Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

April 18, 2000

10 CFR 50.36a(a)(2)
10 CFR 50, Appendix I,
Section IV.B.1

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, AND 3 ANNUAL RADIOACTIVE EFFLUENT RELEASE (ARER) REPORT - JANUARY THROUGH DECEMBER 1999

In accordance with 10 CFR 50.36a(a)(2) and BFN's Technical Specification (TS) 5.6.3, TVA submits the BFN ARER report for January through December 1999. Also, according to BFN's Offsite Dose Calculation Manual (ODCM) Section 1.1.1, Action (b), and Section 1.1.2, Action (c), TVA provides BFN's inoperable radioactive effluent instrumentation report. Finally, according to TS Section 5.5.1, TVA is required to submit revisions of the ODCM implemented during the reporting period. Because no ODCM revisions were implemented during this reporting period for calendar year 1999. This information is not included in this submittal.

This report consists of the following:

Radiological Impact Assessment Report (Enclosure 1)

Meteorological Data Tables (Enclosure 2)

Effluent and Waste Disposal Annual Report (Enclosure 3)

Inoperable Radiological Effluent Instrumentation Report (Enclosure 4)

IE47

There are no commitments contained in this letter. If you have any questions, please contact me at (256) 729-2636.

Sincerely,

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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

RADIOLOGICAL IMPACT ASSESSMENT REPORT
1999

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I. INTRODUCTION

Potential doses to the "maximum exposed individual" and the population around Browns Ferry are calculated for each quarter as required in Section 5.2 of the Offsite Dose Calculation Manual (ODCM). The methodology for determining plant releases for the reporting period used to estimate dose is specified in Sections 6 and 7 of the ODCM. Dispersion of radioactive effluents in the environment is estimated using meteorological data and river flow measured during the period. In this report, the doses resulting from releases are described and compared to limits established for Browns Ferry.

II. DOSE LIMITS

The ODCM specifies limits for the release of radioactive effluents, as well as limits for doses to the general public from the release of radioactive effluents. These limits are set well below the Technical Specification limits which govern the concentrations of radioactivity and doses permissible in unrestricted areas. This ensures that radioactive effluent releases are As Low As Reasonably Achievable.

The air dose limits in areas at and beyond the Site Boundary due to noble gases released in gaseous effluents per unit are:

$\leq$ 5 mrad per quarter and
$\leq$ 10 mrad per year for gamma radiation.
- and -
$\leq$ 10 mrad per quarter and
$\leq$ 20 mrad per year for beta radiation.

The dose limits to a Member of the Public in an unrestricted area from radioiodines, radioactive materials in particulate form, and radionuclides other than noble gases with half-lives > 8 days released in gaseous effluents for each unit are:

$\leq$ 7.5 mrem per quarter and
$\leq$ 15 mrem per year to any organ.

The dose or dose commitment to a Member of the Public from radioactive material in liquid effluents released to unrestricted areas are:

$\leq$ 1.5 mrem per quarter and
$\leq$ 3 mrem per year to the total body,
- and -
$\leq$ 5 mrem per quarter and
$\leq$ 10 mrem per year to any organ.

The limit for the total effective dose equivalent to an individual Member of the Public inside the site boundary is:
100 mrem per year.

The EPA limits for total dose to any Member of the Public in the vicinity of a nuclear power plant, established in the Environmental Dose Standard of 40 CFR 190, are:

$\leq$ 25 mrem per year to the whole body,
$\leq$ 75 mrem per year to the thyroid,
- and -
$\leq$ 25 mrem per year to any other organ.

III. DOSE CALCULATIONS

Estimated doses to Members of the Public are determined using computer models (the Gaseous Effluent Licensing Code, GELC, and the Quarterly Water Dose Assessment Code, QWATA). These models are based on guidance provided by the NRC (in Regulatory Guides 1.109, 1.111 and 1.113) for determining the potential dose to individuals and populations living in the vicinity of the plant. The area around the plant is analyzed to determine the pathways through which the public may receive a dose. The doses calculated are a representation of the dose to a "maximum exposed individual." Some of the factors used in these calculations (such as ingestion rates) are maximum values to ensure conservative reporting data. Many of these factors are obtained from NUREG/CR-1004. The values chosen will tend to overestimate the dose. The expected dose to actual individuals is lower. The calculated doses are presented in Tables 1, 2, 3, 4, 5, 6, 7, 8, and 9.

IV. DOSES FROM AIRBORNE EFFLUENTS

For airborne effluents, Members of the Public can be exposed to radiation from several sources: direct radiation from the radioactivity in the air, direct radiation from radioactivity deposited on the ground, inhalation of airborne radioactivity, ingestion of vegetation which contains radioactivity deposited from the atmosphere, and ingestion of milk and beef which contains radioactivity deposited from the atmosphere onto vegetation and subsequently consumed by milk and beef animals.

Airborne Release Points

There are four monitored release points from Browns Ferry Nuclear Plant: the turbine building, the radwaste building, the reactor building, and the stack.

Releases from the turbine building are considered ground-level releases. The ground-level Joint Frequency Distribution (JFD) is derived from windspeeds and directions measured 10 meters above ground and from the vertical temperature difference between 10 and 45 meters. These releases are presented for each quarter in Tables 10, 11, 12, and 13.

Releases from the radwaste and reactor buildings are considered split-level releases. Portions of the release are treated as ground-level while other portions are considered elevated depending on the ratio of the vertical exit velocity to the horizontal wind speed. The split-level dispersion approach is implemented using a model that requires two complete quarterly JFDs for each effluent vent, one for the ground-level releases and one for the elevated releases. The ground-level portion of the split-level JFD is based on wind speeds and directions measured 10 meters above ground-level and from the vertical temperature difference between 10 and 45 meters. The elevated portion of the split-level JFD is based on wind speeds and direction measurements at the 45 meter level and the vertical temperature difference between 45 and 91 meters. Both of these JFDs are given for each quarter in Tables 14, 15,16, 17, 18, 19, 20, and 21.

Releases from the stack are considered to be elevated releases. The JFDs for elevated releases are based on wind directions and wind speeds measured at 91 meters and the vertical temperature difference between 45 and 91 meters. These releases are given for each quarter in Tables 22, 23, 24, and 25.

Meteorological Data

Meteorological variables at BFN are measured continuously. Measurements collected include wind speed, wind direction, and temperature at heights of 10, 45, and 91 meters above the ground. Quarterly Joint Frequency Distributions (JFDs) are calculated for each release point using the appropriate levels of meteorological data. A JFD gives the percentage of the time in a quarter that the wind is blowing out of a particular upwind compass sector in a particular range of wind speeds for a given stability class A through G. The wind speeds are divided into nine wind speed ranges. Calms are distributed by direction in proportion to the distribution of noncalm wind directions less than 1.6 m/s (3.5 mph). Stability classes are determined from the vertical temperature difference between two measurement levels.

The generally open terrain around BFN does not 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. The Tennessee River/Wheeler Lake may have a minor effect on transport and dispersion in the immediate vicinity of BFN during periods of winds with a southerly component, overcast skies, and relatively high wind speeds. Also, the lower layer (10-45 meters) stability class tends to be more stable. However, during this infrequent condition, dose estimates will be conservative.

External Exposure Dose

Dose calculated for maximum external air dose (gamma-air and beta-air) are made for points at and beyond the unrestricted area boundary as described in the BFN ODCM. The highest of these doses is then selected.

Submersion Dose

External doses to the skin and total body, due to submersion in a cloud of noble gases, are calculated for the nearest residence in each sector. The residence with the highest dose is then selected from all sectors.

Organ Dose

Dose to an organ due to releases of airborne effluents are estimated for the inhalation, ground contamination, and ingestion pathways. The ingestion pathway is further divided into three possible contributing pathways: ingestion of cow/goat milk, ingestion of beef, and ingestion of vegetables. Doses from applicable pathways are calculated for each receptor location identified in the most recent land use survey. To determine the maximum organ dose, the doses from the pathways are summed for each receptor. For the ingestion dose, however, only those pathways that exist for each receptor are considered in the sum, i.e., milk ingestion doses are included only for locations where milk was consumed without commercial preparation and vegetable ingestion is included only for those locations where a garden was identified. To conservatively account for beef ingestion, a beef ingestion dose equal to that for the highest unrestricted area boundary location is added to each identified receptor. For ground contamination, the dose added to the organ dose being calculated is the total body dose calculated for that location, i.e., it is assumed that the dose to an individual organ is equal to the total body dose.

The maximum organ dose, thyroid dose, and total body dose from airborne effluents are presented in Tables 1, 2, 3, and 4.

V. DOSES FROM LIQUID EFFLUENTS

For liquid effluents, the public can be exposed to radiation from three sources: the ingestion of water from the Tennessee River, the ingestion of fish caught in the Tennessee River, and direct exposure from radioactive material deposited on the river shoreline sediment (recreation).

The concentration of radionuclides in the Tennessee River are calculated by a computer model which uses measured hydraulic data downstream of BFN. Parameters used to determine the doses are based on guidance given by the NRC (in Regulatory Guides 1.109) for maximum ingestion rates, exposure times, etc. Wherever possible, parameters used in the dose calculation are site specific. The models that are used to estimate doses, as well as the parameters input to the models, are described in detail in the BFN ODCM.

Liquid Release Points and River Data

Radionuclide concentrations in the Tennessee River are calculated assuming that releases in liquid effluents are continuous. When necessary, liquid releases from BFN, located at Tennessee River Mile 294, are made through diffusers which extend into the Tennessee River. It is assumed that releases to the river through these diffusers will initially be entrained in one-fifth of the water which flows past the plant. The QWATA code makes the assumption that this mixing condition holds true until the water is completely mixed at the first downstream dam (Wheeler Dam), at Tennessee River Mile 283.0.

Doses are calculated for locations within a 50 mile radius downstream of the plant site. The maximum potential recreation dose is calculated for a location immediately downstream from the plant's release point. The maximum exposed individual dose from ingestion of fish is assumed to be that calculated for the consumption of fish caught anywhere between the plant and the first downstream dam. The maximum exposed individual dose from drinking water is assumed to be that calculated at the nearest downstream public water supply [West

Morgan - East Lawrence (WMEL)]. This could be interpreted as indicating that the maximum exposed individual, as assumed for liquid releases from Browns Ferry, is an individual who obtains all of his drinking water at WMEL, consumes fish caught from the Tennessee River between BFN and Wheeler Dam, and spends 500 hours per year on the shoreline just downstream of the plant's release point. Doses calculated for the maximum exposed individual due to liquid effluents for each quarter in the period are presented in Tables 5, 6, 7, and 8, along with the average river flows past the plant site for the periods.

VI. POPULATION DOSES

Population doses due to airborne effluents are calculated for an estimated 627,000 persons living within a 50-mile radius of the plant site. Doses from external pathways and inhalation are based on the 50-mile human population distribution. Ingestion population doses are calculated assuming that each individual consumed milk, vegetables, and meat produced within the sector in which the individual resides.

Population doses due to liquid effluents are calculated for the entire downstream Tennessee River population. Water ingestion population doses are calculated using actual population figures for downstream public water supplies. Fish ingestion population doses are calculated assuming that all sport fish caught in the Tennessee River are consumed by the Tennessee River population. Recreation population doses are calculated using historical recreational data on the number of shoreline visits at downstream locations.

Population doses calculated for airborne and liquid effluents are presented in Tables 1, 2, 3, 4, 5, 6, 7, and 8.

VII. OFFSITE DIRECT RADIATION DOSE

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around BFN as part of the offsite Radiological Environmental Monitoring Program (REMP). The quarterly gamma radiation levels determined from these TLDs during this reporting period averaged approximately 16.3 mrem/quarter at onsite (at or near the site boundary) stations and approximately 13.9 mrem/quarter at offsite stations or approximately 2.4 mrem/quarter higher onsite than at offsite stations. This difference is consistent with levels measured for pre-operation and construction phases of TVA nuclear plants where the average radiation levels onsite were generally 2-6 mrem/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.

VIII. DOSE TO A MEMBER OF THE PUBLIC INSIDE THE SITE BOUNDARY

Pursuant to ODCM section 7.7.5, a review was performed to determine the highest dose to a member of the public in the site boundary. This review assumed that onsite TVA employees engaged in work activities not associated with nuclear power electric generation were considered as members of the public. The dose to a member of the public consists of the sum of dose commitments from effluent releases as well as any direct radiation dose.

The dose from effluent releases consists of inhalation, ingestion, and submersion doses. The inhalation dose commitment assumes that site occupancy factors are sufficiently low to compensate for the increase in the atmospheric dispersion above that for the site boundary. The ingestion dose commitments use the pathways and calculated values described previously for beef, milk, and garden vegetable ingestion as well as the dose commitments from liquid effluents. The submersion dose is an external radiation dose commitment from gaseous effluents.

The direct radiation dose was determined from area TLDs located onsite. It consisted of gamma dose from the plume, ground contamination and from equipment sources (i.e., tanks, turbine shine, radioactive material storage areas, etc.). The highest direct radiation dose accounting for background and occupancy was 3.6 mrem during 1999.

The total annual dose is the sum of the direct radiation dose (3.6 mrem) and the effluent dose commitment (5.6 E-02 mrem) or 3.7 mrem. It can be concluded that the dose limit for a member of the public inside the site boundary as specified in 10 CFR 20.1301 was not exceeded.

IX. TOTAL DOSE

To determine compliance with 40 CFR 190, annual total dose contributions to the maximum individual from BFN radioactive effluents and all other nearby uranium fuel cycle sources are considered.

