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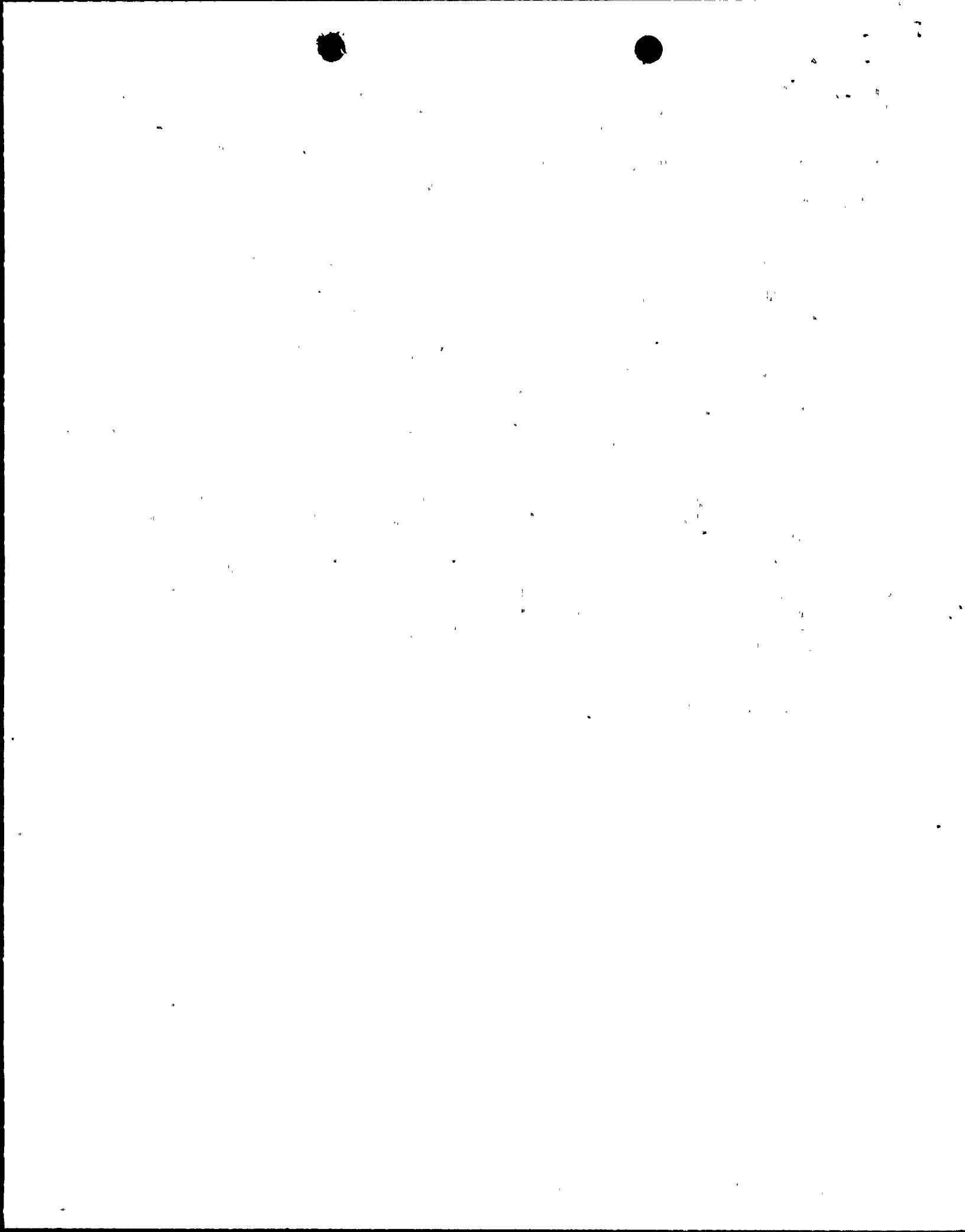
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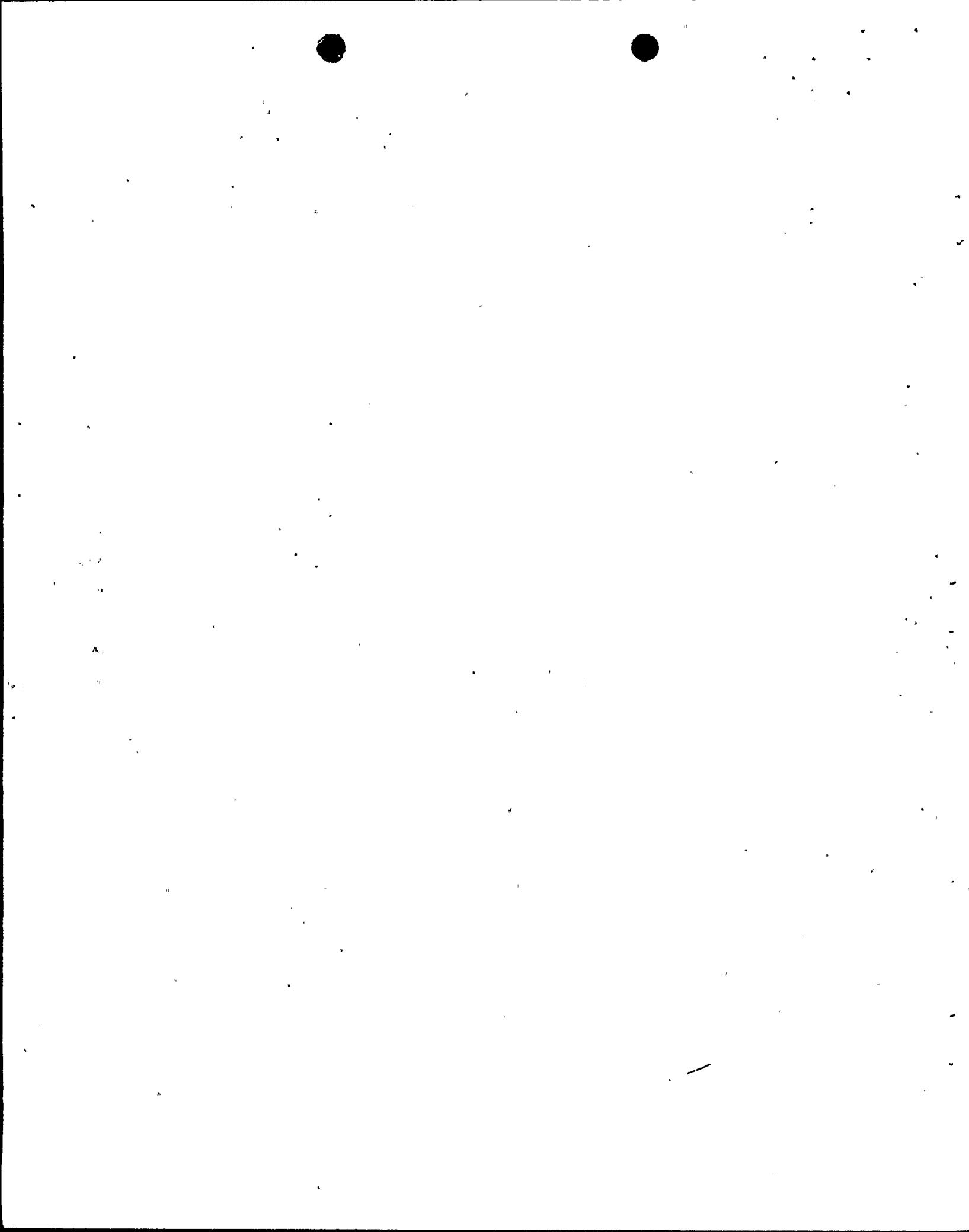
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RADIOLOGICAL IMPACT ASSESSMENT  
BROWNS FERRY NUCLEAR PLANT  
JANUARY - JUNE 1985  
TVA/POWER/RH

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Radiological Impact Assessment  
Browns Ferry Nuclear Plant  
January - June 1985

Introduction

Potential doses to individuals and populations have been calculated for the time period January through June 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 year round. 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.

### 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 18.2 mR/quarter at onsite stations and approximately 15.4 mR/quarter at offsite stations, or approximately 3 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 first quarter, the maximum gamma and beta air doses were calculated to be 0.07 and 0.12 mrad, respectively. During the second quarter, the gamma and beta air doses were  $5.0 \times 10^{-8}$  and  $2.3 \times 10^{-6}$  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 first quarter were calculated to be 0.10 and 0.06 mrem. During the second quarter, the skin and total body were doses  $2.6 \times 10^{-15}$  and  $3.7 \times 10^{-16}$  mrem, respectively. The dose to the maximum exposed organ was 0.03 mrem to the thyroid for the first quarter and 0.007 mrem to the bone for the second quarter. These compare 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 first quarter, the maximum individual doses to the total body and the maximum exposed organ (i.e., liver) were calculated to be 0.09 and 0.12 mrem, respectively. In the second quarter, the maximum doses to the total body and liver were 0.18 and 0.24 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 first quarter were estimated to be 1.39 man-rem to the total body and 1.65 man-rem to the thyroid. For the second quarter, population doses were 0.001 man-rem to the liver and 0.002 man-rem to the bone.

### 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 within 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 43,500 ft<sup>3</sup>/s for the first quarter and 16,900 ft<sup>3</sup>/s for the second quarter. Radioactivity concentrations in the Tennessee River were calculated assuming that releases in liquid effluents were continuous.

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.

From liquid releases during the first quarter, the total population along the Tennessee River was estimated to receive 7.1 man-rem to the total body and 12 man-rem to the maximum exposed organ (liver). For the second quarter, the Tennessee River population was estimated to receive 14 man-rem to the total body and 24 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. In summary, all doses calculated were below the guidelines of Appendix I to 10 CFR 50 and below the limits specified in the BFN Technical Specifications for plant operation.

A tabulation for the quarterly doses over a 5-year period is given in table 15.

