ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
BROWNS FERRY NUCLEAR PLANT

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

JULY THROUGH DECEMBER 1987

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

SUPPLEMENTAL INFORMATION

SECOND HALF 1987

I. Regulatory Limits

A. Fission and Activation Gases in Gaseous Effluent:

1. The average release rate of fission and activation gases is regulated by the dose limits of 10CFR50 Appendix I. The air dose to areas at and beyond the site boundary due to noble gases released in gaseous effluents per unit shall be limited during any calendar quarter to $\leq$ 5 mrad for gamma radiation and $\leq$ 10 mrad for beta radiation; and during any calendar year to $\leq$ 10 mrad for gamma radiation and $\leq$ 20 mrad for beta radiation.

B and C. Iodines and Particulates with half lives greater than 8 days in gaseous effluents.

1. The average release rate of iodines and particulates in gaseous effluent is regulated by the dose limits of 10CFR50 Appendix I. The dose to a member of the public from radioiodines, radioactive materials in particulate form, and radionuclides other than noble gases with half live greater than 8 days in gaseous effluent released per unit to area at and beyond the site boundary shall be limited to any organ during any calendar quarter to $\leq$ 7.5 mrem, and during any calendar year to $\leq$ 15 mrem.

D. Liquid Effluents

1. The average release rate of radioactive liquid effluents is regulated by the dose limits of 10CFR50 Appendix I. The doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas shall be limited during any calendar quarter to $\leq$ 1.5 mrem to the total body and $\leq$ 5 mrem to any organ and, during any calendar year to $\leq$ 3 mrem to the total body and $\leq$ 10 mrem to any organ.

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II. Maximum Permissible Concentrations

A. Fission and Activation Gases in Gaseous Effluent

1. The instantaneous release rate of fission and activation gases is regulated by the dose rate limit of 10CFR20 Appendix B. The dose rate at any time to areas at and beyond the site boundary due to noble gases released in gaseous effluents from the site shall be limited to < 500 mrem/year to the total body and < 3000 mrem/year to the skin.

2. The BFN Offsite Dose Calculation Manual (ODCM) determines the maximum noble gas release rate based upon the dose rate limits in II.A.1. The instantaneous noble gas release rates are limited by the following equation:

$$\frac{Q1}{0.15} + \frac{Q2}{14.4} \leq 1$$

Q1 = The release rate from the building exhaust vents in Ci/sec.

Q2 = The release rate from the main stack in Ci/sec.

B and C. Iodines and Particulates with Half Lives Greater than 8 Days in Gaseous Effluents

1. The instantaneous release rate of particulates and iodines is regulated by the dose rate limit of 10CFR20 Appendix B. The dose rate at any time to areas at and beyond the site boundary due to I-131, I-133, H-3 and particulates with greater than eight days half-lives released in gaseous effluents from the site shall be limited to <1500 mrem/yr to any organ.

2. The BFN ODCM determines the maximum particulate and iodine release rate based upon the dose rate limit of II. B and C.1. The instantaneous iodine and particulate release rates are limited by the following equation:

$$\frac{Q3}{2.19} + \frac{Q4}{35.7} \leq 1$$

Q3 = The release rate from the building exhaust vents in mCi/sec
Q4 = The release rate from the main stack in mCi/sec.

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D. Liquid Effluents

1. The concentration of radionuclides in liquid effluents released at any time from the site to unrestricted areas shall be limited to the concentrations specified in 10CFR 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases.

2. For dissolved or entrained noble gases, the concentration shall be limited to 2E-4 mCi/ml total activity.

III. Average Energy - Not applicable

IV. Measurements and Approximations of Total Radioactivity

A. Fission and Activation Gases:

1. Noble gases in the building vent and stack, gaseous effluent are continuously monitored. The flow rate of the stack is continuously monitored and the building vent effluent flow rates are calculated once a shift based on the configuration of operating exhaust fans. The flow rate data is consolidated weekly to determine the volume of airborne effluent released from the plant. The noble gas monitor data is consolidated monthly to determine the total curies of noble gases released during the month.

2. Gas grab samples are taken and analyzed monthly to determine the relative noble gas activity concentrations. This information is used to apportion the total curies of noble gases released between different noble gas radionuclides.

3. The tritium concentration is determined by the analysis of a monthly grab sample for each release point.

B and C. Iodines and Particulates

1. Iodines and particulates are continuously sampled on impregnated charcoal filters and particulate filters, respectively. The charcoal and particulate samples are replaced at least weekly and analyzed to determine specific activity concentrations. The specific activity concentrations and vent flow rate data are used weekly to verify that release rate limits were not exceeded. The specific activity concentrations and total volume of gaseous effluent are used on a monthly basis to determine the total curies of each particulate and iodine released during the month.

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IV. Measurements and Approximations of Total Radioactivity (Continued)

2. The gross alpha concentration is determined by analysis of a monthly particulate filter composite sample and strontium -89 and -90 are determined by analysis of a quarterly particulate filter composite sample for each release point.

D. Liquid Effluents

1. The gamma ray emitting radionuclide concentrations are determined for each batch by gamma ray spectroscopy analysis of a grab sample. The allowable release rate is calculated for each batch based upon the known dilution flow. The flow rate of the liquid effluent is continuously monitored and the total volume released in each batch is determined. The total gamma activity released in each batch is determined by multiplying the radionuclide concentrations by the total volume discharged. The total gamma activity released during the month is then determined by summing the gamma activity content of each batch discharged during the month.

2. The gross alpha and tritium concentrations are measured on a monthly composite sample. The strontium -89 and -90 and iron -55 are measured on a quarterly composite sample.

V. Batch

		Value		Units
		third Quarter	fourth Quarter	
A. Liquid				
1.	Number of batches released	88	83	Each
2.	Total time period for batch releases	24424	21715	Minutes
3.	Maximum time period for a batch release	380	345	Minutes
4.	Average time period for batch releases	274	262	Minutes
5.	Minimum time period for a batch release	145	172	Minutes
6.	Average stream flow during period of release of effluent into a flowing stream	25380	20462	ft^3/sec

B. Gaseous

None

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LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

		Unit	Third Quarter	Fourth Quarter	% Error
A.	Fission and Activation Products				
	1. Total Releases	Curies	7.43E-02	1.04E-01	9
	2. Average Diluted Concentration During Period	µCi/ml	1.38E-09	2.38E-09	
	3. Percent of Applicable Limit (1.00E-7 µCi/ml)	%	1.38E+00	2.38E+00	
B.	Tritium				
	1. Total Releases	Curies	4.20E-01	2.43E-01	6
	2. Average Diluted Concentration During Period	µCi/ml	7.79E-09	5.56E-09	
	3. Percent of Applicable Limit (3E-03 µCi/ml)	%	2.60E-04	1.85E-04	
C.	Dissolved and Entrained Noble Gases[1]				
	1. Total Releases	Curies	<3.82E-03	<3.94E-03	8
	2. Average Diluted Concentration During Period	µCi/ml	<7.09E-11	<9.02E-11	
	3. Percent of Applicable Limit (2E-04 µCi/ml)	%	0	0	
D.	Gross Alpha Radioactivity				
	1. Total Releases	Curies	2.79E-04	2.19E-03	48
	2. Average Diluted Concentration During Period	µCi/ml	5.18E-12	5.01E-11	
E.	Volume of Waste Release (Before dilution)	Liters	9.51E+06	8.34E+06	3
F.	Volume of Dilution Water for Period	Liters	5.39E+10	4.37E+10	10
G.	Total CCW flow for Six Months	180 gigagallons			

[1] Includes Xe-133, Xe-135, and others.

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LIQUID RELEASES FOR SECOND HALF 1987 - BATCH MODE

Isotope (Required by REG Guide 1.21)		Third Quarter Unit Curies	Fourth Quarter Unit Curies
1.	Cr-51	<1.17E-02	<9.53E-03
2.	Mn-54	1.47E-04	1.03E-04
3.	Co-58	<1.24E-03	<8.27E-04
4.	Fe-59	<2.61E-03	<1.65E-03
5.	Co-60	1.26E-02	1.29E-02
6.	Zn-65	2.03E-03	4.57E-03
7.	Nb-95	<1.22E-03	<8.40E-04
8.	Zr-95	<2.07E-03	<1.48E-03
9.	Mo-Tc-99m	<9.47E-04	<8.62E-04
10.	I-131	<1.59E-03	<1.33E-03
11.	Xe-133	<2.95E-03	<3.25E-03
12.	Cs-134	1.37E-02	1.99E-02
13.	Xe-135	<8.62E-04	<6.94E-04
14.	Cs-137	4.55E-02	6.69E-02
15.	Ba-140	<6.00E-03	<4.53E-03
16.	La-140	<4.25E-04	<3.07E-04
17.	Ce-141	<1.69E-03	<1.50E-03
18.	Sr-89	<3.22E-04	<1.75E-04
19.	Sr-90	<1.73E-04	<1.09E-04

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

LIQUID RELEASES FOR SECOND HALF 1987 - BATCH MODE

Isotope Others (Not Required by REG Guide 1.21)		Third Quarter Unit Curies	Fourth Quarter Unit Curies
1.	Sb-125	2.42E-04	1.76E-05
2.	Ce-144		2.90E-05

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

SECOND HALF 1987[1]

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Summation of All Releases		Unit	Third Quarter	Fourth Quarter	% Error
A.	Fission and Activation Gases				
1.	Total Releases	Ci	<3.60E+02	3.14E-01	45
2.	Average Release Rate for Period	µCi/sec	<4.58E+01	3.99E-02	
3.	Percent of T.S. limit (.15 Ci/sec)	%	0	2.66E-05	
B.	Iodines				
1.	Total Iodine-131	Ci	<1.33E-01	<8.46E+01	36
2.	Average Release Rate for Period	µCi/sec	<1.69E-02	<1.08E+01	
3.	Percent of T.S. Limit (2.19 µCi/sec)	%	0	0	
C.	Particulates				
1.	Particulates with half-lives >8 days	Ci	3.63E-04	5.32E-04	35
2.	Avg. release rate for period	µCi/sec	4.62E-05	6.77E-05	
3.	Percent of T.S. limit (2.19 µCi/Sec)	%	2.11E-03	3.09E-03	
4.	Gross alpha radioactivity	Ci	1.46E-05	1.36E-05	
D.	Tritium				
1.	Total release	Ci	3.43E-01	1.71E-01	21
2.	Average release rate for period	µCi/sec	4.36E-02	2.18E-02	
3.	Percent of T.S. limit (2.19 µCi/sec)	%	1.90E-02	4.96E-02	
4.	Ground level release	Ci	3.42E-01	1.69E-01	
5.	Elevated release	Ci	1.62E-03	1.94E-03	

[1] Reporting period - 182 days.

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SECOND HALF 1987

GASEOUS EFFLUENTS - ELEVATED RELEASE

		Unit	Third Quarter	Fourth Quarter
1.	Fission Gases			
	Krypton-85	Ci	<1.50E+02	3.14E-01
	Krypton-85m	Ci	<1.17E+00	<2.46E-01
	Krypton-87	Ci	<2.21E-05	<3.78E-01
	Krypton-88	Ci	<3.31E+00	<1.02E+00
	Xenon-133	Ci	<1.58E-05	<6.70E-01
	Xenon-135	Ci	<6.81E-06	<1.96E-01
	Xenon-135m	Ci	<3.07E+00	<6.18E-01
	Xenon-138	Ci	<4.50E-05	<1.45E+00
	Total for Period	Ci	<1.58E+02	3.14E-01
	Iodines			
	Iodine-131	Ci	<2.82E-05	<8.46E+01
	Iodine-133	Ci	<2.19E-04	<1.26E-02
	Iodine-135	Ci	<1.88E-03	<7.62E-02
	Total for Period	Ci	<2.13E-03	<8.59E+01

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GASEOUS EFFLUENTS - ELEVATED RELEASE (Continued)

		Unit	Third Quarter	Fourth Quarter
3.	Particulates			
	Sr-89[1]	Ci	<6.57E-07	<6.65E-07
	Sr-90[1]	Ci	<2.57E-07	<3.08E-07
	Cs-134	Ci	<2.81E-05	<7.79E-06
	Cs-137	Ci	<1.71E-05	<1.19E-05
	Ba-140	Ci	<3.45E-04	<3.51E-05
	La-140	Ci	<5.31E-05	<1.24E-05
	Total for Period	Ci	<4.44E-04	<6.04E-05
4.	Tritium	Ci	1.62E-03	1.94E-03

[1] Predicted estimation of releases.

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GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

		Unit	Third Quarter	Fourth Quarter
1.	Fission Gases			
	Krypton-85	Ci	<1.55E+02	<3.15E+02
	Krypton-85m	Ci	<2.26E+00	<1.19E+00
	Krypton-87	Ci	<4.94E+00	<2.43E+00
	Krypton-88	Ci	<8.58E+00	<2.31E+00
	Xenon-133	Ci	<7.65E+00	<2.96E+00
	Xenon-135	Ci	<2.01E+00	<6.82E-01
	Xenon-135m	Ci	<1.71E+00	<1.82E+00
	Xenon-138	Ci	<1.99E+01	<8.63E+00
	Total for Period	Ci	<2.02E+02	<3.35E+02
2.	Iodines			
	Iodine-131	Ci	<1.33E-01	<2.82E-04
	Iodine-133	Ci	<6.72E-02	<2.11E-03
	Iodine-135	Ci	<1.01E-03	<1.12E+00
	Total for Period	Ci	<2.01E-01	<1.21E+00

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

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GASEOUS EFFLUENTS - GROUND LEVEL RELEASE (Continued)

		Unit	Third Quarter	Fourth Quarter
3.	Particulates			
	Sr-89[1]	Ci	<4.29E-02	<2.96E-05
	Sr-90[1]	Ci	<2.90E-02	<1.85E-05
	Cs-134	Ci	<2.03E-03	5.25E-05
	Cs-137	Ci	<1.85E-03	2.91E-04
	Ba-140	Ci	<2.14E-05	<4.12E-04
	La-140	Ci	<2.49E-05	<1.28E-04
	Co-60	Ci	3.63E-04	1.88E-04
	Total for Period	Ci	3.63E-04	5.32E-04
	Tritium	Ci	3.42E-01	1.69E-01

[1] Predicted estimation of releases.

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
SECOND HALF 1987
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. Solid Waste Shipped Off-Site for Burial or Disposal (Not Irradiated Fuel)

1. Type of Waste	Unit	6 Month Period	Error %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m3	1.07E+02	
	Ci	2.48E+02	1.50E+01
b. Dry compressible waste, contaminated equip., etc	m3	4.29E+02	
	Ci	2.07E+01	1.50E+01
c. Irradiated components, control rods, etc.	m3	0.00E+00	
	Ci	0.00E+00	N/A
d. Other	m3	0.00E+00	
	Ci	0.00E+00	N/A

2. Estimate of major nuclide compositions (by type of waste)

a. Spent resins, filter sludges, evaporator bottoms, etc.

