHILD	1.76E-03	1.75E-03	1.79E-05	1.77E-03	1.78E-03	7.73E-03	1.75E-03	1.75E-03
INFANT	1.01E-03	1.01E-03	1.41E-05	1.02E-03	1.02E-03	6.47E-03	1.01E-03	1.01E-03

TABLE VI-A-12

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 12 PORK  
 AT 3.84 MILES SE

4TH QUARTER BETA AIR DOSE = 3.15E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.03E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.97E-04	5.97E-04	5.97E-04	5.97E-04	5.97E-04	5.97E-04	6.28E-04	1.75E-03
MEAT								
ADULT	9.68E-05	9.66E-05	6.67E-07	9.72E-05	9.79E-05	3.99E-04	9.63E-05	9.63E-05
TEEN	5.78E-05	5.76E-05	5.54E-07	5.82E-05	5.87E-05	2.77E-04	5.74E-05	5.74E-05
CHILD	6.99E-05	6.95E-05	1.03E-06	7.04E-05	7.10E-05	4.01E-04	6.94E-05	6.94E-05

TABLE VI-A-13

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 13 VEG.RES  
 AT 0.89 MILES SSE

4TH QUARTER BETA AIR DOSE = 4.66E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.52E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.83E-03	8.83E-03	8.83E-03	8.83E-03	8.83E-03	8.83E-03	9.29E-03	2.59E-02
GROUND	4.79E-05	5.81E-05						
VEGET								
ADULT	1.00E-02	9.91E-03	2.26E-04	1.01E-02	1.04E-02	1.14E-01	9.82E-03	9.82E-03
TEEN	1.14E-02	1.13E-02	2.15E-04	1.15E-02	1.17E-02	9.74E-02	1.12E-02	1.12E-02
CHILD	1.76E-02	1.74E-02	4.01E-04	1.78E-02	1.78E-02	1.48E-01	1.74E-02	1.74E-02
INHAL								
ADULT	5.46E-03	5.45E-03	2.65E-05	5.48E-03	5.50E-03	1.79E-02	5.45E-03	5.44E-03
TEEN	5.50E-03	5.48E-03	3.72E-05	5.52E-03	5.56E-03	2.07E-02	5.49E-03	5.47E-03
CHILD	4.87E-03	4.84E-03	5.05E-05	4.89E-03	4.92E-03	2.18E-02	4.85E-03	4.84E-03
INFANT	2.80E-03	2.78E-03	3.98E-05	2.83E-03	2.84E-03	1.82E-02	2.79E-03	2.78E-03

TABLE VI-A-14

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 14 PORK  
 AT 1.10 MILES SSE

4TH QUARTER BETA AIR DOSE = 3.80E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.24E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.19E-03	7.19E-03	7.19E-03	7.19E-03	7.19E-03	7.19E-03	7.57E-03	2.11E-02
MEAT								
ADULT	1.17E-03	1.16E-03	2.10E-05	1.18E-03	1.20E-03	1.07E-02	1.15E-03	1.15E-03
TEEN	7.00E-04	6.92E-04	1.74E-05	7.11E-04	7.28E-04	7.60E-03	6.87E-04	6.87E-04
CHILD	8.48E-04	8.33E-04	3.23E-05	8.61E-04	8.82E-04	1.13E-02	8.30E-04	8.30E-04

TABLE VI-A-15

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 15 VEG, RES  
 AT 0.78 MILES S

4TH QUARTER BETA AIR DOSE = 4.06E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.32E-02 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	7.69E-03	7.69E-03	7.69E-03	7.69E-03	7.69E-03	7.69E-03	8.09E-03	2.26E-02
GROUND	4.37E-05	5.30E-05						
VEGET								
ADULT	8.72E-03	8.64E-03	2.06E-04	8.84E-03	9.05E-03	1.03E-01	8.55E-03	8.55E-03
TEEN	9.94E-03	9.85E-03	1.96E-04	1.01E-02	1.03E-02	8.84E-02	9.79E-03	9.79E-03
CHILD	1.54E-02	1.52E-02	3.66E-04	1.55E-02	1.58E-02	1.34E-01	1.52E-02	1.52E-02
INHAL								
ADULT	4.76E-03	4.75E-03	2.31E-05	4.77E-03	4.79E-03	1.56E-02	4.75E-03	4.74E-03
TEEN	4.79E-03	4.78E-03	3.25E-05	4.81E-03	4.85E-03	1.81E-02	4.78E-03	4.77E-03
CHILD	4.24E-03	4.22E-03	4.41E-05	4.26E-03	4.29E-03	1.90E-02	4.23E-03	4.22E-03
INFANT	2.44E-03	2.43E-03	3.48E-05	2.47E-03	2.47E-03	1.59E-02	2.43E-03	2.42E-03

TABLE VI-A-16

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-20-86 RETS  
 SPECIAL LOCATION # 16 BEEF  
 AT 1.98 MILES S

4TH QUARTER BETA AIR DOSE = 4.60E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.50E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.73E-04	8.73E-04	8.73E-04	8.73E-04	8.73E-04	8.73E-04	9.19E-04	2.56E-03
MEAT								
ADULT	1.42E-04	1.41E-04	2.46E-06	1.43E-04	1.46E-04	1.26E-03	1.40E-04	1.40E-04
TEEN	8.50E-05	8.41E-05	2.04E-06	8.62E-05	8.82E-05	8.93E-04	8.35E-05	8.35E-05
CHILD	1.03E-04	1.01E-04	3.79E-06	1.05E-04	1.07E-04	1.32E-03	1.01E-04	1.01E-04

TABLE VI-A-17

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 1 COW  
 AT 2.75 MILES S

4TH QUARTER BETA AIR DOSE = 2.19E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 7.13E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.15E-04	4.15E-04	4.15E-04	4.15E-04	4.15E-04	4.15E-04	4.37E-04	1.22E-03
COW MILK ADULT	1.69E-04	1.62E-04	1.54E-05	1.78E-04	1.94E-04	7.36E-03	1.56E-04	1.56E-04
TEEN	2.25E-04	2.11E-04	2.79E-05	2.43E-04	2.71E-04	1.16E-02	2.04E-04	2.04E-04
CHILD	3.60E-04	3.28E-04	6.76E-05	3.90E-04	4.33E-04	2.28E-02	3.22E-04	3.22E-04
INFANT	5.61E-04	4.94E-04	1.41E-04	6.54E-04	6.82E-04	5.51E-02	4.88E-04	4.88E-04

TABLE VI-A-18

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 2 VEG.RES  
 AT 0.62 MILES SSW

‡  
 4TH QUARTER BETA AIR DOSE = 6.81E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.22E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.36E-02	3.79E-02
GROUND	6.59E-05	8.00E-05						
VEGET								
ADULT	1.46E-02	1.45E-02	3.09E-04	1.48E-02	1.51E-02	1.59E-01	1.43E-02	1.43E-02
TEEN	1.66E-02	1.65E-02	2.94E-04	1.68E-02	1.71E-02	1.37E-01	1.64E-02	1.64E-02
CHILD	2.58E-02	2.55E-02	5.47E-04	2.60E-02	2.63E-02	2.07E-01	2.54E-02	2.54E-02
INHAL								
ADULT	7.98E-03	7.96E-03	3.88E-05	8.00E-03	8.04E-03	2.63E-02	7.95E-03	7.95E-03
TEEN	8.04E-03	8.01E-03	5.46E-05	8.08E-03	8.13E-03	3.03E-02	8.00E-03	8.00E-03
CHILD	7.12E-03	7.08E-03	7.41E-05	7.15E-03	7.20E-03	3.21E-02	7.07E-03	7.07E-03
INFANT	4.10E-03	4.07E-03	5.84E-05	4.14E-03	4.15E-03	2.69E-02	4.07E-03	4.07E-03

TABLE VI-A-19

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 3 MILK  
 AT 0.67 MILES SSW