Table 1

## BNF - Gaseous Effluent Releases - First Quarter 1985

BNP STACK RELEASES		BNP REACTOR BLDG. RELEASES		BNP TURBINE BUILDING RELEASES		BNP RADWASTE BUILDING RELEASES	
NUCLIDE RELEASE	(CURIES)	NUCLIDE RELEASE	(CURIES)	NUCLIDE RELEASE	(CURIES)	NUCLIDE RELEASE	(CURIES)
1 TRITIUM	5.48E-02	1 TRITIUM	3.51E+00		0.00E+00	1 TRITIUM	4.04E-02
2 AR-41	8.19E+02	2 CO-60	7.82E-05			2 SR-89	4.13E-06
3 KR-85M	5.29E+03	3 SR-89	1.45E-05	TOTAL RELEASE *****	0.00E+00	3 SR-90	1.39E-06
4 KR-87	2.93E+03	4 SR-90	1.16E-06			4 XE-133	2.84E+02
5 KR-88	9.96E+03	5 XE-135	3.33E+01			5 XE-135	1.03E+02
5 SR-89	1.99E-04	6 CS-134	6.28E-05			6 I-131	4.39E-05
7 SR-90	1.20E-06	7 CS-137	6.43E-05			7 HI-131	4.39E-05
8 NB-95	2.53E-06	8 I-131	2.07E-04			8 I-133	3.46E-04
9 XE-133	5.92E+03	9 MI-131	2.07E-04			9 MI-133	3.46E-04
10 XE-135M	3.60E+01	10 I-133	1.19E-03			10 Y-90	0.00E+00
11 XE-135	3.39E+02	11 MI-133	1.19E-03			11 CS-135	0.00E+00
12 CS-137	4.92E-06	12 Y-90	0.00E+00			12 XE-131M	0.00E+00
13 BA-140	1.30E-03	13 CS-135	0.00E+00			13 XE-133M	0.00E+00
14 LA-140	4.79E-04	14 XE-131M	0.00E+00				
15 I-131	9.80E-03	15 XE-133	0.00E+00	TOTAL RELEASE *****	3.68E+01		
16 MI-131	9.80E-03	16 XE-133M	0.00E+00				
17 I-133	2.59E-02						
18 MI-133	2.59E-02						
19 I-135	1.70E-02						
20 MI-135	1.70E-02						
21 KR-85	0.00E+00						
22 RS-88	0.00E+00						
23 Y-90	0.00E+00						
24 CS-135	0.00E+00						
25 XE-131M	0.00E+00						
26 XE-133M	0.00E+00						
TOTAL RELEASE *****		2.53E+04				TOTAL RELEASE *****	3.87E+02

Table 2

## BNF - Gaseous Effluent Releases - Second Quarter 1985

BNF REACTOR BLDG. RELEASES		BNP RADWASTE-BUILDING RELEASES		BNP TURBINE BUILDING RELEASES		BNP STACK RELEASES	
NUCLIDE RELEASE	(CURIES)	NUCLIDE RELEASE	(CURIES)	NUCLIDE RELEASE	(CURIES)	NUCLIDE RELEASE	(CURIES)
1 TRITIUM	1.35E+00	1 TRITIUM	2.17E-02	1 TRITIUM	4.36E-02	1 TRITIUM	1.42E-03
2 CO-60	1.34E-04	2 SR-89	4.42E-06	2 SR-89	9.03E-07	2 SR-89	1.70E-04
3 MH-54	1.39E-05	3 SR-90	1.48E-06	3 SR-90	1.04E-07	3 SR-90	1.20E-06
4 ZN-65	8.28E-05	4 I-131	3.54E-06	4 Y-90	0.00E+00	4 CS-137	1.37E-06
5 SR-89	1.52E-05	5 MI-131	3.54E-06			5 I-131	1.23E-05
6 SR-90	1.14E-06	6 Y-90	0.00E+00	TOTAL RELEASE *****	4.36E-02	6 MI-131	1.23E-05
7 CS-134	2.25E-05	7 XE-131M	0.00E+00			7 Y-90	0.00E+00
8 CS-137	1.95E-05					8 XE-131M	0.00E+00
9 I-131	1.99E-05	TOTAL RELEASE ***** 2.17E-02				TOTAL RELEASE ***** 1.62E-03	
10 MI-131	1.99E-05						
11 Y-90	0.00E+00						
12 XE-131M	0.00E+00						
TOTAL RELEASE ***** 1.35E+00							

Table 3  
 BFN - Liquid Effluent Releases  
 Activity (uCi)  
 1985

First Quarter		Second Quarter	
Nuclide	Activity	Nuclide	Activity
H-3	1.61e7*	H-3	1.08E7
Na-24	2.72E4	Cr-51	1.32E3
Cr-51	2.06E4	Mn-54	4.14E3
Mn-54	4.49E3	Co-58	2.76E2
Fe-59	2.78E1	Co-60	2.22E4
Co-58	4.36E2	Zn-65	5.47E4
Co-60	4.67E4	As-76	2.29E2
Zn-65	7.67E4	Br-84	5.11E2
Br-84	1.64E3	Kr-85m	2.21E1
Sr-89	1.62E3	Sr-89	3.65E3
Sr-90	8.04E0	Sr-90	4.19E0
Zr-95	5.30E1	Zr-95	5.69E1
Mo-99	1.10E3	Mo-99	9.60E0
Ag-110m	8.65E2	Ag-110m	6.34E2
Sb-124	1.74E2	I-131	5.79E1
I-131	9.64E3	Xe-133	1.36E3
I-133	2.62E4	Xe-135	1.61E1
I-135	9.71E3	Cs-134	5.42E4
Xe-133	1.61E5	Cs-137	6.95E4
Xe-135	1.57E5	Ba-139	9.50E1
Cs-134	7.20E4	Ba-140	1.28E2
Cs-137	8.43E4	Ce-144	1.40E2
Ba-140	5.25E3		
Ce-141	1.54E4		

\*1.61e7 = 1.61 X 10<sup>7</sup>

Table 3a  
BFN - RECEPTOR LOCATIONS AND POINTS OF INTEREST

POINT	SECTOR	CISTANCE (M)	ELEVATION (M)
1 SITE BOUNDARY	N	1525.	7.
2 SITE BOUNDARY	NNE	1300.	4.
3 SITE BOUNDARY	NE	1250.	7.
4 SITE BOUNDARY	ENE	1450.	0.
5 SITE BOUNDARY	E	1375.	0.
6 SITE BOUNDARY	ESE	1575.	0.
7 SITE BOUNDARY	SE	5600.	-6.
8 SITE BOUNDARY	SSE	2875.	-6.
9 SITE BOUNDARY	S	2550.	-6.
10 SITE BOUNDARY	SSW	2425.	-6.
11 SITE BOUNDARY	SW	2300.	-6.
12 SITE BOUNDARY	WSW	2500.	-6.
13 SITE BOUNDARY	W	2550.	-6.
14 SITE BOUNDARY	WNW	3325.	-6.
15 SITE BOUNDARY	WW	2275.	-6.
16 SITE BOUNDARY	NNW	1650.	0.
17 AIR DOSE POINT	NW	5100.	16.
18 AIR DOSE POINT	NW	5500.	16.
19 AIR DOSE POINT	NW	6100.	16.
20 AIR DOSE POINT	NW	6500.	16.
21 AIR DOSE POINT	NW	6800.	16.
22 AIR DOSE POINT	NW	7100.	16.
23 NEAREST RESIDENT,GARDEN	N	1620.	13.
24 NEAREST RESIDENT,GARDEN	NNE	2845.	13.
25 NEAREST RESIDENT	NE	4075.	13.
26 NEAREST RESIDENT,GARDEN	ENE	1960.	13.
27 NEAREST RESIDENT,GARDEN	E	4437.	19.
28 NEAREST RESIDENT,GARDEN	ESE	4655.	-12.
29 NEAREST RESIDENT	SE	8100.	0.
30 NEAREST RESIDENT,GARDEN	SSE	7155.	0.
31 NEAREST RESIDENT,GARDEN	S	4460.	0.
32 NEAREST RESIDENT,GARDEN	SSW	4155.	0.
33 NEAREST RESIDENT,GARDEN	SW	4896.	7.
34 NEAREST RESIDENT,GARDEN	WSW	4131.	0.
35 NEAREST RESIDENT,GARDEN	W	2550.	-24.
36 NEAREST RESIDENT,GARDEN	WNW	4425.	10.
37 NEAREST RESIDENT,GARDEN	NW	3500.	-9.
38 NEAREST RESIDENT,GARDEN	NNW	1650.	-9.
39 GARDEN	NE	4475.	0.
40 MILK COW ADULT	NE	9750.	37.
41 MILK COW CHILD	E	9450.	21.
42 MILK COW TEEN'	NNW	10975.	30.
43 GOAT CHILD	NE	10975.	0.

Table 4

**BFN - Meteorological Data Ground-Level JFD In Percent**  
**First Quarter 1985**

**STABILITY CLASS A**

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.000	0.000	0.000	0.345	0.049	0.000	0.000	0.394
NNE	0.000	0.000	0.000	0.000	0.099	0.789	0.099	0.000	0.000	0.987
NE	0.000	0.000	0.000	0.000	0.000	0.049	0.099	0.000	0.000	0.148
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.300	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	0.739	0.148	0.000	0.000	0.000	0.000	0.887
SSE	0.000	0.000	0.000	0.690	0.099	0.099	0.000	0.000	0.000	0.888
S	0.000	0.000	0.000	0.542	0.197	0.000	0.000	0.000	0.000	0.739
SSW	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.099
SW	0.000	0.000	0.000	0.049	0.049	0.000	0.000	0.000	0.000	0.098
WSW	0.000	0.000	0.000	0.000	0.049	0.000	0.000	0.000	0.000	0.049
W	0.000	0.000	0.000	0.000	0.000	0.099	0.049	0.000	0.000	0.148
WNW	0.000	0.000	0.000	0.000	0.000	0.049	0.099	0.049	0.000	0.197
NW	0.000	0.000	0.000	0.000	0.000	0.197	0.049	0.000	0.000	0.246
NNW	0.000	0.000	0.000	0.000	0.000	0.049	0.197	0.000	0.000	0.246
TOTALS	0.000	0.000	0.000	2.119	0.641	1.676	0.641	0.049	0.000	5.126

**STABILITY CLASS B**

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.000	0.000	0.049	0.197	0.099	0.000	0.300	0.345
NNE	0.000	0.000	0.000	0.049	0.143	0.345	0.000	0.000	0.000	0.542
NE	0.000	0.000	0.000	0.000	0.049	0.099	0.000	0.000	0.000	0.148
ENE	0.000	0.000	0.000	0.049	0.000	0.000	0.000	0.000	0.000	0.049
E	0.000	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.148	0.000	0.000	0.000	0.000	0.000	0.148
SE	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.099
SSE	0.000	0.000	0.000	0.148	0.000	0.049	0.000	0.000	0.000	0.197
S	0.000	0.000	0.000	0.197	0.000	0.000	0.000	0.000	0.000	0.197
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	0.049	0.049	0.000	0.000	0.000	0.000	0.098
WSW	0.000	0.000	0.000	0.049	0.049	0.197	0.000	0.000	0.000	0.295
W	0.000	0.000	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.099
WNW	0.000	0.000	0.000	0.000	0.000	0.345	0.099	0.049	0.000	0.493
NW	0.000	0.000	0.000	0.000	0.000	0.394	0.049	0.049	0.000	0.492
NNW	0.000	0.000	0.000	0.000	0.049	0.296	0.099	0.000	0.000	0.444
TOTALS	0.000	0.000	0.000	0.788	0.393	2.021	0.346	0.098	0.000	3.646