The annual dose to any organ other than thyroid for the maximum individual is conservatively calculated by summing the following doses: the total body air submersion dose for each quarter, the critical organ dose (for any organ other than the thyroid) from airborne effluents for each quarter from ground contamination, inhalation and ingestion, the total body dose from liquid effluents for each quarter, the maximum organ dose (for any organ other than the thyroid) from liquid effluents for each quarter, and any identifiable increase in direct radiation dose levels as measured by the REMP. This dose is compared to the 40 CFR 190 limit for total body or any organ dose (other than thyroid) to determine compliance.

The annual thyroid dose to the maximum individual is conservatively estimated by summing the following doses: the total body air submersion dose for each quarter, the thyroid dose from airborne effluents for each quarter, the total body dose from liquid effluents for each quarter, the thyroid dose from liquid effluents for each quarter, and any identifiable increase in direct radiation dose levels as measured by the REMP. This dose is compared to the 40 CFR 190 limit for thyroid dose to determine compliance.

Total dose from the fuel cycle is presented in Table 9.

Table 1
Doses from Airborne Effluents
First Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	3.8E-06 mrad	5 mrad	< 1 %	N/8000 meters
Beta Air	2.5E-06 mrad	10 mrad	< 1 %	N/8000 meters
Submersion				
Total Body	7.1E-04 mrem	NA	NA	N/2000 meters
Skin	8.3E-04 mrem	NA	NA	N/2000 meters
Organ Doses				
Child/Liver	1.4E-02 mrem	7.5 mrem	< 1 %	NNW/1770 meters
Child/Thyroid	1.5E-02 mrem	7.5 mrem	< 1 %	NNW/1770 meters
Child/Total Body	9.4E-03 mrem	7.5 mrem	< 1 %	NNW/1770 meters

Population Doses

Total Body Dose 1.7E-02 man-rem

Maximum Organ Dose (organ) 2.9E-02 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 2
Doses from Airborne Effluents
Second Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	2.8E-05 mrad	5 mrad	< 1 %	NW/6200 meters
Beta Air	1.3E-05 mrad	10 mrad	< 1 %	NW/6200 meters
Submersion				
Total Body	9.9E-04 mrem	NA	NA	NNW/1639 meters
Skin	1.2E-03 mrem	NA	NA	NNW/1639 meters
Organ Doses				
Child/Liver	9.0E-03 mrem	7.5 mrem	< 1 %	NNW/1770 meters
Child/Thyroid	9.0E-03 mrem	7.5 mrem	< 1 %	NNW/1770 meters
Child /Total Body	5.1E-03 mrem	7.5 mrem	< 1 %	NNW/1770 meters

Population Doses

Total Body Dose 1.2E-02 man-rem

Maximum Organ Dose (organ) 2.3E-02 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 3
Doses from Airborne Effluents
Third Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	2.1E-05 mrad	5 mrad	<1 %	NW/8400 meters
Beta Air	1.0E-05 mrad	10 mrad	<1 %	NW/8400 meters
Submersion				
Total Body	2.7E-04 mrem	NA	NA	E/1610 meters
Skin	3.2E-04mrem	NA	NA	E/1610 meters
Organ Doses				
Child/Liver	3.8E-03 mrem	7.5 mrem	<1 %	NNW/1770 meters
Child/Thyroid	5.4E-03 mrem	7.5 mrem	<1 %	NNW/1770 meters
Child/Total Body	2.3E-03 mrem	7.5 mrem	<1 %	NNW/1770 meters

Population Doses

Total Body Dose 1.0E-02 man-rem

Maximum Organ Dose (organ) 2.2E-02 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 4
Doses from Airborne Effluents
Fourth Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	3.2E-05mrad	5 mrad	<1 %	NW/7000 meters
Beta Air	2.9E-05 mrad	10 mrad	<1 %	NW/7000 meters
Submersion				
Total Body	1.6E-04 mrem	NA	NA	NNW/1639 meters
Skin	1.9E-04 mrem	NA	NA	NNW/1639 meters
Organ Doses				
Child/ Bone	4.9E-03 mrem	7.5 mrem	<1 %	NNW/1770 meters
Child/Thyroid	1.1E-02 mrem	7.5 mrem	<1 %	NNW/1770 meters
Child /Total Body	4.0E-03 mrem	7.5 mrem	<1 %	NNW/1770 meters

Population Doses

Total Body Dose 1.1E-02 man-rem

Maximum Organ Dose (organ) 2.8E-02 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 5
Doses from Liquid Effluents
First Quarter*

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
	Total Body	Fish Ingestion	0		
		Recreation	0		
		Water Ingestion	0		
		Total	**0**	1.5 mrem	0 %
	Liver	Fish Ingestion	0		
		Recreation	0		
		Water Ingestion	0		
		Total	**0**	5 mrem	0 %
	Thyroid	Fish Ingestion	0		
		Recreation	0		
		Water Ingestion	0		
		Total	**0**	5 mrem	0 %

***No liquid releases were made this quarter.**

Average Riverflow past BFN (cubic feet per second): 65190

Population Doses

Total Body Dose 0 man-rem

Maximum Organ Dose (organ) 0 man-rem (organ)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 6
Doses from Liquid Effluents
Second Quarter*

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
	Total Body	Fish Ingestion	0		
		Recreation	0		
		Water Ingestion	0		
		Total	**0**	1.5 mrem	0 %
	Liver	Fish Ingestion	0		
		Recreation	0		
		Water Ingestion	0		
		Total	**0**	5 mrem	0 %
	Thyroid	Fish Ingestion	0		
		Recreation	0		
		Water Ingestion	0		
		Total	**0**	5 mrem	0 %

***No liquid releases were made this quarter.**

Average Riverflow past BFN (cubic feet per second): 22698

Population Doses

Total Body Dose 0 man-rem

Maximum Organ Dose (organ) 0 man-rem (organ)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 7
Doses from Liquid Effluents
Third Quarter

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	Fish Ingestion	3.8E-03		
		Recreation	3.4E-04		
		Water Ingestion	1.3E-04		
		Total	**4.3E-03**	1.5 mrem	<1 %
Teen	Liver	Fish Ingestion	5.4E-03		
		Recreation	3.4E-04		
		Water Ingestion	1.3E-04		
		Total	**5.9E-03**	5 mrem	<1 %
Child	Thyroid	Fish Ingestion	1.0E-06		
		Recreation	3.4E-04		
		Water Ingestion	8.3E-05		
		Total	**4.2E-04**	5 mrem	<1 %

Average Riverflow past BFN (cubic feet per second): 34028

Population Doses

Total Body Dose 4.1E-02 man-rem

Maximum Organ Dose (organ) 5.8E-02 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 8
Doses from Liquid Effluents
Fourth Quarter

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	Fish Ingestion	3.1E-02		
		Recreation	1.7E-03		
		Water Ingestion	5.9E-04		
		Total	**3.3E-02**	1.5 mrem	2.2 %
Teen	Liver	Fish Ingestion	4.3E-02		
		Recreation	1.7E-03		
		Water Ingestion	7.4E-04		
		Total	**4.5E-02**	5 mrem	<1 %
Child	Thyroid	Fish Ingestion	6.7E-07		
		Recreation	1.7E-03		
		Water Ingestion	5.5E-05		
		Total	**1.8E-03**	5 mrem	<1 %

Average Riverflow past BFN (cubic feet per second): 24329

Population Doses

Total Body Dose 2.3E-01 man-rem

Maximum Organ Dose (organ) 3.6E-01 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 56,430 man-rem/year (based on 90 mrem/yr for natural background).

Table 9
Total Dose from Fuel Cycle

Dose	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
Total Body or any Organ (except thyroid)					
Total body air submersion	7.1E-04	9.9E-04	2.7E-04	1.6E-04	
Critical organ dose (air)	1.4E-02	9.0E-03	3.8E-03	4.9E-03	
Total body dose (liquid)	0	0	4.3E-03	3.3E-02	
Maximum organ dose (liquid)	0	0	5.9E-03	4.5E-02	
Direct Radiation Dose	0	0	0	0	
Total	**1.5E-02**	**1.0E-02**	**1.4E-02**	**8.3E-02**	
Cumulative Total Dose (mrem) (Total body or any other organ)					**1.2E-01**
Annual Dose Limit (mrem)					**2.5E+01**
Percent of Limit					**< 1 %**
Thyroid Dose (mrem)					
Total body air submersion	7.1E-04	9.9E-04	2.7E-04	1.6E-04	
Thyroid dose (airborne)	1.5E-02	9.0E-03	5.4E-03	1.1E-02	
Total body dose (liquid)	0	0	4.3E-03	3.3E-02	
Thyroid dose (liquid)	0	0	4.2E-04	1.8E-03	
Direct Radiation Dose	0	0	0	0	
Total	**1.6E- 02**	**1.0E-02**	**1.0E-02**	**4.6E-02**	
Cumulative Total Dose (Thyroid) mrem					**8.2E-02**
Annual Dose Limit (mrem)					**7.5E+01**
Percent of Limit					**< 1 %**

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

METEOROLOGICAL DATA TABLES
1999

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 10

Joint Frequency Distribution in Percent
for Ground Level Releases
First Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.047	0.284	0.758	0.237	0.000	0.000	1.327
NNE	0.000	0.000	0.000	0.047	0.474	0.332	0.047	0.000	0.000	0.900
NE	0.000	0.000	0.000	0.000	0.000	0.474	0.095	0.000	0.000	0.569
ENE	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
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	0.047	0.000	0.000	0.000	0.000	0.047
SE	0.000	0.000	0.000	0.284	0.000	0.190	0.000	0.000	0.000	0.474
SSE	0.000	0.000	0.047	0.427	0.000	0.000	0.000	0.000	0.000	0.474
S	0.000	0.000	0.142	0.569	0.095	0.095	0.000	0.000	0.000	0.900
SSW	0.000	0.000	0.000	0.142	0.142	0.000	0.000	0.000	0.000	0.284
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	0.237	0.047	0.000	0.284
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.047
NNW	0.000	0.000	0.000	0.000	0.047	0.379	0.237	0.000	0.000	0.664
SUBTOTAL	0.000	0.000	0.190	1.517	1.090	2.275	0.900	0.047	0.000	6.019

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS A	130
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	127
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 8.20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.095	0.047	0.095	0.047	0.000	0.000	0.284
NNE	0.000	0.000	0.000	0.000	0.142	0.047	0.000	0.000	0.000	0.190
NE	0.000	0.000	0.000	0.000	0.095	0.095	0.047	0.000	0.000	0.237
ENE	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
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	0.047	0.047	0.047	0.047	0.000	0.000	0.000	0.190
SE	0.000	0.000	0.000	0.521	0.000	0.142	0.000	0.000	0.000	0.664
SSE	0.000	0.000	0.190	0.095	0.047	0.000	0.000	0.000	0.000	0.332
S	0.000	0.000	0.047	0.095	0.095	0.142	0.000	0.000	0.000	0.379
SSW	0.000	0.000	0.000	0.190	0.000	0.000	0.000	0.000	0.000	0.190
SW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
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	0.047	0.000	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.000	0.047	0.095	0.190	0.000	0.000	0.332
NW	0.000	0.000	0.047	0.000	0.000	0.474	0.237	0.000	0.000	0.758
NNW	0.000	0.000	0.000	0.047	0.047	0.000	0.047	0.000	0.000	0.142
SUBTOTAL	0.000	0.000	0.332	1.185	0.569	1.185	0.569	0.000	0.000	3.839

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS B	82
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	81
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 7.62

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.047	0.047	0.047	0.190	0.190	0.000	0.000	0.521
NNE	0.000	0.000	0.000	0.095	0.000	0.095	0.000	0.000	0.000	0.190
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	0.047	0.047	0.000	0.000	0.000	0.095
E	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.095
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	0.095	0.190	0.000	0.237	0.000	0.000	0.000	0.521
SSE	0.000	0.000	0.000	0.237	0.047	0.000	0.000	0.000	0.000	0.284
S	0.000	0.000	0.095	0.095	0.142	0.047	0.000	0.000	0.000	0.379
SSW	0.000	0.000	0.047	0.142	0.000	0.000	0.000	0.000	0.000	0.190
SW	0.000	0.000	0.000	0.095	0.000	0.000	0.000	0.000	0.000	0.095
WSW	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.095
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	0.190	0.142	0.047	0.000	0.379
NW	0.000	0.000	0.000	0.095	0.000	0.142	0.047	0.000	0.000	0.284
NNW	0.000	0.000	0.000	0.000	0.047	0.190	0.142	0.000	0.000	0.379
SUBTOTAL	0.000	0.000	0.284	1.090	0.427	1.185	0.521	0.047	0.000	3.555

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS C	75
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	75
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 7.79

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.142	0.521	0.379	1.232	0.284	0.000	0.000	2.559
NNE	0.000	0.000	0.237	0.521	0.853	0.948	0.142	0.000	0.000	2.701
NE	0.000	0.047	0.237	0.569	0.237	0.474	0.000	0.000	0.000	1.564
ENE	0.000	0.000	0.142	0.427	0.237	0.047	0.000	0.000	0.000	0.853
E	0.000	0.000	0.284	0.332	0.427	0.000	0.047	0.000	0.000	1.090
ESE	0.000	0.000	0.284	0.332	0.569	0.758	0.000	0.000	0.000	1.943
SE	0.000	0.000	0.758	0.237	0.190	1.043	0.000	0.000	0.000	2.227
SSE	0.000	0.047	0.995	0.569	0.237	0.047	0.000	0.000	0.000	1.896
S	0.000	0.000	0.995	1.422	0.284	0.142	0.000	0.000	0.000	2.844
SSW	0.000	0.000	0.379	0.190	0.047	0.000	0.000	0.000	0.000	0.616
SW	0.000	0.000	0.284	0.142	0.095	0.047	0.000	0.000	0.000	0.569
WSW	0.000	0.000	0.379	0.379	0.427	0.237	0.047	0.000	0.000	1.469
W	0.000	0.000	0.237	0.379	0.474	0.521	0.142	0.000	0.000	1.754
WNW	0.000	0.000	0.142	0.379	0.237	1.564	0.853	0.047	0.000	3.223
NW	0.000	0.000	0.095	0.190	0.474	1.896	1.517	0.142	0.000	4.313
NNW	0.000	0.000	0.190	0.284	0.474	1.659	0.806	0.047	0.000	3.460
SUBTOTAL	0.000	0.095	5.782	6.872	5.640	10.616	3.839	0.237	0.000	33.081