4TH QUARTER BETA AIR DOSE = 5.89E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.92E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.12E-02	1.18E-02	3.28E-02
COW MILK ADULT	4.56E-03	4.36E-03	4.56E-04	4.84E-03	5.31E-03	2.18E-01	4.19E-03	4.19E-03
TEEN	6.08E-03	5.69E-03	8.27E-04	6.62E-03	7.45E-03	3.43E-01	5.46E-03	5.46E-03
CHILD	9.77E-03	8.80E-03	2.01E-03	1.06E-02	1.19E-02	6.76E-01	8.62E-03	8.62E-03
INFANT	1.53E-02	1.33E-02	4.19E-03	1.80E-02	1.88E-02	1.63E+00	1.31E-02	1.31E-02

TABLE VI-A-20

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 4 BEEF  
 AT 2.01 MILES SSW

4TH QUARTER BETA AIR DOSE = 4.77E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.55E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.04E-04	9.04E-04	9.04E-04	9.04E-04	9.04E-04	9.04E-04	9.52E-04	2.65E-03
MEAT								
ADULT	1.47E-04	1.46E-04	2.27E-06	1.48E-04	1.50E-04	1.21E-03	1.45E-04	1.45E-04
TEEN	8.78E-05	8.70E-05	1.89E-06	8.91E-05	9.10E-05	8.58E-04	8.64E-05	8.64E-05
CHILD	1.06E-04	1.05E-04	3.50E-06	1.08E-04	1.10E-04	1.27E-03	1.04E-04	1.04E-04

TABLE VI-A-21

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 5 VEG.RES  
 AT 0.79 MILES SW

4TH QUARTER BETA AIR DOSE = 3.61E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.18E-02 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.85E-03	6.85E-03	6.85E-03	6.85E-03	6.85E-03	6.85E-03	7.21E-03	2.01E-02
GROUND	2.42E-05	2.94E-05						
VEGET								
ADULT	7.71E-03	7.66E-03	1.14E-04	7.78E-03	7.90E-03	6.09E-02	7.62E-03	7.62E-03
TEEN	8.80E-03	8.75E-03	1.08E-04	8.87E-03	8.98E-03	5.29E-02	8.72E-03	8.72E-03
CHILD	1.36E-02	1.35E-02	2.01E-04	1.37E-02	1.38E-02	8.05E-02	1.35E-02	1.35E-02
INHAL								
ADULT	4.23E-03	4.22E-03	1.79E-05	4.25E-03	4.26E-03	1.27E-02	4.22E-03	4.22E-03
TEEN	4.27E-03	4.25E-03	2.52E-05	4.28E-03	4.31E-03	1.47E-02	4.25E-03	4.25E-03
CHILD	3.77E-03	3.76E-03	3.42E-05	3.79E-03	3.81E-03	1.53E-02	3.76E-03	3.76E-03
INFANT	2.17E-03	2.16E-03	2.70E-05	2.19E-03	2.20E-03	1.27E-02	2.16E-03	2.16E-03

TABLE VI-A-22

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 6 BEEF  
 AT 0.81 MILES SW

4TH QUARTER BETA AIR DOSE = 2.68E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 8.72E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.07E-03	5.07E-03	5.07E-03	5.07E-03	5.07E-03	5.07E-03	5.34E-03	1.49E-02
MEAT								
ADULT	8.23E-04	8.17E-04	1.39E-05	8.32E-04	8.46E-04	7.32E-03	8.12E-04	8.12E-04
TEEN	4.93E-04	4.87E-04	1.15E-05	5.00E-04	5.12E-04	5.20E-03	4.84E-04	4.84E-04
CHILD	5.97E-04	5.87E-04	2.14E-05	6.06E-04	6.20E-04	7.70E-03	5.85E-04	5.85E-04

TABLE VI-A-23

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 7 VEG,RES  
 AT 1.01 MILES WSW

4TH QUARTER BETA AIR DOSE = 1.45E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 4.71E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.74E-03	2.74E-03	2.74E-03	2.74E-03	2.74E-03	2.74E-03	2.89E-03	8.05E-03
GROUND	1.13E-05	1.38E-05						
VEGET								
ADULT	3.10E-03	3.07E-03	5.31E-05	3.13E-03	3.18E-03	2.80E-02	3.05E-03	3.05E-03
TEEN	3.53E-03	3.51E-03	5.06E-05	3.57E-03	3.62E-03	2.42E-02	3.50E-03	3.50E-03
CHILD	5.47E-03	5.42E-03	9.41E-05	5.51E-03	5.57E-03	3.67E-02	5.42E-03	5.42E-03
INHAL								
ADULT	1.70E-03	1.69E-03	8.15E-06	1.70E-03	1.71E-03	5.55E-03	1.69E-03	1.69E-03
TEEN	1.71E-03	1.70E-03	1.15E-05	1.72E-03	1.73E-03	6.44E-03	1.70E-03	1.70E-03
CHILD	1.51E-03	1.51E-03	1.56E-05	1.52E-03	1.53E-03	6.76E-03	1.51E-03	1.51E-03
INFANT	8.72E-04	8.66E-04	1.23E-05	8.80E-04	8.82E-04	5.66E-03	8.66E-04	8.66E-04

TABLE VI-A-24

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 8 BEEF, PORK  
 AT 4.71 MILES WSW

4TH QUARTER BETA AIR DOSE = 5.02E-04 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.64E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.51E-05	9.51E-05	9.51E-05	9.51E-05	9.51E-05	9.51E-05	1.00E-04	2.79E-04
MEAT								
ADULT	1.55E-05	1.54E-05	1.58E-07	1.56E-05	1.57E-05	8.94E-05	1.54E-05	1.54E-05
TEEN	9.26E-06	9.20E-06	1.31E-07	9.35E-06	9.48E-06	6.28E-05	9.16E-06	9.16E-06
CHILD	1.12E-05	1.11E-05	2.43E-07	1.13E-05	1.15E-05	9.20E-05	1.11E-05	1.11E-05

TABLE VI-A-25

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 9 VEG.RES  
 AT 1.17 MILES W

4TH QUARTER BETA AIR DOSE = 8.00E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.61E-03 MILLRADS

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	1.60E-03	4.45E-03
GROUND	4.75E-06	5.77E-06						
VEGET								
ADULT	1.71E-03	1.70E-03	2.23E-05	1.72E-03	1.75E-03	1.21E-02	1.69E-03	1.69E-03
TEEN	1.95E-03	1.94E-03	2.12E-05	1.97E-03	1.99E-03	1.06E-02	1.94E-03	1.94E-03
CHILD	3.02E-03	3.00E-03	3.95E-05	3.04E-03	3.06E-03	1.61E-02	3.00E-03	3.00E-03
INHAL								
ADULT	9.40E-04	9.38E-04	4.47E-06	9.43E-04	9.48E-04	3.05E-03	9.37E-04	9.37E-04
TEEN	9.47E-04	9.44E-04	6.28E-06	9.51E-04	9.58E-04	3.54E-03	9.43E-04	9.43E-04
CHILD	8.39E-04	8.34E-04	8.53E-06	8.42E-04	8.48E-04	3.71E-03	8.34E-04	8.34E-04
INFANT	4.83E-04	4.80E-04	6.73E-06	4.87E-04	4.89E-04	3.11E-03	4.79E-04	4.79E-04

TABLE VI-A-26

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 10 BEEF  
 AT 1.94 MILES W

4TH QUARTER BETA AIR DOSE = 2.58E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 8.42E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.90E-04	4.90E-04	4.90E-04	4.90E-04	4.90E-04	4.90E-04	5.16E-04	1.44E-03
MEAT								
ADULT	7.92E-05	7.89E-05	7.73E-07	7.97E-05	8.05E-05	4.41E-04	7.86E-05	7.86E-05
TEEN	4.74E-05	4.71E-05	6.42E-07	4.78E-05	4.84E-05	3.09E-04	4.69E-05	4.69E-05
CHILD	5.73E-05	5.67E-05	1.19E-06	5.78E-05	5.86E-05	4.53E-04	5.66E-05	5.66E-05

TABLE VI-A-27

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 11 MILK  
 AT 3.65 MILES W

4TH QUARTER BETA AIR DOSE = 1.02E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 7.17E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.69E-03	4.69E-03	4.69E-03	4.69E-03	4.69E-03	4.69E-03	4.79E-03	1.25E-02
COW MILK								
ADULT	4.69E-05	4.59E-05	2.20E-06	4.83E-05	5.05E-05	1.07E-03	4.51E-05	4.51E-05
TEEN	6.18E-05	5.99E-05	3.99E-06	6.43E-05	6.84E-05	1.69E-03	5.88E-05	5.88E-05
CHILD	9.84E-05	9.37E-05	9.67E-06	1.03E-04	1.09E-04	3.31E-03	9.28E-05	9.28E-05
INFANT	1.51E-04	1.42E-04	2.02E-05	1.65E-04	1.69E-04	7.96E-03	1.41E-04	1.41E-04