Table 4  
(Continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.000	0.049	0.542	0.000	0.000	0.000	0.591	
NNE	0.000	0.000	0.000	0.148	0.099	0.246	0.000	0.000	0.000	0.493	
NE	0.000	0.000	0.000	0.049	0.000	0.099	0.049	0.000	0.000	0.197	
ENE	0.000	0.000	0.000	0.000	0.049	0.000	0.000	0.000	0.000	0.049	
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	0.296	0.197	0.000	0.000	0.000	0.000	0.493	
SSE	0.000	0.000	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.049	
S	0.000	0.000	0.000	0.246	0.000	0.000	0.000	0.000	0.000	0.246	
SSW	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.099	
SW	0.000	0.000	0.049	0.049	0.000	0.000	0.000	0.000	0.000	0.098	
WSW	0.000	0.000	0.000	0.049	0.000	0.246	0.049	0.000	0.000	0.344	
W	0.000	0.000	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.099	
WNW	0.000	0.000	0.049	0.197	0.148	0.345	0.049	0.148	0.009	0.936	
NW	0.000	0.000	0.000	0.000	0.000	0.148	0.049	0.000	0.000	0.197	
NNW	0.000	0.000	0.000	0.000	0.000	0.296	0.197	0.049	0.000	0.542	
TOTALS	0.000	0.000	0.147	1.133	0.542	2.021	0.393	0.197	0.000	4.433	

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.049	0.345	0.345	0.641	2.661	0.591	0.049	0.000	4.681	
NNE	0.000	0.000	0.246	0.641	0.690	2.316	0.493	0.000	0.000	4.386	
NE	0.000	0.049	0.246	0.690	0.641	0.148	0.000	0.000	0.000	1.774	
ENE	0.000	0.000	0.197	0.296	0.246	0.000	0.000	0.000	0.000	0.739	
E	0.000	0.000	0.493	0.444	0.197	0.493	0.099	0.000	0.000	1.726	
ESE	0.000	0.000	0.099	0.148	0.049	0.099	0.000	0.000	0.000	0.395	
SE	0.000	0.049	1.035	1.134	0.444	0.049	0.000	0.000	0.000	2.711	
SSE	0.000	0.000	0.736	0.394	0.099	0.000	0.000	0.000	0.000	1.429	
S	0.000	0.049	0.542	0.591	0.493	0.148	0.049	0.000	0.000	1.872	
SSW	0.000	0.099	0.394	0.296	0.099	0.296	0.000	0.000	0.000	1.184	
SW	0.000	0.049	0.296	0.296	0.148	0.000	0.000	0.000	0.000	0.789	
WSW	0.000	0.000	0.345	0.838	0.345	0.345	0.099	0.000	0.000	1.972	
W	0.000	0.049	0.296	0.739	0.838	1.725	0.246	0.000	0.000	3.893	
WNW	0.000	0.000	0.148	0.246	0.542	1.429	1.577	1.134	0.148	5.224	
NW	0.000	0.000	0.099	0.296	0.345	0.838	0.542	0.000	0.000	2.120	
NNW	0.000	0.000	0.246	0.246	0.789	1.676	1.035	0.099	0.000	4.091	
TOTALS	0.000	0.393	5.963	7.640	6.606	12.223	4.731	1.282	0.148	38.985	

Table 4  
(Continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.003	0.099	0.394	0.838	0.444	1.035	0.049	0.000	0.000	2.862
NNE	0.003	0.099	0.296	0.542	0.542	0.690	0.049	0.000	0.000	2.221
NE	0.005	0.000	0.739	0.444	0.542	0.444	0.000	0.000	0.000	2.174
ENE	0.006	0.099	0.739	0.542	0.591	0.049	0.000	0.000	0.000	2.026
E	0.003	0.000	0.493	0.493	0.246	0.049	0.000	0.000	0.000	1.284
ESE	0.004	0.099	0.444	0.148	0.000	0.148	0.000	0.000	0.000	0.843
SE	0.006	0.246	0.591	0.936	0.591	0.246	0.000	0.000	0.000	2.616
SSE	0.002	0.099	0.148	0.493	0.739	0.296	0.000	0.000	0.000	1.777
S	0.003	0.148	0.296	0.542	1.183	1.479	0.148	0.000	0.000	3.799
SSH	0.004	0.049	0.542	0.345	0.296	0.838	0.049	0.000	0.000	2.123
SW	0.003	0.099	0.296	0.049	0.049	0.000	0.000	0.000	0.000	0.496
WSW	0.003	0.049	0.444	0.591	0.049	0.099	0.000	0.000	0.000	1.235
W	0.003	0.000	0.394	0.542	0.493	0.394	0.000	0.000	0.000	1.826
WNW	0.001	0.000	0.148	0.197	0.099	0.296	0.296	0.000	0.000	1.037
NW	0.001	0.000	0.148	0.148	0.345	0.739	0.049	0.000	0.000	1.430
NNW	0.001	0.000	0.143	0.444	0.936	0.789	0.099	0.000	0.000	2.417
TOTALS	0.051	1.086	6.260	7.294	7.145	7.591	0.739	0.000	0.000	30.165

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.099	0.296	0.345	0.197	0.148	0.000	0.000	0.000	1.085
NNE	0.000	0.000	0.246	0.296	0.345	0.148	0.000	0.000	0.000	1.035
NE	0.000	0.000	0.345	0.296	0.197	0.000	0.000	0.000	0.000	0.838
ENE	0.000	0.049	0.246	0.296	0.099	0.000	0.000	0.000	0.300	0.690
E	0.000	0.049	0.345	0.394	0.000	0.000	0.000	0.000	0.000	0.788
ESE	0.000	0.000	0.345	0.000	0.000	0.000	0.000	0.000	0.000	0.345
SE	0.000	0.099	0.641	0.197	0.197	0.000	0.000	0.000	0.000	1.134
SSE	0.000	0.000	0.789	0.542	0.887	0.444	0.000	0.000	0.000	2.662
S	0.000	0.049	0.542	0.345	0.591	0.296	0.000	0.000	0.000	1.823
SSW	0.000	0.000	0.099	0.099	0.099	0.000	0.000	0.000	0.000	0.297
SW	0.000	0.000	0.197	0.000	0.049	0.000	0.000	0.000	0.000	0.246
WSW	0.000	0.000	0.246	0.000	0.000	0.000	0.000	0.000	0.000	0.246
W	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.099
WNW	0.000	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
NW	0.000	0.000	0.148	0.000	0.049	0.000	0.000	0.000	0.000	0.197
NNW	0.000	0.000	0.000	0.148	0.246	0.000	0.000	0.000	0.000	0.394
TOTALS	0.000	0.394	4.485	3.057	2.956	1.036	0.000	0.000	0.000	11.928

Table 4

(Continued)

## STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.197	0.099	0.296	0.000	0.000	0.000	0.000	0.592
NNE	0.000	0.000	0.148	0.049	0.099	0.000	0.000	0.000	0.000	0.296
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	0.197	0.099	0.000	0.000	0.000	0.000	0.000	0.296
ESE	0.000	0.000	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.049
SE	0.000	0.000	0.444	0.296	0.000	0.000	0.000	0.000	0.000	0.740
SSE	0.000	0.000	0.641	1.479	0.641	0.197	0.000	0.000	0.000	2.958
S	0.000	0.000	0.296	0.197	0.099	0.049	0.000	0.000	0.000	0.641
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	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.049
NNW	0.000	0.000	0.049	0.049	0.000	0.000	0.000	0.000	0.000	0.098
TOTALS	0.000	0.000	2.070	2.268	1.135	0.246	0.000	0.000	0.000	5.719

Table 5

BFN - Meteorological Data  
Ground-Level JFD In Percent  
Second Quarter 1985

## STABILITY CLASS A

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.047	0.047	0.281	0.187	0.000	0.000	0.000	0.562
NNE	0.000	0.000	0.000	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.280
NE	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.300	0.000	0.000	0.094
ENE	0.000	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	0.000
ESE	0.000	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	1.402	0.514	0.000	0.000	0.000	0.000	0.000	1.963
SSE	0.000	0.000	0.047	0.748	0.047	0.000	0.000	0.000	0.000	0.000	0.842
S	0.000	0.000	0.047	0.281	0.094	0.000	0.000	0.000	0.000	0.000	0.422
SSW	0.000	0.000	0.047	0.234	0.047	0.000	0.000	0.000	0.000	0.000	0.328
SW	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.094
WSW	0.000	0.000	0.000	0.094	0.140	0.000	0.000	0.000	0.000	0.000	0.234
W	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.047	0.000	0.234	0.234	0.000	0.000	0.000	0.515
NW	0.003	0.000	0.000	0.000	0.094	0.608	0.608	0.300	0.000	0.000	1.309
NNW	0.000	0.000	0.000	0.000	0.000	0.187	0.000	0.000	0.000	0.000	0.187
TOTALS	0.000	0.000	0.188	2.699	1.123	1.496	1.168	0.000	0.000	0.000	6.875

## STABILITY CLASS B

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	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	0.047	0.047	0.047	0.094	0.000	0.000	0.000	0.235
NE	0.003	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	0.000
E	0.003	0.000	0.300	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	0.000
SE	0.300	0.000	0.187	0.561	0.000	0.000	0.000	0.000	0.000	0.000	0.748
SSE	0.003	0.000	0.187	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.327
S	0.000	0.000	0.047	0.281	0.047	0.000	0.000	0.000	0.000	0.000	0.375
SSW	0.000	0.300	0.047	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.141
SW	0.000	0.000	0.000	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.234
WSW	0.000	0.000	0.000	0.187	0.094	0.347	0.000	0.000	0.000	0.000	0.328
W	0.000	0.000	0.300	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.047	0.187	0.374	0.187	0.000	0.000	0.000	0.795
NW	0.000	0.000	0.300	0.000	0.234	0.655	0.234	0.000	0.000	0.000	1.122
NNW	0.000	0.000	0.300	0.047	0.140	0.327	0.000	0.000	0.000	0.000	0.514
TOTALS	0.000	0.000	0.468	1.637	0.749	1.496	0.515	0.000	0.000	0.000	4.864

Table 5  
(Continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.300	0.047	0.234	0.140	0.000	0.000	0.000	0.421	
NNE	0.000	0.000	0.000	0.047	0.281	0.047	0.000	0.000	0.000	0.375	
NE	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.300	0.047	
ENE	0.000	0.000	0.300	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	0.281	0.561	0.047	0.000	0.000	0.000	0.000	0.889	
SSE	0.000	0.000	0.094	0.468	0.000	0.000	0.000	0.000	0.000	0.562	
S	0.000	0.000	0.094	0.468	0.094	0.047	0.000	0.000	0.000	0.703	
SSW	0.000	0.000	0.000	0.327	0.000	0.047	0.000	0.000	0.000	0.374	
SW	0.000	0.000	0.234	0.140	0.000	0.000	0.000	0.000	0.000	0.374	
WSW	0.000	0.000	0.047	0.327	0.140	0.094	0.000	0.000	0.000	0.608	
W	0.000	0.000	0.000	0.047	0.094	0.187	0.000	0.000	0.000	0.328	
WNW	0.000	0.000	0.000	0.187	0.047	0.374	0.047	0.000	0.000	0.655	
NW	0.000	0.000	0.000	0.187	0.374	0.421	0.281	0.000	0.000	1.262	
NNW	0.000	0.000	0.000	0.094	0.140	0.281	0.000	0.000	0.000	0.515	
TOTALS	0.000	0.000	0.750	2.898	1.497	1.637	0.328	0.000	0.000	7.110	