Nuclide	Unit		Unit	
1. Zinc-65 (1)	%	1.99E+01	Ci	4.95E+01
2. Cesium-137 (1)	%	1.78E+01	Ci	4.42E+01
3. Cesium-134 (1)	%	6.03E+00	Ci	1.50E+01
4. Cobalt-60 (1)	%	3.66E+01	Ci	9.09E+01
5. Manganese-54 (1)	%	4.70E-01	Ci	1.17E+00
6. Iron-55 (2)	%	1.24E+01	Ci	3.07E+01
7. Other Nuclides (2)	%	6.76E+00	Ci	1.68E+01

(1) Measured
(2) Estimated thru use of scaling factors

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
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SOLID WASTE AND IRRADIATED FUEL SHIPMENTS (CONTINUED)

2. Estimate of major nuclide compositions (by type of waste) (cont'd)
b. Dry compressible waste, contaminated equipment, etc..

	Nuclide	Unit		Unit	
1.	Zinc-65 (2)	%	1.78E+01	Ci	3.69E+00
2.	Cesium-137 (2)	%	6.66E+00	Ci	1.38E+00
3.	Cesium-134 (2)	%	6.60E+00	Ci	1.37E+00
4.	Chromium-51 (2)	%	1.11E+01	Ci	2.30E+00
5.	Cobalt-60 (2)	%	1.74E+01	Ci	3.61E+00
6.	Iron-55 (2)	%	2.36E+01	Ci	4.89E+00
7.	Iron-59 (2)	%	1.21E+00	Ci	2.51E-01
8.	Manganese-54 (2)	%	4.06E+00	Ci	8.41E-01
9.	Silver-110m (2)	%	1.21E+00	Ci	2.51E-01
10.	Niobium-95 (2)	%	2.12E+00	Ci	4.39E-01
11.	Other Nuclides (2)	%	8.27E+00	Ci	1.71E-01

(1) Measured
(2) Estimated thru dose to curie and scaling factors

c. Irradiated components, control rods, etc - None

d. Other - None

3. Solid waste disposition

Number of Shipments	Mode of Transportation	Destination
41	Sole Use Truck	Barnwell, SC
1	Sole Use Truck	Richland, WA

. Irradiated Fuel Disposition

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

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
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SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

C. Waste Sources, Burial Class and Type Quantity. Container type, Total Volume in Cubic Feet and Number of Containers Used.

Type of Waste	Type Quantity	Burial Class	Container Type	Number of Containers	Disposal Volume
DEWATERED					
(Resin)					
RX CLEANUP	B-LSA	A-Stable	HIC	5	601.5
CONDS/WASTE	A-LSA	A-Stable	HIC	23	3877.9
(Filters)	A-LSA	A-Unstable	STC	13	98.0
DRY ACTIVE WASTE					
(Compacted)					
DRUM	A-LSA	A-Unstable	17H	46	345.0
BOX	A-LSA	A-Unstable	STC	64	5953.3
(Uncompacted)					
DRUM	N/A	N/A	N/A	NONE	N/A
BOX	A-LSA	A-Unstable	STC	77	7779.7
SOLIDIFIED	N/A	N/A	N/A	NONE	N/A
ABSORBED					
Oil Pillows/Rags	A-LSA	A-Unstable	STC	10	980.0

Solidification agent used: NONE

Absorbents Used: Celite and Oil-Dry

TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR SERVICES
RADIOLOGICAL CONTROL

RADIOLOGICAL IMPACT ASSESSMENT REPORT

BROWNS FERRY NUCLEAR PLANT

JULY THROUGH DECEMBER 1987

TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR SERVICES
RADIOLOGICAL CONTROL

RADIOLOGICAL IMPACT ASSESSMENT REPORT
BROWNS FERRY NUCLEAR PLANT

JULY THROUGH DECEMBER 1987

Prepared by: _____

Reviewed by: _____

Approved by: _____

Radiological Impact Assessment
Browns Ferry Nuclear Plant
July - December 1987

Introduction

Potential doses to individuals and populations have been calculated for the time period July through December in compliance with the requirements of Radiological Effluent Technical Specification 6.7.3.A. Dose calculations are based on Regulatory Guides 1.109, 1.111, 1.113, and NUREG/CR-1004 to determine compliance with the dose objectives contained in 10 CFR 50, Appendix I, and 40 CFR 190. Measured plant releases (listed in tables 1-3 for radioactivity in both gaseous and liquid effluents) for the reporting period are used as input in the Gaseous Effluent Licensing Code (for gaseous releases) and the Quarterly Water Assessment Code (for liquid releases) to estimate dose. Dispersion of radioactive effluents in the environment has been calculated using meteorological data and riverflow data measured during this period.

Meteorological Data

Meteorological data were measured, and average quarterly joint frequency distributions (JFDs) for ground-level, split-level, and stack releases were calculated. The ground-level JFD was derived from windspeeds and directions measured 10 meters above ground-level and from the vertical temperature gradient between 10 and 45 meters. The ground-level portion of the split-level JFD was based on wind speeds and directions measured with a sensor located 10 meters above ground-level and from the vertical temperature gradient between 10 and 45 meters. The elevated portion of the split-level JFD was based on wind speeds and direction measurements at the 46-meter level and the vertical temperature gradient between 45 and 90 meters. The JFDs for elevated releases were based on wind directions and wind speeds measured at 93 meters. Stability class D was assumed to persist at the effluent release level of 180 meters for the entire period. For the period January 1, 1978 - December 31, 1980, stable conditions (E, F, or G stability) existed in the layer from 45 to 90 meters at Browns Ferry Nuclear Plant (BFN) about 43 percent of the time. Neutral conditions existed about 56 percent of the time. This suggests that the use of a D stability for stack releases is conservative or realistic about 99 percent of the time. Also, temperature data taken between 110 and 275 meters at the Colbert Steam Plant during the spring and summer of 1976 indicated that for that layer stable conditions existed 53 percent of the time and neutral conditions existed 45 percent of the time. Thus, the 98 percent occurrence of stable or neutral conditions in the elevated layer at Colbert is comparable to the BFN upper layer percent. Although these data are limited to spring and summer, the small percentage of unstable conditions in the 3-year data set suggests that the results are reasonable throughout the year. For an elevated release, assumption of class D instead of E yields conservative results.

The wind speeds were divided into nine wind speed ranges. Calms (0-0.5 mph) were not distributed by direction. The quarterly JFDs are listed in tables 4 and 5 for ground-level releases, tables 6 and 7 for split-level releases, and in tables 8 and 9 for elevated releases.

Gaseous Effluents

Ground-level and elevated dispersion models were applied to turbine building and stack releases respectively. Releases from the reactor building and radwaste building were treated as split-level releases, i.e., partly elevated and partly ground-level. The split-level dispersion approach was implemented using a model that required for each effluent vent two complete average-annual JFDs, one for the elevated releases and one for the ground-level releases. Radionuclides in gaseous effluents were assumed to be released continuously. The generally open terrain around BFN is not believed to cause any significant effects on the transport and dispersion of gaseous effluents from the plant. Within 30 kilometers of BFN, the terrain is mostly gently rolling hills (30-60 meters). Between 30 and 80 kilometers the hills become larger to the north and south, and mountainous to the east and northeast. Terrain may have a small effect on transport and dispersion during periods of southeasterly and southerly winds, overcast skies, and relatively high wind speeds. Then, the lower layer (10-45 meters) tends to be more stable than would be expected. However, during this infrequent condition, dose estimates will be conservative.

Dose estimates for external air exposures were made at and beyond the site boundary. External doses to the skin and total body were estimated for the nearest residence in each sector. Internal doses to organs were estimated from the ingestion, inhalation, and ground contamination exposure pathways. The internal doses were calculated for farms where milk is consumed without commercial preparation. All receptor locations and points of interest are listed in table 3a. Doses are given in tables 10 and 11 for these individual exposure pathways at the maximum exposure locations.

Population doses were calculated for an estimated 627,000 persons living within a 50-mile radius of the plant site. Population doses were calculated assuming that each individual consumes vegetables and meat produced with the sector annulus in which he resides. Doses from milk ingestion were calculated from data on milk production within 50 miles of the plant site. Doses from external pathways, inhalation, and beef and vegetable ingestion are based on the 50-mile human population distribution. Population dose estimates for the gaseous effluents are presented in table 12.

Liquid Effluents

Doses from liquid effluents were calculated using measured hydraulic data. The average river flows at the plant site were 25,380 ft^3/s for the third quarter and 20,462 ft^3/s for the fourth quarter. Radioactivity concentrations in the Tennessee River were calculated assuming that releases in liquid effluents were continuous.
(0300c)

Doses were calculated for recreation, consumption of fish, and drinking water from public water supplies between the plant site and the mouth of the Tennessee River. The maximum individual dose from drinking water was assumed to be that calculated at the nearest downstream public water supply (Champion Paper Company). The maximum potential recreation dose was calculated for a location immediately downstream from the plant outfall. Dose estimates for the liquid effluents are presented in tables 13 and 14.

Direct Radiation

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around BFN. The quarterly gamma radiation levels determined from these TLDs during this reporting period averaged approximately 20.2 mR/quarter at onsite stations and approximately 17.0 mR/quarter at offsite stations, or approximately 3.2 mR/quarter higher onsite than at offsite stations. This is consistent with levels reported at TVA's nonoperating nuclear power plant construction sites where the average radiation levels onsite are generally 2-6 mR/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other undetermined influences. Fluctuations in natural background dose rates and in TLD readings tend to mask any small increments which may be due to plant operations. Thus, there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents.

Dose Summary

Doses calculated for this semiannual period result from the low-level effluent releases of units 1, 2, and 3. For gaseous effluents released in the third quarter, the maximum gamma and beta air doses were calculated to be <.001 and <.001 mrad, respectively. During the fourth quarter, the gamma and beta air doses were <.001 and <.001 mrad, respectively. These quarterly doses are well below the annual air dose guidelines (as specified in Appendix I to 10 CFR 50) of 30 and 60 mrad for gamma and beta radiation, respectively, for three reactor units. The maximum doses from noble gases to the skin and total body during the third quarter were calculated to be 0.0 and 0.0 mrem. During the fourth quarter, the skin and total body doses were <0.001 and <0.001 mrem respectively. The dose to the maximum exposed organ was 0.0037 mrem to the g.i. tract for the third quarter and 0.0071 mrem to the liver for the fourth quarter. These can be compared with annual dose guidelines of 45 mrem to the skin and maximum exposed organ and 15 mrem to the total body. These doses result from ingestion, inhalation, and ground contamination pathways and can be compared to a natural background radiation dose to an individual of about 90 mrem/yr.

For liquid effluents released in the third quarter, the maximum individual doses to the total body and the maximum exposed organ (i.e., liver) were calculated to be 0.055 and 0.073 mrem, respectively. In the fourth

quarter, the maximum doses to the total body and liver were 0.089 and 0.12 mrem, respectively. These compare with annual dose guidelines as specified in Appendix I to 10 CFR 50 of 9 and 30 mrem to the total body and maximum exposed organ, respectively, for three units.

Population doses from gaseous effluents during the third quarter were estimated to be 0.0025 man-rem to the g.i. tract and 0.0029 man-rem to the lung. For the fourth quarter, population doses were 0.0026 man-rem to the liver and 0.0022 man-rem to the bone.

From liquid releases during the third quarter, the total population along the Tennessee River was estimated to receive 4.5 man-rem to the total body and 7.9 man-rem to the maximum exposed organ (liver). For the fourth quarter, the Tennessee River population was estimated to receive 7.4 man-rem to the total body and 13 man-rem to the maximum exposed organ (liver).

Population doses can be compared to the natural background dose to the 627,000 persons living within 50 miles of the plant of about 56,430 man-rem/yr.

To determine compliance with 40 CFR 190, the annual dose contributions to the maximum individual from BFN radioactive effluents and all other nearby uranium fuel-cycle sources have been considered. No nearby fuel-cycle facilities other than BFN have been identified which would significantly expose the maximum individual. The dose to the maximum individual has been conservatively estimated by: first, summing the total body air submersion dose, the critical organ dose from gaseous effluents, the total body dose from liquid effluents, and the critical organ does from liquid effluents (direct radiation, as reported above, is not identifiable over background levels) for each quarter; then, taking the sum for each quarter and summing over four quarters. Using this method, the total dose to the maximum individual for the twelve consecutive months in 1987 has been calculated to be 0.52 mrem. This is well below the limit of 40 CFR 190 (25 mrem/yr).

In addition, no routine activities within the site boundary by members of the public have been identified which would lead to their radiation exposure.

For the purposes of determining plant performance a summary of the quarterly doses for the past five years is presented in Table 15. Figures 1 through 5 present this data graphically.

In summary, all annual gaseous and liquid effluent doses calculated were below the guidelines of Appendix I to 10 CFR 50 and below the annual limits specified in the BFN Technical Specifications for plant operation.