TABLE VI-A-28

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 12 RES. BEEF  
 AT 1.91 MILES WNW

4TH QUARTER BETA AIR DOSE = 4.57E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.49E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.67E-04	8.67E-04	8.67E-04	8.67E-04	8.67E-04	8.67E-04	9.13E-04	2.54E-03
GROUND	1.99E-06	2.42E-06						
MEAT								
ADULT	1.40E-04	1.39E-04	1.14E-06	1.41E-04	1.42E-04	6.74E-04	1.39E-04	1.39E-04
TEEN	8.36E-05	8.32E-05	9.48E-07	8.42E-05	8.52E-05	4.70E-04	8.29E-05	8.29E-05
CHILD	1.01E-04	1.00E-04	1.76E-06	1.02E-04	1.03E-04	6.85E-04	1.00E-04	1.00E-04
INHAL								
ADULT	5.38E-04	5.36E-04	2.50E-06	5.39E-04	5.42E-04	1.72E-03	5.36E-04	5.36E-04
TEEN	5.42E-04	5.40E-04	3.51E-06	5.44E-04	5.47E-04	1.99E-03	5.39E-04	5.39E-04
CHILD	4.79E-04	4.77E-04	4.76E-06	4.81E-04	4.85E-04	2.09E-03	4.77E-04	4.77E-04
INFANT	2.76E-04	2.74E-04	3.76E-06	2.79E-04	2.79E-04	1.74E-03	2.74E-04	2.74E-04

TABLE VI-A-29

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 13 VEG  
 AT 1.93 MILES WNW

4TH QUARTER BETA AIR DOSE = 4.50E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.47E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.53E-04	8.53E-04	8.53E-04	8.53E-04	8.53E-04	8.53E-04	8.98E-04	2.50E-03
VEGET ADULT	9.60E-04	9.56E-04	9.35E-06	9.66E-04	9.75E-04	5.34E-03	9.52E-04	9.52E-04
TEEN	1.10E-03	1.09E-03	8.90E-06	1.10E-03	1.11E-03	4.73E-03	1.09E-03	1.09E-03
CHILD	1.70E-03	1.69E-03	1.66E-05	1.71E-03	1.72E-03	7.20E-03	1.69E-03	1.69E-03

TABLE VI-A-30

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 14 MILK  
 AT 2.78 MILES WNW

4TH QUARTER BETA AIR DOSE = 2.08E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 6.76E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04	4.14E-04	1.16E-03
COW MILK								
ADULT	1.54E-04	1.51E-04	6.72E-06	1.58E-04	1.65E-04	3.30E-03	1.49E-04	1.49E-04
TEEN	2.03E-04	1.97E-04	1.22E-05	2.11E-04	2.23E-04	5.18E-03	1.93E-04	1.93E-04
CHILD	3.23E-04	3.08E-04	2.96E-05	3.35E-04	3.55E-04	1.01E-02	3.06E-04	3.06E-04
INFANT	4.96E-04	4.66E-04	6.18E-05	5.37E-04	5.49E-04	2.44E-02	4.64E-04	4.64E-04

TABLE VI-A-31

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 15 RES  
 AT 2.40 MILES NW

4TH QUARTER BETA AIR DOSE = 5.83E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.90E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.11E-03	1.11E-03	1.11E-03	1.11E-03	1.11E-03	1.11E-03	1.16E-03	3.24E-03
GROUND	2.44E-06	2.96E-06						
INHAL ADULT	6.87E-04	6.85E-04	3.18E-06	6.88E-04	6.92E-04	2.19E-03	6.84E-04	6.84E-04
TEEN	6.92E-04	6.89E-04	4.47E-06	6.95E-04	6.99E-04	2.53E-03	6.88E-04	6.88E-04
CHILD	6.12E-04	6.09E-04	6.07E-06	6.15E-04	6.19E-04	2.66E-03	6.09E-04	6.09E-04
INFANT	3.52E-04	3.50E-04	4.78E-06	3.56E-04	3.57E-04	2.22E-03	3.50E-04	3.50E-04

TABLE VI-A-32

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 16 VEG  
 AT 2.32 MILES NW

4TH QUARTER BETA AIR DOSE = 5.94E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.94E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.13E-03	1.13E-03	1.13E-03	1.13E-03	1.13E-03	1.13E-03	1.19E-03	3.30E-03
VEGET								
ADULT	1.27E-03	1.26E-03	1.19E-05	1.27E-03	1.29E-03	6.84E-03	1.26E-03	1.26E-03
TEEN	1.45E-03	1.44E-03	1.13E-05	1.46E-03	1.47E-03	6.07E-03	1.44E-03	1.44E-03
CHILD	2.24E-03	2.23E-03	2.11E-05	2.25E-03	2.26E-03	9.23E-03	2.23E-03	2.23E-03

TABLE VI-A-33

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 1 MILK,PORK  
 AT 3.47 MILES NW

4TH QUARTER BETA AIR DOSE = 2.84E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 9.25E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	5.38E-04	5.38E-04	5.38E-04	5.38E-04	5.38E-04	5.38E-04	5.66E-04	1.58E-03
MEAT								
ADULT	8.71E-05	8.68E-05	5.88E-07	8.74E-05	8.80E-05	3.62E-04	8.66E-05	8.66E-05
TEEN	5.20E-05	5.18E-05	4.89E-07	5.23E-05	5.28E-05	2.51E-04	5.17E-05	5.17E-05
CHILD	6.29E-05	6.25E-05	9.06E-07	6.33E-05	6.39E-05	3.64E-04	6.24E-05	6.24E-05
COW MILK								
ADULT	2.10E-04	2.06E-04	8.11E-06	2.15E-04	2.23E-04	4.01E-03	2.03E-04	2.03E-04
TEEN	2.76E-04	2.69E-04	1.47E-05	2.86E-04	3.00E-04	6.28E-03	2.65E-04	2.65E-04
CHILD	4.39E-04	4.22E-04	3.57E-05	4.54E-04	4.78E-04	1.23E-02	4.19E-04	4.19E-04
INFANT	6.74E-04	6.38E-04	7.45E-05	7.23E-04	7.38E-04	2.95E-02	6.35E-04	6.35E-04

TABLE VI-A-34

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 2 BEEF  
 AT 1.06 MILES NNW

4TH QUARTER BETA AIR DOSE = 3.62E-02 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 1.18E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.85E-03	6.85E-03	6.85E-03	6.85E-03	6.85E-03	6.85E-03	7.22E-03	2.01E-02
MEAT								
ADULT	1.11E-03	1.10E-03	1.40E-05	1.12E-03	1.13E-03	7.65E-03	1.10E-03	1.10E-03
TEEN	6.63E-04	6.58E-04	1.16E-05	6.71E-04	6.83E-04	5.40E-03	6.55E-04	6.55E-04
CHILD	8.03E-04	7.93E-04	2.15E-05	8.12E-04	8.26E-04	7.95E-03	7.91E-04	7.91E-04

TABLE VI-A-35

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 3 VEG, RES  
 AT 2.01 MILES NNW

4TH QUARTER BETA AIR DOSE = 8.90E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 2.90E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.69E-03	1.69E-03	1.69E-03	1.69E-03	1.69E-03	1.69E-03	1.78E-03	4.95E-03
GROUND	4.75E-06	5.77E-06						
VEGET ADULT	1.91E-03	1.90E-03	2.23E-05	1.92E-03	1.94E-03	1.23E-02	1.89E-03	1.89E-03
TEEN	2.18E-03	2.17E-03	2.12E-05	2.19E-03	2.21E-03	1.08E-02	2.16E-03	2.16E-03
CHILD	3.37E-03	3.35E-03	3.95E-05	3.39E-03	3.41E-03	1.65E-02	3.35E-03	3.35E-03
INHAL ADULT	1.05E-03	1.05E-03	4.90E-06	1.05E-03	1.06E-03	3.36E-03	1.05E-03	1.05E-03
TEEN	1.06E-03	1.05E-03	6.89E-06	1.06E-03	1.07E-03	3.90E-03	1.05E-03	1.05E-03
CHILD	9.36E-04	9.31E-04	9.35E-06	5.40E-04	9.46E-04	4.09E-03	9.31E-04	9.31E-04
INFANT	5.39E-04	5.35E-04	7.38E-06	5.44E-04	5.45E-04	3.42E-03	5.35E-04	5.35E-04