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.234	0.514	0.374	0.655	0.047	0.000	0.000	1.823	
VNE	0.000	0.000	0.140	0.234	0.234	0.140	0.187	0.000	0.000	0.934	
NE	0.000	0.000	0.094	0.327	0.374	0.047	0.000	0.000	0.000	0.842	
ENE	0.000	0.000	0.047	0.281	0.234	0.234	0.000	0.000	0.000	0.796	
E	0.000	0.000	0.234	0.187	0.795	0.140	0.000	0.000	0.000	1.355	
ESE	0.000	0.000	0.234	0.281	0.187	0.000	0.000	0.000	0.000	0.702	
SE	0.000	0.047	3.177	2.056	0.234	0.047	0.000	0.000	0.000	5.561	
SSE	0.000	0.047	1.729	0.981	0.234	0.000	0.000	0.000	0.000	2.991	
S	0.000	0.000	1.308	1.355	0.187	0.234	0.094	0.000	0.000	3.178	
SSW	0.000	0.000	0.748	0.981	0.140	0.000	0.000	0.000	0.000	1.869	
SW	0.000	0.000	0.608	0.327	0.000	0.000	0.000	0.000	0.000	0.934	
WSW	0.000	0.000	0.514	1.261	0.655	0.187	0.000	0.000	0.000	2.617	
W	0.000	0.000	0.234	1.028	0.981	0.234	0.047	0.000	0.000	2.525	
WNW	0.000	0.000	0.094	0.468	0.842	1.589	0.374	0.094	0.000	3.460	
NW	0.000	0.000	0.094	0.374	0.842	1.261	0.514	0.000	0.000	3.084	
NNW	0.000	0.000	0.187	0.701	0.514	0.842	0.234	0.000	0.000	2.477	
TOTALS	0.000	0.094	9.675	11.356	6.824	5.609	1.496	0.094	0.000	35.147	

Table 5

(Continued)

## STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.003	0.047	0.281	0.514	0.374	0.094	0.000	0.000	0.000	1.312
NNE	0.005	0.094	0.374	0.421	0.094	0.094	0.047	0.000	0.000	1.128
NE	0.005	0.187	0.374	0.281	0.094	0.094	0.000	0.000	0.000	1.034
ENE	0.005	0.140	0.327	0.140	0.187	0.000	0.000	0.000	0.000	0.799
E	0.013	0.140	1.215	0.281	0.187	0.000	0.000	0.000	0.000	1.836
ESE	0.011	0.187	0.688	0.327	0.000	0.000	0.000	0.000	0.000	1.412
SE	0.028	0.327	2.524	0.842	0.281	0.047	0.000	0.000	0.000	4.048
SSE	0.018	0.187	1.682	0.795	0.047	0.000	0.000	0.009	0.000	2.728
S	0.015	0.047	1.448	1.074	0.000	0.561	0.374	0.000	0.000	3.519
SSW	0.011	0.140	1.028	0.421	0.000	0.094	0.000	0.000	0.000	1.694
SW	0.002	0.000	0.187	0.047	0.000	0.000	0.000	0.000	0.000	0.236
WSW	0.007	0.047	0.655	0.514	0.140	0.000	0.047	0.000	0.000	1.409
W	0.005	0.047	0.514	0.748	0.140	0.047	0.000	0.000	0.000	1.500
WNW	0.005	0.047	0.514	0.187	0.234	0.187	0.000	0.000	0.000	1.173
NW	0.004	0.140	0.281	0.468	0.187	0.094	0.000	0.000	0.000	1.173
NNW	0.003	0.094	0.187	0.795	0.468	0.608	0.094	0.000	0.000	2.248
TOTALS	0.140	1.870	12.477	7.852	2.432	1.919	0.562	0.000	0.000	27.251

## STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.018	0.140	0.608	0.187	0.140	0.000	0.000	0.000	0.000	1.092
NNE	0.015	0.094	0.561	0.281	0.094	0.000	0.000	0.000	0.000	1.045
NE	0.016	0.281	0.374	0.140	0.000	0.000	0.000	0.000	0.000	0.811
CNE	0.029	0.561	0.655	0.327	0.000	0.000	0.000	0.000	0.000	1.571
E	0.029	0.094	1.121	0.281	0.000	0.000	0.000	0.000	0.000	1.525
ESE	0.014	0.187	0.421	0.047	0.000	0.000	0.000	0.000	0.000	0.669
SE	0.033	0.421	0.981	0.047	0.000	0.000	0.000	0.000	0.000	1.482
SSE	0.027	0.281	0.842	0.047	0.000	0.000	0.000	0.000	0.000	1.196
S	0.016	0.187	0.468	0.140	0.000	0.187	0.000	0.000	0.000	0.997
SSW	0.008	0.094	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.336
SW	0.002	0.047	0.047	0.060	0.000	0.000	0.000	0.000	0.000	0.096
WSW	0.004	0.094	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.192
W	0.002	0.000	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.096
WNW	0.003	0.047	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.144
NW	0.008	0.094	0.234	0.047	0.000	0.000	0.000	0.000	0.000	0.383
NNW	0.010	0.047	0.374	0.140	0.047	0.000	0.000	0.000	0.000	0.618
TOTALS	0.235	2.668	7.200	1.683	0.281	0.187	0.000	0.000	0.000	12.253

Table 5  
(Continued)

**STABILITY CLASS G**

Table 6

**BFN - Meteorological Data Split-Level  
In Percent Ground-Level Portion  
First Quarter 1985**

**STABILITY CLASS A**

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.000	0.000	0.000	0.047	0.010	0.000	0.000	0.057
NNE	0.000	0.000	0.000	0.000	0.009	0.125	0.020	0.000	0.000	0.154
NE	0.000	0.000	0.000	0.000	0.000	0.009	0.020	0.000	0.000	0.029
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	0.030	0.000	0.015	0.017	0.000	0.000	0.000	0.000	0.032
SSE	0.000	0.000	0.000	0.052	0.015	0.054	0.000	0.000	0.000	0.121
S	0.000	0.000	0.000	0.043	0.029	0.000	0.000	0.000	0.300	0.072
SSH	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.011
SH	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.009
WSH	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.900	0.008
W	0.000	0.000	0.000	0.000	0.000	0.020	0.015	0.000	0.000	0.035
WNW	0.000	0.000	0.000	0.000	0.000	0.007	0.021	0.032	0.000	0.060
NW	0.000	0.000	0.000	0.000	0.000	0.033	0.010	0.000	0.000	0.043
NNW	0.000	0.000	0.000	0.000	0.000	0.008	0.063	0.000	0.000	0.071
TOTALS	0.000	0.000	0.000	0.121	0.087	0.303	0.159	0.032	0.000	0.702

**STABILITY CLASS B**

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.000	0.000	0.004	0.022	0.021	0.000	0.000	0.047
NNE	0.000	0.000	0.000	0.000	0.008	0.050	0.000	0.000	0.000	0.058
NE	0.000	0.030	0.000	0.000	0.005	0.014	0.000	0.000	0.000	0.019
ENE	0.000	0.003	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	0.002	0.000	0.000	0.000	0.000	0.000	0.002
SE	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003
SSE	0.000	0.000	0.000	0.010	0.000	0.029	0.000	0.000	0.000	0.039
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SH	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.006
WSH	0.000	0.000	0.000	0.001	0.006	0.037	0.000	0.000	0.000	0.044
W	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.010
WNW	0.000	0.000	0.000	0.000	0.000	0.037	0.027	0.032	0.000	0.096
NW	0.000	0.000	0.000	0.000	0.000	0.057	0.027	0.040	0.000	0.124
NNW	0.000	0.030	0.000	0.000	0.003	0.034	0.027	0.000	0.000	0.064
TOTALS	0.000	0.000	0.000	0.016	0.032	0.290	0.102	0.072	0.000	0.512

Table 6  
(Continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.000	0.004	0.071	0.000	0.000	0.000	0.075	
NNE	0.000	0.000	0.000	0.001	0.009	0.038	0.000	0.000	0.000	0.048	
NE	0.000	0.000	0.000	0.000	0.000	0.015	0.009	0.000	0.300	0.024	
ENE	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.006	
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	0.017	0.025	0.000	0.000	0.000	0.000	0.042	
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
S	0.000	0.003	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.025	
SSW	0.000	0.000	0.003	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	0.001	0.000	0.044	0.021	0.000	0.000	0.066	
W	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.006	
WNW	0.000	3.000	0.000	0.000	0.008	0.051	0.011	0.099	0.000	0.169	
NW	0.000	0.000	0.000	0.000	0.000	0.024	0.010	0.000	0.000	0.034	
NNW	0.000	0.000	0.000	0.000	0.000	0.038	0.045	0.044	0.000	0.127	
TOTALS	0.000	0.000	0.000	0.044	0.052	0.287	0.096	0.143	0.000	0.622	

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.001	0.037	0.425	0.183	0.038	0.000	0.684	
NNE	0.000	0.000	0.000	0.010	0.061	0.398	0.103	0.000	0.000	0.572	
NE	0.000	0.000	0.000	0.011	0.040	0.016	0.000	0.000	0.000	0.067	
ENE	0.000	0.000	0.000	0.003	0.021	0.000	0.000	0.000	0.000	0.024	
E	0.000	0.000	0.000	0.012	0.022	0.099	0.030	0.000	0.000	0.163	
ESE	0.000	0.000	0.000	0.007	0.006	0.018	0.000	0.000	0.000	0.031	
SE	0.000	0.000	0.001	0.100	0.072	0.009	0.000	0.000	0.000	0.182	
SSE	0.000	0.000	0.023	0.047	0.018	0.000	0.000	0.000	0.000	0.088	
S	0.000	0.000	0.004	0.349	0.037	0.067	0.051	0.000	0.000	0.258	
SSW	0.000	0.000	0.011	0.027	0.015	0.135	0.000	0.000	0.000	0.188	
SW	0.000	0.000	0.002	0.001	0.015	0.000	0.000	0.000	0.000	0.018	
WSW	0.000	0.000	0.001	0.049	0.041	0.064	0.094	0.000	0.000	0.249	
W	0.000	0.000	0.000	0.049	0.089	0.290	0.080	0.000	0.000	0.508	
WNW	0.000	0.000	0.000	0.009	0.038	0.221	0.437	0.859	0.153	1.717	
NW	0.000	0.000	0.000	0.000	0.034	0.117	0.127	0.000	0.000	0.278	
NNW	0.000	0.000	0.000	0.003	0.072	0.258	0.398	0.079	0.000	0.810	
TOTALS	0.000	0.000	0.042	0.378	0.668	2.117	1.503	0.976	0.153	5.837	

Table 6

(Continued)

## STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.003	0.060	0.065	0.164	0.023	0.000	0.000	0.315
NNE	0.000	0.000	0.000	0.036	0.079	0.124	0.014	0.000	0.000	0.253
NE	0.000	0.000	0.022	0.047	0.083	0.083	0.000	0.000	0.000	0.235
ENE	0.000	0.000	0.031	0.061	0.096	0.009	0.000	0.000	0.000	0.197
E	0.000	0.000	0.013	0.050	0.037	0.009	0.000	0.000	0.000	0.109
ESE	0.000	0.000	0.015	0.010	0.000	0.027	0.000	0.000	0.000	0.052
SE	0.000	0.000	0.017	0.112	0.103	0.077	0.000	0.000	0.000	0.309
SSE	0.000	0.000	0.005	0.076	0.264	0.178	0.000	0.000	0.000	0.523
S	0.000	0.001	0.009	0.085	0.257	0.741	0.153	0.000	0.000	1.246
SSW	0.000	0.000	0.036	0.057	0.076	0.299	0.051	0.000	0.000	0.519
SW	0.000	0.000	0.018	0.010	0.015	0.000	0.000	0.000	0.000	0.043
WSW	0.000	0.000	0.013	0.061	0.009	0.026	0.000	0.000	0.000	0.109
W	0.000	0.000	0.008	0.053	0.066	0.069	0.000	0.000	0.000	0.196
WNW	0.000	0.000	0.003	0.017	0.005	0.053	0.087	0.000	0.000	0.165
NW	0.000	0.000	0.005	0.010	0.034	0.099	0.030	0.000	0.000	0.178
NNW	0.000	0.000	0.002	0.022	0.117	0.136	0.027	0.000	0.000	0.304
TOTALS	0.000	0.001	0.200	0.767	1.306	2.094	0.385	0.000	0.000	4.753.

## STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.010	0.038	0.033	0.029	0.000	0.000	0.000	0.110
NNE	0.000	0.000	0.015	0.037	0.057	0.028	0.000	0.000	0.000	0.137
NE	0.000	0.000	0.022	0.039	0.033	0.000	0.000	0.000	0.000	0.094
ENE	0.000	0.000	0.006	0.035	0.017	0.000	0.000	0.000	0.000	0.058
E	0.000	0.000	0.007	0.024	0.000	0.000	0.000	0.000	0.000	0.031
ESE	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.017
SE	0.000	0.004	0.037	0.029	0.036	0.000	0.000	0.000	0.000	0.106
SSE	0.000	0.000	0.097	0.102	0.293	0.316	0.000	0.000	0.000	0.308
S	0.000	0.006	0.044	0.060	0.156	0.157	0.000	0.000	0.000	0.423
SSW	0.000	0.000	0.013	0.018	0.030	0.000	0.000	0.000	0.000	0.061
SW	0.000	0.000	0.004	0.000	0.009	0.000	0.000	0.000	0.000	0.013
WSW	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.012
W	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.011
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	0.006	0.000	0.006	0.000	0.000	0.000	0.000	0.012
NNW	0.000	0.000	0.000	0.013	0.042	0.000	0.000	0.000	0.000	0.055
TOTALS	0.000	0.010	0.290	0.406	0.712	0.530	0.000	0.000	0.000	1.948

Table 6  
(Continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.005	0.013	0.047	0.000	0.000	0.000	0.000	0.065
NNE	0.000	0.000	0.005	0.004	0.017	0.000	0.000	0.000	0.000	0.026
NE	0.000	0.000	0.006	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	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.008
ESE	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.002
SE	0.000	0.000	0.033	0.068	0.000	0.000	0.000	0.000	0.000	0.101
SSE	0.000	0.000	0.105	0.367	0.335	0.185	0.000	0.000	0.000	0.992
S	0.000	0.000	0.037	0.036	0.029	0.030	0.000	0.000	0.000	0.132
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	0.300	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	0.030
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	0.006	0.000	0.000	0.000	0.000	0.000	0.006
TOTALS	0.000	0.000	0.195	0.494	0.428	0.215	0.000	0.000	0.000	1.332

Table 6 (Continued)

**STABILITY CLASS A**

**STABILITY CLASS B**

Table 6

(Continued)

## STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
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	0.300	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	0.043	0.041	0.000	0.000	0.084
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	0.044	0.000	0.000	0.000	0.044
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	0.087	0.041	0.000	0.000	0.128

## STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.86	4.45	6.91	9.59	10.95	
N	0.000	0.051	0.051	0.613	0.686	1.598	2.258	0.197	0.000	5.454
NNE	0.000	0.000	0.051	0.511	0.794	3.104	2.208	0.037	0.000	6.705
NE	0.000	0.000	0.051	0.613	0.788	0.496	0.209	0.000	0.000	2.157
ENE	0.000	0.000	0.000	0.358	0.197	0.320	0.000	0.000	0.000	0.875
E	0.000	0.051	0.102	0.306	0.202	0.186	0.371	0.073	0.000	1.291
ESE	0.000	0.051	0.204	0.460	0.537	0.316	0.251	0.000	0.300	1.819
SE	0.000	0.000	0.204	0.684	0.552	0.755	0.498	0.120	0.000	2.793
SSE	0.000	0.000	0.306	0.255	0.443	0.725	0.537	0.247	0.013	2.526
S	0.000	0.000	0.051	0.358	0.147	1.015	1.241	0.533	0.020	3.365
SSW	0.000	0.000	0.204	0.409	0.196	0.580	1.320	0.425	0.019	3.153
SW	0.000	0.051	0.255	0.613	0.542	1.071	0.335	0.000	0.016	2.883
WSW	0.000	0.000	0.204	0.306	0.989	0.775	0.495	0.065	0.000	2.834
W	0.000	0.102	0.051	0.409	0.486	2.385	1.580	0.269	0.000	5.282
WNW	0.000	0.000	0.051	0.306	0.294	0.935	1.492	0.877	0.058	4.013
NW	0.000	0.000	0.153	0.204	0.247	1.111	1.251	0.169	0.000	3.135
NNW	0.000	0.000	0.204	0.204	0.195	2.352	2.073	0.552	0.018	5.598
TOTALS	0.000	0.306	2.142	6.589	7.295	17.725	16.120	3.564	0.144	53.885

Table 6  
(Continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.102	0.204	0.492	0.566	0.252	0.000	0.000	1.616	
NNE	0.000	0.051	0.051	0.255	0.295	0.713	0.421	0.000	0.000	1.786	
NE	0.000	0.000	0.051	0.102	0.300	0.620	0.336	0.000	0.000	1.409	
ENE	0.000	0.000	0.000	0.255	0.292	0.757	0.085	0.000	0.000	1.389	
E	0.000	0.000	0.051	0.358	0.298	0.725	0.169	0.000	0.000	1.601	
ESE	0.000	0.000	0.102	0.358	0.389	0.456	0.000	0.000	0.000	1.305	
SE	0.000	0.000	0.153	0.664	0.438	1.440	0.619	0.205	0.000	3.519	
SSE	0.000	0.051	0.153	0.255	0.194	0.589	1.824	1.142	0.043	4.251	
S	0.000	0.000	0.000	0.204	0.196	0.707	0.501	0.144	0.022	1.774	
SSW	0.000	0.000	0.051	0.000	0.248	0.445	0.125	0.035	0.000	0.904	
SW	0.000	0.000	0.000	0.204	0.396	0.455	0.166	0.128	0.012	1.361	
WSW	0.000	0.000	0.051	0.153	0.191	0.276	0.083	0.000	0.000	0.754	
W	0.000	0.000	0.051	0.153	0.340	0.494	0.211	0.000	0.000	1.249	
WNW	0.000	0.000	0.000	0.051	0.239	0.137	0.000	0.000	0.000	0.427	
NW	0.000	0.000	0.051	0.051	0.051	0.310	0.042	0.000	0.000	0.505	
NNW	0.000	0.000	0.153	0.102	0.145	0.675	0.084	0.000	0.000	1.159	
TOTALS	0.000	0.102	1.020	3.369	4.504	9.365	4.918	1.654	0.077	25.010	

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.000	0.000	0.132	0.000	0.000	0.000	0.132	
NNE	0.000	0.000	0.000	0.000	0.099	0.087	0.168	0.000	0.000	0.354	
NE	0.000	0.000	0.000	0.102	0.095	0.358	0.041	0.000	0.000	0.596	
ENE	0.000	0.000	0.051	0.000	0.097	0.543	0.084	0.000	0.000	0.775	
E	0.000	0.000	0.000	0.051	0.147	0.183	0.042	0.000	0.000	0.423	
ESE	0.000	0.000	0.000	0.102	0.150	0.139	0.000	0.000	0.000	0.391	
SE	0.000	0.000	0.000	0.409	0.345	0.461	0.000	0.000	0.000	1.215	
SSE	0.000	0.000	0.102	0.153	0.051	0.000	0.000	0.000	0.000	0.306	
S	0.000	0.000	0.000	0.000	0.000	0.178	0.000	0.000	0.000	0.178	
SSW	0.000	0.000	0.003	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	0.045	0.000	0.000	0.000	0.045	
WSW	0.000	0.000	0.051	0.000	0.000	0.000	0.000	0.000	0.000	0.051	
W	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045	
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	0.050	0.000	0.000	0.000	0.000	0.050	
TOTALS	0.000	0.000	0.204	0.817	1.034	2.171	0.335	0.000	0.000	4.561	

Table 6  
(Continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.300	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.131	0.000	0.000	0.000	0.131
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	0.051	0.083	0.000	0.000	0.000	0.139
E	0.000	0.000	0.000	0.300	0.000	0.044	0.000	0.000	0.000	0.044
ESE	0.000	0.000	0.000	0.051	0.600	0.000	0.000	0.000	0.000	0.051
SE	0.000	0.000	0.000	0.102	0.049	0.000	0.000	0.000	0.000	0.151
SSE	0.000	0.000	0.000	0.351	0.000	0.003	0.000	0.000	0.000	0.051
S	0.000	0.000	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.043
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	0.030	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	0.204	0.100	0.306	0.000	0.000	0.000	0.610

Table 7

BFN = Meteorological Data Split-Level JFD  
 In Percent Ground-Level Portion  
 Second Quarter 1985

## STABILITY CLASS A

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.000	0.004	0.039	0.041	0.000	0.000	0.084	
NNE	0.000	0.000	0.000	0.000	0.000	0.018	0.028	0.000	0.000	0.046	
NE	0.000	0.000	0.000	0.000	0.001	0.005	0.000	0.000	0.000	0.006	
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	0.066	0.000	0.000	0.000	0.000	0.152	
SSE	0.002	0.000	0.001	0.072	0.009	0.000	0.000	0.007	0.000	0.080	
S	0.000	0.000	0.000	0.038	0.018	0.000	0.000	0.000	0.000	0.056	
SSW	0.000	0.000	0.000	0.019	0.002	0.000	0.000	0.000	0.000	0.021	
SW	0.002	0.000	0.000	0.006	0.003	0.000	0.000	0.000	0.000	0.009	
WSW	0.000	0.000	0.000	0.005	0.018	0.000	0.000	0.000	0.000	0.023	
W	0.000	0.000	0.000	0.010	0.006	0.000	0.000	0.000	0.000	0.006	
WNW	0.000	0.000	0.000	0.000	0.000	0.039	0.046	0.000	0.000	0.085	
NW	0.000	0.000	0.000	0.000	0.006	0.086	0.160	0.000	0.000	0.252	
NNW	0.000	0.000	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.029	
TOTALS	0.000	0.000	0.001	0.224	0.133	0.216	0.275	0.000	0.000	0.849	