TABLE 1

BROWNS FERRY NUCLEAR PLANT - GASEOUS EFFLUENT RELEASES
THIRD QUARTER 1987

Reactor Building Releases	
Tritium	2.40E-01 Ci

Turbine Building Releases	
Tritium	1.02E-01 Ci
Co-60	3.63E-04 Ci

Radwaste Building Releases
None

Stack Releases	
Tritium	1.62E-03 Ci

(0300c)

TABLE 2

BROWNS FERRY NUCLEAR PLANT - GASEOUS EFFLUENT RELEASES
FOURTH QUARTER 1987

Reactor Building Releases

Tritium	1.62E-01 Ci
Cs-134	5.25E-05 Ci
Cs-137	2.91E-04 Ci
Co-60	1.88E-04 Ci

Turbine Building Releases

None

Radwaste Building Releases

Tritium	7.11E-03 Ci

Stack Releases

Tritium	1.94E-03 Ci
Kr-85	3.14E-01 Ci

TABLE 3

1987 BROWNS FERRY NUCLEAR PLANT LIQUID EFFLUENT RELEASES

(CURIES)

Nuclide	3RD QUARTER	4TH QUARTER
H-3	4.20E-01	2.43E-01
Sr-89	<3.22E-04	<1.75E-04
Sr-90	<1.73E-04	<1.09E-04
Fe-55	0.00E+00	0.00E+00
Mn-54	1.47E-04	1.03E-04
Co-58	<1.24E-03	<8.27E-04
Fe-59	<2.61E-03	<1.65E-03
Co-60	1.26E-02	1.29E-02
Zn-65	2.03E-03	4.57E-03
Mo-99	<9.47E-04	<8.62E-04
I-131	<1.59E-03	<1.33E-03
Cs-134	1.37E-02	1.99E-02
Cs-137	4.55E-02	6.69E-02
Ce-141	<1.69E-03	<1.50E-03
Ce-144	0.00E+00	2.90E-05
Co-57	0.00E+00	0.00E+00
Sb-125	2.42E-04	1.76E-05
Tc-99m	<9.47E-04	<8.62E-04
Kr-87	0.00E+00	0.00E+00
Kr-88	0.00E+00	0.00E+00
Xe-133	<2.95E-03	<3.25E-03
Xe-133m	0.00E+00	0.00E+00
Xe-135	<8.62E-04	<6.94E-04
Xe-138	0.00E+00	0.00E+00

TABLE 3a

BROWNS FERRY NUCLEAR PLANT - RECEPTOR LOCATIONS AND POINTS OF INTEREST

	POINT	SECTOR	DISTANCE (M)
1	SITE BOUNDARY	N	1525.
2	SITE BOUNDARY	NNE	1300.
3	SITE BOUNDARY	NE	1250.
4	SITE BOUNDARY	ENE	1450.
5	SITE BOUNDARY	E	1375.
6	SITE BOUNDARY	ESE	1575.
7	SITE BOUNDARY	SE	5600.
8	SITE BOUNDARY	SSE	2875.
9	SITE BOUNDARY	S	2550.
10	SITE BOUNDARY	SSW	2425.
11	SITE BOUNDARY	SW	2300.
12	SITE BOUNDARY	WSW	2500.
13	SITE BOUNDARY	W	2550.
14	SITE BOUNDARY	WNW	3325.
15	SITE BOUNDARY	NW	2275.
16	SITE BOUNDARY	NNW	1650.
17	AIR DOSE POINT	NW	5100.
18	AIR DOSE POINT	NW	5500.
19	AIR DOSE POINT	NW	6100.
20	AIR DOSE POINT	NW	6500.
21	AIR DOSE POINT	NW	6800.
22	AIR DOSE POINT	NW	7100.
23	RESIDENT,GARDEN	N	1620.
24	RESIDENT	NNE	2845.
25	RESIDENT	NE	4075.
26	RESIDENT,GARDEN	ENE	1960.
27	RESIDENT,GARDEN	E	4437.
28	RESIDENT	ESE	4655.
29	RESIDENT	SE	8100.
30	RESIDENT,GARDEN	SSE	7155.
31	RESIDENT,GARDEN	S	4460.
32	RESIDENT,GARDEN	SSW	4155.
33	RESIDENT	SW	4896.
34	RESIDENT,GARDEN	WSW	4131.
35	RESIDENT	W	2550.
36	RESIDENT,GARDEN	WNW	4425.
37	RESIDENT,GARDEN	NW	3500.
38	RESIDENT,GARDEN	NNW	1650.
39	GARDEN	NE	4475.
40	GARDEN	NNE	2980.
41	GARDEN	SW	5430.
42	GARDEN	W	2675.
43	MILK COW CHILD	N	8045.
44	MILK COW INFANT	ENE	9450.
45	MILK COW CHILD	NNW	10975.
46	GOAT CHILD	NE	10975.

TABLE 4

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
GROUND-LEVEL JOINT
FREQUENCY DISTRIBUTION IN PERCENT
THIRD QUARTER 1987

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.237	0.000	0.000	0.000	0.237
NNE	0.000	0.000	0.000	0.000	0.047	0.142	0.000	0.000	0.000	0.189
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.000	0.095	0.427	0.095	0.000	0.000	0.000	0.617
SE	0.000	0.000	0.047	0.853	0.237	0.000	0.000	0.000	0.000	1.137
SSE	0.000	0.000	0.142	0.758	0.047	0.000	0.000	0.000	0.000	0.947
S	0.000	0.000	0.047	0.521	0.000	0.000	0.000	0.000	0.000	0.568
SSW	0.000	0.000	0.047	0.284	0.142	0.000	0.000	0.000	0.000	0.473
SW	0.000	0.000	0.000	0.190	0.047	0.000	0.000	0.000	0.000	0.237
WSW	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
W	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.332	0.047	0.000	0.000	0.379
NNW	0.000	0.000	0.000	0.047	0.142	0.047	0.000	0.000	0.000	0 236
TOTALS	0.000	0.000	0.283	2.748	1.183	0.900	0.047	0 000	0.000	5 161

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.047	0.190	0.000	0.000	0.000	0.237
NNE	0.000	0.000	0.000	0.000	0.190	0.190	0.000	0.000	0.000	0.380
NE	0.000	0.000	0.000	0.000	0.000	0.142	0 000	0.000	0.000	0.142
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000
E	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.000	0.190	0.000	0.000	0.000	0.000	0.000	0.190
SE	0.000	0.000	0.047	0.237	0.000	0.000	0.000	0.000	0 000	0.284
SSE	0.000	0.000	0.095	0.142	0.000	0.000	0.000	0.000	0.000	0.237
S	0.000	0.000	0.047	0.427	0.000	0.000	0.000	0.000	0.000	0.474
SSW	0.000	0.000	0.000	0.237	0.000	0.000	0.000	0.000	0.000	0.237
SW	0.000	0.000	0.000	0.142	0.047	0.000	0.000	0.000	0.000	0.189
WSW	0.000	0.000	0.000	0.000	0.095	0.000	0.000	0.000	0.000	0.095
W	0.000	0.000	0.000	0.000	0.237	0.000	0.000	0 000	0.000	0.237
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.047	0.190	0.000	0.000	0.000	0.237
NNW	0.000	0.000	0.000	0.000	0.047	0.095	0.000	0 000	0 000	0 142
TOTALS	0.000	0.000	0.189	1.375	0.757	0.807	0.000	0 000	0 000	3.128

TABLE 4 (continued)

STABILITY CLASS C

WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED

SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.190	0.000	0.000	0.000	0.190
NNE	0.000	0.000	0.000	0.095	0.095	0.142	0.000	0.000	0.000	0.332
NE	0.000	0.000	0.000	0.000	0.095	0.047	0.000	0.000	0.000	0.142
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.095	0.237	0.000	0.000	0.000	0.000	0.332
SE	0.000	0.000	0.095	0.284	0.047	0.000	0.000	0.000	0.000	0.426
SSE	0.000	0.000	0.190	0.284	0.000	0.000	0.000	0.000	0.000	0.474
S	0.000	0.000	0.190	0.190	0.047	0.000	0.000	0.000	0.000	0.427
SSW	0.000	0.000	0.000	0.427	0.000	0.000	0.000	0.000	0.000	0.427
SW	0.000	0.000	0.000	0.142	0.000	0.000	0.000	0.000	0.000	0.142
WSW	0.000	0.000	0.000	0.142	0.047	0.000	0.000	0.000	0.000	0.189
W	0.000	0.000	0.000	0.000	0.190	0.047	0.000	0.000	0.000	0.237
WNW	0.000	0.000	0.000	0.047	0.142	0.000	0.000	0.000	0.000	0.189
NW	0.000	0.000	0.000	0.095	0.095	0.237	0.000	0.000	0.000	0.427
NNW	0.000	0.000	0.000	0.000	0.000	0.190	0.000	0.000	0.000	0.190
TOTALS	0.000	0.000	0.475	1.801	0.995	0.853	0.000	0.000	0.000	4.124

STABILITY CLASS D

WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED

SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.142	0.332	0.474	0.521	0.284	0.047	0.000	0.000	1.800
NNE	0.000	0.000	0.474	0.379	0.474	0.237	0.000	0.000	0.000	1.564
NE	0.000	0.047	0.237	0.427	0.237	0.095	0.000	0.000	0.000	1.043
ENE	0.000	0.000	0.332	0.332	0.142	0.000	0.000	0.000	0.000	0.806
E	0.000	0.047	0.237	0.190	0.237	0.000	0.000	0.000	0.000	0.711
ESE	0.000	0.000	0.284	0.664	0.190	0.000	0.000	0.000	0.000	1.138
SE	0.000	0.095	1.327	0.664	0.047	0.000	0.000	0.000	0.000	2.133
SSE	0.000	0.000	2.844	0.758	0.000	0.000	0.000	0.000	0.000	3.602
S	0.000	0.190	2.701	1.137	0.000	0.000	0.000	0.000	0.000	4.028
SSW	0.000	0.095	1.659	0.995	0.047	0.000	0.000	0.000	0.000	2.796
SW	0.000	0.142	0.711	0.853	0.000	0.000	0.000	0.000	0.000	1.706
WSW	0.000	0.095	1.374	1.517	0.379	0.047	0.000	0.000	0.000	3.412
W	0.000	0.000	0.284	1.137	1.327	0.237	0.000	0.000	0.000	2.985
WNW	0.000	0.047	0.095	0.521	1.517	0.664	0.000	0.000	0.000	2.844
NW	0.000	0.000	0.237	0.664	1.232	1.280	0.047	0.000	0.000	3.460
NNW	0.000	0.000	0.095	0.427	0.284	0.427	0.000	0.000	0.000	1.233
TOTALS	0.000	0.900	13.224	11.140	6.635	3.271	0.094	0.000	0.000	35.264

TABLE 4 (continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.026	0.237	0.806	0.806	0.190	0.190	0.000	0.000	0.000	2.255
NNE	0.018	0.190	0.521	0.190	0.237	0.095	0.000	0.000	0.000	1.251
NE	0.020	0.190	0.616	0.284	0.095	0.047	0.000	0.000	0.000	1.252
ENE	0.016	0.047	0.569	0.142	0.047	0.000	0.047	0.000	0.000	0.868
E	0.028	0.142	0.948	1.280	0.332	0.000	0.000	0.000	0.000	2.730
ESE	0.040	0.332	1.232	1.280	0.190	0.000	0.000	0.000	0.000	3.074
SE	0.041	0.616	0.995	0.948	0.142	0.000	0.000	0.000	0.000	2.742
SSE	0.041	0.379	1.232	0.095	0.000	0.000	0.000	0.000	0.000	1.747
S	0.041	0.616	0.995	0.379	0.000	0.000	0.000	0.000	0.000	2.031
SSW	0.028	0.237	0.853	0.758	0.047	0.000	0.000	0.000	0.000	1.923
SW	0.023	0.332	0.569	0.142	0.000	0.000	0.000	0.000	0.000	1.066
WSW	0.037	0.237	1.232	0.379	0.047	0.000	0.000	0.000	0.000	1.932
W	0.031	0.142	1.090	0.332	0.047	0.000	0.000	0.000	0.000	1.642
WNW	0.010	0.000	0.379	0.284	0.190	0.047	0.000	0.000	0.000	0.910
NW	0.008	0.095	0.237	0.521	0.000	0.095	0.000	0.000	0.000	0.956
NNW	0.020	0.095	0.711	0.806	0.379	0.237	0.000	0.000	0.000	2.248
TOTALS	0.428	3.887	12.986	8.627	1.943	0.711	0.047	0.000	0.000	28.630

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.098	0.521	0.995	0.474	0.190	0.000	0.000	0.000	0.000	2.278
NNE	0.055	0.332	0.521	0.806	0.284	0.047	0.000	0.000	0.000	2.045
NE	0.052	0.521	0.284	0.332	0.000	0.000	0.000	0.000	0.000	1.189
ENE	0.070	0.284	0.806	0.142	0.000	0.000	0.000	0.000	0.000	1.302
E	0.083	0.237	1.043	0.853	0.000	0.000	0.000	0.000	0.000	2.216
ESE	0.049	0.190	0.569	0.047	0.000	0.000	0.000	0.000	0.000	0.855
SE	0.018	0.095	0.190	0.000	0.000	0.000	0.000	0.000	0.000	0.303
SSE	0.006	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.101
S	0.009	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.151
SSW	0.003	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.050
SW	0.006	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.100
WSW	0.015	0.190	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.252
W	0.015	0.095	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.252
WNW	0.015	0.142	0.095	0.000	0.047	0.000	0.000	0.000	0.000	0.299
NW	0.024	0.142	0.237	0.000	0.000	0.000	0.000	0.000	0.000	0.403
NNW	0.049	0.379	0.379	0.616	0.095	0.000	0.000	0.000	0.000	1.518
TOTALS	0.567	3.412	5.403	3.270	0.616	0.047	0.000	0.000	0.000	13.315

TABLE 4 (continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.339	0.474	1.611	0.284	0.000	0.000	0.000	0.000	0.000	2.708
NNE	0.239	0.664	0.806	1.137	0.142	0.000	0.000	0.000	0.000	2.988
NE	0.177	0.711	0.379	0.047	0.047	0 000	0.000	0.000	0.000	1.361
ENE	0.169	0.190	0.853	0.095	0.000	0.000	0.000	0 000	0.000	1.307
E	0.085	0.047	0.474	0.095	0.000	0.000	0 000	0 000	0.000	0.701
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.023	0.095	0.047	0.000	0.000	0.000	0.000	0.000	0 000	0.165
SSE	0.008	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.055
S	0.008	0.047	0.000	0.000	0.000	0 000	0.000	0.000	0.000	0.055
SSW	0.000	0 000	0.000	0.000	0.000	0.000	0 000	0.000	0.000	0.000
SW	0.015	0.095	0.000	0.000	0.000	0.000	0 000	0 000	0 000	0.110
WSW	0.008	0.047	0.000	0.000	0.000	0 000	0.000	0.000	0.000	0.055
W	0.015	0 095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.110
WNW	0.015	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.109
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.085	0.142	0.379	0.047	0.000	0.000	0.000	0.000	0.000	0.653
TOTALS	1.186	2.654	4.643	1.705	0.189	0.000	0.000	0.000	0.000	10.378

TABLE 5

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
GROUND-LEVEL JOINT
FREQUENCY DISTRIBUTION IN PERCENT
FOURTH QUARTER 1987

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.461	0.369	0.000	0.000	0.830
NNE	0.000	0.000	0.000	0.000	0.000	0.185	0.277	0.000	0.000	0.462
NE	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.092
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.092
SE	0.000	0.000	0.000	1.061	0.092	0.000	0.000	0.000	0.000	1.153
SSE	0.000	0.000	0.000	0.369	0.046	0.000	0.000	0.000	0.000	0.415
S	0.000	0.000	0.000	0.323	0.046	0.000	0.000	0.000	0.000	0.369
SSW	0.000	0.000	0.000	0.046	0.000	0.046	0.000	0.000	0.000	0.092
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.046	0.092	0.000	0.000	0.138
NW	0.000	0.000	0.000	0.000	0.000	0.138	0.415	0.000	0.000	0.553
NNW	0.000	0.000	0.000	0.000	0.000	0.046	0.323	0.000	0.000	0.369
TOTALS	0.000	0.000	0.000	1.846	0.230	1.060	1.476	0.000	0.000	4.612