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS D	699
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	698
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 7.39

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.095	0.521	0.332	0.427	0.616	0.000	0.000	0.000	1.991
NNE	0.000	0.095	0.806	1.090	0.616	0.190	0.000	0.000	0.000	2.796
NE	0.000	0.095	0.758	0.474	0.521	0.616	0.000	0.000	0.000	2.464
ENE	0.000	0.142	0.711	0.284	0.332	0.095	0.000	0.000	0.000	1.564
E	0.000	0.095	0.900	0.379	0.190	0.237	0.000	0.000	0.000	1.801
ESE	0.000	0.190	0.995	0.569	0.332	0.000	0.000	0.000	0.000	2.085
SE	0.000	0.332	1.090	1.280	0.427	0.142	0.000	0.000	0.000	3.270
SSE	0.000	0.095	1.896	0.521	0.284	0.190	0.000	0.000	0.000	2.986
S	0.000	0.190	0.521	0.711	1.327	0.711	0.047	0.000	0.000	3.507
SSW	0.000	0.095	0.237	0.190	0.190	0.237	0.000	0.000	0.000	0.948
SW	0.000	0.095	0.474	0.095	0.047	0.095	0.000	0.000	0.000	0.806
WSW	0.000	0.047	0.142	0.237	0.000	0.000	0.000	0.000	0.000	0.427
W	0.000	0.047	0.284	0.332	0.095	0.047	0.000	0.000	0.000	0.806
WNW	0.000	0.000	0.237	0.190	0.237	0.332	0.000	0.000	0.000	0.995
NW	0.000	0.047	0.142	0.142	0.142	0.237	0.000	0.000	0.000	0.711
NNW	0.000	0.047	0.379	0.379	0.379	0.284	0.000	0.000	0.000	1.469
SUBTOTAL	0.000	1.706	10.095	7.204	5.545	4.028	0.047	0.000	0.000	28.626

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS E	605
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	604
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 4.50

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.003	0.000	0.569	0.569	0.047	0.000	0.000	0.000	0.000	1.188
NNE	0.003	0.047	0.427	0.995	0.427	0.047	0.000	0.000	0.000	1.946
NE	0.001	0.095	0.095	0.142	0.000	0.000	0.000	0.000	0.000	0.333
ENE	0.002	0.047	0.237	0.142	0.000	0.000	0.000	0.000	0.000	0.428
E	0.004	0.190	0.569	0.047	0.000	0.000	0.000	0.000	0.000	0.810
ESE	0.002	0.047	0.379	0.095	0.000	0.000	0.000	0.000	0.000	0.524
SE	0.010	0.427	1.422	0.284	0.142	0.000	0.000	0.000	0.000	2.285
SSE	0.012	0.521	1.659	0.569	0.237	0.142	0.000	0.000	0.000	3.140
S	0.003	0.142	0.332	1.043	1.280	1.043	0.000	0.000	0.000	3.841
SSW	0.002	0.142	0.190	0.000	0.047	0.000	0.000	0.000	0.000	0.381
SW	0.001	0.047	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.191
WSW	0.001	0.095	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.191
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	0.047	0.095	0.000	0.000	0.000	0.000	0.000	0.142
NW	0.001	0.000	0.190	0.095	0.000	0.000	0.000	0.000	0.000	0.285
NNW	0.003	0.047	0.521	0.332	0.190	0.142	0.000	0.000	0.000	1.235
SUBTOTAL	0.047	1.848	6.872	4.408	2.370	1.374	0.000	0.000	0.000	16.919

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS F	357
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	357
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 3.87

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.004	0.095	0.332	0.379	0.000	0.000	0.000	0.000	0.000	0.809
NNE	0.002	0.095	0.142	0.047	0.000	0.000	0.000	0.000	0.000	0.286
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.001	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.096
E	0.002	0.047	0.237	0.095	0.000	0.000	0.000	0.000	0.000	0.382
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.005	0.190	0.427	0.047	0.095	0.000	0.000	0.000	0.000	0.764
SSE	0.025	0.237	2.607	0.521	0.095	0.000	0.000	0.000	0.000	3.484
S	0.005	0.047	0.521	0.711	0.284	0.047	0.000	0.000	0.000	1.616
SSW	0.001	0.095	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.143
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	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.048
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	0.001	0.095	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.143
NNW	0.001	0.000	0.095	0.095	0.000	0.000	0.000	0.000	0.000	0.190
SUBTOTAL	0.047	0.948	4.550	1.896	0.474	0.047	0.000	0.000	0.000	7.962

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS G	168
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	168
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2110
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 2.90

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 11

Joint Frequency Distribution in Percent
for Ground Level Releases
Second Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.093	0.701	0.000	0.000	0.000	0.794
NNE	0.000	0.000	0.000	0.000	0.093	0.607	0.000	0.000	0.000	0.701
NE	0.000	0.000	0.000	0.047	0.047	0.421	0.000	0.000	0.000	0.514
ENE	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.093
E	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.047	0.421	0.607	0.000	0.000	0.000	0.000	1.075
SE	0.000	0.000	0.748	0.841	0.000	0.000	0.000	0.000	0.000	1.589
SSE	0.000	0.000	1.168	0.327	0.000	0.000	0.000	0.000	0.000	1.495
S	0.000	0.000	0.467	0.607	0.000	0.000	0.000	0.000	0.000	1.075
SSW	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
SW	0.000	0.000	0.047	0.234	0.047	0.000	0.000	0.000	0.000	0.327
WSW	0.000	0.000	0.000	0.047	0.140	0.000	0.000	0.000	0.000	0.187
W	0.000	0.000	0.000	0.000	0.327	0.374	0.187	0.000	0.000	0.888
WNW	0.000	0.000	0.000	0.000	0.093	0.140	0.047	0.000	0.000	0.280
NW	0.000	0.000	0.000	0.000	0.327	0.701	0.093	0.000	0.000	1.121
NNW	0.000	0.000	0.000	0.000	0.000	0.327	0.000	0.000	0.000	0.327
SUBTOTAL	0.000	0.000	2.477	2.664	1.869	3.271	0.327	0.000	0.000	10.607

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2143
TOTAL HOURS OF STABILITY CLASS A 228
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 227
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2140
TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 6.36

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.234	0.000	0.093	0.000	0.000	0.000	0.327
NNE	0.000	0.000	0.000	0.047	0.187	0.047	0.000	0.000	0.000	0.280
NE	0.000	0.000	0.000	0.000	0.234	0.047	0.000	0.000	0.000	0.280
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	0.047	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.093
SE	0.000	0.000	0.467	0.234	0.000	0.000	0.000	0.000	0.000	0.701
SSE	0.000	0.000	0.280	0.140	0.000	0.000	0.000	0.000	0.000	0.421
S	0.000	0.000	0.234	0.327	0.000	0.000	0.000	0.000	0.000	0.561
SSW	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.000	0.000	0.280
SW	0.000	0.000	0.047	0.093	0.047	0.000	0.000	0.000	0.000	0.187
WSW	0.000	0.000	0.000	0.280	0.093	0.000	0.000	0.000	0.000	0.374
W	0.000	0.000	0.000	0.093	0.140	0.234	0.047	0.000	0.000	0.514
WNW	0.000	0.000	0.000	0.140	0.327	0.374	0.187	0.000	0.000	1.028
NW	0.000	0.000	0.000	0.047	0.234	0.374	0.047	0.000	0.000	0.701
NNW	0.000	0.000	0.047	0.047	0.140	0.093	0.000	0.000	0.000	0.327
SUBTOTAL	0.000	0.000	1.215	1.869	1.449	1.308	0.280	0.000	0.000	6.121

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2143
TOTAL HOURS OF STABILITY CLASS B	131
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	131
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 6.05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.047	0.000	0.047	0.000	0.000	0.000	0.093
NNE	0.000	0.000	0.000	0.093	0.140	0.047	0.000	0.000	0.000	0.280
NE	0.000	0.000	0.000	0.140	0.047	0.047	0.000	0.000	0.000	0.234
ENE	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
E	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.047	0.234	0.234	0.047	0.000	0.000	0.000	0.561
SE	0.000	0.000	0.467	0.234	0.000	0.000	0.000	0.000	0.000	0.701
SSE	0.000	0.000	0.187	0.327	0.000	0.000	0.000	0.000	0.000	0.514
S	0.000	0.000	0.280	0.187	0.000	0.000	0.000	0.000	0.000	0.467
SSW	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.000	0.000	0.280
SW	0.000	0.000	0.047	0.234	0.000	0.000	0.000	0.000	0.000	0.280
WSW	0.000	0.000	0.047	0.280	0.187	0.280	0.093	0.000	0.000	0.888
W	0.000	0.000	0.000	0.093	0.234	0.140	0.000	0.000	0.000	0.467
WNW	0.000	0.000	0.047	0.187	0.187	0.140	0.093	0.000	0.000	0.654
NW	0.000	0.000	0.000	0.140	0.280	0.140	0.047	0.000	0.000	0.607
NNW	0.000	0.000	0.047	0.000	0.000	0.047	0.000	0.000	0.000	0.093
SUBTOTAL	0.000	0.000	1.308	2.430	1.308	0.981	0.234	0.000	0.000	6.262

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2143
TOTAL HOURS OF STABILITY CLASS C	134
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	134
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 5.69

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.047	0.280	0.093	0.187	0.000	0.000	0.000	0.607
NNE	0.000	0.000	0.140	0.280	0.327	0.187	0.000	0.000	0.000	0.935
NE	0.000	0.000	0.140	0.327	0.234	0.327	0.047	0.000	0.000	1.075
ENE	0.000	0.000	0.093	0.047	0.047	0.000	0.000	0.000	0.000	0.187
E	0.000	0.000	0.140	0.607	0.374	0.047	0.000	0.000	0.000	1.168
ESE	0.000	0.000	0.888	1.449	0.748	0.140	0.000	0.000	0.000	3.224
SE	0.000	0.047	1.542	1.355	0.140	0.000	0.000	0.000	0.000	3.084
SSE	0.000	0.047	1.869	0.794	0.000	0.000	0.000	0.000	0.000	2.710
S	0.000	0.000	2.664	1.215	0.280	0.000	0.000	0.000	0.000	4.159
SSW	0.000	0.093	1.168	0.701	0.234	0.000	0.000	0.000	0.000	2.196
SW	0.000	0.000	0.981	0.327	0.187	0.047	0.000	0.000	0.000	1.542
WSW	0.000	0.000	0.841	1.729	0.701	0.374	0.000	0.000	0.000	3.645
W	0.000	0.000	0.654	0.981	0.888	0.794	0.234	0.000	0.000	3.551
WNW	0.000	0.000	0.093	0.280	0.748	0.561	0.374	0.000	0.000	2.056
NW	0.000	0.000	0.140	0.280	0.280	0.654	0.140	0.000	0.000	1.495
NNW	0.000	0.000	0.187	0.234	0.234	0.234	0.000	0.000	0.000	0.888
SUBTOTAL	0.000	0.187	11.589	10.888	5.514	3.551	0.794	0.000	0.000	32.523

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2143
TOTAL HOURS OF STABILITY CLASS D	697
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	696
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 4.85

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.005	0.047	0.327	0.467	0.467	0.187	0.000	0.000	0.000	1.500
NNE	0.007	0.047	0.514	0.701	0.421	0.093	0.000	0.000	0.000	1.783
NE	0.004	0.047	0.234	0.374	0.280	0.093	0.000	0.000	0.000	1.032
ENE	0.006	0.000	0.421	0.187	0.093	0.000	0.000	0.000	0.000	0.706
E	0.026	0.187	1.822	0.701	0.187	0.000	0.000	0.000	0.000	2.924
ESE	0.031	0.140	2.196	0.935	0.140	0.093	0.000	0.000	0.000	3.535
SE	0.020	0.140	1.402	0.421	0.093	0.000	0.000	0.000	0.000	2.076
SSE	0.023	0.421	1.308	0.327	0.000	0.000	0.000	0.000	0.000	2.079
S	0.021	0.327	1.262	0.607	0.280	0.000	0.000	0.000	0.000	2.498
SSW	0.009	0.234	0.421	0.140	0.093	0.047	0.000	0.000	0.000	0.943
SW	0.009	0.140	0.514	0.187	0.047	0.047	0.000	0.000	0.000	0.943
WSW	0.011	0.140	0.701	0.514	0.140	0.280	0.000	0.000	0.000	1.787
W	0.005	0.047	0.327	0.280	0.093	0.000	0.000	0.000	0.000	0.753
WNW	0.004	0.047	0.280	0.187	0.000	0.047	0.000	0.000	0.000	0.565
NW	0.003	0.093	0.140	0.187	0.140	0.093	0.000	0.000	0.000	0.657
NNW	0.004	0.000	0.280	0.561	0.093	0.327	0.000	0.000	0.000	1.265
SUBTOTAL	0.187	2.056	12.150	6.776	2.570	1.308	0.000	0.000	0.000	25.047