## STABILITY CLASS B

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.003	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	0.003	0.006	0.032	0.000	0.000	0.041	
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	0.002	0.000	0.000	0.000	0.000	0.000	
SE	0.000	0.000	0.000	0.016	0.002	0.000	0.000	0.000	0.000	0.016	
SSE	0.000	0.000	0.001	0.015	0.000	0.000	0.000	0.000	0.000	0.016	
S	0.000	0.000	0.000	0.032	0.017	0.000	0.000	0.000	0.000	0.049	
SSW	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.012	
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	0.024	0.013	0.009	0.000	0.000	0.000	0.046	
W	0.000	0.000	0.000	0.000	0.000	0.098	0.099	0.000	0.000	0.008	
WNW	0.000	0.000	0.000	0.000	0.009	0.055	0.053	0.000	0.000	0.117	
NW	0.000	0.000	0.000	0.000	0.015	0.088	0.049	0.000	0.000	0.152	
NNW	0.000	0.000	0.000	0.000	0.009	0.045	0.000	0.000	0.000	0.054	
TOTALS	0.000	0.000	0.001	0.102	0.066	0.211	0.134	0.000	0.000	0.514	

Table 7

(Continued)

## STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.009	0.000	0.000	0.018	0.019	0.000	0.000	0.000	0.037	
NNE	0.000	0.000	0.000	0.000	0.021	0.007	0.000	0.000	0.000	0.028	
NE	0.000	0.000	0.000	0.002	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	0.003	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	0.017	0.005	0.000	0.000	0.000	0.000	0.022	
SSE	0.000	0.000	0.009	0.047	0.000	0.000	0.000	0.000	0.000	0.056	
S	0.000	0.000	0.000	0.045	0.029	0.023	0.030	0.000	0.000	0.097	
SSW	0.000	0.000	0.000	0.031	0.000	0.016	0.000	0.000	0.000	0.047	
SW	0.000	0.000	0.200	0.012	0.002	0.000	0.000	0.000	0.000	0.012	
WSW	0.000	0.000	0.000	0.034	0.017	0.016	0.000	0.000	0.000	0.057	
W	0.000	0.000	0.000	0.000	0.010	0.028	0.030	0.000	0.000	0.038	
WNW	0.000	0.000	0.000	0.000	0.005	0.054	0.015	0.000	0.000	0.074	
NW	0.000	0.000	0.000	0.001	0.025	0.058	0.076	0.000	0.000	0.160	
NNW	0.000	0.000	0.000	0.002	0.011	0.043	0.000	0.000	0.000	0.056	
TOTALS	0.000	0.000	0.009	0.189	0.141	0.264	0.091	0.000	0.000	0.694	

## STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.000	0.007	0.028	0.107	0.034	0.000	0.000	0.176	
NNE	0.000	0.000	0.000	0.001	0.021	0.026	0.063	0.000	0.000	0.111	
NE	0.000	0.000	0.000	0.012	0.036	0.009	0.000	0.000	0.000	0.057	
ENE	0.000	0.000	0.000	0.013	0.027	0.038	0.000	0.000	0.000	0.078	
E	0.000	0.000	0.000	0.008	0.101	0.023	0.000	0.000	0.000	0.132	
ESE	0.000	0.000	0.001	0.022	0.025	0.030	0.000	0.000	0.000	0.048	
SE	0.000	0.000	0.049	0.163	0.045	0.010	0.000	0.000	0.000	0.267	
SSE	0.000	0.000	0.070	0.141	0.088	0.000	0.030	0.000	0.000	0.299	
S	0.000	0.000	0.077	0.168	0.041	0.186	0.088	0.000	0.000	0.560	
SSW	0.000	0.000	0.019	0.116	0.028	0.000	0.000	0.000	0.000	0.163	
SW	0.000	0.000	0.006	0.012	0.000	0.000	0.000	0.000	0.000	0.018	
WSW	0.000	0.000	0.004	0.102	0.083	0.035	0.020	0.000	0.000	0.224	
W	0.000	0.000	0.000	0.056	0.108	0.033	0.035	0.000	0.000	0.232	
WNW	0.000	0.000	0.000	0.008	0.064	0.253	0.140	0.077	0.000	0.542	
NW	0.000	0.000	0.000	0.007	0.061	0.187	0.139	0.000	0.000	0.394	
NNW	0.000	0.000	0.000	0.008	0.045	0.143	0.056	0.000	0.000	0.252	
TOTALS	0.000	0.000	0.226	0.844	0.801	1.050	0.555	0.677	0.300	3.553	

Table 7

(Continued)

## STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.006	0.001	0.006	0.045	0.055	0.017	0.009	0.009	0.000	0.124	
NNE	0.000	0.000	0.009	0.026	0.014	0.016	0.014	0.000	0.000	0.079	
NE	0.009	0.000	0.201	0.027	0.013	0.017	0.009	0.002	0.200	0.058	
ENE	0.000	0.000	0.300	0.015	0.028	0.000	0.000	0.000	0.000	0.043	
E	0.000	0.000	0.025	0.026	0.028	0.000	0.000	0.000	0.000	0.079	
ESE	0.000	0.000	0.021	0.032	0.000	0.000	0.030	0.000	0.000	0.053	
SE	0.031	0.006	0.142	0.099	0.056	0.009	0.000	0.000	0.000	0.313	
SSE	0.001	0.001	0.145	0.173	0.014	0.000	0.009	0.002	0.000	0.334	
S	0.001	0.000	0.118	0.149	0.000	0.373	0.373	0.000	0.000	1.014	
SSW	0.001	0.000	0.093	0.073	0.000	0.076	0.000	0.009	0.000	0.243	
SW	0.000	0.000	0.011	0.067	0.000	0.000	0.000	0.000	0.000	0.018	
WSW	0.000	0.000	0.026	0.047	0.022	0.000	0.042	0.000	0.000	0.137	
W	0.006	0.000	0.005	0.045	0.014	0.008	0.000	0.000	0.000	0.072	
WNW	0.000	0.000	0.007	0.013	0.022	0.032	0.020	0.002	0.000	0.074	
NW	0.000	0.000	0.201	0.027	0.022	0.016	0.000	0.000	0.000	0.066	
NNW	0.000	0.000	0.002	0.049	0.056	0.114	0.029	0.007	0.000	0.250	
TOTALS	0.004	0.008	0.612	0.853	0.344	0.678	0.458	0.309	0.000	2.957	

## STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.017	0.018	0.023	0.000	0.000	0.000	0.000	0.058	
NNE	0.000	0.000	0.018	0.032	0.015	0.000	0.000	0.000	0.000	0.065	
NE	0.000	0.001	0.016	0.019	0.009	0.000	0.000	0.000	0.000	0.036	
ENE	0.000	0.023	0.012	0.034	0.000	0.000	0.000	0.000	0.000	0.069	
E	0.000	0.003	0.020	0.015	0.000	0.000	0.000	0.000	0.000	0.038	
ESE	0.000	0.003	0.211	0.001	0.000	0.000	0.000	0.000	0.000	0.015	
SE	0.001	0.011	0.065	0.008	0.000	0.000	0.000	0.000	0.000	0.085	
SSE	0.000	0.010	0.048	0.017	0.009	0.000	0.000	0.000	0.000	0.075	
S	0.000	0.009	0.026	0.026	0.000	0.142	0.000	0.000	0.000	0.203	
SSW	0.000	0.005	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.021	
SW	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	
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	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.007	
NNW	0.000	0.000	0.014	0.011	0.007	0.000	0.000	0.000	0.000	0.032	
TOTALS	0.001	0.370	0.268	0.183	0.045	0.142	0.060	0.000	0.000	0.709	

Table 7  
(Continued)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED								TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	
N	0.000	0.000	0.018	0.012	0.000	0.000	0.000	0.000	0.030
NNE	0.000	0.000	0.031	0.057	0.000	0.000	0.000	0.000	0.088
NE	0.000	0.000	0.020	0.013	0.000	0.000	0.000	0.000	0.033
ENE	0.000	0.010	0.014	0.006	0.000	0.000	0.000	0.000	0.030
E	0.000	0.000	0.004	0.010	0.000	0.000	0.000	0.000	0.014
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.035
SSE	0.000	0.012	0.061	0.000	0.000	0.000	0.000	0.000	0.073
S.	0.000	0.014	0.022	0.000	0.000	0.000	0.000	0.000	0.036
SSW	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.007
SW.	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
W	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
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.004	0.001	0.000	0.000	0.000	0.000	0.005
TOTALS	0.000	0.060	0.192	0.099	0.000	0.000	0.000	0.000	0.351

Table 7 (Continued)  
Elevated Portion of JFD

**STABILITY CLASS A**

**STABILITY CLASS B**

Table 7  
(Continued)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.200	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	0.000
NE	0.000	0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FNE	0.000	0.200	0.200	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	0.303	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	0.000
SE	0.003	0.300	0.200	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	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	0.000
SSW	0.000	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	0.200	0.047	0.045	0.082	0.000	0.000	0.000	0.000	0.174
WSW	0.000	0.000	0.300	0.000	0.000	0.084	0.000	0.000	0.000	0.000	0.084
W	0.000	0.000	0.000	0.000	0.000	0.041	0.020	0.000	0.000	0.000	0.041
WNW	0.000	0.000	0.300	0.000	0.000	0.000	0.000	0.000	2.000	0.000	0.000
NW	0.003	0.000	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.003	0.000	0.000	0.000	0.300	0.000	0.000	0.000	0.000	0.000
TOTALS	0.000	0.000	0.000	0.094	0.045	0.207	0.000	0.000	0.000	0.346	

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.000	0.280	0.420	0.627	0.993	0.422	0.037	0.000	2.779	
NNE	0.000	0.003	0.093	0.093	0.585	0.662	0.413	0.140	0.300	1.986	
NE	0.000	0.000	0.000	0.233	0.176	0.252	0.038	0.000	0.000	0.699	
ENE	0.000	0.000	0.140	0.093	0.312	0.246	0.077	0.000	0.000	0.862	
E	0.000	0.000	0.140	0.187	0.089	0.447	0.155	0.000	0.209	1.019	
ESE	0.000	0.000	0.093	0.327	0.319	0.662	0.000	0.000	0.000	1.401	
SE	0.000	0.047	1.027	2.194	1.527	1.814	0.382	0.000	0.000	6.992	
SSE	0.000	0.000	0.420	0.840	0.671	1.716	0.910	0.312	0.000	4.870	
S	0.000	0.000	0.327	0.373	0.539	2.280	1.369	0.213	0.219	5.121	
SSW	0.000	0.293	0.093	0.514	0.492	1.226	0.458	0.117	0.031	3.024	
SW	0.000	0.000	0.514	0.887	0.629	1.227	0.153	0.000	0.000	3.410	
WSW	0.000	0.000	0.373	0.514	0.808	1.529	0.225	0.000	0.000	3.449	
W	0.000	0.000	0.140	0.467	0.844	1.514	0.309	0.065	0.000	3.339	
WNW	0.000	0.000	0.140	0.467	0.672	1.313	1.468	0.195	0.004	4.279	
NW	0.000	0.000	0.140	0.467	1.167	3.298	1.399	0.463	0.000	6.932	
NNW	0.000	0.000	0.187	0.467	0.267	0.816	0.796	0.108	0.000	2.641	
TOTALS	0.000	0.140	4.137	6.544	9.725	19.997	8.595	1.647	0.054	52.810	