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.138	0.138	0.000	0.000	0.276
NNE	0.000	0.000	0.000	0.046	0.000	0.092	0.000	0.000	0.000	0.138
NE	0.000	0.000	0.000	0.000	0.046	0.092	0.000	0.000	0.000	0.138
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.046	0.000	0.092	0.000	0.000	0.000	0.138
SE	0.000	0.000	0.231	0.277	0.000	0.000	0.000	0.000	0.000	0.508
SSE	0.000	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.138
S	0.000	0.000	0.092	0.231	0.000	0.046	0.000	0.000	0.000	0.369
SSW	0.000	0.000	0.000	0.138	0.092	0.000	0.000	0.000	0.000	0.230
SW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
WSW	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
W	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.277	0.000	0.000	0.277
NW	0.000	0.000	0.000	0.000	0.000	0.092	0.185	0.000	0.000	0.277
NNW	0.000	0.000	0.000	0.000	0.000	0.138	0.231	0.000	0.000	0.369
TOTALS	0.000	0.000	0.369	0.968	0.184	0.690	0.831	0.000	0.000	3.043

TABLE 5 (continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.092	0.461	0.000	0.046	0.000	0.599
NNE	0.000	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.138
NE	0.000	0.000	0.000	0.000	0.000	0.138	0.000	0.000	0.000	0.138
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.185	0.277	0.000	0.000	0.000	0.000	0.000	0.462
SSE	0.000	0.000	0.138	0.185	0.000	0.000	0.000	0.000	0.000	0.323
S	0.000	0.000	0.000	0.185	0.000	0.046	0.000	0.000	0.000	0.231
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
WSW	0.000	0.000	0.000	0.138	0.000	0.138	0.000	0.000	0.000	0.276
W	0.000	0.000	0.000	0.000	0.000	0.138	0.000	0.000	0.000	0.138
WNW	0.000	0.000	0.000	0.046	0.046	0.231	0.092	0.000	0.000	0.415
NW	0.000	0.000	0.000	0.000	0.185	0.185	0.138	0.000	0.000	0.508
NNW	0.000	0.000	0.000	0.000	0.046	0.092	0.092	0.000	0.000	0.230
TOTALS	0.000	0.000	0.323	1.015	0.415	1.475	0.322	0.046	0.000	3.597

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.092	0.369	0.461	1.061	0.692	0.138	0.000	2.814
NNE	0.000	0.000	0.277	0.600	0.554	0.554	0.046	0.000	0.000	2.032
NE	0.000	0.000	0.046	0.646	0.323	0.508	0.046	0.000	0.000	1.569
ENE	0.000	0.000	0.323	0.369	0.231	0.138	0.000	0.000	0.000	1.061
E	0.000	0.000	0.277	0.185	0.046	0.046	0.000	0.000	0.000	0.554
ESE	0.000	0.000	0.415	0.369	0.323	0.231	0.000	0.000	0.000	1.338
SE	0.000	0.000	1.246	0.784	0.046	0.092	0.000	0.000	0.000	2.169
SSE	0.000	0.000	0.831	0.508	0.046	0.138	0.000	0.000	0.000	1.523
S	0.000	0.046	0.323	0.231	0.092	0.092	0.000	0.000	0.000	0.784
SSW	0.000	0.000	0.369	0.185	0.092	0.046	0.000	0.000	0.000	0.692
SW	0.000	0.000	0.277	0.046	0.000	0.138	0.000	0.000	0.000	0.461
WSW	0.000	0.000	0.092	0.508	0.600	0.185	0.138	0.000	0.000	1.523
W	0.000	0.000	0.046	0.185	0.877	0.877	0.138	0.046	0.000	2.170
WNW	0.000	0.000	0.046	0.323	0.692	1.292	0.508	0.185	0.000	3.047
NW	0.000	0.000	0.185	0.508	0.277	0.877	1.246	0.138	0.000	3.232
NNW	0.000	0.000	0.092	0.415	0.508	0.969	0.415	0.000	0.000	2.400
TOTALS	0.000	0.046	4.939	6.233	5.170	7.246	3.230	0.507	0.000	27.370

TABLE 5 (continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.010	0.046	0.461	0.277	0.277	0.646	0.600	0.000	0.000	2.318
NNE	0.006	0.000	0.323	0.185	0.092	0.277	0.046	0.000	0.000	0.929
NE	0.005	0.046	0.231	0.369	0.277	0.046	0.000	0.000	0.000	0.974
ENE	0.010	0.092	0.461	0.185	0.138	0.092	0.000	0.000	0.000	0.978
E	0.017	0.185	0.738	0.554	0.277	0.000	0.000	0.000	0.000	1.772
ESE	0.036	0.323	1.569	1.292	1.384	0.415	0.000	0.000	0.000	5.021
SE	0.026	0.231	1.154	1.154	0.508	0.508	0.000	0.000	0.000	3.562
SSE	0.022	0.277	0.877	1.246	0.554	0.138	0.000	0.000	0.000	3.115
S	0.018	0.277	0.692	0.923	0.877	0.277	0.000	0.000	0.000	3.065
SSW	0.004	0.138	0.092	0.277	0.046	0.000	0.000	0.000	0.000	0.557
SW	0.001	0.046	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.093
WSW	0.004	0.000	0.231	0.231	0.046	0.138	0.092	0.000	0.000	0.742
W	0.005	0.092	0.185	0.323	0.415	0.323	0.000	0.000	0.000	1.343
WNW	0.006	0.000	0.323	0.231	0.369	0.185	0.046	0.000	0.000	1.160
NW	0.006	0.092	0.231	0.600	0.369	0.646	0.277	0.000	0.000	2.222
NNW	0.008	0.046	0.369	0.554	0.692	1.061	0.092	0.000	0.000	2.823
TOTALS	0.184	1.892	7.939	8.450	6.323	4.753	1.153	0.000	0.000	30.694

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.004	0.046	0.185	0.738	0.323	0.000	0.000	0.000	0.000	1.296
NNE	0.004	0.092	0.138	0.369	0.323	0.000	0.000	0.000	0.000	0.926
NE	0.003	0.046	0.138	0.185	0.046	0.046	0.000	0.000	0.000	0.464
ENE	0.011	0.138	0.508	0.138	0.046	0.000	0.000	0.000	0.000	0.841
E	0.020	0.092	1.061	0.692	0.046	0.000	0.000	0.000	0.000	1.912
ESE	0.022	0.231	1.061	0.046	0.138	0.046	0.000	0.000	0.000	1.544
SE	0.026	0.323	1.154	0.923	0.138	0.185	0.000	0.000	0.000	2.750
SSE	0.016	0.323	0.600	0.784	0.415	0.323	0.046	0.000	0.000	2.508
S	0.014	0.138	0.646	0.092	0.461	0.461	0.000	0.000	0.000	1.813
SSW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SW	0.001	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
WSW	0.001	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
W	0.002	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.140
WNW	0.002	0.046	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.186
NW	0.005	0.000	0.277	0.138	0.000	0.000	0.000	0.000	0.000	0.420
NNW	0.007	0.046	0.369	0.554	0.277	0.046	0.000	0.000	0.000	1.299
TOTALS	0.138	1.613	6.369	4.706	2.260	1.107	0.046	0.000	0.000	16.240

TABLE 5 (continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.046	0.277	0.600	0.784	0.046	0.000	0.000	0.000	0.000	1.754
NNE	0.087	0.508	1.154	0.877	0.185	0.000	0.000	0.000	0.000	2.812
NE	0.046	0.231	0.646	0.092	0.000	0.000	0.000	0.000	0.000	1.015
ENE	0.075	0.046	1.384	0.138	0.000	0.000	0.000	0.000	0.000	1.644
E	0.092	0.185	1.569	0.646	0.000	0.000	0.000	0.000	0.000	2.493
ESE	0.024	0.092	0.369	0.000	0.000	0.000	0.000	0.000	0.000	0.485
SE	0.041	0.185	0.600	0.046	0.046	0.000	0.000	0.000	0.000	0.918
SSE	0.044	0.369	0.461	0.831	0.000	0.046	0.000	0.000	0.000	1.752
S	0.005	0.046	0.046	0.138	0.185	0.046	0.000	0.000	0.000	0.466
SSW	0.002	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.048
SW	0.002	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.002	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
NW	0.022	0.046	0.369	0.000	0.000	0.000	0.000	0.000	0.000	0.437
NNW	0.019	0.138	0.231	0.092	0.046	0.000	0.000	0.000	0.000	0.526
TOTALS	0.507	2.216	7.477	3.645	0.508	0.092	0.000	0.000	0.000	14.445

TABLE 6

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
SPLIT-LEVEL IN PERCENT
GROUND-LEVEL PORTION
THIRD QUARTER 1987

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.03?	0.000	0 000	0.000	0.03?
NNE	0.000	0.000	0.000	0.000	0.005	0.020	0 000	0 000	0.000	0 025
NE	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0 000	0.000	0 000
ENE	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0.000	0.000	0 000
E	0.000	0.000	0.000	0.000	0.007	0 000	0 000	0 000	0.000	0.007
ESE	0.000	0.000	0.000	0.008	0.057	0.016	0.000	0 000	0 000	0.081
SE	0.000	0.000	0.000	0.038	0.028	0.000	0.000	0.000	0.000	0.066
SSE	0.000	0.000	0.003	0.047	0.005	0.000	0.000	0.000	0.000	0.055
S	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.000	0.000	0.043
SSW	0.000	0.000	0.000	0.024	0.025	0.000	0.000	0.000	0.000	0.049
SW	0.000	0.000	0.000	0.015	0.008	0.000	0.000	0.000	0.000	0.023
WSW	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.005
W	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.006
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0 000
NW	0.000	0.000	0.000	0.000	0 000	0.046	0 009	0 000	0.000	0 055
NNW	0.000	0.000	0.000	0.005	0.008	0.005	0.000	0 000	0.000	0.018
TOTALS	0.000	0.000	0.003	0.180	0.148	0.130	0 009	0.000	0.000	0.470

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.004	0.030	0 000	0.000	0.000	0 034
NNE	0.000	0.000	0.000	0.000	0.014	0.022	0 000	0.000	0.000	0.036
NE	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.016
ENE	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.006	0.000	0 000	0.000	0.000	0.006
ESE	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.006
SE	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0 000	0.000	0.009
SSE	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001
S	0.000	0.000	0.001	0.021	0.000	0.000	0.000	0.000	0.000	0.022
SSW	0.000	0.000	0.000	0.008	0.000	0.000	0 000	0.000	0.000	0.008
SW	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0 000	0.000	0.002
WSW	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.007
W	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.017
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.004	0.023	0.000	0.000	0.000	0.027
NNW	0.000	0.000	0.000	0.000	0 004	0.011	0 000	0.000	0 000	0.015
TOTALS	0.000	0.000	0.001	0.045	0.058	0 102	0 000	0 000	0 000	0 206

TABLE 6 (continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.024
NNE	0.000	0.000	0.000	0.001	0.007	0.023	0.000	0.000	0.000	0.031
NE	0.000	0.000	0.000	0.000	0.008	0.005	0.000	0.000	0.000	0.013
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.009	0.029	0.000	0.000	0.000	0.000	0.038
SE	0.000	0.000	0.000	0.008	0.008	0.000	0.000	0.000	0.000	0.016
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.003	0.010	0.009	0.000	0.000	0.000	0.000	0.022
SSW	0.000	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.025
SW	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001
WSW	0.000	0.000	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.003
W	0.000	0.000	0.000	0.000	0.013	0.006	0.000	0.000	0.000	0.019
WNW	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.006
NW	0.000	0.000	0.000	0.000	0.005	0.030	0.000	0.000	0.000	0.035
NNW	0.000	0.000	0.000	0.000	0.000	0.026	0.000	0.000	0.000	0.026
TOTALS	0.000	0.000	0.003	0.055	0.087	0.114	0.000	0.000	0.000	0.259

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.010	0.052	0.042	0.009	0.000	0.000	0.113
NNE	0.000	0.000	0.000	0.006	0.048	0.033	0.000	0.000	0.000	0.087
NE	0.000	0.000	0.000	0.002	0.013	0.011	0.000	0.000	0.000	0.026
ENE	0.000	0.000	0.000	0.005	0.009	0.000	0.000	0.000	0.000	0.014
E	0.000	0.000	0.000	0.002	0.023	0.000	0.000	0.000	0.000	0.025
ESE	0.000	0.000	0.007	0.055	0.025	0.000	0.000	0.000	0.000	0.087
SE	0.000	0.000	0.029	0.057	0.008	0.000	0.000	0.000	0.000	0.094
SSE	0.000	0.000	0.059	0.045	0.000	0.000	0.000	0.000	0.000	0.104
S	0.000	0.000	0.123	0.074	0.000	0.000	0.000	0.000	0.000	0.197
SSW	0.000	0.000	0.043	0.076	0.010	0.000	0.000	0.000	0.000	0.129
SW	0.000	0.000	0.001	0.046	0.000	0.000	0.000	0.000	0.000	0.047
WSW	0.000	0.000	0.004	0.049	0.058	0.008	0.000	0.000	0.000	0.119
W	0.000	0.000	0.000	0.013	0.091	0.027	0.000	0.000	0.000	0.131
WNW	0.000	0.000	0.000	0.004	0.101	0.084	0.000	0.000	0.000	0.189
NW	0.000	0.000	0.000	0.005	0.071	0.174	0.009	0.000	0.000	0.259
NNW	0.000	0.000	0.000	0.004	0.030	0.069	0.000	0.000	0.000	0.103
TOTALS	0.000	0.000	0.266	0.453	0.539	0.448	0.018	0.000	0.000	1.724

TABLE 6 (continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.005	0.080	0.029	0.030	0.000	0.000	0.000	0.144
NNE	0.000	0.000	0.015	0.018	0.036	0.018	0.000	0.000	0.000	0.087
NE	0.000	0.000	0.014	0.026	0.016	0.006	0.000	0.000	0.000	0.062
ENE	0.000	0.000	0.013	0.018	0.005	0.000	0.032	0.000	0.000	0.068
E	0.000	0.000	0.012	0.101	0.043	0.000	0.000	0.000	0.000	0.156
ESE	0.000	0.003	0.046	0.121	0.026	0.000	0 000	0 000	0.000	0.196
SE	0.000	0.012	0.074	0.143	0.026	0.000	0 000	0.000	0.000	0.255
SSE	0.000	0.004	0.092	0.017	0.000	0.000	0.000	0.000	0.000	0.113
S	0.000	0.011	0.075	0.062	0.000	0.000	0 000	0.000	0.000	0.148
SSW	0.000	0.000	0.056	0.110	0.009	0.000	0.000	0.000	0.000	0.175
SW	0.000	0.000	0.009	0.003	0.000	0.000	0.000	0.000	0.000	0.012
WSW	0.000	0.000	0.005	0.022	0.006	0.000	0.000	0 000	0.000	0.033
W	0.000	0.003	0.005	0.012	0.004	0.000	0.000	0.000	0.000	0.024
WNW	0.000	0.000	0.000	0.010	0.014	0.007	0.000	0.000	0.000	0.031
NW	0.000	0.000	0.000	0.017	0.000	0.016	0.000	0.000	0.000	0.033
NNW	0.000	0.000	0.005	0.054	0.051	0.037	0.000	0.000	0.000	0.147
TOTALS	0.000	0.033	0.426	0.814	0.205	0 114	0 032	0 000	0.000	1.684