TABLE VI-A-36

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 02-14-86 RETS  
 SPECIAL LOCATION # 4 PORK  
 AT 3.70 MILES NNW

4TH QUARTER BETA AIR DOSE = 2.59E-03 MILLRADS  
 4TH QUARTER GAMMA AIR DOSE = 8.43E-04 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	4.91E-04	4.91E-04	4.91E-04	4.91E-04	4.91E-04	4.91E-04	5.17E-04	1.44E-03
MEAT								
ADULT	7.96E-05	7.93E-05	6.26E-07	7.99E-05	8.06E-05	3.73E-04	7.90E-05	7.90E-05
TEEN	4.75E-05	4.73E-05	5.21E-07	4.79E-05	4.84E-05	2.60E-04	4.72E-05	4.72E-05
CHILD	5.75E-05	5.70E-05	9.65E-07	5.79E-05	5.86E-05	3.74E-04	5.70E-05	5.70E-05

TABLE VI-B-1

FORT CALHOUN 1 4TH QUARTER 10/85-12/85 TRI-EX TOWER DATA 02-19-86 RETS  
 4TH QUARTER ALARA INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.02E-02 25.31%	1.02E-02 25.50%	1.02E-02 93.82%	1.02E-02 25.09%	1.02E-02 24.76%	1.02E-02 3.42%	1.10E-02 26.97%	3.66E-02 55.18%
GROUND	2.48E-05 0.06%	2.48E-05 0.06%	2.48E-05 0.23%	2.48E-05 0.06%	2.48E-05 0.06%	2.48E-05 0.01%	2.48E-05 0.06%	3.01E-05 0.05%
INHAL	9.09E-03 22.49%	9.07E-03 22.60%	4.66E-05 0.43%	9.12E-03 22.36%	9.16E-03 22.17%	2.90E-02 9.69%	9.06E-03 22.24%	9.06E-03 13.65%
VEGET	1.42E-02 35.12%	1.40E-02 34.94%	3.81E-04 3.49%	1.44E-02 35.32%	1.47E-02 35.63%	1.66E-01 55.42%	1.39E-02 34.20%	1.39E-02 20.99%
COW MILK	3.72E-03 9.20%	3.63E-03 9.05%	1.94E-04 1.78%	3.82E-03 9.37%	3.98E-03 9.63%	7.89E-02 26.41%	3.59E-03 8.81%	3.59E-03 5.41%
MEAT	3.16E-03 7.82%	3.15E-03 7.85%	2.79E-05 0.26%	3.18E-03 7.80%	3.20E-03 7.75%	1.51E-02 5.05%	3.14E-03 7.71%	3.14E-03 4.73%
*TOTAL*	4.04E-02	4.01E-02	1.09E-02	4.08E-02	4.13E-02	2.99E-01	4.07E-02	6.64E-02

TABLE VI-B-2

FORT CALHOUN 1 DOSE CONTRIBUTIONS FROM GASEOUS EFFLUENTS  
UNRESTRICTED AREA BOUNDARY  
REQUIRED BY TECHNICAL SPECIFICATION 5.9.4 a.

QUARTERLY FOR OCT 85 TO DEC 85

MAXIMUM SITE BOUNDARY GAMMA AIR DOSE = 3.75E-02 MILLIRAD

MAXIMUM SITE BOUNDARY BETA AIR DOSE = 1.16E-01 MILLIRAD

TABLE VI-C-1

FT. CALHOUN 1 4TH QUARTER RELEASES FOR OCT 1985 TO DEC 1985 02-20-86 RETS

DISCHARGE=8.02E+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

FT. CALHOUN S. TERMS 10/85-12/85

NO RECONCENTRATION OF NUCLIDES

\* \* \* ADULT DOSE FACTORS \* \* \*

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)				RECON
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY			
27CO 57	9.09E-07	0.00E+00	1.75E-07	2.91E-07	0.00E+00	0.00E+00	0.00E+00	4.44E-06	1.00E-09	9.10E-10	1.00E+00		
53I 131	6.23E-03	4.16E-06	5.96E-06	3.41E-06	1.95E-03	1.02E-05	0.00E+00	1.57E-06	3.40E-09	2.80E-09	1.00E+00		
56BA 140	5.59E-05	2.03E-05	2.55E-08	1.34E-06	0.00E+00	8.68E-09	1.46E-08	4.18E-05	2.40E-09	2.10E-09	1.00E+00		
55CS 137	3.59E-02	7.98E-05	1.09E-04	7.15E-05	0.00E+00	3.71E-05	1.23E-05	2.10E-06	4.90E-09	4.20E-09	1.00E+00		
41NB 95	2.80E-05	6.23E-09	3.46E-09	1.36E-09	0.00E+00	3.43E-09	0.00E+00	2.10E-05	6.00E-09	5.10E-09	1.00E+00		
55CS 134	2.33E-02	6.22E-05	1.48E-04	1.21E-04	0.00E+00	4.80E-05	1.59E-05	2.59E-06	1.40E-08	1.20E-08	1.00E+00		
27CO 58	9.41E-02	0.00E+00	7.46E-07	1.67E-06	0.00E+00	0.00E+00	0.00E+00	1.51E-05	8.20E-09	7.00E-09	1.00E+00		
25MN 54	1.02E-03	0.00E+00	4.57E-06	8.73E-07	0.00E+00	1.36E-06	0.00E+00	1.40E-05	6.80E-09	5.80E-09	1.00E+00		
55CS 136	1.96E-04	6.51E-06	2.57E-05	1.85E-05	0.00E+00	1.43E-05	1.96E-06	2.92E-06	1.70E-08	1.50E-08	1.00E+00		
27CO 60	1.64E-03	0.00E+00	2.15E-06	4.72E-06	0.00E+00	0.00E+00	0.00E+00	4.02E-05	2.00E-08	1.70E-08	1.00E+00		
57LA 140	8.21E-05	2.50E-09	1.26E-09	3.34E-10	0.00E+00	0.00E+00	0.00E+00	9.25E-05	1.70E-08	1.50E-08	1.00E+00		
51SB 124	8.72E-05	2.81E-06	5.30E-08	1.11E-06	6.79E-09	0.00E+00	0.00E+00	2.18E-06	7.95E-05	1.50E-08	1.00E+00		
IH 3	1.52E+01	0.00E+00	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	0.00E+00	0.00E+00	1.00E+00		
47AG 110M	3.07E-03	1.60E-07	1.48E-07	8.80E-08	0.00E+00	2.91E-07	0.00E+00	6.04E-05	2.10E-08	1.80E-08	1.00E+00		
51SB 125	6.79E-05	2.23E-06	2.40E-08	4.48E-07	1.98E-09	0.00E+00	2.33E-04	1.97E-05	3.50E-09	3.10E-09	1.00E+00		

TABLE VI-C-2

\* \* \* TEENAGER DOSE FACTORS \* \* \*

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)		RECON
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	
53I 131	6.23E-03	5.57E-06	7.87E-06	4.69E-06	2.27E-03	1.02E-05	0.00E+00	1.49E-06			
56BA 140	5.59E-05	2.83E-05	3.48E-08	1.82E-06	0.00E+00	8.68E-09	2.33E-08	4.14E-06			
55CS 137	3.59E-02	1.07E-04	1.44E-04	5.05E-05	0.00E+00	3.71E-05	1.91E-05	1.92E-06			
41NB 95	2.80E-05	7.24E-09	4.36E-09	2.46E-09	0.00E+00	3.43E-09	0.00E+00	1.78E-05			
55CS 134	2.33E-02	8.05E-05	1.94E-04	9.06E-05	0.00E+00	4.80E-05	2.35E-05	2.24E-06			
27CO 58	9.41E-02	0.00E+00	9.92E-07	2.26E-06	0.00E+00	0.00E+00	0.00E+00	1.34E-05			
27CO 60	1.64E-03	0.00E+00	2.76E-06	6.30E-06	0.00E+00	0.00E+00	0.00E+00	3.31E-05			
57LA 140	8.21E-05	3.48E-09	1.72E-09	4.55E-10	0.00E+00	0.00E+00	0.00E+00	9.48E-05			
IH 3	1.52E+01	0.00E+00	1.06E-07	1.06E-07	1.06E-07	1.34E-07	1.06E-07	1.06E-07			
47AG 110M	3.07E-03	2.05E-07	1.94E-07	1.18E-07	0.00E+00	2.91E-07	0.00E+00	5.45E-05			