Table 7  
(Continued)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
N	0.000	0.093	0.347	0.140	0.403	0.499	0.116	0.000	0.000	1.298	
NNE	0.000	0.000	0.140	0.233	0.401	1.925	0.038	0.000	0.000	1.837	
NE	0.009	0.093	0.187	0.093	0.133	0.498	0.077	0.000	0.000	1.081	
ENE	0.000	0.047	0.140	0.289	0.179	0.331	0.000	0.000	0.000	0.977	
E	0.000	0.000	0.000	0.373	0.362	0.286	0.000	0.000	0.000	1.021	
ESE	0.000	0.093	0.187	0.467	0.443	0.329	0.000	0.000	0.000	1.519	
SE	0.000	0.047	1.027	1.307	1.186	0.582	0.038	0.000	0.000	4.187	
SSE	0.000	0.000	0.420	1.074	0.585	1.188	0.762	0.082	0.000	4.111	
S	0.000	0.000	0.420	0.700	0.631	0.979	0.306	0.041	0.000	3.077	
SSW	0.000	0.000	0.280	0.327	0.264	1.138	0.116	0.000	0.000	2.125	
SW	0.000	0.000	0.233	0.233	0.088	0.284	0.077	0.000	0.005	0.920	
WSW	0.000	0.347	0.280	0.327	0.361	0.415	0.038	0.000	0.000	1.468	
W	0.000	0.000	0.233	0.233	0.183	0.127	0.039	0.000	0.000	0.815	
WNW	0.000	0.000	0.047	0.327	0.405	0.127	0.000	0.000	0.000	0.906	
NW	0.000	0.047	0.193	0.514	0.314	0.254	0.037	0.000	0.000	1.259	
NNW	0.000	0.000	0.280	0.233	0.584	0.622	0.154	0.000	0.000	1.873	
TOTALS	0.000	0.467	4.14	6.862	6.523	8.685	1.798	0.123	0.005	28.477	

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED										TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95		
V	0.000	0.000	0.000	0.000	0.089	0.125	0.000	0.000	0.000	0.214	
VNE	0.000	0.200	0.000	0.000	0.088	0.159	0.000	0.000	0.000	0.247	
NE	0.000	0.000	0.093	0.047	0.044	0.163	0.000	0.000	0.000	0.347	
ENE	0.000	0.300	0.093	0.047	0.089	0.163	0.155	0.000	0.000	0.547	
E	0.000	0.000	0.000	0.003	0.228	0.208	0.000	0.000	0.000	0.529	
ESE	0.000	0.000	0.047	0.233	0.226	0.041	0.000	0.000	0.000	0.547	
SE	0.000	0.000	0.233	0.747	0.468	0.300	0.000	0.000	0.300	1.388	
SSE	0.000	0.000	0.093	0.187	0.134	0.207	0.000	0.000	0.000	0.621	
S	0.000	0.093	0.047	0.373	0.230	0.412	0.000	0.000	0.000	1.155	
SSW	0.000	0.347	0.093	0.233	0.181	0.289	0.000	0.000	0.000	0.843	
SW	0.000	0.000	0.147	0.093	0.043	0.082	0.000	0.000	0.000	0.265	
WSW	0.000	0.000	0.147	0.047	0.087	0.042	0.000	0.000	0.000	0.223	
W	0.000	0.000	0.193	0.327	0.047	0.000	0.000	0.000	0.000	0.467	
WNW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047	
NW	0.000	0.047	0.100	0.000	0.133	0.000	0.000	0.000	0.000	0.180	
NNW	0.000	0.047	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.047	
TOTALS	0.000	0.234	0.666	2.474	2.027	1.891	0.155	0.000	0.000	7.668	

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	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.094
NNE	0.000	0.000	0.200	0.090	0.000	0.039	0.000	0.000	0.000	0.039
NE	0.000	0.000	0.000	0.000	0.000	0.040	0.000	0.002	0.000	0.040
ENE	0.000	0.000	0.000	0.000	0.089	0.000	0.000	0.000	0.000	0.089
E	0.000	0.000	0.000	0.047	0.000	0.081	0.000	0.000	0.300	0.128
ESE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.003	0.000	0.047
SE	0.000	0.000	0.547	0.233	0.000	0.000	0.000	0.003	0.000	0.280
SSE	0.000	0.000	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
SSW	0.000	0.300	0.500	0.000	0.132	0.095	0.000	0.000	0.000	0.217
SW	0.000	0.300	0.300	0.047	0.000	0.000	0.000	0.003	0.000	0.047
WSW	0.000	0.200	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.200	0.200	0.000	0.000	0.000	0.000	0.003	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.300	0.000
TOTALS	0.000	0.600	0.141	0.467	0.221	0.245	0.000	0.003	0.000	1.074

Table 8

**BFN - Meteorological Data Elevated JFD In Percent**  
**First Quarter 1985**

**STABILITY CLASS D**

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.100	0.747	0.698	1.993	4.235	0.747	0.050	8.570
NNE	0.000	0.050	0.050	0.349	0.698	2.740	3.886	0.947	0.000	8.720
NE	0.000	0.000	0.050	0.349	0.648	1.295	1.395	0.399	0.000	4.136
ENE	0.000	0.050	0.100	0.249	0.299	0.947	0.797	0.399	0.000	2.841
E	0.000	0.000	0.199	0.448	0.598	0.847	0.548	0.249	0.199	3.088
ESE	0.000	0.000	0.100	0.498	0.598	2.242	1.146	0.498	0.000	5.082
SE	0.000	0.000	0.199	0.399	0.598	2.043	2.342	1.794	0.299	7.674
SSE	0.000	0.000	0.050	0.349	0.299	1.794	2.242	3.039	1.146	8.919
S	0.000	0.000	0.149	0.149	0.399	1.694	2.192	1.495	0.747	6.825
SSW	0.000	0.000	0.050	0.249	0.199	0.698	2.093	1.744	0.349	5.382
SW	0.000	0.000	0.249	0.498	0.299	1.395	1.445	0.349	0.349	4.584
WSW	0.000	0.000	0.149	0.199	0.349	1.893	1.395	0.598	0.100	4.683
W	0.000	0.050	0.100	0.399	0.598	2.740	2.890	1.246	0.249	8.272
WNW	0.000	0.050	0.100	0.149	0.249	1.694	1.943	1.345	1.893	7.423
NW	0.000	0.000	0.199	0.299	0.199	1.345	1.993	0.648	0.100	4.783
NNW	0.000	0.000	0.149	0.199	0.299	3.189	3.189	1.545	0.448	9.018
TOTALS	0.000	0.200	1.993	5.529	7.027	28.549	33.731	17.042	5.929	100.001

Table 9

**BFN - Meteorological Data Elevated JFD In Percent**  
**Second Quarter 1985**

**STABILITY CLASS D**

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	10.95	
N	0.000	0.000	0.188	0.375	0.703	2.672	1.406	0.422	0.000	5.766
NNE	0.000	0.000	0.094	0.328	0.328	1.078	1.219	0.281	0.047	3.375
NE	0.000	0.000	0.047	0.188	0.375	1.078	0.797	0.047	0.300	2.532
ENE	0.000	0.000	0.000	0.047	0.188	0.609	0.609	0.094	0.300	1.547
E	0.000	0.000	0.281	0.234	0.094	1.078	0.891	0.000	0.000	2.578
ESE	0.000	0.047	0.422	0.703	0.891	1.969	1.500	0.000	0.000	5.532
SE	0.000	0.047	0.422	1.782	1.360	3.188	2.016	0.516	0.047	9.378
SSE	0.000	0.000	0.656	0.938	1.360	3.141	2.579	1.078	0.000	9.752
S	0.000	0.000	0.609	0.609	1.266	4.313	3.516	0.891	0.656	11.860
SSW	0.000	0.000	0.516	0.375	0.938	2.344	3.329	0.422	0.703	8.627
SW	0.000	0.000	0.234	0.516	0.703	2.344	2.438	0.281	0.000	6.516
WSW	0.000	0.000	0.328	0.656	0.703	1.969	1.782	0.234	0.094	5.766
W	0.000	0.000	0.000	0.703	0.703	2.063	1.406	0.047	0.188	5.110
WNW	0.000	0.000	0.234	0.797	0.844	2.625	2.344	0.656	0.188	7.688
NW	0.000	0.000	0.375	0.703	0.985	3.985	1.735	1.453	0.141	9.377
NNW	0.000	0.047	0.141	0.375	0.609	1.688	1.266	0.469	0.000	4.595
TOTALS	0.000	0.141	4.547	9.329	12.050	36.145	28.833	6.891	2.064	100.000

Table 10

Browns Ferry Nuclear Plant - Individual Doses From Gaseous Effluents

First Quarter 1985

<u>Effluent</u>	<u>Pathway</u>	<u>Guideline*</u>	<u>Point</u>	<u>Dose</u>
Noble gases	$\gamma$ Air dose	30	Max. Exp. <sup>1</sup>	0.07 mrad
	$\beta$ Air dose	60	Max. Exp.	0.12 mrad
	Total body <sup>2</sup>	15	Residence <sup>3</sup>	0.06 mrem
	Skin <sup>2</sup>	45	Residence <sup>3</sup>	0.10 mrem
<b>Iodines/Particulates</b>				
	Thyroid (critical organ)	45	Real Pathway <sup>4</sup>	0.03 mrem

Breakdown of Iodine/Particulate Exposures (mrem)

	<u>Child</u>	<u>Adult</u>
Vegetable Ingestion	$2.33 \times 10^{-2}$	$1.11 \times 10^{-2}$
Beef Ingestion <sup>5</sup>	$1.49 \times 10^{-4}$	$1.45 \times 10^{-4}$
Inhalation	$5.98 \times 10^{-4}$	$2.92 \times 10^{-4}$
Ground Contamination	$2.53 \times 10^{-3}$	$2.53 \times 10^{-3}$
Total	0.03	0.01

\*The annual guidelines are defined by Appendix I to 10 CFR 50.

1. The maximum exposure point is at 6100 meters in the NW sector.
2. Dose from air submersion.
3. Receptor is a 4155 meters in the E sector.
4. Receptor is at 1650 meters in the NNW sector.
5. Beef ingestion dose is calculated at the site boundary at 1,650 meters in the NNW sector.