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.001	0.042	0.049	0.032	0.000	0 000	0.000	0.000	0.124
NNE	0.000	0.001	0.010	0.100	0.047	0.009	0.000	0.000	0.000	0.167
NE	0.000	0.002	0.012	0.043	0.000	0.000	0.000	0.000	0.000	0.057
ENE	0.000	0.004	0.018	0.004	0.000	0.000	0.000	0.000	0.000	0.026
E	0.000	0.000	0.011	0.055	0.000	0 000	0.000	0 000	0.000	0.066
ESE	0.000	0.005	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.019
SE	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.009
SSE	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0.000	0.000	0 000
S	0.000	0.001	0.000	0.000	0.000	0 000	0.000	0.000	0 000	0 001
SSW	0 000	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0 000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0.000	0.000
WSW	0.000	0 000	0 000	0.000	0.000	0.000	0 000	0 000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.006
NW	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0 000	0.000	0.000
NNW	0.000	0.000	0 009	0.075	0.015	0.000	0.000	0.000	0.000	0.099
TOTALS	0.000	0.014	0.122	0.329	0.100	0.009	0.000	0.000	0 000	0.574

TABLE 6 (continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.39	10.95	TOTALS
N	0.000	0.000	0.099	0.034	0.000	0 000	0 000	0 000	0.000	0 133
NNE	0.000	0.009	0.019	0.157	0.026	0.000	0.000	0.000	0.000	0.211
NE	0.000	0.000	0.003	0.007	0.009	0 000	0 000	0.000	0.000	0.019
ENE	0.000	0.000	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.012
E	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.007
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0 000	0.000	0.000	0.000	0 000	0 000	0.000
SSE	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0 000	0.000	0.003
S	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0.000	0 000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 000
SW	0.000	0.000	0.000	0 000	0.000	0.000	0.000	0 000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0 000	0 000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0.000
NNW	0.000	0.000	0.014	0.008	0.000	0.000	0 000	0.000	0.000	0.022
TOTALS	0.000	0.009	0.150	0.213	0.035	0.000	0.000	0.000	0.000	0.407

TABLE 6

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
SPLIT-LEVEL IN PERCENT
ELEVATED PORTION
THIRD QUARTER 1987

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SSW	0.000	0.000	0.000	0.000	0.000	0.082	0.000	0.000	0.000	0.082
SW	0.000	0.000	0.000	0.000	0.045	0.042	0.000	0.000	0.000	0.087
WSW	0.000	0.000	0.000	0.000	0.133	0.000	0.000	0.000	0.000	0.133
W	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.000	0.000	0.041
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.000	0.000	0.047	0.178	0.165	0.000	0.000	0.000	0.390

TABLE 6 (continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0 000	0.000	0 000	0.000	0 000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.047	0.045	0.085	0.000	0.000	0.000	0.177
SE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.000	0.095	0.000	0.000	0 000	0.000	0.000	0.095
S	0.000	0.000	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.095
SSW	0.000	0.000	0.047	0.142	0.000	0 083	0 000	0.000	0.000	0.272
SW	0.000	0.000	0.000	0.237	0.137	0.000	0.000	0.000	0.000	0.374
WSW	0.000	0.000	0.000	0.142	0.182	0 000	0.000	0.000	0.000	0.324
W	0.000	0.000	0.000	0.047	0.045	0.127	0.000	0.000	0.000	0.219
WNW	0.000	0 000	0.000	0.000	0.046	0.043	0.000	0 000	0.000	0.089
NW	0.000	0.000	0.000	0.047	0.047	0.000	0.039	0 000	0.000	0.133
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0 000	0 000	0.000	0.000
TOTALS	0.000	0.000	0.142	0.804	0.502	0.338	0 039	0 000	0.000	1.825

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.001	0.047	0.095	0.474	0.462	1.335	0.272	0.000	0.000	2.687
NNE	0.003	0.142	0.379	0.284	0.408	1 004	0 038	0 037	0.000	2.296
NE	0.001	0.047	0.095	0.190	0.183	0.341	0.000	0.000	0.000	0.857
ENE	0.001	0.047	0.095	0.237	0.091	0.000	0 000	0.000	0.000	0.471
E	0.001	0.095	0.142	0.237	0.181	0.084	0.000	0 000	0.000	0.740
ESE	0.003	0.000	0.569	0.521	0.590	1.089	0 000	0.000	0.000	2.773
SE	0.007	0.000	1.232	1.564	0.832	1.920	0.548	0.000	0.000	6.105
SSE	0 008	0.190	1.090	1.327	1.327	1.223	0 273	0 029	0.000	5.468
S	0.004	0.000	0.711	1.374	1.280	1.944	0 661	0.000	0.000	5.975
SSW	0.005	0.000	0.806	1.232	0.552	0.753	0.273	0 037	0.000	3 659
SW	0.003	0.047	0.521	1.090	0.184	0.617	0.079	0.000	0.000	2.542
WSW	0.003	0.047	0.474	1 137	0.878	0 417	0 000	0.000	0.000	2 957
W	0.002	0.000	0.332	0.900	1.319	0.720	0.000	0.000	0.000	3.274
WNW	0.001	0.095	0.142	0.474	1 082	1 262	0 039	0 000	0 000	3 096
NW	0.002	0.047	0.237	0.569	1.056	1.835	0.468	0.000	0.000	4.215
NNW	0.001	0 095	0.000	0.284	0.273	0.875	0 117	0 000	0.000	1.645
TOTALS	0.046	0 899	6.922	11.897	10.701	15 423	2 769	0 103	0 000	48.759

TABLE 6 (continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.026	0.047	0.474	0.379	0.636	0.918	0.236	0.000	0.000	2.717
NNE	0.014	0.047	0.237	0.237	0.279	0.992	0.078	0.000	0.000	1.884
NE	0.007	0.000	0.142	0.284	0.509	0.463	0.039	0.000	0.000	1.444
ENE	0.019	0.047	0.332	0.521	0.366	0.258	0.000	0.015	0.000	1.558
E	0.019	0.000	0.379	0.521	0.323	0.849	0.000	0.000	0.000	2.092
ESE	0.026	0.095	0.427	0.664	0.641	1.189	0.000	0.000	0.000	3.043
SE	0.028	0.000	0.569	1.185	0.775	0.504	0.000	0.000	0.000	3.062
SSE	0.049	0.190	0.806	0.521	0.410	0.499	0.118	0.000	0.000	2.594
S	0.037	0.142	0.616	0.806	0.137	0.456	0.193	0.030	0.000	2.418
SSW	0.023	0.047	0.427	0.569	0.178	0.205	0.156	0.000	0.000	1.605
SW	0.023	0.047	0.427	0.853	0.229	0.209	0.000	0.000	0.000	1.788
WSW	0.028	0.095	0.474	0.521	0.367	0.083	0.000	0.000	0.000	1.568
W	0.021	0.000	0.427	0.569	0.325	0.127	0.000	0.000	0.000	1.469
WNW	0.023	0.047	0.427	0.616	0.370	0.044	0.000	0.000	0.000	1.527
NW	0.023	0.095	0.379	0.474	0.413	0.419	0.039	0.000	0.000	1.842
NNW	0.014	0.095	0.190	0.237	0.409	0.792	0.039	0.000	0.000	1.776
TOTALS	0.380	0.994	6.735	8.959	6.369	8.009	0.898	0.045	0.000	32.389

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.009	0.000	0.095	0.190	0.225	0.462	0.039	0.000	0.000	1.020
NNE	0.017	0.000	0.190	0.142	0.000	0.735	0.156	0.000	0.000	1.240
NE	0.013	0.000	0.142	0.142	0.407	0.382	0.078	0.000	0.000	1.164
ENE	0.017	0.047	0.142	0.237	0.273	0.042	0.000	0.000	0.000	0.758
E	0.000	0.000	0.000	0.047	0.000	0.126	0.000	0.000	0.000	0.173
ESE	0.017	0.142	0.047	0.095	0.414	0.168	0.000	0.000	0.000	0.883
SE	0.022	0.000	0.237	0.284	0.091	0.043	0.000	0.000	0.000	0.677
SSE	0.017	0.000	0.190	0.095	0.047	0.000	0.000	0.000	0.000	0.349
S	0.004	0.000	0.047	0.000	0.045	0.082	0.000	0.000	0.000	0.178
SSW	0.009	0.000	0.095	0.142	0.045	0.000	0.000	0.000	0.000	0.291
SW	0.017	0.095	0.095	0.095	0.047	0.000	0.000	0.000	0.000	0.349
WSW	0.017	0.047	0.142	0.095	0.044	0.000	0.000	0.000	0.000	0.345
W	0.013	0.047	0.095	0.237	0.047	0.041	0.000	0.000	0.000	0.480
WNW	0.009	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.103
NW	0.004	0.000	0.047	0.142	0.046	0.000	0.000	0.000	0.000	0.239
NNW	0.004	0.000	0.047	0.190	0.186	0.249	0.000	0.000	0.000	0.676
TOTALS	0.189	0.425	1.658	2.134	1.917	2.331	0.273	0.000	0.000	8.927

TABLE 6 (continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	8.59	10.95	TOTALS
N	0.000	0.000	0.000	0.095	0.000	0.209	0.000	0.000	0.000	0.304
NNE	0.009	0.000	0.047	0.047	0.177	0.333	0.078	0.000	0.000	0.691
NE	0.019	0.000	0.095	0.047	0.091	0.285	0.000	0.000	0.000	0.537
ENE	0.000	0.000	0.000	0.047	0.000	0.085	0.000	0.000	0.000	0.132
E	0.000	0.000	0.000	0.095	0.000	0.000	0.000	0.000	0.000	0.095
ESE	0.009	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.056
SE	0.019	0.000	0.095	0.047	0.000	0.000	0.000	0.000	0.000	0.161
SSE	0.019	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.113
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.093
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.009	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.103
W	0.009	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.056
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
TOTALS	0.093	0.047	0.425	0.425	0.406	0.912	0.078	0.000	0.000	2.387

TABLE 7

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
SPLIT-LEVEL JFD IN PERCENT
GROUND LEVEL PORTION
FOURTH QUARTER 1987

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.082	0.134	0.000	0.000	0.216
NNE	0.000	0.000	0.000	0.000	0.000	0.031	0.056	0.000	0.000	0.087
NE	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.012
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.003	0.007	0.000	0.000	0.000	0.000	0.010
SE	0.000	0.000	0.000	0.040	0.008	0.000	0.000	0.000	0.000	0.048
SSE	0.000	0.000	0.000	0.047	0.009	0.000	0.000	0.000	0.000	0.056
S	0.000	0.000	0.000	0.038	0.010	0.000	0.000	0.000	0.000	0.048
SSW	0.000	0.000	0.000	0.002	0.000	0.009	0.000	0.000	0.000	0.011
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.022	0.000	0.000	0.000	0.022
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.008	0.039	0.000	0.000	0.047
NW	0.000	0.000	0.000	0.000	0.000	0.024	0.100	0.000	0.000	0.124
NNW	0.000	0.000	0.000	0.000	0.000	0.008	0.075	0.000	0.000	0.083
TOTALS	0.000	0.000	0.000	0.130	0.034	0.196	0.404	0.000	0.000	0.764

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.022	0.041	0.000	0.000	0.063
NNE	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.015
NE	0.000	0.000	0.000	0.000	0.001	0.012	0.000	0.000	0.000	0.013
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.016
SE	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.011
SSE	0.000	0.000	0.000	0.014	0.009	0.000	0.000	0.000	0.000	0.023
S	0.000	0.000	0.000	0.020	0.000	0.011	0.000	0.000	0.000	0.031
SSW	0.000	0.000	0.000	0.006	0.018	0.000	0.000	0.000	0.000	0.024
SW	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.056	0.000	0.000	0.056
NW	0.000	0.000	0.000	0.000	0.000	0.012	0.059	0.000	0.000	0.071
NNW	0.000	0.000	0.000	0.000	0.000	0.024	0.047	0.000	0.000	0.071
TOTALS	0.000	0.000	0.000	0.054	0.028	0.112	0.203	0.000	0.000	0.397

TABLE 7 (continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.008	0.076	0.000	0.037	0.000	0.121
NNE	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.004
NE	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.019
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.008
SE	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.005
SSE	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
S	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.021
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.009
WSW	0.000	0.000	0.000	0.002	0.000	0.032	0.000	0.000	0.000	0.034
W	0.000	0.000	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.023
WNW	0.000	0.000	0.000	0.000	0.000	0.037	0.029	0.000	0.000	0.066
NW	0.000	0.000	0.000	0.000	0.013	0.029	0.039	0.000	0.000	0.081
NNW	0.000	0.000	0.000	0.000	0.005	0.014	0.019	0.000	0.000	0.038
TOTALS	0.000	0.000	0.003	0.016	0.030	0.259	0.087	0.037	0.000	0.432

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.015	0.046	0.170	0.269	0.118	0.000	0.618
NNE	0.000	0.000	0.000	0.011	0.056	0.085	0.039	0.000	0.000	0.191
NE	0.000	0.000	0.000	0.014	0.020	0.077	0.009	0.000	0.000	0.120
ENE	0.000	0.000	0.000	0.003	0.022	0.021	0.000	0.000	0.000	0.046
E	0.000	0.000	0.002	0.003	0.006	0.007	0.000	0.000	0.000	0.018
ESE	0.000	0.000	0.001	0.020	0.050	0.040	0.000	0.000	0.000	0.111
SE	0.000	0.000	0.000	0.067	0.008	0.016	0.000	0.000	0.000	0.091
SSE	0.000	0.000	0.007	0.037	0.008	0.038	0.000	0.000	0.000	0.090
S	0.000	0.000	0.003	0.035	0.021	0.028	0.000	0.000	0.000	0.087
SSW	0.000	0.000	0.014	0.030	0.018	0.012	0.000	0.000	0.000	0.074
SW	0.000	0.000	0.008	0.000	0.000	0.029	0.000	0.000	0.000	0.037
WSW	0.000	0.000	0.000	0.027	0.082	0.062	0.089	0.000	0.000	0.260
W	0.000	0.000	0.000	0.011	0.090	0.132	0.074	0.046	0.000	0.353
WNW	0.000	0.000	0.000	0.001	0.043	0.195	0.173	0.130	0.000	0.542
NW	0.000	0.000	0.000	0.002	0.025	0.142	0.343	0.110	0.000	0.622
NNW	0.000	0.000	0.000	0.007	0.056	0.153	0.103	0.000	0.000	0.319
TOTALS	0.000	0.000	0.035	0.283	0.551	1.207	1.099	0.404	0.000	3.579

TABLE 7 (continued)