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2143
TOTAL HOURS OF STABILITY CLASS E	536
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	536
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	4

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 3.58

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.025	0.093	0.561	0.607	0.000	0.000	0.000	0.000	0.000	1.287
NNE	0.029	0.234	0.514	0.607	0.093	0.000	0.000	0.000	0.000	1.478
NE	0.020	0.234	0.280	0.421	0.187	0.000	0.000	0.000	0.000	1.141
ENE	0.029	0.280	0.467	0.234	0.047	0.000	0.000	0.000	0.000	1.057
E	0.052	0.187	1.168	0.654	0.000	0.000	0.000	0.000	0.000	2.062
ESE	0.038	0.187	0.794	0.047	0.000	0.000	0.000	0.000	0.000	1.066
SE	0.027	0.280	0.421	0.000	0.000	0.000	0.000	0.000	0.000	0.728
SSE	0.027	0.327	0.374	0.140	0.000	0.000	0.000	0.000	0.000	0.868
S	0.022	0.234	0.327	0.187	0.047	0.000	0.000	0.000	0.000	0.816
SSW	0.009	0.140	0.093	0.047	0.000	0.000	0.000	0.000	0.000	0.289
SW	0.011	0.187	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.291
WSW	0.009	0.187	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.243
W	0.002	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
WNW	0.007	0.093	0.093	0.047	0.000	0.000	0.000	0.000	0.000	0.241
NW	0.009	0.047	0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.243
NNW	0.011	0.000	0.280	0.280	0.000	0.000	0.000	0.000	0.000	0.572
SUBTOTAL	0.327	2.757	5.701	3.271	0.374	0.000	0.000	0.000	0.000	12.430

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2143
TOTAL HOURS OF STABILITY CLASS F	266
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	266
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	7

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 2.62

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.026	0.607	0.888	0.327	0.047	0.000	0.000	0.000	0.000	1.895
NNE	0.019	0.607	0.514	0.561	0.093	0.000	0.000	0.000	0.000	1.795
NE	0.006	0.140	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.380
ENE	0.005	0.047	0.234	0.093	0.000	0.000	0.000	0.000	0.000	0.379
E	0.003	0.047	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.190
ESE	0.002	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.095
SE	0.009	0.234	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.523
SSE	0.014	0.093	0.701	0.093	0.000	0.000	0.000	0.000	0.000	0.902
S	0.003	0.140	0.047	0.234	0.000	0.000	0.000	0.000	0.000	0.424
SSW	0.001	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
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	0.001	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.048
NNW	0.005	0.093	0.187	0.047	0.000	0.000	0.000	0.000	0.000	0.332
SUBTOTAL	0.093	2.150	3.271	1.355	0.140	0.000	0.000	0.000	0.000	7.009

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2143
TOTAL HOURS OF STABILITY CLASS G	151
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	150
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	2

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 2.32

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 12

Joint Frequency Distribution in Percent
for Ground Level Releases
Third Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.096	0.478	1.338	0.239	0.000	0.000	2.151
NNE	0.000	0.000	0.000	0.143	0.478	1.147	0.430	0.000	0.000	2.199
NE	0.000	0.000	0.000	0.000	0.526	0.717	0.096	0.000	0.000	1.338
ENE	0.000	0.000	0.000	0.000	0.000	0.143	0.000	0.000	0.000	0.143
E	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
ESE	0.000	0.000	0.000	0.526	0.191	0.000	0.000	0.000	0.000	0.717
SE	0.000	0.000	0.669	1.721	0.096	0.000	0.000	0.000	0.000	2.486
SSE	0.000	0.000	1.243	1.434	0.000	0.000	0.000	0.000	0.000	2.677
S	0.000	0.000	0.717	1.338	0.000	0.000	0.000	0.000	0.000	2.055
SSW	0.000	0.000	0.048	0.478	0.000	0.000	0.000	0.000	0.000	0.526
SW	0.000	0.000	0.048	0.478	0.000	0.000	0.000	0.000	0.000	0.526
WSW	0.000	0.000	0.000	0.287	0.143	0.000	0.000	0.000	0.000	0.430
W	0.000	0.000	0.000	0.048	0.621	0.574	0.000	0.000	0.000	1.243
WNW	0.000	0.000	0.000	0.000	0.287	0.621	0.000	0.000	0.000	0.908
NW	0.000	0.000	0.000	0.000	0.096	0.382	0.000	0.000	0.000	0.478
NNW	0.000	0.000	0.000	0.000	0.191	0.239	0.000	0.000	0.000	0.430
SUBTOTAL	0.000	0.000	2.725	6.597	3.107	5.163	0.765	0.000	0.000	18.356

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS A	387
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	384
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□□

MEAN WIND SPEED = 6.18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.048	0.143	0.191	0.000	0.000	0.000	0.382
NNE	0.000	0.000	0.000	0.096	0.000	0.143	0.000	0.000	0.000	0.239
NE	0.000	0.000	0.000	0.143	0.143	0.287	0.000	0.000	0.000	0.574
ENE	0.000	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.096
E	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
ESE	0.000	0.000	0.096	0.143	0.048	0.000	0.000	0.000	0.000	0.287
SE	0.000	0.000	0.382	0.096	0.000	0.000	0.000	0.000	0.000	0.478
SSE	0.000	0.000	0.717	0.143	0.000	0.000	0.000	0.000	0.000	0.860
S	0.000	0.000	0.239	0.239	0.000	0.000	0.000	0.000	0.000	0.478
SSW	0.000	0.000	0.143	0.143	0.000	0.000	0.000	0.000	0.000	0.287
SW	0.000	0.000	0.048	0.382	0.000	0.000	0.000	0.000	0.000	0.430
WSW	0.000	0.000	0.000	0.239	0.143	0.000	0.000	0.000	0.000	0.382
W	0.000	0.000	0.000	0.096	0.574	0.191	0.000	0.000	0.000	0.860
WNW	0.000	0.000	0.000	0.000	0.335	0.335	0.000	0.000	0.000	0.669
NW	0.000	0.000	0.000	0.048	0.191	0.143	0.000	0.000	0.000	0.382
NNW	0.000	0.000	0.000	0.048	0.143	0.143	0.000	0.000	0.000	0.335
SUBTOTAL	0.000	0.000	1.625	1.912	1.769	1.482	0.000	0.000	0.000	6.788

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS B	142
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	142
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□□

MEAN WIND SPEED = 5.54

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.096	0.096	0.239	0.048	0.000	0.000	0.478
NNE	0.000	0.000	0.000	0.096	0.239	0.191	0.048	0.000	0.000	0.574
NE	0.000	0.000	0.000	0.096	0.048	0.096	0.000	0.000	0.000	0.239
ENE	0.000	0.000	0.000	0.096	0.000	0.000	0.000	0.000	0.000	0.096
E	0.000	0.000	0.000	0.096	0.000	0.000	0.000	0.000	0.000	0.096
ESE	0.000	0.000	0.096	0.048	0.000	0.000	0.000	0.000	0.000	0.143
SE	0.000	0.000	0.430	0.239	0.000	0.000	0.000	0.000	0.000	0.669
SSE	0.000	0.000	0.239	0.191	0.000	0.000	0.000	0.000	0.000	0.430
S	0.000	0.000	0.287	0.143	0.000	0.000	0.000	0.000	0.000	0.430
SSW	0.000	0.000	0.239	0.096	0.000	0.000	0.000	0.000	0.000	0.335
SW	0.000	0.000	0.048	0.143	0.000	0.000	0.000	0.000	0.000	0.191
WSW	0.000	0.000	0.096	0.382	0.000	0.000	0.000	0.000	0.000	0.478
W	0.000	0.000	0.048	0.096	0.191	0.000	0.000	0.000	0.000	0.335
WNW	0.000	0.000	0.000	0.048	0.335	0.048	0.000	0.000	0.000	0.430
NW	0.000	0.000	0.000	0.000	0.287	0.048	0.000	0.000	0.000	0.335
NNW	0.000	0.000	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.096
SUBTOTAL	0.000	0.000	1.577	1.864	1.195	0.621	0.096	0.000	0.000	5.354

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS C	113
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	112
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□□

MEAN WIND SPEED = 5.20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.048	0.239	0.430	0.382	0.430	0.048	0.000	0.000	1.577
NNE	0.000	0.048	0.191	0.239	0.239	0.239	0.000	0.000	0.000	0.956
NE	0.000	0.000	0.048	0.000	0.191	0.287	0.000	0.000	0.000	0.526
ENE	0.000	0.000	0.287	0.191	0.000	0.048	0.000	0.000	0.000	0.526
E	0.000	0.000	0.621	0.048	0.000	0.000	0.000	0.000	0.000	0.669
ESE	0.000	0.048	0.956	0.526	0.191	0.048	0.000	0.000	0.000	1.769
SE	0.000	0.000	0.860	0.621	0.048	0.000	0.000	0.000	0.000	1.530
SSE	0.000	0.048	1.434	0.908	0.000	0.000	0.000	0.000	0.000	2.390
S	0.000	0.096	1.864	0.621	0.048	0.000	0.000	0.000	0.000	2.629
SSW	0.000	0.048	1.195	0.621	0.000	0.000	0.000	0.000	0.000	1.864
SW	0.000	0.000	0.765	0.239	0.000	0.000	0.000	0.000	0.000	1.004
WSW	0.000	0.000	1.099	0.669	0.143	0.000	0.000	0.000	0.000	1.912
W	0.000	0.048	0.239	0.908	0.335	0.143	0.000	0.000	0.000	1.673
WNW	0.000	0.000	0.048	0.191	0.526	0.239	0.000	0.000	0.000	1.004
NW	0.000	0.000	0.096	0.335	0.430	0.096	0.048	0.000	0.000	1.004
NNW	0.000	0.000	0.143	0.191	0.287	0.430	0.048	0.000	0.000	1.099
SUBTOTAL	0.000	0.382	10.086	6.740	2.820	1.960	0.143	0.000	0.000	22.132

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS D	464
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	463
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□□

MEAN WIND SPEED = 4.23

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.048	0.717	0.908	0.478	0.191	0.000	0.000	0.000	2.342
NNE	0.000	0.096	0.574	0.574	0.382	0.143	0.000	0.000	0.000	1.769
NE	0.000	0.239	0.430	0.239	0.765	0.191	0.000	0.000	0.000	1.864
ENE	0.000	0.096	0.478	0.143	0.048	0.000	0.000	0.000	0.000	0.765
E	0.000	0.239	1.147	0.717	0.000	0.000	0.000	0.000	0.000	2.103
ESE	0.000	0.239	1.769	0.717	0.048	0.000	0.000	0.000	0.000	2.772
SE	0.000	0.430	1.195	0.287	0.000	0.000	0.000	0.000	0.000	1.912
SSE	0.000	0.239	0.813	0.048	0.000	0.000	0.000	0.000	0.000	1.099
S	0.000	0.335	1.004	0.000	0.000	0.000	0.000	0.000	0.000	1.338
SSW	0.000	0.143	0.621	0.000	0.000	0.000	0.000	0.000	0.000	0.765
SW	0.000	0.096	0.478	0.048	0.000	0.000	0.000	0.000	0.000	0.621
WSW	0.000	0.096	0.860	0.096	0.000	0.000	0.000	0.000	0.000	1.052
W	0.000	0.000	0.860	0.526	0.143	0.000	0.000	0.000	0.000	1.530
WNW	0.000	0.096	0.191	0.143	0.143	0.000	0.000	0.000	0.000	0.574
NW	0.000	0.096	0.239	0.430	0.000	0.000	0.000	0.000	0.000	0.765
NNW	0.000	0.000	0.526	0.621	0.096	0.000	0.000	0.000	0.000	1.243
SUBTOTAL	0.000	2.486	11.902	5.497	2.103	0.526	0.000	0.000	0.000	22.514

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS E	481
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	471
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□

MEAN WIND SPEED = 3.24

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.008	0.335	1.195	0.956	0.287	0.096	0.000	0.000	0.000	2.876
NNE	0.006	0.239	0.956	1.195	0.335	0.048	0.000	0.000	0.000	2.778
NE	0.003	0.239	0.430	0.478	0.096	0.000	0.000	0.000	0.000	1.246
ENE	0.004	0.287	0.621	0.335	0.000	0.000	0.000	0.000	0.000	1.247
E	0.007	0.048	1.386	0.335	0.000	0.000	0.000	0.000	0.000	1.776
ESE	0.005	0.239	0.860	0.048	0.000	0.000	0.000	0.000	0.000	1.153
SE	0.003	0.287	0.239	0.000	0.000	0.000	0.000	0.000	0.000	0.528
SSE	0.001	0.191	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.288
S	0.002	0.191	0.143	0.000	0.000	0.000	0.000	0.000	0.000	0.336
SSW	0.000	0.000	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.096
SW	0.001	0.048	0.143	0.048	0.000	0.000	0.000	0.000	0.000	0.240
WSW	0.001	0.000	0.191	0.048	0.000	0.000	0.000	0.000	0.000	0.240
W	0.001	0.096	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.192
WNW	0.001	0.096	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.192
NW	0.001	0.096	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.144
NNW	0.004	0.143	0.574	0.335	0.048	0.000	0.000	0.000	0.000	1.103
SUBTOTAL	0.048	2.533	7.170	3.776	0.765	0.143	0.000	0.000	0.000	14.436

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS F	328
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	302
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□□