\* \* \* CHILD DOSE FACTORS \* \* \*

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)		RECON
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	
53I 131	6.23E-03	1.63E-05	1.67E-05	1.26E-05	5.43E-03	1.02E-05	0.00E+00	1.43E-06			
56BA 140	5.59E-05	8.26E-05	7.25E-08	4.85E-08	0.00E+00	8.68E-09	4.32E-08	4.21E-06			
55CS 137	3.59E-02	3.12E-04	3.02E-04	4.50E-05	0.00E+00	3.71E-05	3.54E-05	1.84E-06			
41NB 95	2.80E-05	1.95E-08	8.32E-09	6.11E-09	0.00E+00	3.43E-09	0.00E+00	1.44E-05			
55CS 134	2.33E-02	2.24E-04	3.77E-04	8.02E-05	0.00E+00	4.80E-05	4.19E-05	2.04E-06			
27CO 58	9.41E-02	0.00E+00	1.85E-06	5.58E-06	0.00E+00	0.00E+00	0.00E+00	1.10E-05			
27CO 60	1.64E-03	0.00E+00	5.17E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	2.86E-05			
57LA 140	8.21E-05	1.01E-08	3.52E-09	1.19E-09	0.00E+00	0.00E+00	0.00E+00	1.00E-04			
IH 3	1.52E+01	0.00E+00	2.03E-07	2.03E-07	2.03E-07	1.34E-07	2.03E-07	2.03E-07			
47AG 110M	3.07E-03	5.39E-07	3.64E-07	2.91E-07	0.00E+00	2.91E-07	0.00E+00	4.33E-05			

\* \* \* INFANT DOSE FACTORS \* \* \*

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)		RECON
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	
53I 131	6.23E-03	3.42E-05	4.07E-05	2.38E-05	1.31E-02	1.02E-05	0.00E+00	1.53E-06			
56BA 140	5.59E-05	1.74E-04	1.75E-07	8.99E-06	0.00E+00	8.68E-09	1.07E-07	4.43E-06			
55CS 137	3.59E-02	6.53E-04	7.31E-04	4.20E-05	0.00E+00	3.71E-05	8.81E-05	1.89E-06			
41NB 95	2.80E-05	3.89E-08	1.75E-08	1.03E-08	0.00E+00	3.43E-09	0.00E+00	1.40E-05			
55CS 134	2.33E-02	4.58E-04	8.24E-04	6.97E-05	0.00E+00	4.80E-05	9.42E-05	1.96E-06			
27CO 58	9.41E-02	0.00E+00	3.78E-06	9.26E-06	0.00E+00	0.00E+00	0.00E+00	9.79E-06			
27CO 60	1.64E-03	0.00E+00	1.07E-05	2.56E-05	0.00E+00	0.00E+00	0.00E+00	2.64E-05			
57LA 140	8.21E-05	2.12E-08	8.37E-09	2.16E-09	0.00E+00	0.00E+00	0.00E+00	1.04E-04			
IH 3	1.52E+01	0.00E+00	3.07E-07	3.07E-07	3.07E-07	1.34E-07	3.07E-07	3.07E-07			
47AG 110M	3.07E-03	9.96E-07	7.27E-07	4.81E-07	0.00E+00	2.91E-07	0.00E+00	3.77E-05			

TOTAL NUMBER IN SOURCE TERM IS 15 TOTAL RELEASE IS 1.5366E+01

TABLE VI-C-3

\* \* \* AS LOW AS REASONABLY ACHIEVABLE \* \* \*

A D U L T   D O S E S

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.46E-02	5.91E-02	4.33E-02	6.78E-04	1.97E-02	6.53E-03	1.49E-03
DRINKING		1.44E-04	3.15E-04	2.52E-04	4.43E-04	1.50E-04	9.47E-05	1.28E-04
SHORELINE	4.22E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05
SWIMMING	0.00E+00	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.96E-07
BOATING	0.00E+00	3.48E-07	3.48E-07	3.48E-07	3.48E-07	3.48E-07	3.48E-07	3.48E-07
TOTAL	4.22E-05	3.48E-02	5.95E-02	4.36E-02	1.16E-03	1.99E-02	6.66E-03	1.66E-03

	USAGE (KG/YR,HR/YR)	DILUTION	TIME(HR)	SHOREWIDTH FACTOR=0.2
FISH	21.0	7.3	24.00	
DRINKING	730.0	30.8	18.60	
SHORELINE	12.0	7.3	0.00	
SWIMMING	12.0	7.3	0.00	
BOATING	12.0	7.3	0.00	

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
FISH		CS 137	66%	CS 137	66%	CS 137	47%	I 131	98%	CS 137	54%	CS 137	54%	CS 137	40%	
		CS 134	33%	CS 134	33%	CS 134	52%	H 3	1%	CS 134	45%	CS 134	45%	NB 95	4%	
														CS 134	32%	
DRINKING		CS 137	66%	CS 137	41%	CS 137	33%	I 131	84%	I 131	1%	CS 137	15%	CS 137	1%	
		CS 134	33%	CS 134	36%	CS 134	37%	H 3	15%	CS 137	29%	CS 134	12%	CS 134	1%	
				H 3	21%	CO 58	2%			CS 134	24%	H 3	71%	CO 58	36%	
						H 3	26%			H 3	44%			CO 60	1%	
														H 3	52%	
														AG 110M	4%	
SHORELINE		CS 137	60%	CS 137	60%											
		CS 134	25%	CS 134	25%											
		CO 58	5%	CO 58	5%											
		CO 60	5%	CO 60	5%											
		AG 110M	1%	AG 110M	1%											
SWIM M F				I 131	1%											
				CS 137	11%											
				CS 134	22%											
				CO 58	55%											
				CO 60	2%											
			AG 110M	4%												

TABLE VI-C-4

\* \* \* AS LOW AS REASONABLY ACHIEVABLE \* \* \*

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.50E-02	5.93E-02	2.40E-02	6.00E-04	1.50E-02	7.55E-03	1.01E-03
DRINKING		1.33E-04	2.65E-04	1.34E-04	3.43E-04	1.05E-04	6.61E-05	7.49E-05
SHORELINE	2.36E-04	2.02E-04	2.02E-04	2.02E-04	2.02E-04	2.02E-04	2.02E-04	2.02E-04
SWIMMING	0.00E+00	3.89E-06	3.89E-06	3.89E-06	3.89E-06	3.89E-06	3.89E-06	3.89E-06
BOATING	0.00E+00	1.94E-06	1.94E-06	1.94E-06	1.94E-06	1.94E-06	1.94E-06	1.94E-06
TOTAL	2.36E-04	3.53E-02	5.98E-02	2.44E-02	1.15E-03	1.53E-02	7.82E-03	1.29E-03

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

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI		
FISH	CS 137	67%	CS 137	53%	CS 137	46%	I 131	99%	CS 137	41%
	CS 134	32%	CS 134	46%	CS 134	53%	CS 137	54%	CS 137	55%
							CS 134	45%	CS 134	44%
DRINKING	CS 137	66%	CS 137	45%	CS 137	31%	I 131	89%	I 131	1%
	CS 134	32%	CS 134	39%	CS 134	36%	H 3	10%	CS 137	29%
			H 3	14%	CO 58	3%	CS 134	24%	CS 137	23%
					H 3	27%	H 3	44%	CS 134	19%
									H 3	56%
SHORELINE	CS 137	60%	CS 137	60%					CS 137	2%
	CS 134	25%	CS 134	25%					CS 134	1%
	CO 58	5%	CO 58	5%					CO 58	38%
	CO 60	5%	CO 60	5%					CO 60	1%
	AG 110M	1%	AG 110M	1%					H 3	46%
SWIM M F									AG 110M	5%
			I 131	1%						
			CS 137	11%						
			CS 134	22%						
			CO 58	55%						