STABILITY CLASS E

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.009	0.015	0.038	0.118	0.169	0.000	0.000	0.349
NNE	0.000	0.000	0.002	0.018	0.014	0.051	0.016	0.000	0.000	0.101
NE	0.000	0.000	0.005	0.025	0.039	0.007	0.000	0.000	0.000	0.076
ENE	0.000	0.000	0.000	0.014	0.020	0.015	0.000	0.000	0.000	0.049
E	0.000	0.000	0.010	0.044	0.042	0.000	0.000	0.000	0.000	0.096
ESE	0.000	0.000	0.048	0.127	0.204	0.073	0.000	0.000	0.000	0.452
SE	0.000	0.005	0.061	0.156	0.083	0.119	0.000	0.000	0.000	0.424
SSE	0.000	0.002	0.045	0.224	0.164	0.104	0.000	0.000	0.000	0.539
S	0.000	0.007	0.060	0.145	0.193	0.145	0.000	0.000	0.000	0.550
SSW	0.000	0.001	0.000	0.044	0.009	0.000	0.000	0.000	0.000	0.054
SW	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.007
WSW	0.000	0.000	0.008	0.025	0.008	0.027	0.072	0.000	0.000	0.140
W	0.000	0.002	0.004	0.030	0.050	0.060	0.000	0.000	0.000	0.146
WNW	0.000	0.000	0.001	0.018	0.044	0.033	0.014	0.000	0.000	0.110
NW	0.000	0.000	0.000	0.034	0.047	0.116	0.073	0.000	0.000	0.270
NNW	0.000	0.000	0.009	0.053	0.097	0.187	0.019	0.000	0.000	0.365
TOTALS	0.000	0.017	0.262	0.979	1.052	1.055	0.363	0.000	0.000	3.728

STABILITY CLASS F

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.009	0.089	0.052	0.000	0.000	0.000	0.000	0.150
NNE	0.000	0.005	0.005	0.045	0.051	0.000	0.000	0.000	0.000	0.106
NE	0.000	0.000	0.003	0.020	0.007	0.008	0.000	0.000	0.000	0.038
ENE	0.000	0.003	0.018	0.014	0.007	0.000	0.000	0.000	0.000	0.042
E	0.000	0.002	0.014	0.036	0.008	0.000	0.000	0.000	0.000	0.060
ESE	0.000	0.003	0.036	0.005	0.022	0.009	0.000	0.000	0.000	0.075
SE	0.001	0.005	0.110	0.156	0.030	0.061	0.000	0.000	0.000	0.363
SSE	0.001	0.003	0.068	0.161	0.274	0.323	0.047	0.000	0.000	0.877
S	0.000	0.003	0.045	0.015	0.097	0.182	0.000	0.000	0.000	0.342
SSW	0.000	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.023
SW	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
WNW	0.000	0.000	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.007
NW	0.000	0.000	0.002	0.011	0.000	0.000	0.000	0.000	0.000	0.013
NNW	0.000	0.000	0.009	0.067	0.045	0.008	0.000	0.000	0.000	0.129
TOTALS	0.002	0.025	0.324	0.624	0.616	0.591	0.047	0.000	0.000	2.229

TABLE 7 (continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.027	0.101	0.008	0.000	0.000	0.000	0.000	0.136
NNE	0.001	0.000	0.034	0.116	0.032	0.000	0.000	0.000	0.000	0.183
NE	0.000	0.000	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.026
ENE	0.000	0.000	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.014
E	0.000	0.000	0.020	0.016	0.000	0.000	0.000	0.000	0.000	0.036
ESE	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.010
SE	0.001	0.002	0.053	0.009	0.014	0.000	0.000	0.000	0.000	0.079
SSE	0.001	0.015	0.068	0.242	0.000	0.043	0.000	0.000	0.000	0.369
S	0.000	0.000	0.007	0.028	0.057	0.023	0.000	0.000	0.000	0.115
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.016
NNW	0.000	0.000	0.006	0.014	0.008	0.000	0.000	0.000	0.000	0.028
TOTALS	0.003	0.017	0.264	0.543	0.119	0.066	0.000	0.000	0.000	1.012

TABLE 7 (continued)

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
SPLIT-LEVEL JFD IN PERCENT
ELEVATED PORTION
FOURTH QUARTER 1987

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.000	0.047	0.094	0.000	0.000	0.000	0.000	0.000	0.141

TABLE 7 (continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SW	0.000	0.000	0.000	0.000	0.045	0.042	0.000	0.000	0.000	0.087
WSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
W	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.000	0.000	0.041
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.000	0.029
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.037	0.000	0.000	0.037
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.000	0.094	0.094	0.045	0.083	0.037	0.029	0.000	0.382

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.047	0.328	0.179	1.519	1.720	0.752	0.018	4.563
NNE	0.000	0.000	0.047	0.469	0.272	1.027	0.648	0.000	0.008	2.471
NE	0.000	0.000	0.187	0.281	0.634	0.700	0.193	0.000	0.000	1.995
ENE	0.000	0.047	0.187	0.234	0.230	0.209	0.039	0.000	0.000	0.946
E	0.000	0.000	0.094	0.281	0.091	0.164	0.000	0.000	0.000	0.630
ESE	0.000	0.047	0.515	0.469	0.631	0.403	0.271	0.000	0.000	2.336
SE	0.000	0.000	0.890	1.172	0.276	0.778	0.342	0.022	0.000	3.480
SSE	0.000	0.187	0.469	0.469	0.135	0.773	0.990	0.456	0.011	3.490
S	0.000	0.000	0.328	0.234	0.134	0.689	1.364	0.448	0.000	3.197
SSW	0.000	0.000	0.234	0.234	0.178	0.484	0.381	0.085	0.000	1.596
SW	0.000	0.000	0.094	0.187	0.309	0.209	0.303	0.100	0.000	1.202
WSW	0.000	0.000	0.047	0.234	0.181	0.785	0.307	0.116	0.010	1.680
W	0.000	0.000	0.141	0.094	0.273	1.304	0.421	0.127	0.001	2.361
WNW	0.000	0.000	0.094	0.375	0.409	1.432	0.912	0.224	0.029	3.475
NW	0.000	0.000	0.047	0.375	0.455	0.817	1.935	0.545	0.000	4.174
NNW	0.000	0.047	0.141	0.141	0.452	1.136	1.596	0.176	0.000	3.689
TOTALS	0.000	0.328	3.562	5.577	4.839	12.429	11.422	3.051	0.077	41.284

TABLE 7 (continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.002	0.000	0.094	0.328	0.543	1.387	0.231	0.028	0.000	2.613
NNE	0.002	0.000	0.094	0.141	0.632	0.404	0.039	0.067	0.000	1.379
NE	0.002	0.000	0.094	0.328	0.229	0.657	0.039	0.000	0.000	1.349
ENE	0.003	0.000	0.141	0.281	0.136	0.250	0.000	0.000	0.000	0.811
E	0.009	0.094	0.328	0.187	0.487	0.370	0.039	0.000	0.000	1.514
ESE	0.002	0.047	0.047	0.609	0.761	1.976	0.155	0.000	0.000	3.597
SE	0.011	0.047	0.469	0.750	1.259	3.111	1.143	0.223	0.004	7.017
SSE	0.004	0.000	0.187	0.375	0.639	1.348	0.907	0.292	0.013	3.765
S	0.004	0.047	0.141	0.375	0.315	0.411	0.267	0.242	0.004	1.806
SSW	0.000	0.000	0.000	0.141	0.178	0.083	0.310	0.000	0.000	0.712
SW	0.001	0.000	0.047	0.000	0.000	0.082	0.038	0.000	0.000	0.168
WSW	0.003	0.000	0.141	0.000	0.047	0.081	0.039	0.000	0.000	0.311
W	0.001	0.000	0.047	0.094	0.135	0.420	0.230	0.000	0.000	0.927
WNW	0.000	0.000	0.000	0.141	0.275	0.500	0.038	0.000	0.000	0.954
NW	0.003	0.000	0.141	0.141	0.183	0.658	0.345	0.000	0.000	1.471
NNW	0.001	0.000	0.047	0.141	0.411	1.111	0.232	0.000	0.000	1.943
TOTALS	0.048	0.235	2.018	4.032	6.230	12.849	4.052	0.852	0.021	30.336

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.000	0.094	0.045	0.940	0.156	0.000	0.000	1.235
NNE	0.000	0.000	0.000	0.000	0.044	0.573	0.077	0.000	0.000	0.694
NE	0.003	0.047	0.047	0.047	0.045	0.285	0.038	0.000	0.000	0.512
ENE	0.000	0.000	0.000	0.000	0.045	0.285	0.077	0.000	0.000	0.407
E	0.002	0.000	0.047	0.328	0.360	0.127	0.039	0.000	0.000	0.903
ESE	0.011	0.000	0.328	0.562	0.544	0.336	0.000	0.000	0.000	1.781
SE	0.006	0.000	0.187	0.890	0.455	0.212	0.000	0.000	0.000	1.750
SSE	0.006	0.000	0.187	0.187	0.138	0.127	0.000	0.000	0.000	0.645
S	0.005	0.000	0.141	0.234	0.181	0.166	0.000	0.000	0.000	0.727
SSW	0.003	0.047	0.047	0.094	0.088	0.125	0.000	0.000	0.000	0.404
SW	0.003	0.047	0.047	0.047	0.046	0.000	0.000	0.000	0.000	0.190
WSW	0.003	0.000	0.094	0.047	0.000	0.042	0.000	0.000	0.000	0.186
W	0.000	0.000	0.000	0.000	0.133	0.043	0.000	0.000	0.000	0.176
WNW	0.003	0.000	0.094	0.000	0.045	0.041	0.000	0.000	0.000	0.183
NW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
NNW	0.003	0.000	0.094	0.094	0.090	0.079	0.000	0.000	0.000	0.360
TOTALS	0.048	0.141	1.313	2.671	2.259	3.381	0.387	0.000	0.000	10.200

TABLE 7 (continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.000	0.000	0.094	0.000	0.000	0.081	0.000	0.000	0.000	0.175
NNE	0.000	0.000	0.000	0.000	0.045	0.040	0.077	0.000	0.000	0.162
NE	0.000	0.000	0.000	0.000	0.000	0.040	0.000	0.000	0.000	0.040
ENE	0.000	0.000	0.000	0.047	0.044	0.042	0.000	0.000	0.000	0.133
E	0.000	0.000	0.047	0.094	0.046	0.041	0.000	0.000	0.000	0.228
ESE	0.000	0.000	0.469	1.031	0.325	0.127	0.000	0.000	0.000	1.952
SE	0.000	0.000	0.422	0.750	0.138	0.042	0.000	0.000	0.000	1.352
SSE	0.000	0.047	0.187	0.187	0.229	0.000	0.000	0.000	0.000	0.650
S	0.000	0.000	0.141	0.047	0.044	0.000	0.000	0.000	0.000	0.232
SSW	0.000	0.000	0.000	0.047	0.046	0.000	0.000	0.000	0.000	0.093
SW	0.000	0.000	0.047	0.047	0.045	0.000	0.000	0.000	0.000	0.139
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.047	0.000	0.047	0.047	0.128	0.000	0.000	0.000	0.269
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.094	1.454	2.297	1.009	0.541	0.077	0.000	0.000	5.472

TABLE 8

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
ELEVATED JFD IN PERCENT
THIRD QUARTER 1987

STABILITY CLASS D

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.008	0.048	0.190	0.476	0.618	2.758	1.950	0.333	0.000	6.381
NNE	0.013	0.095	0.285	0.333	0.476	1.569	2.140	0.476	0.000	5.387
NE	0.011	0.000	0.333	0.380	0.618	1.427	1.046	0.285	0.000	4.100
ENE	0.005	0.000	0.143	0.238	0.476	1.379	0.571	0.000	0.048	2.860
E	0.024	0.095	0.618	0.285	0.666	1.094	0.095	0.000	0.000	2.877
ESE	0.028	0.048	0.808	1.046	0.808	1.712	2.330	0.428	0.000	7.208
SE	0.043	0.190	1.094	2.378	1.950	3.376	3.376	0.360	0.000	12.786
SSE	0.047	0.238	1.189	1.474	1.379	2.187	0.856	0.048	0.000	7.418
S	0.024	0.048	0.666	1.427	0.999	3.233	1.522	0.285	0.000	8.204
SSW	0.039	0.143	1.046	0.999	0.856	1.617	1.569	0.238	0.000	6.507
SW	0.028	0.048	0.808	1.236	1.236	1.094	1.189	0.048	0.000	5.687
WSW	0.021	0.000	0.618	1.664	1.236	1.759	0.571	0.000	0.000	5.869
W	0.024	0.095	0.618	1.569	1.759	1.854	0.285	0.000	0.000	6.204
WNW	0.014	0.000	0.428	0.951	1.236	2.425	0.476	0.000	0.000	5.530
NW	0.033	0.238	0.761	1.331	1.569	2.853	1.046	0.048	0.000	7.879
NNW	0.019	0.095	0.476	0.808	0.571	1.712	1.284	0.143	0.000	5.108
TOTALS	0.381	1.381	10.080	16.594	16.452	32.047	20.305	2.712	0.048	100.000

TABLE 9

BROWNS FERRY NUCLEAR PLANT METEOROLOGICAL DATA
ELEVATED JFD IN PERCENT
FOURTH QUARTER 1987

STABILITY CLASS D

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	TOTALS
N	0.007	0.138	0.092	0.184	0.415	1.890	4.749	1.936	0.461	9.872
NNE	0.004	0.000	0.138	0.553	0.507	2.029	1.936	0.415	0.046	5.628
NE	0.004	0.000	0.138	0.323	0.507	1.337	1.337	0.369	0.000	4.015
ENE	0.005	0.000	0.184	0.461	0.231	1.199	0.369	0.184	0.000	2.633
E	0.007	0.000	0.231	0.507	0.415	0.692	0.369	0.000	0.000	2.221
ESE	0.014	0.000	0.461	0.692	1.060	2.213	1.475	0.922	0.046	6.883
SE	0.023	0.138	0.645	1.107	1.660	3.781	3.504	2.674	1.614	15.146
SSE	0.025	0.092	0.738	0.922	0.553	2.766	4.103	1.752	0.784	11.735
S	0.016	0.000	0.553	0.415	0.738	2.075	2.259	1.660	0.138	7.854
SSW	0.008	0.092	0.184	0.461	0.277	1.475	1.844	0.876	0.138	5.355
SW	0.007	0.000	0.231	0.231	0.415	1.014	0.599	0.369	0.046	2.912
WSW	0.007	0.000	0.231	0.461	0.046	0.784	0.692	0.231	0.369	2.821
W	0.000	0.000	0.000	0.277	0.231	0.922	1.521	0.461	0.184	3.596
WNW	0.004	0.000	0.138	0.231	0.507	2.121	1.568	0.784	0.369	5.722
NW	0.004	0.046	0.092	0.184	0.507	1.153	2.536	1.982	0.231	6.735
NNW	0.003	0.000	0.092	0.323	0.599	1.706	2.490	1.614	0.046	6.873
TOTALS	0.138	0.506	4.148	7.332	8.668	27.157	31.351	16.229	4.472	100.001

TABLE 10
BROWNS FERRY NUCLEAR PLANT - INDIVIDUAL DOSES FROM GASEOUS EFFLUENTS
THIRD QUARTER 1987

Effluent	Pathway	Guideline*	Point	Dose
Noble gases	γ Air dose	30	Max. Exp.[1]	5.5×10^{-7} mrad
	β Air dose	60	Max. Exp.[1]	9.9×10^{-7} mrad
	Total body[2]	15	Residence	0.0 mrem
	Skin[2]	45	Residence	0.0 mrem
Iodines/ Particulates	G.I. Tract (critical organ)	45	Real[3] Pathway	3.7×10^{-3} mrem

Breakdown of Iodine/Particulate Exposures (mrem)

	Teen	Adult
Vegetable ingestion	1.79×10^{-3}	1.65×10^{-3}
Beef ingestion[4]	6.75×10^{-5}	1.25×10^{-4}
Inhalation	1.84×10^{-6}	1.91×10^{-5}
Ground contamination	1.88×10^{-3}	1.88×10^{-3}
Total	3.72×10^{-3}	3.62×10^{-3}

*These are the annual guidelines defined by Appendix I to 10 CFR 50.