MEAN WIND SPEED = 2.96

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.026	0.765	1.434	0.717	0.048	0.000	0.000	0.000	0.000	2.989
NNE	0.025	0.239	1.912	1.052	0.048	0.000	0.000	0.000	0.000	3.276
NE	0.012	0.335	0.669	0.096	0.000	0.000	0.000	0.000	0.000	1.111
ENE	0.005	0.096	0.335	0.048	0.000	0.000	0.000	0.000	0.000	0.483
E	0.005	0.143	0.287	0.096	0.000	0.000	0.000	0.000	0.000	0.531
ESE	0.002	0.048	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.145
SE	0.001	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.097
SSE	0.001	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.097
S	0.001	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.097
SSW	0.003	0.191	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.242
SW	0.001	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.048
WSW	0.001	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
W	0.001	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.097
WNW	0.001	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
NW	0.001	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.097
NNW	0.011	0.478	0.478	0.048	0.000	0.000	0.000	0.000	0.000	1.015
SUBTOTAL	0.096	2.677	5.497	2.055	0.096	0.000	0.000	0.000	0.000	10.421

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS G	221
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	218
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2092
TOTAL HOURS CALM	2

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 19991110□□□□□□□□□

MEAN WIND SPEED = 2.42

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 13

Joint Frequency Distribution in Percent
for Ground Level Releases
Fourth Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.050	0.099	0.644	0.198	0.000	0.000	0.991
NNE	0.000	0.000	0.000	0.000	0.248	1.090	0.149	0.000	0.000	1.486
NE	0.000	0.000	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.099
ENE	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.050
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	0.396	0.495	0.000	0.000	0.000	0.000	0.892
SE	0.000	0.000	0.050	0.792	0.198	0.000	0.000	0.000	0.000	1.040
SSE	0.000	0.000	0.000	0.743	0.000	0.000	0.000	0.000	0.000	0.743
S	0.000	0.000	0.099	0.693	0.000	0.000	0.000	0.000	0.000	0.792
SSW	0.000	0.000	0.050	0.198	0.000	0.000	0.000	0.000	0.000	0.248
SW	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.050
WSW	0.000	0.000	0.000	0.000	0.099	0.050	0.000	0.000	0.000	0.149
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	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.050	0.050	0.149	0.149	0.000	0.396
NNW	0.000	0.000	0.000	0.000	0.000	0.347	0.198	0.000	0.000	0.545
SUBTOTAL	0.000	0.000	0.198	2.972	1.189	2.377	0.693	0.149	0.000	7.578

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS A	153
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	153
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2019
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 7.47

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.050	0.149	0.149	0.050	0.000	0.000	0.396
NNE	0.000	0.000	0.000	0.000	0.050	0.248	0.000	0.000	0.000	0.297
NE	0.000	0.000	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.099
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	0.050	0.000	0.000	0.000	0.000	0.050
SE	0.000	0.000	0.050	0.545	0.000	0.000	0.000	0.000	0.000	0.594
SSE	0.000	0.000	0.050	0.248	0.000	0.000	0.000	0.000	0.000	0.297
S	0.000	0.000	0.050	0.149	0.050	0.000	0.000	0.000	0.000	0.248
SSW	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.050
SW	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.050
WSW	0.000	0.000	0.000	0.000	0.149	0.050	0.000	0.000	0.000	0.198
W	0.000	0.000	0.000	0.000	0.050	0.099	0.000	0.000	0.000	0.149
WNW	0.000	0.000	0.000	0.000	0.050	0.248	0.000	0.000	0.000	0.297
NW	0.000	0.000	0.000	0.000	0.050	0.248	0.050	0.050	0.000	0.396
NNW	0.000	0.000	0.000	0.000	0.050	0.099	0.149	0.000	0.000	0.297
SUBTOTAL	0.000	0.000	0.149	1.090	0.644	1.238	0.248	0.050	0.000	3.418

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS B	69
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	69
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2019
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 7.54

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.050	0.198	0.347	0.000	0.000	0.000	0.594
NNE	0.000	0.000	0.000	0.099	0.050	0.099	0.000	0.000	0.000	0.248
NE	0.000	0.000	0.050	0.000	0.000	0.050	0.000	0.000	0.000	0.099
ENE	0.000	0.000	0.000	0.050	0.050	0.000	0.000	0.000	0.000	0.099
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	0.149	0.000	0.000	0.000	0.000	0.000	0.149
SE	0.000	0.000	0.099	0.396	0.050	0.000	0.000	0.000	0.000	0.545
SSE	0.000	0.000	0.248	0.297	0.000	0.000	0.000	0.000	0.000	0.545
S	0.000	0.000	0.099	0.099	0.000	0.000	0.000	0.000	0.000	0.198
SSW	0.000	0.000	0.050	0.099	0.000	0.000	0.000	0.000	0.000	0.149
SW	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.099
WSW	0.000	0.000	0.000	0.050	0.050	0.198	0.000	0.000	0.000	0.297
W	0.000	0.000	0.000	0.000	0.050	0.149	0.000	0.000	0.000	0.198
WNW	0.000	0.000	0.000	0.050	0.000	0.297	0.050	0.000	0.000	0.396
NW	0.000	0.000	0.000	0.000	0.149	0.198	0.050	0.000	0.000	0.396
NNW	0.000	0.000	0.000	0.000	0.050	0.198	0.099	0.000	0.000	0.347
SUBTOTAL	0.000	0.000	0.545	1.436	0.644	1.535	0.198	0.000	0.000	4.359

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS C	90
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	88
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2019
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 6.70

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.099	0.347	0.545	1.486	0.050	0.000	0.000	2.526
NNE	0.000	0.000	0.248	0.644	0.644	0.693	0.050	0.000	0.000	2.278
NE	0.000	0.000	0.099	0.248	0.545	0.297	0.000	0.000	0.000	1.189
ENE	0.000	0.000	0.248	0.198	0.099	0.099	0.050	0.000	0.000	0.693
E	0.000	0.000	0.099	0.297	0.198	0.050	0.000	0.000	0.000	0.644
ESE	0.000	0.000	0.396	0.693	0.198	0.000	0.000	0.000	0.000	1.288
SE	0.000	0.000	0.892	1.288	0.446	0.050	0.000	0.000	0.000	2.675
SSE	0.000	0.000	1.387	0.892	0.000	0.050	0.000	0.000	0.000	2.328
S	0.000	0.050	1.040	0.446	0.000	0.198	0.000	0.000	0.000	1.734
SSW	0.000	0.000	0.347	0.198	0.099	0.050	0.000	0.000	0.000	0.693
SW	0.000	0.050	0.446	0.099	0.099	0.149	0.000	0.000	0.000	0.842
WSW	0.000	0.000	0.248	0.347	0.099	0.991	0.000	0.000	0.000	1.684
W	0.000	0.000	0.149	0.693	0.297	0.545	0.000	0.000	0.000	1.684
WNW	0.000	0.000	0.297	0.248	0.347	0.743	0.099	0.000	0.000	1.734
NW	0.000	0.000	0.050	0.347	0.198	0.545	0.149	0.099	0.000	1.387
NNW	0.000	0.000	0.198	0.396	0.347	0.792	0.396	0.149	0.000	2.278
SUBTOTAL	0.000	0.099	6.241	7.380	4.160	6.736	0.792	0.248	0.000	25.656

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS D	544
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	518
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2019
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 5.99

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.003	0.000	0.446	1.337	0.347	0.248	0.000	0.000	0.000	2.381
NNE	0.001	0.000	0.149	0.693	0.396	0.099	0.000	0.000	0.000	1.338
NE	0.003	0.000	0.396	0.198	0.495	0.000	0.000	0.000	0.000	1.093
ENE	0.003	0.050	0.297	0.248	0.099	0.000	0.000	0.000	0.000	0.696
E	0.007	0.000	0.842	1.040	0.000	0.000	0.000	0.000	0.000	1.889
ESE	0.013	0.149	1.486	1.436	0.446	0.000	0.000	0.000	0.000	3.529
SE	0.019	0.248	2.130	1.189	0.099	0.000	0.000	0.000	0.000	3.684
SSE	0.012	0.149	1.436	0.991	0.000	0.050	0.000	0.000	0.000	2.637
S	0.009	0.297	0.892	0.446	0.198	0.000	0.000	0.000	0.000	1.842
SSW	0.005	0.050	0.644	0.050	0.000	0.000	0.000	0.000	0.000	0.748
SW	0.008	0.198	0.792	0.198	0.000	0.000	0.000	0.000	0.000	1.196
WSW	0.005	0.000	0.693	0.198	0.050	0.000	0.000	0.000	0.000	0.946
W	0.003	0.000	0.446	0.644	0.545	0.000	0.000	0.000	0.000	1.638
WNW	0.002	0.000	0.198	0.198	0.198	0.198	0.000	0.000	0.000	0.794
NW	0.002	0.050	0.248	0.149	0.149	0.050	0.000	0.000	0.000	0.646
NNW	0.003	0.099	0.297	0.446	0.446	0.792	0.050	0.000	0.000	2.133
SUBTOTAL	0.099	1.288	11.392	9.460	3.467	1.436	0.050	0.000	0.000	27.192

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2059
TOTAL HOURS OF STABILITY CLASS E 559
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 549
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2019
TOTAL HOURS CALM 2

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 3.90

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.015	0.099	0.545	1.040	0.248	0.000	0.000	0.000	0.000	1.947
NNE	0.013	0.000	0.545	1.486	0.099	0.000	0.000	0.000	0.000	2.143
NE	0.012	0.198	0.297	0.050	0.050	0.050	0.000	0.000	0.000	0.656
ENE	0.014	0.149	0.446	0.099	0.050	0.000	0.000	0.000	0.000	0.757
E	0.031	0.198	1.090	0.446	0.000	0.000	0.000	0.000	0.000	1.764
ESE	0.037	0.198	1.337	0.099	0.000	0.000	0.000	0.000	0.000	1.671
SE	0.068	0.644	2.229	0.050	0.000	0.000	0.000	0.000	0.000	2.991
SSE	0.052	0.941	1.238	0.198	0.000	0.000	0.000	0.000	0.000	2.429
S	0.022	0.347	0.594	0.198	0.000	0.000	0.000	0.000	0.000	1.162
SSW	0.004	0.050	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.152
SW	0.006	0.050	0.198	0.000	0.000	0.000	0.000	0.000	0.000	0.254
WSW	0.002	0.050	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.151
W	0.007	0.000	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.304
WNW	0.001	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.051
NW	0.006	0.198	0.050	0.099	0.000	0.000	0.000	0.000	0.000	0.353
NNW	0.007	0.000	0.297	0.594	0.198	0.050	0.000	0.000	0.000	1.146
SUBTOTAL	0.297	3.120	9.361	4.408	0.644	0.099	0.000	0.000	0.000	17.930

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2059
TOTAL HOURS OF STABILITY CLASS F 363
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 362
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2019
TOTAL HOURS CALM 6

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 2.79

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.056	0.743	1.090	0.644	0.000	0.000	0.000	0.000	0.000	2.532
NNE	0.035	0.545	0.594	0.991	0.000	0.000	0.000	0.000	0.000	2.165
NE	0.041	0.396	0.941	0.050	0.000	0.000	0.000	0.000	0.000	1.428
ENE	0.041	0.396	0.941	0.198	0.000	0.000	0.000	0.000	0.000	1.576
E	0.033	0.149	0.941	0.099	0.000	0.000	0.000	0.000	0.000	1.222
ESE	0.015	0.248	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.510
SE	0.020	0.248	0.396	0.050	0.000	0.000	0.000	0.000	0.000	0.713
SSE	0.045	0.644	0.842	0.050	0.000	0.000	0.000	0.000	0.000	1.581
S	0.018	0.347	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.613
SSW	0.003	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.102
SW	0.005	0.149	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.153
WSW	0.008	0.149	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.255
W	0.008	0.050	0.198	0.000	0.000	0.000	0.000	0.000	0.000	0.255
WNW	0.003	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.102
NW	0.005	0.050	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.153
NNW	0.012	0.198	0.198	0.099	0.000	0.000	0.000	0.000	0.000	0.507
SUBTOTAL	0.347	4.458	6.885	2.179	0.000	0.000	0.000	0.000	0.000	13.868

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS G	281
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	280
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2019
TOTAL HOURS CALM	7

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.42 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 2.12

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 14

Joint Frequency Distribution in Percent
for Split Level Releases
(Ground Level Portion)
First Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.025	0.114	0.048	0.000	0.000	0.187
NNE	0.000	0.000	0.000	0.001	0.043	0.051	0.010	0.000	0.000	0.105
NE	0.000	0.000	0.000	0.000	0.000	0.067	0.019	0.000	0.000	0.086
ENE	0.000	0.000	0.000	0.000	0.000	0.006	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	0.006	0.000	0.000	0.000	0.000	0.006
SE	0.000	0.000	0.000	0.006	0.000	0.073	0.000	0.000	0.000	0.078
SSE	0.000	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.000	0.027
S	0.000	0.000	0.000	0.061	0.018	0.055	0.000	0.000	0.000	0.133
SSW	0.000	0.000	0.000	0.003	0.027	0.000	0.000	0.000	0.000	0.029
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	0.077	0.035	0.000	0.111
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.010
NNW	0.000	0.000	0.000	0.000	0.004	0.054	0.048	0.000	0.000	0.106
SUBTOTAL	0.000	0.000	0.000	0.097	0.122	0.419	0.212	0.035	0.000	0.885

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS A 20.380
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 18.670