Table 11

Browns Ferry Nuclear Plant - Individual Doses From Gaseous Effluents

Second Quarter 1985

<u>Effluent</u>	<u>Pathway</u>	<u>Guideline*</u>	<u>Point</u>	<u>Dose</u>
Noble gases	$\gamma$ Air dose	30	Max. Exp. <sup>1</sup>	$5.0 \times 10^{-8}$ mrad
	$\beta$ Air dose	60	Max. Exp. <sup>1</sup>	$2.3 \times 10^{-6}$ mrad
	Total body <sup>2</sup>	15	Residence <sup>3</sup>	$3.7 \times 10^{-16}$ mrem
	Skin <sup>2</sup>	45	Residence <sup>3</sup>	$2.6 \times 10^{-15}$ mrem
<b>Iodines/Particulates</b>				
	Bone (critical organ)	45	Real Pathway <sup>4</sup>	$7.2 \times 10^{-3}$ mrem

Breakdown of Iodine/Particulate Exposures (mrem)

	<u>Child</u>	<u>Adult</u>
Vegetable Ingestion	$6.7 \times 10^{-3}$	$2.5 \times 10^{-3}$
Beef Ingestion <sup>5</sup>	$3.8 \times 10^{-5}$	$2.9 \times 10^{-5}$
Inhalation	$8.6 \times 10^{-6}$	$5.4 \times 10^{-6}$
Ground Contamination	$4.8 \times 10^{-4}$	$4.8 \times 10^{-4}$
Total	$7.2 \times 10^{-3}$	$3.0 \times 10^{-3}$

\*The annual guidelines are defined by Appendix I to 10 CFR 50.

1. The maximum exposure point is at 1,620 meters in the N sector.
2. Dose from air submersion.
3. The maximum exposure point is at 3,500 meters in the NW sector.
4. Receptor is at 1,620 meters in the N sector.
5. The maximum exposure point is at 1,525 meters in the N sector.

Table 12

BFN -- QUARTERLY GASEOUS ASSESSMENT    \*\* 1Q85 \*\*  
 BFN DATA  
 SUMMATION OF POPULATION DOSES

	THYROID					TOTAL BODY				
	INFANT	CHILD	TEEN	ADULT	TOTALS	INFANT	CHILD	TEEN	ADULT	TOTALS
SUBMERSION	4.46E-02	2.78E-01	1.77E-01	8.19E-01	1.32E+00	4.46E-02	2.78E-01	1.77E-01	8.19E-01	1.32E+00
GROUND	1.17E-03	7.27E-03	4.63E-03	2.14E-02	3.45E-02	1.17E-03	7.27E-03	4.63E-03	2.14E-02	3.45E-02
INHALATION	4.39E-04	4.47E-03	1.63E-03	6.04E-03	1.26E-02	1.18E-03	1.40E-02	4.47E-03	1.49E-02	3.46E-02
COW MILK	3.71E-02	9.51E-02	2.52E-02	9.54E-02	2.53E-01	8.40E-05	3.16E-04	1.06E-04	4.67E-04	9.73E-04
BEEF INGESTION	0.00E+00	1.47E-03	6.24E-04	3.80E-03	5.89E-03	0.00E+00	2.46E-05	1.66E-05	1.39E-04	1.81E-04
VEG INGESTION	0.00E+00	7.78E-03	3.34E-03	1.92E-02	3.03E-02	0.00E+00	4.41E-05	2.36E-05	1.61E-04	2.28E-04
TOTAL MAN-REM	8.32E-02	3.94E-01	2.12E-01	9.65E-01	1.65E+00	4.70E-02	2.99E-01	1.86E-01	8.56E-01	1.39E+00

BFN -- 2Q85 QUARTERLY ASSESSMENT  
 BFN DATA  
 SUMMATION OF POPULATION DOSES

	LIVER					BONE				
	INFANT	CHILD	TEEN	ADULT	TOTALS	INFANT	CHILD	TEEN	ADULT	TOTALS
SUBMERSION	7.60E-16	4.74E-15	3.01E-15	1.40E-14	2.25E-14	7.60E-16	4.74E-15	3.01E-15	1.40E-14	2.25E-14
GROUND	1.89E-05	1.18E-04	7.51E-05	3.48E-04	5.60E-04	1.89E-05	1.18E-04	7.51E-05	3.48E-04	5.60E-04
INHALATION	3.60E-06	5.77E-05	2.79E-05	1.29E-04	2.19E-04	5.84E-07	1.20E-05	5.13E-06	2.13E-05	3.90E-05
COW MILK	4.35E-05	1.61E-04	5.32E-05	2.12E-04	4.69E-04	6.67E-05	2.48E-04	5.80E-05	2.05E-04	5.78E-04
BEEF INGESTION	0.00E+00	2.68E-05	1.40E-05	8.62E-05	1.27E-04	0.00E+00	2.34E-05	8.68E-06	4.90E-05	8.11E-05
VEG INGESTION	0.00E+00	1.72E-05	9.07E-06	5.47E-05	8.09E-05	0.00E+00	1.74E-04	6.63E-05	3.59E-04	6.00E-04
TOTAL MAN-REM	6.60E-05	3.80E-04	1.79E-04	8.30E-04	1.46E-03	8.62E-05	5.75E-04	2.13E-04	9.83E-04	1.86E-03

Table 13

**LIQUID EFFLUENT DOSES**  
**BROWNS FERRY NUCLEAR PLANT ROUTINE RELEASES, 1ST QUARTER-1985**

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	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
<hr/>						
I. WATER INGESTION AT U.S. PLYWOOD-CHAMPION PAPER						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	3.2E-03	6.0E-04	5.1E-03	8.7E-04	3.7E-03	8.7E-04
B. MAXIMUM INDIVIDUAL ADULT (MREM)	1.2E-03	7.9E-04	3.0E-03	1.5E-03	2.0E-03	1.5E-03
C. TENNESSEE RIVER POPULATION (MAN-REM)	2.1E-02	6.0E-03	2.2E-02	1.6E-02	3.0E-02	1.6E-02
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II. FISH INGESTION FROM WHEELER LAKE BELOW BFN						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	8.2E-02	1.6E-03	1.8E-02	1.7E-02	9.8E-02	1.7E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	6.3E-02	6.4E-03	8.1E-02	8.0E-02	1.1E-01	8.0E-02
C. TENNESSEE RIVER POPULATION (MAN-REM)	7.6E+00	5.6E-01	7.0E+00	7.0E+00	1.2E+01	7.0E+00
<hr/>						
III. RECREATION AT WHEELER LAKE BELOW BFN						
A. SHORELINE INDIVIDUAL (MREM) POPULATION (MAN-REM)	5.0E-03 1.0E-01	4.0E-03 8.0E-02	3.5E-03 7.0E-02	4.2E-03 8.5E-02	3.6E-03 7.2E-02	5.1E-03 1.0E-01
B. IN-WATER INDIVIDUAL (MREM) POPULATION (MAN-REM)	4.6E-05 6.6E-05	3.7E-05 5.3E-05	3.6E-05 4.7E-05	3.9E-05 5.6E-05	3.3E-05 4.7E-05	4.7E-05 6.8E-05
C. ABOVE-WATER INDIVIDUAL (MREM) POPULATION (MAN-REM)	4.5E-05 1.7E-04	3.7E-05 1.4E-04	3.5E-05 1.2E-04	3.8E-05 1.5E-04	3.3E-05 1.2E-04	4.6E-05 1.8E-04
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IV. TOTAL						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	9.0E-02	6.2E-03	2.6E-02	2.2E-02	1.1E-01	2.3E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	6.9E-02	1.1E-02	8.7E-02	8.6E-02	1.2E-01	8.7E-02
C. TENNESSEE RIVER POPULATION (MAN-REM)	7.7E+00	6.4E-01	7.1E+00	7.1E+00	1.2E+01	7.1E+00

Table 14

LIQUID EFFLUENT DOSES  
BROWNS FERRY NUCLEAR PLANT ROUTINE RELEASES 2ND QUARTER-1985

	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
<b>I. WATER INGESTION AT U.S. PLYWOOD-CHAMPION PAPER</b>						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	6.9E-03	6.0E-04	1.7E-03	1.7E-03	7.5E-03	1.7E-03
B. MAXIMUM INDIVIDUAL ADULT (MREM)	2.6E-03	7.2E-04	3.0E-03	3.0E-03	4.0E-03	3.0E-03
C. TENNESSEE RIVER POPULATION (MAN-REM)	4.4E-02	7.8E-03	3.1E-02	3.1E-02	5.9E-02	3.1E-02
<b>II. FISH INGESTION FROM WHEELER LAKE BELOW BFN</b>						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	1.6E-01	2.8E-03	3.4E-02	3.4E-02	2.0E-01	3.4E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	2.2E-01	1.1E-02	1.6E-01	1.6E-01	2.2E-01	1.6E-01
C. TENNESSEE RIVER POPULATION (MAN-REM)	1.5E+01	9.9E-01	1.4E+01	1.4E+01	2.4E+01	1.4E+01
<b>III. RECREATION AT WHEELER LAKE BELOW BFN</b>						
A. SHORELINE INDIVIDUAL (MREM) POPULATION (MAN-REM)	2.6E-02	2.0E-02	1.7E-02	2.1E-02	1.8E-02	2.6E-02
B. IN-WATER INDIVIDUAL (MREM) POPULATION (MAN-REM)	1.4E-04	1.1E-04	9.7E-05	1.2E-04	1.0E-04	1.5E-04
C. ABOVE-WATER INDIVIDUAL (MREM) POPULATION (MAN-REM)	1.4E-04	1.1E-04	9.5E-05	1.2E-04	1.0E-04	1.4E-04
<b>IV. TOTAL</b>						
A. MAXIMUM INDIVIDUAL CHILD (MREM)	1.9E-01	2.4E-02	5.3E-02	5.7E-02	2.2E-01	6.2E-02
B. MAXIMUM INDIVIDUAL ADULT (MREM)	1.5E-01	3.2E-02	1.8E-01	1.8E-01	2.4E-01	1.9E-01
C. TENNESSEE RIVER POPULATION (MAN-REM)	1.5E+01	1.4E+00	1.4E+01	1.4E+01	2.4E+01	1.4E+01

Table 15  
Browns Ferry Nuclear Plant - Five-Year Summary  
of Quarterly Doses\*

Year	Quarter	Air- $\gamma$	Air- $\beta$	Air Submersion		Real Pathway	Liquid Effluents	
		(mrad)	(mrad)	Skin (mrem)	Total Body (mrem)	Maximum Organ (mrem)	Total Body (mrem)	Maximum Organ (mrem)
1980	3 <sup>a</sup>	.40	.52	.31	.21	.07 Thyr.	.09	.11 Liver
	4	.93	1.09	.64	.45	.08 Thyr.	.15	.19 Liver
1981	1	1.97	2.11	1.40	.96	.09 Bone	.07	.10 Liver
	2	.28	.35	.23	.15	.98 Bone	.21	.25 Liver
	3	.15	.19	.11	.07	.14 Bone	.23	.28 Liver
	4	.09	.12	.09	.06	.08 Thyr.	.05	.06 Liver
1982	1	.11	.16	.09	.07	.13 Bone	.11	.13 Liver
	2	.33	.52	.23	.17	.11 Bone	.06	.07 Liver
	3	.27	.35	.37	.27	.24 Bone	.10	.12 Liver
	4	.19	.23	.20	.13	.16 Bone	.07	.08 Liver
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	.007 Bone	.18	.24 Liver

<sup>a</sup> Prior to the third quarter of 1980 the liver was not considered in liquid dose analyses.

\* Note: All calculated doses are below limits specified in Appendix I to 10 CFR 50.