1. Maximum offsite exposure point is 2550 meters in the S sector.
2. Dose from air submersion.
3. Real receptor is located at 1620 meters in the NNW sector.
4. Beef ingestion dose is calculated at the site boundary at 1525 meters in the N sector.

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TABLE 11

BROWNS FERRY NUCLEAR PLANT - INDIVIDUAL DOSES FROM GASEOUS EFFLUENTS
FOURTH QUARTER 1987

Effluent	Pathway	Guideline*	Point	Dose
Noble gases	γ Air dose	30	Max. Exp.[1]	7.9×10^{-8} mrad
	β Air dose	60	Max. Exp.[2]	1.1×10^{-6} mrad
	Total body[3]	15	Residence[4]	1.6×10^{-9} mrem
	Skin[3]	45	Residence[4]	1.4×10^{-7} mrem
Iodines/ Particulates	Liver (critical organ)	45	Real Pathway[4]	7.1×10^{-3} mrem

Breakdown of Iodine/Particulate Exposures (mrem)

	Child	Adult
Vegetable ingestion	5.9×10^{-3}	2.1×10^{-3}
Beef ingestion[5]	1.8×10^{-4}	1.7×10^{-4}
Inhalation	1.0×10^{-5}	6.3×10^{-6}
Ground contamination	1.0×10^{-3}	1.0×10^{-3}
Total	7.1×10^{-3}	3.3×10^{-3}

*These are the annual guidelines defined by Appendix I to 10 CFR 50.

1. Maximum offsite exposure point is at 1650 meters in the NNW sector.
2. Maximum offsite exposure point is at 6100 meters in the NW sector.
3. Dose from air submersion.
4. Receptor is located at 4425 meters in the WNW sector.
5. Receptor is located at 1650 meters in the NNW sector.
6. Beef ingestion exposure point is located at 1650 meters in the NNW sector.

TABLE 12

BROWNS FERRY NUCLEAR PLANT

BFN -- 3087 QUARTERLY ASSESSMENT
BFN DATA
SUMMATION OF POPULATION DOSES

	G.I. TRACT					LUNG				
	INFANT	CHILD	TEEN	ADULT	TOTALS	INFANT	CHILD	TEEN	ADULT	TOTALS
SUBMERSION	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	0.00E+00
GROUND	6.45E-05	4.02E-04	2.56E-04	1.19E 03	1.91E 03	6.45E-05	4.02E-04	2.5oE 04	1.19E 03	1.91E-03
INHALATION	1.89E-06	3.18E-05	1.74E-05	8.27E 05	1.34E 04	1.69E-05	2.48E 04	1.30E 04	4.36E-04	8.31E 04
COW MILK	7.86E 06	3.48E-05	1.43E 05	6.82E 05	1.25E 04	7.01E-06	2.88E 05	9.56E 06	4.39E 05	8.93E 05
BEEF INGESTION	0.00E+00	1.59E-05	1.71E 05	1.38E-04	1.71E 04	0.00E+00	4.13E-06	2.19E;06	1.02E 05	2.25E 05
VEG INGESTION	0.00E+00	1.18E 05	1.23E 05	9.39E 05	1.18E 04	0.00E+00	3.79E 06	2.03E 06	1.42E 05	2.00E 05
TOTAL MAN-REM	7.43E-05	4.96E-04	3.17E-04	1.57E-03	2.46E 03	8.84E 05	6.87E 04	3.99E-04	1.70E 03	2.87E 03

BFN -- 4087 QUARTERLY ASSESSMENT
BFN DATA
SUMMATION OF POPULATION DOSES

	LIVER					BONE				
	INFANT	CHILD	TEEN	ADULT	TOTALS	INFANT	CHILD	TEEN	ADULT	TOTALS
SUBMERSION	2.62E-09	1.64E-08	1.04E-08	4.82E-08	7.76E-08	2.62E-09	1.64E-08	1.04E-08	4.82E-08	7.76E-08
GROUND	4.20E-05	2.62E-04	1.66E-04	7.71E-04	1.24E-03	4.20E-05	2.62E-04	1.66E-04	7.71E-04	1.24E-03
INHALATION	1.11E-06	1.55E-05	7.15E-06	2.85E-05	5.23E-05	5.87E-07	8.97E-06	2.85E-06	9.60E-06	2.20E-05
COW MILK	8.29E-05	2.69E-04	8.26E-05	2.84E-04	7.19E-04	6.51E-05	2.54E-04	5.55E-05	1.84E-04	5.59E-04
BEEF INGESTION	0.00E+00	8.14E-05	3.99E-05	2.20E-04	3.41E-04	0.00E+00	7.74E-05	2.71E-05	1.44E-04	2.49E-04
VEG INGESTION	0.00E+00	4.88E-05	2.42E-05	1.27E-04	2.00E-04	0.00E+00	4.61E-05	1.63E-05	8.23E-05	1.45E-04
TOTAL MAN-REM	1.26E-04	6.76E-04	3.20E-04	1.43E-03	2.55E-03	1.08E-04	6.48E-04	2.68E-04	1.19E-03	2.22E-03

TABLE 13

BROWNS FERRY NUCLEAR PLANT

LIQUID EFFLUENT DOSES
BROWNS FERRY NUCLEAR PLANT ROUTINE RELEASES 3RD QUARTER-1987

	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
I. WATER INGESTION AT U.S. PLYWOOD-CHAMPION PAPER						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	2.0E-03	6.5E-05	3.9E-04	3.9E-04	7.2E-03	3.9E-04
B. MAXIMUM INDIVIDUAL ADULT (MREM)	7.3E-04	1.1E-04	7.9E-04	7.9E-04	1.1E-03	7.9E-04
C. TENNESSEE RIVER POPULATION (MAN-REM)	1.5E-02	1.3E-03	9.3E-03	9.3E-03	2.0E-02	9.3E-03
II. FISH INGESTION FROM WHEELER LAKE BELOW BFN						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	5.4E-02	4.2E-04	9.6E-03	9.6E-03	5.8E-02	9.6E-03
B. MAXIMUM INDIVIDUAL ADULT (MREM)	4.1E-02	1.5E-03	4.5E-02	4.5E-02	6.4E-02	4.5E-02
C. TENNESSEE RIVER POPULATION (MAN-REM)	5.5E+00	1.5E-01	4.3E+00	4.3E+00	7.7E+00	4.3E+00
III. RECREATION AT WHEELER LAKE BELOW BFN						
A. SHORELINE INDIVIDUAL (MREM)	1.2E-02	9.3E-03	8.1E-03	9.9E-03	8.4E-03	1.2E-02
POPULATION (MAN-REM)	2.8E-01	2.2E-01	1.9E-01	2.3E-01	2.0E-01	2.8E-01
B. IN-WATER INDIVIDUAL (MREM)	4.8E-05	3.8E-05	3.3E-05	4.1E-05	3.4E-05	4.9E-05
POPULATION (MAN-REM)	1.1E-04	9.0E-05	7.9E-05	9.6E-05	8.1E-05	1.2E-04
C. ABOVE-WATER INDIVIDUAL (MREM)	4.7E-05	3.8E-05	3.3E-05	4.0E-05	3.4E-05	4.8E-05
POPULATION (MAN-REM)	3.0E-04	2.4E-04	2.1E-04	2.5E-04	2.1E-04	3.1E-04
IV. TOTAL						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	6.8E-02	9.9E-03	1.8E-02	2.0E-02	6.9E-02	2.2E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	5.3E-02	1.1E-02	5.3E-02	5.5E-02	7.3E-02	5.8E-02
C. TENNESSEE RIVER POPULATION (MAN-REM)	5.8E+00	3.7E-01	4.5E+00	4.5E+00	7.9E+00	4.6E+00

TABLE 14

BROWNS FERRY NUCLEAR PLANT

LIQUID EFFLUENT DOSES
BROWNS FERRY NUCLEAR PLANT ROUTINE RELEASES 4TH QUARTER-1987

	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
I. WATER INGESTION AT U.S. PLYWOOD-CHAMPION PAPER						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	3.6E-03	8.5E-05	6.7E-04	6.7E-04	3.9E-03	6.7E-04
B. MAXIMUM INDIVIDUAL ADULT (MREM)	1.3E-03	1.5E-04	1.4E-03	1.4E-03	2.0E-03	1.4E-03
C. TENNESSEE RIVER POPULATION (MAN-REM)	2.4E-02	1.6E-03	1.4E-02	1.4E-02	3.0E-02	1.4E-02
II. FISH INGESTION FROM WHEELER LAKE BELOW BFN						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	9.7E-02	7.7E-04	1.7E-02	1.7E-02	1.0E-01	1.7E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	7.3E-02	2.8E-03	8.0E-02	8.0E-02	1.1E-01	8.0E-02
C. TENNESSEE RIVER POPULATION (MAN-REM)	9.3E+00	2.5E-01	7.2E+00	7.2E+00	1.3E+01	7.2E+00
III. RECREATION AT WHEELER LAKE BELOW BFN						
A. SHORELINE INDIVIDUAL (MREM)	9.8E-03	7.6E-03	6.6E-03	8.1E-03	6.9E-03	1.0E-02
POPULATION (MAN-REM)	2.1E-01	1.6E-01	1.4E-01	1.7E-01	1.5E-01	2.1E-01
B. IN-WATER INDIVIDUAL (MREM)	3.9E-05	3.1E-05	2.7E-05	3.3E-05	2.8E-05	4.0E-05
POPULATION (MAN-REM)	8.3E-05	6.6E-05	5.7E-05	7.0E-05	5.9E-05	8.5E-05
C. ABOVE-WATER INDIVIDUAL (MREM)	3.8E-05	3.0E-05	2.6E-05	3.2E-05	2.7E-05	3.9E-05
POPULATION (MAN-REM)	2.2E-04	1.7E-04	1.5E-04	1.8E-04	1.6E-04	2.2E-04
IV. TOTAL						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	1.1E-01	8.5E-03	2.4E-02	2.6E-02	1.2E-01	2.8E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	8.4E-02	1.1E-02	8.8E-02	8.9E-02	1.2E-01	9.1E-02
C. TENNESSEE RIVER POPULATION (MAN-REM)	9.5E+00	4.2E-01	7.4E+00	7.4E+00	1.3E+01	7.4E+00

TABLE 15

BROWNS FERRY NUCLEAR PLANT

FIVE-YEAR SUMMARY OF QUARTERLY DOSES*

Year	Quarter	Air-γ (mrad)	Air-ß (mrad)	Air Submersion Skin (mrem)	Air Submersion TB (mrem)	Real Pathway Max. Organ (mrem)	Liquid Effluents TB (mrem)	Liquid Effluents Max. Organ (mrem)
1983	1	.47	.45	.24	.16	.25 Bone	.07	.09 Liver
	2	.48	.42	.32	.19	.31 Thyr.	.09	.11 Liver
	3	.18	.34	.16	.10	.30 Bone	.25	.33 Liver
	4	.39	.85	.24	.14	.04 Thyr.	.54	.73 Liver
1984	1	.39	.66	.47	.30	.41 Thyr.	.58	.79 Liver
	2	1.19	2.09	1.48	.98	.09 Thyr.	.11	.15 Liver
	3	.51	.98	.48	.31	.08 Thyr.	.10	.12 Liver
	4	.30	.58	.17	.10	.06 Thyr.	.31	.41 Liver
1985	1	.07	.12	.10	.06	.03 Thyr.	.09	.12 Liver
	2	<.001	<.001	<.001	<.001	.017 Bone	.18	.24 Liver
	3	<.001	<.001	0.0	0.0	.01 Bone	.05	.07 Liver
	4	<.001	<.001	0.0	0.0	.01 Bone	.10	.14 Liver
1986	1	<.001	<.001	0.0	0.0	.01 Bone	.08	.11 Liver
	2	<.001	<.001	<.001	<.001	<.001 Liver	.23	.31 Liver
	3	<.001	<.001	0.0	0.0	<.001 Liver	.15	.19 Liver
	4	<.001	<.001	0.0	0.0	<.001 Liver	.03	.04 Liver
1987	1	<.001	<.001	<.001	<.001	.0015 G.I. Tract	.02	.02 Liver
	2	<.001	<.001	<.001	<.001	.0024 G.I. Tract	.05	.07 Liver
	3	<.001	<.001	0.0	0.0	.0037 G.I. Tract	.06	.07 Liver
	4	<.001	<.001	<.001	<.001	.0071 Liver	.09	.12 Liver

*Note: All calculated doses are below limits specified in Appendix I to 10 CFR 50.
(0300c)