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.002	0.015	0.010	0.000	0.000	0.027
NNE	0.000	0.000	0.000	0.000	0.011	0.008	0.000	0.000	0.000	0.019
NE	0.000	0.000	0.000	0.000	0.007	0.012	0.009	0.000	0.000	0.028
ENE	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.005
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	0.005	0.010	0.000	0.000	0.000	0.016
SE	0.000	0.000	0.000	0.008	0.000	0.092	0.000	0.000	0.000	0.100
SSE	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.010
S	0.000	0.000	0.000	0.000	0.018	0.071	0.000	0.000	0.000	0.089
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	0.000	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	0.004	0.017	0.045	0.000	0.000	0.065
NW	0.000	0.000	0.000	0.000	0.000	0.069	0.056	0.000	0.000	0.126
NNW	0.000	0.000	0.000	0.000	0.004	0.000	0.010	0.000	0.000	0.014
SUBTOTAL	0.000	0.000	0.000	0.017	0.061	0.300	0.130	0.000	0.000	0.508

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS B 14.710
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B 10.710

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.005	0.030	0.038	0.000	0.000	0.073
NNE	0.000	0.000	0.000	0.001	0.000	0.016	0.000	0.000	0.000	0.017
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	0.003	0.006	0.000	0.000	0.000	0.009
E	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.004
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	0.001	0.000	0.141	0.000	0.000	0.000	0.142
SSE	0.000	0.000	0.000	0.011	0.011	0.000	0.000	0.000	0.000	0.022
S	0.000	0.000	0.000	0.007	0.028	0.011	0.000	0.000	0.000	0.046
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	0.007	0.000	0.000	0.000	0.000	0.007
W	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.007
WNW	0.000	0.000	0.000	0.000	0.000	0.026	0.040	0.037	0.000	0.102
NW	0.000	0.000	0.000	0.000	0.000	0.024	0.023	0.000	0.000	0.047
NNW	0.000	0.000	0.000	0.000	0.004	0.032	0.034	0.000	0.000	0.069
SUBTOTAL	0.000	0.000	0.000	0.020	0.062	0.292	0.135	0.037	0.000	0.545

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS C 26.160
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 11.500

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.016	0.048	0.211	0.058	0.000	0.000	0.333
NNE	0.000	0.000	0.000	0.015	0.107	0.177	0.037	0.000	0.000	0.336
NE	0.000	0.000	0.000	0.010	0.027	0.070	0.000	0.000	0.000	0.107
ENE	0.000	0.000	0.000	0.015	0.025	0.010	0.000	0.000	0.000	0.049
E	0.000	0.000	0.000	0.011	0.064	0.000	0.013	0.000	0.000	0.088
ESE	0.000	0.000	0.000	0.027	0.090	0.144	0.000	0.000	0.000	0.260
SE	0.000	0.000	0.003	0.016	0.039	0.328	0.000	0.000	0.000	0.386
SSE	0.000	0.000	0.028	0.088	0.083	0.047	0.000	0.000	0.000	0.246
S	0.000	0.000	0.028	0.165	0.052	0.048	0.000	0.000	0.000	0.293
SSW	0.000	0.000	0.005	0.030	0.009	0.000	0.000	0.000	0.000	0.043
SW	0.000	0.000	0.002	0.011	0.017	0.036	0.000	0.000	0.000	0.066
WSW	0.000	0.000	0.000	0.021	0.067	0.063	0.028	0.000	0.000	0.180
W	0.000	0.000	0.000	0.023	0.054	0.085	0.059	0.000	0.000	0.221
WNW	0.000	0.000	0.000	0.003	0.020	0.265	0.232	0.033	0.000	0.553
NW	0.000	0.000	0.000	0.000	0.034	0.300	0.444	0.106	0.000	0.884
NNW	0.000	0.000	0.000	0.007	0.047	0.286	0.267	0.035	0.000	0.642
SUBTOTAL	0.000	0.000	0.066	0.457	0.783	2.070	1.138	0.174	0.000	4.688

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS D 1133.090
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 98.870

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.010	0.032	0.059	0.113	0.000	0.000	0.000	0.215
NNE	0.000	0.000	0.018	0.117	0.095	0.034	0.000	0.000	0.000	0.263
NE	0.000	0.000	0.022	0.042	0.068	0.101	0.000	0.000	0.000	0.233
ENE	0.000	0.000	0.025	0.026	0.048	0.016	0.000	0.000	0.000	0.115
E	0.000	0.000	0.028	0.034	0.028	0.039	0.000	0.000	0.000	0.129
ESE	0.000	0.000	0.016	0.061	0.050	0.000	0.000	0.000	0.000	0.127
SE	0.000	0.004	0.033	0.168	0.110	0.067	0.000	0.000	0.000	0.382
SSE	0.000	0.000	0.147	0.091	0.271	0.185	0.000	0.000	0.000	0.694
S	0.000	0.000	0.018	0.108	0.288	0.402	0.047	0.000	0.000	0.863
SSW	0.000	0.000	0.019	0.031	0.037	0.108	0.000	0.000	0.000	0.195
SW	0.000	0.000	0.018	0.015	0.009	0.022	0.000	0.000	0.000	0.064
WSW	0.000	0.000	0.003	0.030	0.000	0.000	0.000	0.000	0.000	0.033
W	0.000	0.000	0.000	0.035	0.015	0.010	0.000	0.000	0.000	0.060
WNW	0.000	0.000	0.008	0.016	0.031	0.055	0.000	0.000	0.000	0.110
NW	0.000	0.000	0.000	0.003	0.018	0.042	0.000	0.000	0.000	0.063
NNW	0.000	0.000	0.007	0.037	0.053	0.047	0.000	0.000	0.000	0.143
SUBTOTAL	0.000	0.004	0.371	0.846	1.180	1.241	0.047	0.000	0.000	3.690

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS E 715.810
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 77.830

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.035	0.067	0.008	0.000	0.000	0.000	0.000	0.110
NNE	0.000	0.000	0.024	0.132	0.069	0.009	0.000	0.000	0.000	0.233
NE	0.000	0.000	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.023
ENE	0.000	0.000	0.009	0.013	0.000	0.000	0.000	0.000	0.000	0.023
E	0.000	0.002	0.011	0.006	0.000	0.000	0.000	0.000	0.000	0.019
ESE	0.000	0.000	0.018	0.006	0.000	0.000	0.000	0.000	0.000	0.023
SE	0.000	0.014	0.124	0.041	0.068	0.000	0.000	0.000	0.000	0.247
SSE	0.000	0.019	0.189	0.159	0.193	0.128	0.000	0.000	0.000	0.687
S	0.000	0.003	0.032	0.184	0.269	0.708	0.000	0.000	0.000	1.197
SSW	0.000	0.008	0.017	0.000	0.009	0.000	0.000	0.000	0.000	0.034
SW	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.011
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	0.002	0.010	0.000	0.000	0.000	0.000	0.000	0.012
NW	0.000	0.000	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.011
NNW	0.000	0.000	0.023	0.036	0.033	0.026	0.000	0.000	0.000	0.117
SUBTOTAL	0.000	0.046	0.505	0.677	0.649	0.870	0.000	0.000	0.000	2.747

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS F 158.730
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 57.940

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.007	0.050	0.000	0.000	0.000	0.000	0.000	0.056
NNE	0.000	0.000	0.004	0.005	0.000	0.000	0.000	0.000	0.000	0.009
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	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.004
E	0.000	0.000	0.001	0.010	0.000	0.000	0.000	0.000	0.000	0.011
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.011	0.053	0.009	0.056	0.000	0.000	0.000	0.000	0.129
SSE	0.000	0.025	0.388	0.139	0.037	0.000	0.000	0.000	0.000	0.588
S	0.000	0.000	0.068	0.139	0.102	0.029	0.000	0.000	0.000	0.339
SSW	0.000	0.012	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.018
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	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
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	0.008	0.000	0.000	0.000	0.000	0.000	0.008
SUBTOTAL	0.000	0.048	0.531	0.361	0.194	0.029	0.000	0.000	0.000	1.164

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF GROUND LEVEL RELEASE 300.060
TOTAL HOURS OF STABILITY CLASS G 40.120
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 24.540

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 15

Joint Frequency Distribution in Percent
for Split Level Releases
(Ground Level Portion)
Second Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.012	0.102	0.000	0.000	0.000	0.115
NNE	0.000	0.000	0.000	0.000	0.008	0.108	0.000	0.000	0.000	0.116
NE	0.000	0.000	0.000	0.000	0.006	0.069	0.000	0.000	0.000	0.075
ENE	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.008
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	0.035	0.081	0.000	0.000	0.000	0.000	0.116
SE	0.000	0.000	0.061	0.043	0.000	0.000	0.000	0.000	0.000	0.104
SSE	0.000	0.000	0.118	0.055	0.000	0.000	0.000	0.000	0.000	0.174
S	0.000	0.000	0.043	0.092	0.000	0.000	0.000	0.000	0.000	0.136
SSW	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.010
SW	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.019
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	0.044	0.025	0.000	0.000	0.000	0.069
WNW	0.000	0.000	0.000	0.000	0.011	0.022	0.000	0.000	0.000	0.033
NW	0.000	0.000	0.000	0.000	0.020	0.114	0.021	0.000	0.000	0.155
NNW	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.014
SUBTOTAL	0.000	0.000	0.223	0.255	0.198	0.455	0.021	0.000	0.000	1.151

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE 156.040
TOTAL HOURS OF STABILITY CLASS A 20.800
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 20.800

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.001	0.000	0.017	0.000	0.000	0.000	0.018
NNE	0.000	0.000	0.000	0.001	0.015	0.008	0.000	0.000	0.000	0.025
NE	0.000	0.000	0.000	0.000	0.020	0.008	0.000	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	0.009	0.000	0.000	0.000	0.009
ESE	0.000	0.000	0.000	0.006	0.007	0.000	0.000	0.000	0.000	0.013
SE	0.000	0.000	0.017	0.027	0.000	0.000	0.000	0.000	0.000	0.044
SSE	0.000	0.000	0.015	0.011	0.000	0.000	0.000	0.000	0.000	0.025
S	0.000	0.000	0.009	0.058	0.000	0.000	0.000	0.000	0.000	0.068
SSW	0.000	0.000	0.025	0.009	0.000	0.000	0.000	0.000	0.000	0.034
SW	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.004
WSW	0.000	0.000	0.000	0.017	0.016	0.000	0.000	0.000	0.000	0.033
W	0.000	0.000	0.000	0.003	0.013	0.034	0.000	0.000	0.000	0.050
WNW	0.000	0.000	0.000	0.000	0.012	0.030	0.000	0.000	0.000	0.042
NW	0.000	0.000	0.000	0.000	0.013	0.046	0.011	0.000	0.000	0.071
NNW	0.000	0.000	0.000	0.000	0.012	0.007	0.000	0.000	0.000	0.019
SUBTOTAL	0.000	0.000	0.067	0.136	0.110	0.160	0.011	0.000	0.000	0.484

TOTAL HOURS OF VALID OBSERVATIONS	1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE	156.040
TOTAL HOURS OF STABILITY CLASS B	9.540
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B	8.740

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.001	0.000	0.008	0.000	0.000	0.000	0.009
NNE	0.000	0.000	0.000	0.000	0.019	0.009	0.000	0.000	0.000	0.028
NE	0.000	0.000	0.000	0.002	0.000	0.010	0.000	0.000	0.000	0.012
ENE	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002
E	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.009
ESE	0.000	0.000	0.000	0.020	0.050	0.010	0.000	0.000	0.000	0.080
SE	0.000	0.000	0.022	0.032	0.000	0.000	0.000	0.000	0.000	0.054
SSE	0.000	0.000	0.011	0.035	0.000	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.016	0.036	0.000	0.000	0.000	0.000	0.000	0.052
SSW	0.000	0.000	0.003	0.020	0.000	0.000	0.000	0.000	0.000	0.023
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	0.015	0.033	0.082	0.082	0.000	0.000	0.213
W	0.000	0.000	0.000	0.000	0.022	0.009	0.000	0.000	0.000	0.030
WNW	0.000	0.000	0.000	0.000	0.010	0.009	0.000	0.000	0.000	0.019
NW	0.000	0.000	0.000	0.001	0.007	0.022	0.000	0.000	0.000	0.029
NNW	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.008
SUBTOTAL	0.000	0.000	0.051	0.163	0.141	0.178	0.082	0.000	0.000	0.615

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE 156.040
TOTAL HOURS OF STABILITY CLASS C 14.770
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 11.110

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.014	0.013	0.019	0.000	0.000	0.000	0.046
NNE	0.000	0.000	0.000	0.015	0.048	0.036	0.000	0.000	0.000	0.100
NE	0.000	0.000	0.000	0.004	0.029	0.065	0.011	0.000	0.000	0.108
ENE	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.004
E	0.000	0.000	0.000	0.053	0.049	0.009	0.000	0.000	0.000	0.111
ESE	0.000	0.000	0.039	0.170	0.105	0.010	0.000	0.000	0.000	0.325
SE	0.000	0.000	0.113	0.215	0.040	0.000	0.000	0.000	0.000	0.368
SSE	0.000	0.000	0.074	0.226	0.000	0.000	0.000	0.000	0.000	0.300
S	0.000	0.000	0.185	0.217	0.090	0.000	0.000	0.000	0.000	0.493
SSW	0.000	0.000	0.077	0.109	0.011	0.000	0.000	0.000	0.000	0.197
SW	0.000	0.000	0.024	0.039	0.009	0.020	0.000	0.000	0.000	0.093
WSW	0.000	0.000	0.014	0.094	0.096	0.061	0.000	0.000	0.000	0.266
W	0.000	0.000	0.007	0.019	0.079	0.079	0.000	0.000	0.000	0.184
WNW	0.000	0.000	0.000	0.001	0.066	0.108	0.023	0.000	0.000	0.198
NW	0.000	0.000	0.000	0.006	0.023	0.090	0.034	0.000	0.000	0.152
NNW	0.000	0.000	0.001	0.001	0.027	0.035	0.000	0.000	0.000	0.064
SUBTOTAL	0.000	0.000	0.535	1.184	0.688	0.533	0.068	0.000	0.000	3.008