TABLE VI-C-5

\* \* \* AS LOW AS REASONABLY ACHIEVABLE \* \* \*

CHILD DOSES

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		4.33E-02	5.18E-02	9.24E-03	6.18E-04	6.47E-03	5.93E-03	3.99E-04
DRINKING		3.82E-04	5.31E-04	1.66E-04	8.02E-04	1.05E-04	1.24E-04	1.03E-04
SHORELINE	4.92E-05	4.22E-05	4.22E-05	4.22E-05	4.22E-05	4.22E-05	4.22E-05	4.22E-05
SWIMMING	0.00E+00	8.12E-07	8.12E-07	8.12E-07	8.12E-07	8.12E-07	8.12E-07	8.12E-07
BOATING	0.00E+00	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07
TOTAL	4.92E-05	4.37E-02	5.23E-02	9.45E-03	1.46E-03	6.62E-03	6.10E-03	5.45E-04

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

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 68%	CS 137 55%	CS 137 46%	I 131 99%	CS 137 54%	CS 137 56%	CS 137 43%
		CS 134 31%	CS 134 44%	CS 134 53%		CS 134 45%	CS 134 43%	NB 95 3%
								CS 134 31%
								CO 58 16%
								MN 54 1%
DRINKING		CS 137 67%	CS 137 47%	I 131 1%	I 131 91%	I 131 1%	CS 137 23%	CS 137 1%
		CS 134 31%	CS 134 38%	CS 137 22%	H 3 8%	CS 137 29%	CS 134 18%	CS 134 1%
			H 3 13%	CS 134 25%		CS 134 24%	H 3 57%	CO 58 23%
				CO 58 7%		H 3 44%		CO 60 1%
				H 3 42%				H 3 69%
								AG 110M 2%
SHORELINE	CS 137 60%	CS 137 60%						
	CS 134 25%	CS 134 25%						
	CO 58 5%	CO 58 5%						
	CO 60 5%	CO 60 5%						
	AG 110M 1%	AG 110M 1%						
SWIM M F		I 131 1%						
		CS 137 11%						
		CS 134 22%						
		CO 58 55%						
		CO 60 2%						
		AG 110M 4%						

TABLE VI-C-6

\* \* \* AS LOW AS REASONABLY ACHIEVABLE \* \* \*

I N F A N T D O S E S

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	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		5.13E-04	7.58E-04	1.32E-04	1.21E-03	6.80E-05	1.50E-04	8.81E-05
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	5.13E-04	7.58E-04	1.32E-04	1.21E-03	6.80E-05	1.50E-04	8.81E-05

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

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
				I 131	CO 58	I 131	H 3	I 131	CS 137	CS 134	H 3	CS 137	CO 58
DRINKING		CS 137 68%	CS 137 51%	I 131 1%		I 131 94%		I 131 1%	CS 137 31%	CS 137 1%		CS 137 1%	
		CS 134 31%	CS 134 37%	CS 137 17%		H 3 5%		CS 137 29%	CS 134 21%	CS 134 21%		CO 58 15%	
			H 3 9%	CS 134 18%				CS 134 24%	H 3 46%	H 3 46%		H 3 79%	
				CO 58 9%				H 3 44%				AG 110M 1%	
				H 3 52%									

TABLE VI-C-7

\* \* \* SELECTED LOCATION \* \* \*

LOCATION IS SITE DISCHG.

A D U L T D O S E S

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		2.53E-01	4.32E-01	3.16E-01	4.95E-03	1.44E-01	4.76E-02	1.09E-02
DRINKING		4.42E-03	9.69E-03	7.75E-03	1.39E-02	4.64E-03	2.92E-03	3.95E-03
SHORELINE	3.08E-04	2.64E-04	2.64E-04	2.64E-04	2.64E-04	2.64E-04	2.64E-04	2.64E-04
SWIMMING	0.00E+00	5.08E-06	5.08E-06	5.08E-06	5.08E-06	5.08E-06	5.08E-06	5.08E-06
BOATING	0.00E+00	2.54E-06	2.54E-06	2.54E-06	2.54E-06	2.54E-06	2.54E-06	2.54E-06
TOTAL	3.08E-04	2.57E-01	4.42E-01	3.24E-01	1.92E-02	1.49E-01	5.08E-02	1.51E-02

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

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
FISH	CS 137	66%	CS 137	53%	CS 137	47%	CS 137	47%	I 131	98%	CS 137	54%	CS 137	54%	CS 137	40%
	CS 134	33%	CS 134	46%	CS 134	52%	CS 134	52%	H 3	1%	CS 134	45%	CS 134	45%	NB 95	4%
DRINKING	CS 137	65%	CS 137	41%	CS 137	33%	CS 137	33%	I 131	85%	I 131	1%	CS 137	15%	CS 137	1%
	CS 134	33%	CS 134	36%	CS 134	37%	CS 134	37%	H 3	14%	CS 137	29%	CS 134	12%	CS 134	1%
			H 3	21%	CO 58	2%	CO 58	2%			CS 134	24%	H 3	71%	CO 58	36%
					H 3	26%	H 3	26%			H 3	44%			CO 60	1%
SHORELINE	CS 137	60%	CS 137	60%											H 3	52%
	CS 134	25%	CS 134	25%											AG 110M	4%
	CO 58	5%	CO 58	5%												
	CO 60	5%	CO 60	5%												
	AG 110M	1%	AG 110M	1%												
SWIM M F			I 131	1%												
			CS 137	11%												
			CS 134	22%												
			CO 58	55%												
			CO 60	2%												

TABLE VI-C-8

\* \* \* SELECTED LOCATION \* \* \*

LOCATION IS SITE DISCHG.

TEENAGER DOSES

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		2.55E-01	4.33E-01	1.76E-01	4.38E-03	1.10E-01	5.51E-02	7.39E-03
DRINKING		4.09E-03	8.15E-03	4.12E-03	1.08E-02	3.24E-03	2.04E-03	2.31E-03
SHORELINE	1.72E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03
SWIMMING	0.00E+00	2.84E-05	2.84E-05	2.84E-05	2.84E-05	2.84E-05	2.84E-05	2.84E-05
BOATING	0.00E+00	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05
TOTAL	1.72E-03	2.61E-01	4.43E-01	1.81E-01	1.67E-02	1.14E-01	5.86E-02	1.12E-02

SHOREWIDTH FACTOR=0.2

PATHWAY	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)
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 67%	CS 137 53%	CS 137 46%	I 131 99%	CS 137 54%	CS 137 55%	CS 137 41%	
		CS 134 32%	CS 134 46%	CS 134 53%		CS 134 45%	CS 134 44%	NB 95 4%	CS 134 31%
DRINKING		CS 137 66%	CS 137 45%	CS 137 31%	I 131 89%	I 131 1%	CS 137 23%	CS 137 2%	
		CS 134 32%	CS 134 39%	CS 134 36%		H 3 10%	CS 137 29%	CS 134 19%	CS 134 1%
			H 3 14%	CO 58 3%		CS 134 24%	H 3 56%	CO 60 1%	H 3 49%
				H 3 27%		H 3 44%		AG 110M 5%	
SHORELINE	CS 137 60%	CS 137 60%							
	CS 134 25%	CS 134 25%							
	CO 58 5%	CO 58 5%							
	CO 60 5%	CO 60 5%							
	AG 110M 1%	AG 110M 1%							
SWIM M f		I 131 1%							
		CS 137 11%							
		CS 134 22%							
		CO 58 55%							
		CO 60 2%							

TABLE VI-C-9

• • • SELECTED LOCATION • • •  
 LOCATION IS SITE DISCHG.