Figure 1

Browns Ferry Quarterly Gaseous Doses
Five-Year Summary of Gamma-air Doses

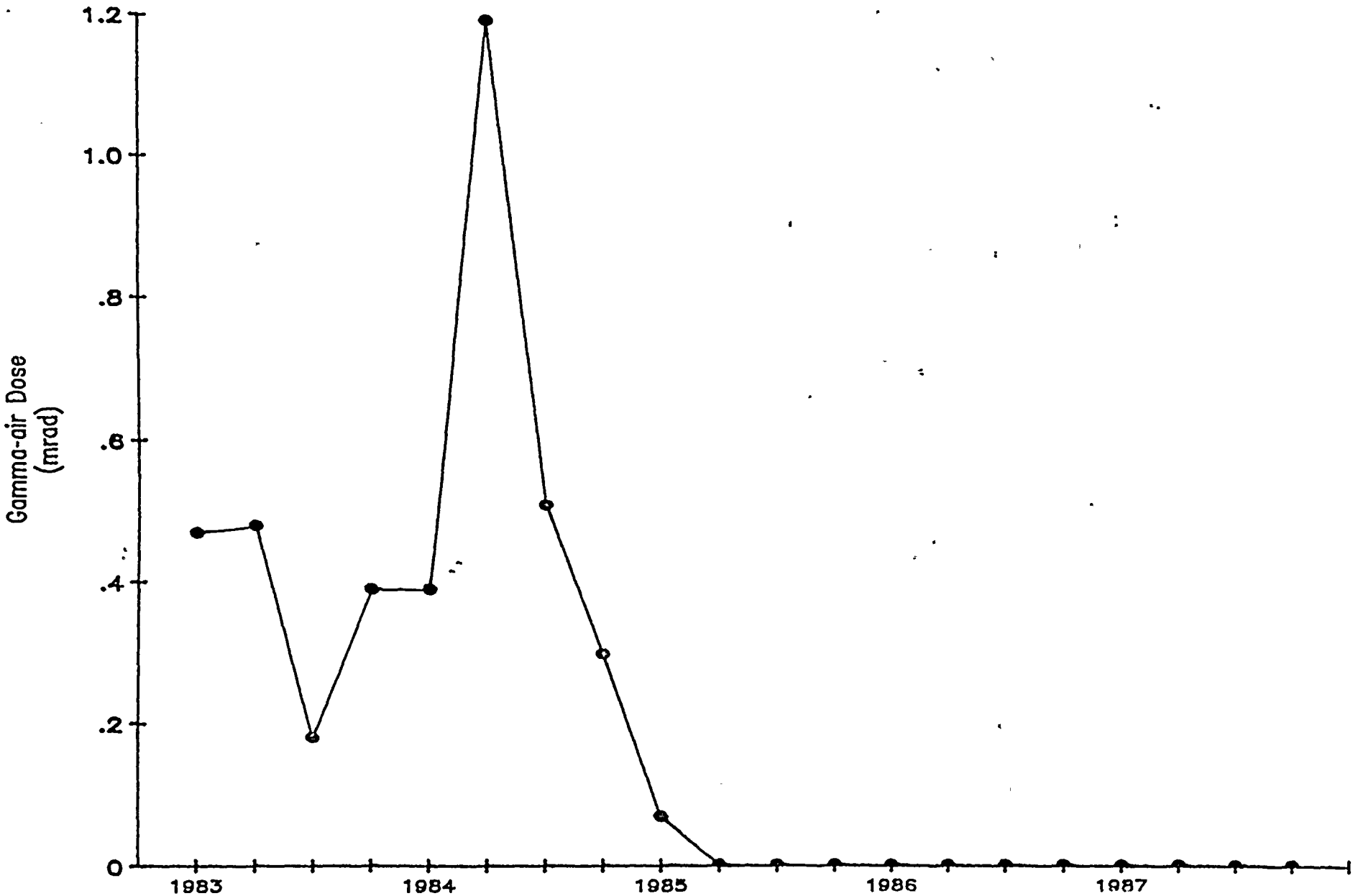

Figure 2

Browns Ferry Quarterly Gaseous Doses
Five-Year Summary of Beta-air Doses

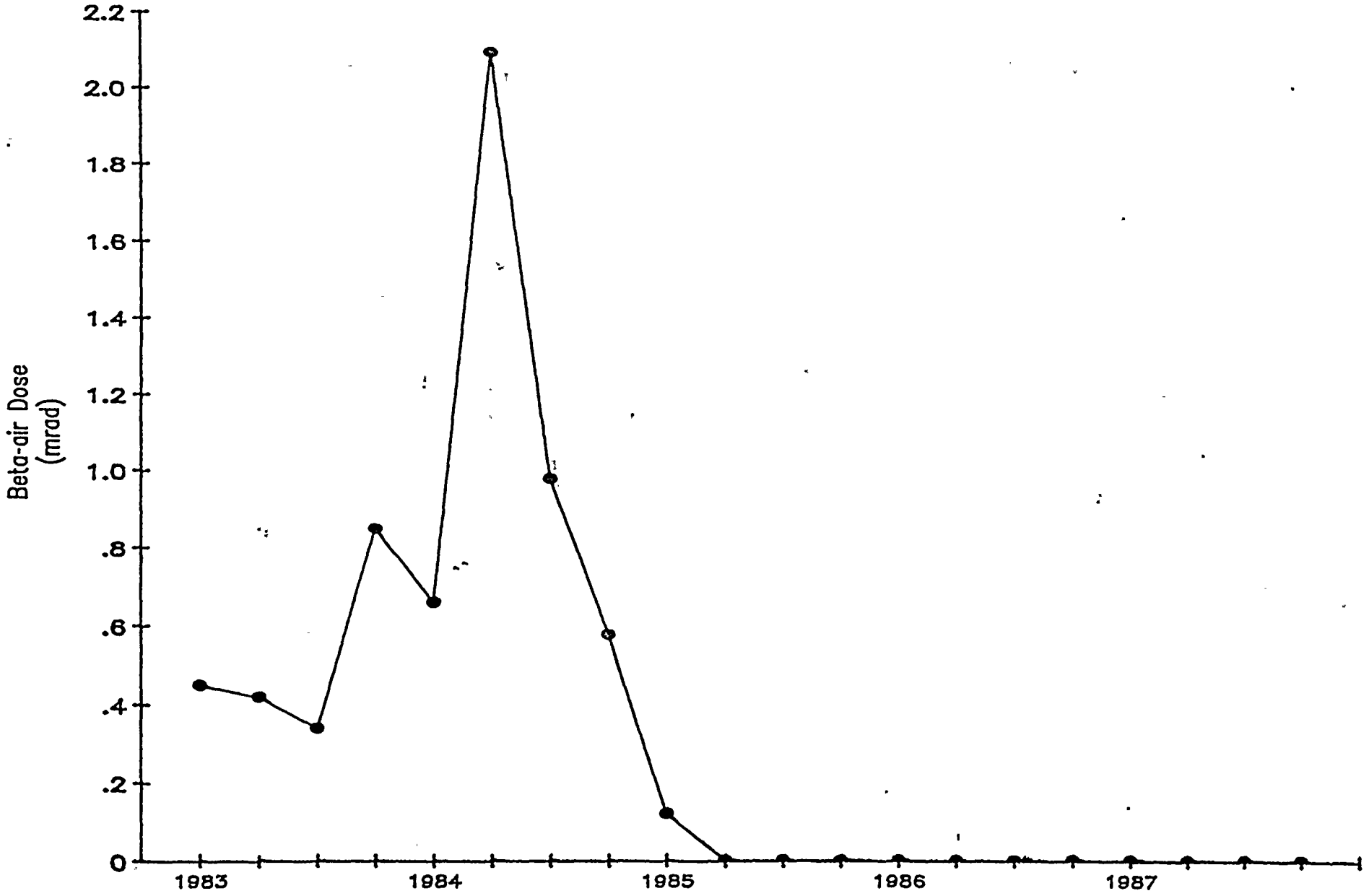

Figure 3

Browns Ferry Quarterly Gaseous Doses
Five-year Summary of Maximum Organ Doses

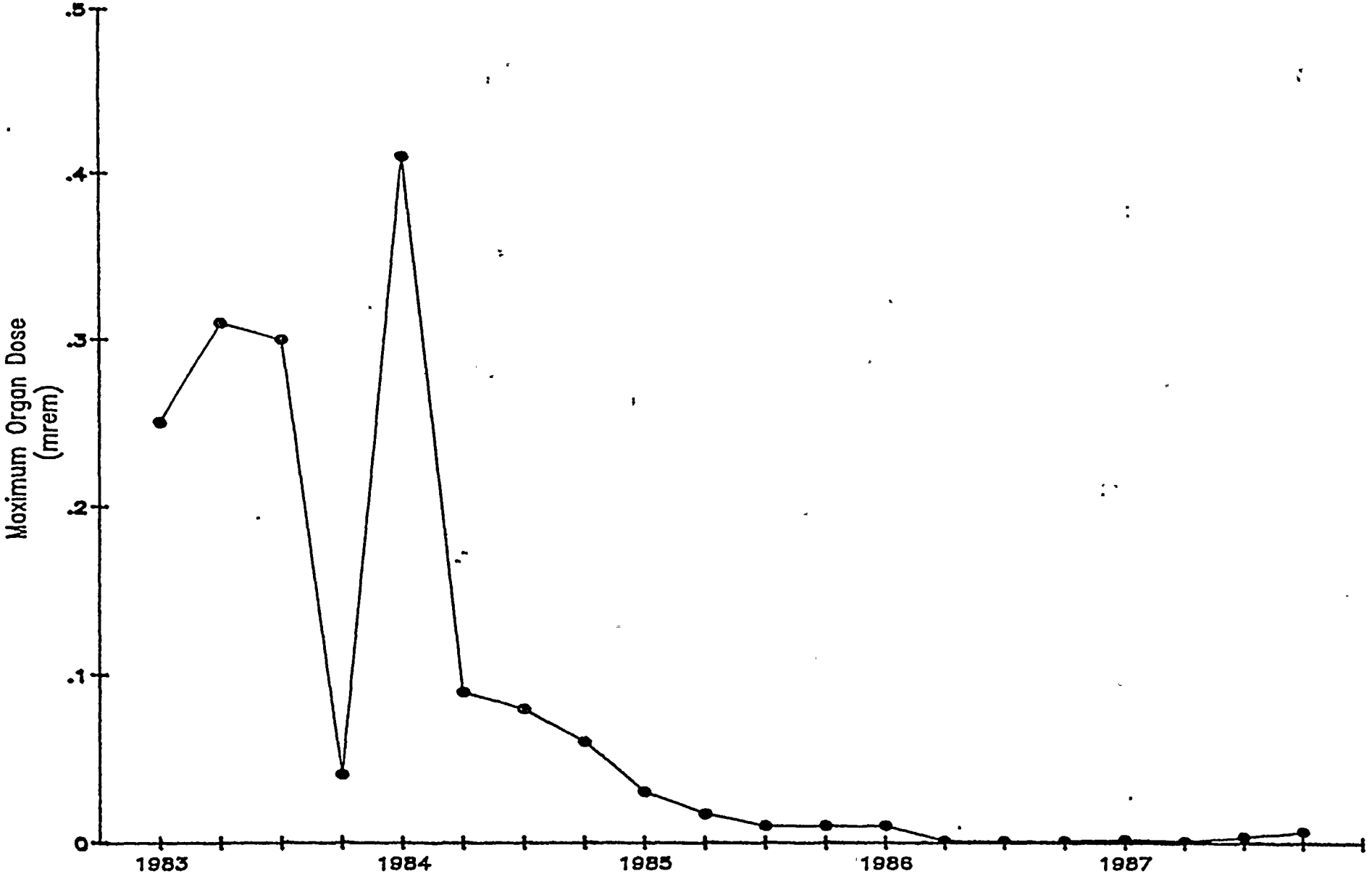

Figure 4

Browns Ferry Quarterly Liquid Doses
Five-Year Summary of Total Body Doses

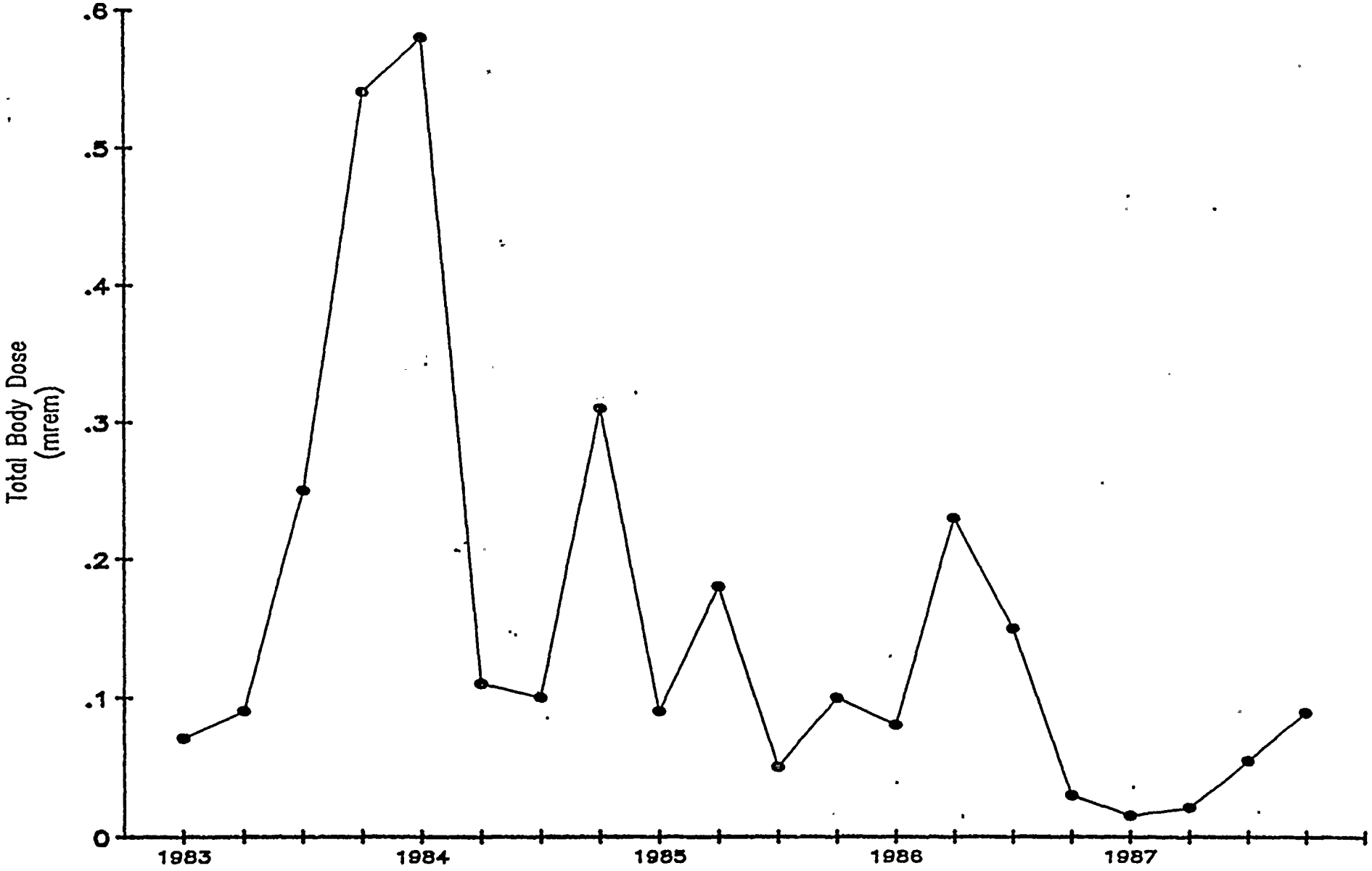

Figure 5

Browns Ferry Quarterly Liquid Doses
Five-Year Summary of Maximum Organ Doses