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE 156.040
TOTAL HOURS OF STABILITY CLASS D 896.810
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 54.360

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.014	0.063	0.075	0.011	0.000	0.000	0.000	0.162
NNE	0.000	0.000	0.009	0.100	0.040	0.011	0.000	0.000	0.000	0.160
NE	0.000	0.000	0.003	0.018	0.028	0.018	0.000	0.000	0.000	0.067
ENE	0.000	0.000	0.009	0.021	0.017	0.000	0.000	0.000	0.000	0.046
E	0.000	0.000	0.086	0.079	0.006	0.000	0.000	0.000	0.000	0.171
ESE	0.000	0.007	0.137	0.132	0.013	0.000	0.000	0.000	0.000	0.289
SE	0.000	0.000	0.082	0.123	0.067	0.000	0.000	0.000	0.000	0.272
SSE	0.000	0.008	0.118	0.086	0.000	0.000	0.000	0.000	0.000	0.212
S	0.000	0.012	0.058	0.121	0.049	0.000	0.000	0.000	0.000	0.239
SSW	0.000	0.003	0.034	0.009	0.000	0.038	0.000	0.000	0.000	0.084
SW	0.000	0.000	0.016	0.012	0.000	0.000	0.000	0.000	0.000	0.028
WSW	0.000	0.000	0.029	0.033	0.019	0.045	0.000	0.000	0.000	0.126
W	0.000	0.000	0.004	0.032	0.008	0.000	0.000	0.000	0.000	0.044
WNW	0.000	0.000	0.004	0.017	0.000	0.000	0.000	0.000	0.000	0.021
NW	0.000	0.000	0.000	0.010	0.023	0.000	0.000	0.000	0.000	0.033
NNW	0.000	0.000	0.011	0.063	0.007	0.039	0.000	0.000	0.000	0.121
SUBTOTAL	0.001	0.030	0.614	0.918	0.351	0.161	0.000	0.000	0.000	2.074

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE 156.040
TOTAL HOURS OF STABILITY CLASS E 648.590
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 37.480

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.035	0.092	0.000	0.000	0.000	0.000	0.000	0.127
NNE	0.000	0.001	0.030	0.049	0.020	0.000	0.000	0.000	0.000	0.100
NE	0.000	0.019	0.015	0.052	0.037	0.000	0.000	0.000	0.000	0.124
ENE	0.000	0.015	0.018	0.027	0.008	0.000	0.000	0.000	0.000	0.069
E	0.000	0.000	0.029	0.056	0.000	0.000	0.000	0.000	0.000	0.085
ESE	0.000	0.018	0.022	0.004	0.000	0.000	0.000	0.000	0.000	0.044
SE	0.000	0.014	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.031
SSE	0.000	0.017	0.020	0.026	0.000	0.000	0.000	0.000	0.000	0.063
S	0.000	0.000	0.046	0.020	0.022	0.000	0.000	0.000	0.000	0.089
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
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	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.002
NW	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
NNW	0.000	0.000	0.015	0.028	0.000	0.000	0.000	0.000	0.000	0.044
SUBTOTAL	0.000	0.092	0.253	0.355	0.087	0.000	0.000	0.000	0.000	0.788

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE 156.040
TOTAL HOURS OF STABILITY CLASS F 171.480
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 14.240

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED (MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.058	0.056	0.009	0.000	0.000	0.000	0.000	0.123
NNE	0.000	0.002	0.014	0.097	0.020	0.000	0.000	0.000	0.000	0.133
NE	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.012
ENE	0.000	0.000	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.012
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.006	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.022
SSE	0.000	0.007	0.082	0.038	0.000	0.000	0.000	0.000	0.000	0.128
S	0.000	0.000	0.008	0.057	0.000	0.000	0.000	0.000	0.000	0.065
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	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.013
SUBTOTAL	0.000	0.015	0.208	0.263	0.029	0.000	0.000	0.000	0.000	0.515

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF GROUND LEVEL RELEASE 156.040
TOTAL HOURS OF STABILITY CLASS G 45.010
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 9.310

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 16

Joint Frequency Distribution in Percent
for Split Level Releases
(Ground Level Portion)
Third Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.001	0.033	0.207	0.066	0.000	0.000	0.308
NNE	0.000	0.000	0.000	0.001	0.038	0.152	0.143	0.000	0.000	0.335
NE	0.000	0.000	0.000	0.000	0.048	0.088	0.020	0.000	0.000	0.156
ENE	0.000	0.000	0.000	0.000	0.000	0.006	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	0.031	0.025	0.000	0.000	0.000	0.000	0.057
SE	0.000	0.000	0.005	0.048	0.012	0.000	0.000	0.000	0.000	0.065
SSE	0.000	0.000	0.021	0.016	0.000	0.000	0.000	0.000	0.000	0.037
S	0.000	0.000	0.011	0.053	0.000	0.000	0.000	0.000	0.000	0.064
SSW	0.000	0.000	0.004	0.018	0.000	0.000	0.000	0.000	0.000	0.023
SW	0.000	0.000	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.014
WSW	0.000	0.000	0.000	0.012	0.011	0.000	0.000	0.000	0.000	0.023
W	0.000	0.000	0.000	0.000	0.039	0.048	0.000	0.000	0.000	0.086
WNW	0.000	0.000	0.000	0.000	0.016	0.074	0.000	0.000	0.000	0.091
NW	0.000	0.000	0.000	0.000	0.006	0.036	0.000	0.000	0.000	0.042
NNW	0.000	0.000	0.000	0.000	0.015	0.034	0.000	0.000	0.000	0.049
SUBTOTAL	0.000	0.000	0.047	0.190	0.244	0.645	0.229	0.000	0.000	1.355

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE 128.340
TOTAL HOURS OF STABILITY CLASS A 28.220
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 28.220

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9° DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.011	0.034	0.000	0.000	0.000	0.044
NNE	0.000	0.000	0.000	0.001	0.000	0.023	0.000	0.000	0.000	0.024
NE	0.000	0.000	0.000	0.001	0.015	0.038	0.000	0.000	0.000	0.054
ENE	0.000	0.000	0.000	0.000	0.002	0.006	0.000	0.000	0.000	0.008
E	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002
ESE	0.000	0.000	0.000	0.006	0.007	0.000	0.000	0.000	0.000	0.013
SE	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.004
SSE	0.000	0.000	0.004	0.009	0.000	0.000	0.000	0.000	0.000	0.013
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	0.015	0.000	0.000	0.000	0.000	0.000	0.015
SW	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.019
WSW	0.000	0.000	0.000	0.002	0.010	0.000	0.000	0.000	0.000	0.012
W	0.000	0.000	0.000	0.001	0.038	0.023	0.000	0.000	0.000	0.062
WNW	0.000	0.000	0.000	0.000	0.019	0.041	0.000	0.000	0.000	0.060
NW	0.000	0.000	0.000	0.000	0.012	0.017	0.000	0.000	0.000	0.029
NNW	0.000	0.000	0.000	0.000	0.014	0.024	0.000	0.000	0.000	0.038
SUBTOTAL	0.000	0.000	0.009	0.055	0.129	0.205	0.000	0.000	0.000	0.398

TOTAL HOURS OF VALID OBSERVATIONS	2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE	128.340
TOTAL HOURS OF STABILITY CLASS B	9.200
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B	8.290

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.008	0.046	0.010	0.000	0.000	0.064
NNE	0.000	0.000	0.000	0.000	0.024	0.026	0.025	0.000	0.000	0.076
NE	0.000	0.000	0.000	0.000	0.005	0.016	0.000	0.000	0.000	0.021
ENE	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001
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	0.005	0.000	0.000	0.000	0.000	0.000	0.005
SE	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.005
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	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.007
SSW	0.000	0.000	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.008
SW	0.000	0.000	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.011
WSW	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.007
W	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.011
WNW	0.000	0.000	0.000	0.000	0.026	0.006	0.000	0.000	0.000	0.032
NW	0.000	0.000	0.000	0.000	0.019	0.007	0.000	0.000	0.000	0.026
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.017	0.027	0.092	0.102	0.036	0.000	0.000	0.274

TOTAL HOURS OF VALID OBSERVATIONS	2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE	128.340
TOTAL HOURS OF STABILITY CLASS C	32.990
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C	5.710

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.015	0.048	0.078	0.010	0.000	0.000	0.151
NNE	0.000	0.000	0.000	0.005	0.032	0.039	0.000	0.000	0.000	0.077
NE	0.000	0.000	0.000	0.000	0.016	0.029	0.000	0.000	0.000	0.045
ENE	0.000	0.000	0.000	0.006	0.000	0.007	0.000	0.000	0.000	0.012
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	0.022	0.040	0.032	0.009	0.000	0.000	0.000	0.102
SE	0.000	0.000	0.014	0.088	0.000	0.000	0.000	0.000	0.000	0.103
SSE	0.000	0.000	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.041
S	0.000	0.000	0.084	0.077	0.031	0.000	0.000	0.000	0.000	0.192
SSW	0.000	0.000	0.063	0.076	0.000	0.000	0.000	0.000	0.000	0.139
SW	0.000	0.000	0.009	0.013	0.000	0.000	0.000	0.000	0.000	0.022
WSW	0.000	0.000	0.015	0.038	0.012	0.000	0.000	0.000	0.000	0.065
W	0.000	0.000	0.000	0.044	0.027	0.014	0.000	0.000	0.000	0.085
WNW	0.000	0.000	0.000	0.000	0.047	0.035	0.000	0.000	0.000	0.082
NW	0.000	0.000	0.000	0.002	0.034	0.017	0.022	0.000	0.000	0.074
NNW	0.000	0.000	0.000	0.003	0.030	0.073	0.023	0.000	0.000	0.130
SUBTOTAL	0.000	0.000	0.249	0.407	0.310	0.301	0.055	0.000	0.000	1.321

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE 128.340
TOTAL HOURS OF STABILITY CLASS D 934.570
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 27.510

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.041	0.091	0.074	0.035	0.000	0.000	0.000	0.241
NNE	0.000	0.000	0.012	0.062	0.063	0.031	0.000	0.000	0.000	0.169
NE	0.000	0.006	0.003	0.025	0.103	0.034	0.000	0.000	0.000	0.172
ENE	0.000	0.003	0.008	0.009	0.008	0.000	0.000	0.000	0.000	0.028
E	0.000	0.000	0.024	0.062	0.000	0.000	0.000	0.000	0.000	0.086
ESE	0.000	0.005	0.102	0.096	0.008	0.000	0.000	0.000	0.000	0.211
SE	0.000	0.001	0.063	0.034	0.000	0.000	0.000	0.000	0.000	0.098
SSE	0.000	0.000	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.036
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	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.010
SW	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.004
WSW	0.000	0.000	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.006
W	0.000	0.000	0.006	0.032	0.020	0.000	0.000	0.000	0.000	0.058
WNW	0.000	0.000	0.000	0.002	0.017	0.000	0.000	0.000	0.000	0.020
NW	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.019
NNW	0.000	0.000	0.018	0.051	0.013	0.000	0.000	0.000	0.000	0.082
SUBTOTAL	0.000	0.016	0.422	0.490	0.306	0.100	0.000	0.000	0.000	1.334

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE 128.340
TOTAL HOURS OF STABILITY CLASS E 757.850
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 27.790

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.004	0.068	0.130	0.048	0.017	0.000	0.000	0.000	0.267
NNE	0.000	0.000	0.067	0.163	0.064	0.008	0.000	0.000	0.000	0.302
NE	0.000	0.000	0.012	0.051	0.017	0.000	0.000	0.000	0.000	0.080
ENE	0.000	0.006	0.007	0.028	0.000	0.000	0.000	0.000	0.000	0.041
E	0.000	0.000	0.025	0.036	0.000	0.000	0.000	0.000	0.000	0.061
ESE	0.000	0.000	0.024	0.006	0.000	0.000	0.000	0.000	0.000	0.031
SE	0.000	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.023
SSE	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009
S	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
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	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.004
WSW	0.000	0.000	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.009
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	0.000	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	0.025	0.044	0.008	0.000	0.000	0.000	0.000	0.076
SUBTOTAL	0.000	0.039	0.247	0.465	0.137	0.025	0.000	0.000	0.000	0.913

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE 128.340
TOTAL HOURS OF STABILITY CLASS F 262.700
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 19.020

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.046	0.083	0.010	0.000	0.000	0.000	0.000	0.139
NNE	0.000	0.000	0.145	0.152	0.009	0.000	0.000	0.000	0.000	0.307
NE	0.000	0.000	0.036	0.014	0.000	0.000	0.000	0.000	0.000	0.050
ENE	0.000	0.000	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.012
E	0.000	0.001	0.009	0.008	0.000	0.000	0.000	0.000	0.000	0.018
ESE	0.000	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.011
SE	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.004
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	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.004
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	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
NNW	0.000	0.000	0.014	0.007	0.000	0.000	0.000	0.000	0.000	0.021
SUBTOTAL	0.000	0.006	0.271	0.271	0.019	0.000	0.000	0.000	0.000	0.566

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF GROUND LEVEL RELEASE 128.340
TOTAL HOURS OF STABILITY CLASS G 57.470
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 11.800