C H I L D   D O S E S

PATHWAY	DOSE (MREM PER 5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.16E-01	3.78E-01	6.74E-02	4.51E-03	4.72E-02	4.33E-02	2.91E-03
DRINKING		1.18E-02	1.64E-02	5.12E-03	2.53E-02	3.24E-03	3.81E-03	3.16E-03
SHORELINE	3.59E-04	3.08E-04	3.08E-04	3.08E-04	3.08E-04	3.08E-04	3.08E-04	3.08E-04
SWIMMING	0.00E+00	5.93E-06	5.93E-06	5.93E-06	5.93E-06	5.93E-06	5.93E-06	5.93E-06
BOATING	0.00E+00	2.96E-06	2.96E-06	2.96E-06	2.96E-06	2.96E-06	2.96E-06	2.96E-06
TOTAL	3.59E-04	3.28E-01	3.95E-01	7.29E-02	3.01E-02	5.08E-02	4.74E-02	6.40E-03

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

• • • ISOTOPE CONTRIBUTION • • •

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
	FISH	CS 137	68%	CS 137	68%	CS 137	55%	CS 137	46%	I 131	99%	CS 137	54%	CS 137	56%	CS 137
	CS 134	31%	CS 134	31%	CS 134	44%	CS 134	53%			CS 134	45%	CS 134	43%	CS 134	31%
															CO 58	16%
															MN 54	1%
DRINKING	CS 137	67%	CS 137	67%	CS 137	47%	I 131	1%	I 131	91%	I 131	1%	CS 137	23%	CS 137	1%
	CS 134	31%	CS 134	38%	CS 134	38%	CS 137	22%	H 3	8%	CS 137	29%	CS 134	18%	CS 134	1%
			H 3	13%	H 3	13%	CS 134	25%			CS 134	24%	H 3	57%	CO 58	23%
							CO 58	7%			H 3	44%			CO 60	1%
							H 3	42%							H 3	69%
															AG 110M	2%
SHORELINE	CS 137	60%	CS 137	60%												
	CS 134	25%	CS 134	25%												
	CO 58	5%	CO 58	5%												
	CO 60	5%	CO 60	5%												
	AG 110M	1%	AG 110M	1%												
SWIM M F			I 131	1%												
			CS 137	11%												
			CS 134	22%												
			CO 58	55%												
			CO 60	2%												
			AG 110M	4%												

TABLE VI-C-10

• • • SELECTED LOCATION • • •

LOCATION IS SITE DISCHG.

I N F A N T D O S E S

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	0.00E+00
DRINKING	1.58E-02	1.58E-02	2.34E-02	4.08E-03	3.81E-02	2.10E-03	4.62E-03	2.71E-03
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	1.58E-02	2.34E-02	4.08E-03	3.81E-02	2.10E-03	4.62E-03	2.71E-03

USAGE (KG/YR,HR/YR)

FISH	0.0	DILUTION	1.0	TIME(HR)	24.00
DRINKING	330.0		1.0		12.00

SHOREWIDTH FACTOR=0.2

• • • ISOTOPE CONTRIBUTION • • •

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	CS 137 68%	CS 137 51%	I 131 1%	I 131 1%	I 131 94%	I 131 1%	CS 137 31%	CS 137 1%
	CS 134 31%	CS 134 37%	CS 137 17%	CS 137 17%	H 3 5%	CS 137 29%	CS 134 21%	CO 58 15%
		H 3 9%	CS 134 18%	CO 58 18%	CS 134 24%	H 3 44%	H 3 46%	H 3 79%
			H 3 52%				AG 110M 1%	

TABLE VI-D-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	9.40E-02	1.60E-01	1.17E-01	1.11E-03	5.34E-02	1.77E-02	3.98E-03
FISH	TEENAGER	9.29E+03	1.99E-02	3.37E-02	1.37E-02	2.05E-04	8.54E-03	4.29E-03	5.66E-04
FISH	CHILD	5.61E+03	3.46E-02	4.13E-02	7.36E-03	2.95E-04	5.16E-03	4.73E-03	3.14E-04
FISH	TOTAL	7.30E+04	1.48E-01	2.35E-01	1.38E-01	1.61E-03	6.71E-02	2.67E-02	4.86E-03

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

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	66%	CS 137	53%	CS 137	47%	I 131	98%	CS 137	54%	CS 137	54%	CS 137	41%
	CS 134	33%	CS 134	46%	CS 134	52%	H 3	1%	CS 134	45%	CS 134	45%	NB 95	4%
TEENAGER	CS 137	67%	CS 137	53%	CS 137	46%	I 131	98%	CS 137	54%	CS 137	55%	CS 137	42%
	CS 134	32%	CS 134	46%	CS 134	53%	H 3	1%	CS 134	45%	CS 134	44%	NB 95	4%
													CS 134	31%
													CO 58	18%
CHILD	CS 137	68%	CS 137	55%	CS 137	46%	I 131	99%	CS 137	54%	CS 137	56%	CS 137	44%
	CS 134	31%	CS 134	44%	CS 134	53%			CS 134	45%	CS 134	43%	NB 95	3%
													CS 134	31%
													CO 58	16%
												MN 54	1%	

TABLE VI-D-2

FISH CONSUMPTION POPULATION DOSES  
MAN-REM

COMMERCIAL HARVEST

COMMERCIAL HARVEST		DOSE (MAN-REM)								
PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
FISH	ADULT	3.35E+06	8.97E-03	1.53E-02	1.12E-02	8.20E-05	5.09E-03	1.69E-03	3.77E-04	
FISH	TEENAGER	5.35E+05	1.90E-03	3.22E-03	1.30E-03	1.52E-05	8.14E-04	4.10E-04	5.36E-05	
FISH	CHILD	3.23E+05	3.30E-03	3.94E-03	7.02E-04	2.18E-05	4.92E-04	4.51E-04	2.97E-05	
FISH	TOTAL	4.20E+06	1.42E-02	2.25E-02	1.32E-02	1.19E-04	6.40E-03	2.55E-03	4.60E-04	

DILUTION 7.30E+00 CATCH 7.30E+04 TIME(HR)-INCLUDES FOOD PROCESSING TIME OF 2.40E+02 HR 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 66%	CS 137 53%	CS 137 47%	I 131 97%	CS 137 54%	CS 137 54%	CS 137 41%
	CS 134 33%	CS 134 46%	CS 134 52%	H 3 2%	CS 134 45%	CS 134 45%	NB 95 4%
TEENAGER	CS 137 67%	CS 137 53%	CS 137 46%	I 131 98%	CS 137 54%	CS 137 55%	CS 137 42%
	CS 134 32%	CS 134 46%	CS 134 53%	H 3 1%	CS 134 45%	CS 134 44%	NB 95 3%
CHILD	CS 137 68%	CS 137 55%	CS 137 46%	I 131 98%	CS 137 54%	CS 137 56%	CS 137 44%
	CS 134 31%	CS 134 44%	CS 134 53%	H 3 1%	CS 134 45%	CS 134 43%	NB 95 3%
							CS 134 31%
							CO 58 17%
							MN 54 1%

NEPA DOSES

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

NEPA DOSES		DOSE (MAN-REM)								
PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
FISH	ADULT	5.81E+04	9.39E-02	1.60E-01	1.17E-01	8.59E-04	5.33E-02	1.77E-02	3.94E-03	
FISH	TEENAGER	9.29E+03	1.99E-02	3.37E-02	1.37E-02	1.59E-04	8.52E-03	4.29E-03	5.61E-04	
FISH	CHILD	5.61E+03	3.45E-02	4.12E-02	7.35E-03	2.29E-04	5.15E-03	4.72E-03	3.11E-04	
FISH	TOTAL	7.30E+04	1.48E-01	2.35E-01	1.38E-01	1.25E-03	6.70E-02	2.67E-02	4.81E-03	

TABLE VI-

• • • 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	2.54E-02	5.56E-02	4.45E-02	7.56E-02	2.66E-02	1.68E-02	2.26E-02
DRINKING	TEENAGER	1.93E+07	5.01E-03	9.98E-03	5.04E-03	1.25E-02	3.97E-03	2.49E-03	2.82E-03
DRINKING	CHILD	2.75E+07	2.06E-02	2.86E-02	8.96E-03	4.16E-02	5.67E-03	6.66E-03	5.53E-03
DRINKING	TOTAL	1.76E+08	5.10E-02	9.43E-02	5.85E-02	1.30E-01	3.62E-02	2.59E-02	3.10E-02

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	CS 137 66%	CS 137 41%	CS 137 33%	I 131 84%	I 131 1%	CS 137 15%	CS 137 1%
	CS 134 33%	CS 134 36%	CS 134 37%	H 3 15%	CS 137 29%	CS 134 12%	CS 134 1%
		H 3 21%	CO 58 2%		CS 134 24%	H 3 71%	CO 58 36%
			H 3 26%		H 3 44%		CO 60 1%
TEENAGER	CS 137 66%	CS 137 45%	CS 137 31%	I 131 88%	I 131 1%	CS 137 23%	CS 137 2%
	CS 134 32%	CS 134 39%	CS 134 36%	H 3 11%	CS 137 29%	CS 134 19%	CS 134 1%
		H 3 14%	CO 58 3%		CS 134 24%	H 3 56%	CO 58 38%
			H 3 27%		H 3 44%		CO 60 1%
CHILD	CS 137 67%	CS 137 47%	CS 137 22%	I 131 90%	I 131 1%	CS 137 23%	CS 137 1%
	CS 134 31%	CS 134 38%	CS 134 25%	H 3 9%	CS 137 29%	CS 134 18%	CS 134 1%
		H 3 13%	CO 58 7%		CS 134 24%	H 3 57%	CO 58 23%
			H 3 42%		H 3 44%		CO 60 1%

-----DOSE (MAN-REM)-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	2.12E+07	4.11E-03	9.01E-03	7.20E-03	1.22E-02	4.31E-03	2.71E-03	3.66E-03
DRINKING	TEENAGER	3.17E+06	8.12E-04	1.62E-03	8.16E-04	2.01E-03	6.42E-04	4.04E-04	4.57E-04
DRINKING	CHILD	4.52E+06	3.33E-03	4.63E-03	1.45E-03	6.73E-03	9.17E-04	1.08E-03	8.95E-04
DRINKING	TOTAL	2.89E+07	8.25E-03	1.53E-02	9.47E-03	2.10E-02	5.87E-03	4.19E-03	5.01E-03

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	CS 137 66%	CS 137 41%	CS 137 33%	I 131 84%	I 131 1%	CS 137 15%	CS 137 1%
	CS 134 33%	CS 134 36%	CS 134 37%	H 3 15%	CS 137 29%	CS 134 12%	CS 134 1%
		H 3 21%	CO 58 2%		CS 134 24%	H 3 71%	CO 58 36%
			H 3 26%		H 3 44%		CO 60 1%

VI-57

TABLE VI-D-4

TEENAGER	CS 137 66%	CS 137 45%	CS 137 31%	I 131 88%	I 131 1%	CS 137 23%	CS 137 2%
	CS 134 32%	CS 134 39%	CS 134 36%	H 3 11%	CS 137 29%	CS 134 19%	CS 134 1%
		H 3 14%	CO 58 3%		CS 134 24%	H 3 56%	CO 58 38%
			H 3 27%		H 3 44%		CO 60 1%
							H 3 49%
CHILD	CS 137 67%	CS 137 47%	CS 137 22%	I 131 90%	I 131 1%	CS 137 23%	CS 137 1%
	CS 134 31%	CS 134 38%	CS 134 25%	H 3 9%	CS 137 29%	CS 134 18%	CS 134 1%
		H 3 13%	CO 58 7%		CS 134 24%	H 3 57%	CO 58 23%
			H 3 42%		H 3 44%		CO 60 1%
							H 3 69%

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

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	CUMUL TOTAL	2.05E+08	5.92E-02	1.10E-01	6.80E-02	1.51E-01	4.21E-02	3.01E-02	3.60E-02

\_\_\_\_\_HYDROSPHERE TRITIUM DOSE\_\_\_\_\_

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
WATER	TOTAL	2.20E+00	9.51E-12	9.51E-12	9.51E-12	9.51E-12	9.51E-12	9.51E-12	9.51E-12

TABLE VI-D-5

RECREATION POPULATION DOSES

		DOSE (MAN-REM)			
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SHORELINE	TOTAL POPUL	4.10E+07	1.44E-01	1.23E-01	1.23E-01
LOCATION- DOWN STREAM		TRANSIT TIME=0.67E+00 HR			
DILUTION=0.73E+01		SWF=0.2			
ISOTOPE CONTRIBUTION					
AGE GROUP	SKIN	TOTAL BODY			
ADULT		CS 137 60%	CS 137 60%		
		CS 134 25%	CS 134 25%		
		CO 58 5%	CO 58 5%		
		CO 60 5%	CO 60 5%		
		AG 110M 1%	AG 110M 1%		

		DOSE (MAN-REM)			
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SWIMMING	TOTAL POPUL	4.10E+07	0.00E+00	2.38E-03	2.38E-03
LOCATION- DOWN STREAM		TRANSIT TIME=0.67E+00 HR			
DILUTION=0.73E+01					
ISOTOPE CONTRIBUTION					
AGE GROUP	SKIN	TOTAL BODY			
ADULT		I 131 1%			
		CS 137 11%			
		CS 134 22%			
		CO 58 55%			
		CO 60 2%			
		AG 110M 4%			

		DOSE (MAN-REM)			
PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
BOATING	TOTAL POPUL	4.10E+07	0.00E+00	1.19E-03	1.19E-03
LOCATION- DOWN STREAM		TRANSIT TIME=0.67E+00 HR			
DILUTION=0.73E+01					
ISOTOPE CONTRIBUTION					
AGE GROUP	SKIN	TOTAL BODY			
ADULT		I 131 1%			
		CS 137 11%			
		CS 134 22%			
		CO 58 55%			
		CO 60 2%			
		AG 110M 4%			

TABLE VI-D-6

\* \* \* DOSE TO BIOTA \* \* \*

MRADS PER .5YR

	ILUTION= 1.00E+00	TRANSIT TIME= 0.00E+00 HR	
	INTERNAL	EXTERNAL	TOTAL
FISH	8.38E-01	9.70E-01	1.81E+00
INVERTEBRATE	2.30E-01	1.94E+00	2.17E+00
ALGAE	2.87E-01	3.72E-03	2.91E-01
MUSKRAT	4.90E+00	6.46E-01	5.55E+00
RACCOON	2.20E-01	4.83E-01	7.04E-01
HERON	2.97E+01	6.45E-01	3.03E+01
DUCK	4.28E+00	9.68E-01	5.25E+00

\* \* \* ISOTOPE CONTRIBUTION \* \* \*

PATHWAY	BODY
FISH	CS 137 59%
	CS 134 37%
	CO 58 1%
INVERTEBRATE	CS 137 10%
	CS 134 6%
	CO 58 19%
	MN 54 53%
	AG 110M 6%
ALGAE	CS 137 43%
	CS 134 27%
	CO 58 15%
	MN 54 4%
	LA 140 2%
	AG 110M 1%
MUSKRAT	CS 137 55%
	CS 134 43%
RACCOON	CS 137 46%
	CS 134 39%
	CO 58 3%
	MN 54 9%
HERON	CS 137 53%
	CS 134 46%
DUCK	CS 137 58%
	CS 134 40%

**Omaha Public Power District**  
1623 Harney Omaha, Nebraska 68102-2247  
402/536-4000  
May 1, 1986  
LIC-86-201

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

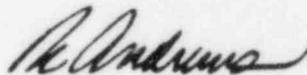
Reference: 1) Docket No. 50-285  
2) Letter from R. L. Andrews to NRC Region IV (LIC-86-081)

Gentlemen:

Semi-Annual and Annual Reports

Please find attached 18 copies of a report that summarizes effluent releases and environmental operations for July 1, 1985 to December 31, 1985, and occupational personnel radiation exposures for January 1, 1985 to December 31, 1985. One copy of this report was previously submitted per Reference (1), and the additional copies are submitted to satisfy Regulatory Guide 10.1. If you have any questions, please contact us.

Sincerely,



R. L. Andrews  
Division Manager  
Nuclear Production

RLA/JRG/me

Enclosure

cc: LeBoeuf, Lamb, Leiby & MacRae  
1333 New Hampshire Ave., N.W.  
Washington, DC 20036

R. D. Martin, Administrator - Region IV  
D. E. Sells, NRC Project Manager  
P. H. Harrell, NRC Senior Resident Inspector

*IKES*  
*1/18*