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 17

Joint Frequency Distribution in Percent
for Split Level Releases
(Ground Level Portion)
Fourth Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.001	0.008	0.098	0.050	0.000	0.000	0.158
NNE	0.000	0.000	0.000	0.000	0.026	0.167	0.039	0.000	0.000	0.232
NE	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.017
ENE	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002
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	0.035	0.076	0.000	0.000	0.000	0.000	0.111
SE	0.000	0.000	0.000	0.077	0.072	0.000	0.000	0.000	0.000	0.149
SSE	0.000	0.000	0.000	0.065	0.000	0.000	0.000	0.000	0.000	0.065
S	0.000	0.000	0.003	0.085	0.000	0.000	0.000	0.000	0.000	0.088
SSW	0.000	0.000	0.004	0.019	0.000	0.000	0.000	0.000	0.000	0.024
SW	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.008
WSW	0.000	0.000	0.000	0.000	0.015	0.009	0.000	0.000	0.000	0.024
W	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.015
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	0.003	0.007	0.029	0.115	0.000	0.154
NNW	0.000	0.000	0.000	0.000	0.000	0.062	0.039	0.000	0.000	0.101
SUBTOTAL	0.000	0.000	0.008	0.293	0.200	0.377	0.157	0.115	0.000	1.150

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS A 23.220
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 23.220

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.001	0.013	0.026	0.010	0.000	0.000	0.050
NNE	0.000	0.000	0.000	0.000	0.005	0.039	0.000	0.000	0.000	0.044
NE	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.014
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	0.007	0.000	0.000	0.000	0.000	0.007
SE	0.000	0.000	0.000	0.026	0.000	0.000	0.000	0.000	0.000	0.026
SSE	0.000	0.000	0.002	0.017	0.000	0.000	0.000	0.000	0.000	0.019
S	0.000	0.000	0.007	0.007	0.010	0.000	0.000	0.000	0.000	0.024
SSW	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.006
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	0.021	0.013	0.000	0.000	0.000	0.035
W	0.000	0.000	0.000	0.000	0.007	0.019	0.000	0.000	0.000	0.026
WNW	0.000	0.000	0.000	0.000	0.003	0.038	0.000	0.000	0.000	0.041
NW	0.000	0.000	0.000	0.000	0.003	0.036	0.009	0.040	0.000	0.088
NNW	0.000	0.000	0.000	0.000	0.005	0.017	0.033	0.000	0.000	0.055
SUBTOTAL	0.000	0.000	0.009	0.057	0.074	0.202	0.052	0.040	0.000	0.436

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS B 9.640
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B 8.800

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.018	0.054	0.000	0.000	0.000	0.072
NNE	0.000	0.000	0.000	0.000	0.003	0.017	0.000	0.000	0.000	0.020
NE	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.006
ENE	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.003
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	0.007	0.000	0.000	0.000	0.000	0.000	0.007
SE	0.000	0.000	0.000	0.014	0.011	0.000	0.000	0.000	0.000	0.026
SSE	0.000	0.000	0.007	0.033	0.000	0.000	0.000	0.000	0.000	0.041
S	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.006
SSW	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.014
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	0.005	0.037	0.000	0.000	0.000	0.042
W	0.000	0.000	0.000	0.000	0.004	0.028	0.000	0.000	0.000	0.032
WNW	0.000	0.000	0.000	0.000	0.000	0.043	0.010	0.000	0.000	0.053
NW	0.000	0.000	0.000	0.000	0.013	0.025	0.031	0.000	0.000	0.069
NNW	0.000	0.000	0.000	0.000	0.003	0.029	0.044	0.000	0.000	0.076
SUBTOTAL	0.000	0.000	0.007	0.075	0.062	0.239	0.084	0.000	0.000	0.468

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS C 23.940
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 9.450

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.016	0.058	0.256	0.010	0.000	0.000	0.342
NNE	0.000	0.000	0.000	0.035	0.083	0.120	0.019	0.000	0.000	0.256
NE	0.000	0.000	0.000	0.009	0.057	0.048	0.000	0.000	0.000	0.113
ENE	0.000	0.000	0.001	0.008	0.012	0.020	0.013	0.000	0.000	0.054
E	0.000	0.000	0.000	0.015	0.026	0.008	0.000	0.000	0.000	0.049
ESE	0.000	0.000	0.006	0.050	0.033	0.000	0.000	0.000	0.000	0.090
SE	0.000	0.000	0.021	0.176	0.118	0.010	0.000	0.000	0.000	0.325
SSE	0.000	0.000	0.015	0.081	0.000	0.050	0.000	0.000	0.000	0.146
S	0.000	0.000	0.029	0.052	0.000	0.059	0.000	0.000	0.000	0.141
SSW	0.000	0.000	0.005	0.005	0.018	0.010	0.000	0.000	0.000	0.039
SW	0.000	0.000	0.005	0.002	0.020	0.031	0.000	0.000	0.000	0.058
WSW	0.000	0.000	0.001	0.019	0.014	0.235	0.000	0.000	0.000	0.270
W	0.000	0.000	0.000	0.015	0.040	0.097	0.000	0.000	0.000	0.152
WNW	0.000	0.000	0.000	0.003	0.029	0.106	0.020	0.000	0.000	0.159
NW	0.000	0.000	0.000	0.000	0.018	0.072	0.042	0.079	0.000	0.211
NNW	0.000	0.000	0.000	0.003	0.035	0.132	0.151	0.122	0.000	0.443
SUBTOTAL	0.000	0.000	0.084	0.492	0.562	1.254	0.256	0.200	0.000	2.848

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS D 850.760
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 57.530

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.022	0.136	0.053	0.053	0.000	0.000	0.000	0.264
NNE	0.000	0.000	0.003	0.064	0.065	0.017	0.000	0.000	0.000	0.149
NE	0.000	0.000	0.001	0.015	0.071	0.000	0.000	0.000	0.000	0.088
ENE	0.000	0.000	0.004	0.020	0.016	0.000	0.000	0.000	0.000	0.040
E	0.000	0.000	0.033	0.121	0.000	0.000	0.000	0.000	0.000	0.154
ESE	0.000	0.000	0.028	0.161	0.075	0.000	0.000	0.000	0.000	0.264
SE	0.000	0.000	0.140	0.149	0.035	0.000	0.000	0.000	0.000	0.324
SSE	0.000	0.000	0.142	0.230	0.000	0.048	0.000	0.000	0.000	0.420
S	0.000	0.004	0.046	0.079	0.040	0.000	0.000	0.000	0.000	0.169
SSW	0.000	0.000	0.018	0.007	0.000	0.000	0.000	0.000	0.000	0.026
SW	0.000	0.005	0.022	0.019	0.000	0.000	0.000	0.000	0.000	0.047
WSW	0.000	0.000	0.008	0.015	0.008	0.000	0.000	0.000	0.000	0.031
W	0.000	0.000	0.013	0.050	0.070	0.000	0.000	0.000	0.000	0.134
WNW	0.000	0.000	0.000	0.020	0.023	0.032	0.000	0.000	0.000	0.076
NW	0.000	0.000	0.004	0.011	0.018	0.009	0.000	0.000	0.000	0.042
NNW	0.000	0.004	0.007	0.044	0.070	0.145	0.010	0.000	0.000	0.281
SUBTOTAL	0.000	0.014	0.492	1.141	0.545	0.305	0.010	0.000	0.000	2.507

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS E 733.780
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 50.640

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.044	0.139	0.041	0.000	0.000	0.000	0.000	0.223
NNE	0.000	0.000	0.041	0.200	0.018	0.000	0.000	0.000	0.000	0.259
NE	0.000	0.000	0.014	0.007	0.008	0.009	0.000	0.000	0.000	0.038
ENE	0.000	0.006	0.013	0.009	0.008	0.000	0.000	0.000	0.000	0.036
E	0.000	0.003	0.031	0.039	0.000	0.000	0.000	0.000	0.000	0.074
ESE	0.000	0.007	0.073	0.013	0.000	0.000	0.000	0.000	0.000	0.093
SE	0.001	0.037	0.204	0.007	0.000	0.000	0.000	0.000	0.000	0.249
SSE	0.001	0.048	0.171	0.042	0.000	0.000	0.000	0.000	0.000	0.261
S	0.000	0.016	0.048	0.047	0.000	0.000	0.000	0.000	0.000	0.111
SSW	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.005
SW	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.004
WSW	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.005
W	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.004
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	0.008	0.000	0.000	0.000	0.000	0.000	0.008
NNW	0.000	0.000	0.015	0.069	0.033	0.008	0.000	0.000	0.000	0.125
SUBTOTAL	0.002	0.119	0.666	0.585	0.107	0.017	0.000	0.000	0.000	1.497

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS F 262.120
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 30.240

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.070	0.091	0.000	0.000	0.000	0.000	0.000	0.160
NNE	0.000	0.001	0.041	0.142	0.000	0.000	0.000	0.000	0.000	0.183
NE	0.000	0.005	0.008	0.005	0.000	0.000	0.000	0.000	0.000	0.019
ENE	0.000	0.000	0.006	0.011	0.000	0.000	0.000	0.000	0.000	0.017
E	0.000	0.002	0.038	0.011	0.000	0.000	0.000	0.000	0.000	0.051
ESE	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.018
SE	0.000	0.012	0.030	0.007	0.000	0.000	0.000	0.000	0.000	0.050
SSE	0.000	0.036	0.114	0.032	0.000	0.000	0.000	0.000	0.000	0.182
S	0.000	0.012	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.029
SSW	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
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	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
WNW	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.002
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	0.005	0.012	0.000	0.000	0.000	0.000	0.000	0.017
SUBTOTAL	0.000	0.072	0.352	0.311	0.000	0.000	0.000	0.000	0.000	0.735

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF GROUND LEVEL RELEASE 194.730
TOTAL HOURS OF STABILITY CLASS G 116.540
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 14.850

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.42 METER LEVEL
WIND SPEED MEASURED AT 10.42 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 18

Joint Frequency Distribution in Percent
for Split Level Releases
(Elevated Portion)
First Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.047	0.000	0.000	0.000	0.000	0.000	0.047
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	0.034	0.000	0.034
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
SUBTOTAL	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.034	0.000	0.081

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF ELEVATED RELEASES 1808.940
TOTAL HOURS OF STABILITY CLASS A 20.380
TOTAL HOURS OF ELEVATED STABILITY CLASS A 1.710

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.008	0.008
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	0.095	0.046	0.000	0.000	0.000	0.000	0.141
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	0.041	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
SUBTOTAL	0.000	0.000	0.000	0.095	0.046	0.041	0.000	0.000	0.008	0.190

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF ELEVATED RELEASES 1808.940
TOTAL HOURS OF STABILITY CLASS B 14.710
TOTAL HOURS OF ELEVATED STABILITY CLASS B 4.000

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.010	0.010
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	0.095	0.141	0.000	0.039	0.000	0.000	0.275
WSW	0.000	0.000	0.000	0.000	0.000	0.083	0.000	0.000	0.000	0.083
W	0.000	0.000	0.000	0.000	0.091	0.083	0.000	0.000	0.000	0.174
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.077	0.000	0.000	0.077
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.010	0.037
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.000	0.000	0.038
SUBTOTAL	0.000	0.000	0.000	0.095	0.231	0.166	0.155	0.028	0.020	0.695

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF ELEVATED RELEASES 1808.940
TOTAL HOURS OF STABILITY CLASS C 26.160
TOTAL HOURS OF ELEVATED STABILITY CLASS C 14.660

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.190	0.427	0.502	2.018	1.887	0.075	0.000	5.098
NNE	0.000	0.000	0.095	0.664	0.821	2.745	0.771	0.175	0.000	5.271
NE	0.000	0.000	0.142	0.569	0.684	1.392	0.156	0.000	0.000	2.943
ENE	0.000	0.000	0.142	0.332	0.450	0.628	0.000	0.000	0.000	1.551
E	0.000	0.000	0.284	0.284	0.139	0.570	0.157	0.035	0.000	1.470
ESE	0.000	0.000	0.332	0.759	0.370	0.743	0.769	0.108	0.000	3.080
SE	0.000	0.000	0.284	0.853	0.229	0.293	0.686	0.500	0.016	2.862
SSE	0.000	0.000	0.522	0.379	0.272	0.830	0.772	0.187	0.000	2.963
S	0.000	0.000	0.190	0.569	0.185	1.441	1.651	0.917	0.025	4.979
SSW	0.000	0.047	0.237	0.427	0.413	0.532	0.807	0.375	0.003	2.839
SW	0.000	0.000	0.095	0.284	0.093	0.412	0.234	0.000	0.011	1.130
WSW	0.000	0.000	0.190	0.332	0.274	0.499	0.195	0.037	0.008	1.535
W	0.000	0.000	0.095	0.379	0.321	0.453	0.886	0.077	0.000	2.211
WNW	0.000	0.000	0.047	0.142	0.093	1.120	1.342	0.489	0.010	3.244
NW	0.000	0.000	0.095	0.190	0.275	1.122	1.887	0.492	0.010	4.071
NNW	0.000	0.000	0.047	0.095	0.318	1.605	1.503	0.224	0.000	3.791
SUBTOTAL	0.000	0.047	2.987	6.686	5.438	16.403	13.704	3.690	0.083	49.038

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF ELEVATED RELEASES 1808.940
TOTAL HOURS OF STABILITY CLASS D 1133.090
TOTAL HOURS OF ELEVATED STABILITY CLASS D 1034.220

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.095	0.237	0.222	0.757	0.235	0.000	0.000	1.545
NNE	0.000	0.000	0.047	0.095	0.319	1.488	0.275	0.000	0.000	2.224
NE	0.000	0.047	0.190	0.284	0.587	0.710	0.274	0.000	0.000	2.093
ENE	0.000	0.000	0.095	0.427	0.268	0.252	0.118	0.037	0.000	1.198
E	0.000	0.000	0.095	0.237	0.363	0.379	0.039	0.000	0.000	1.113
ESE	0.000	0.000	0.284	0.522	0.277	0.716	0.116	0.000	0.000	1.915
SE	0.000	0.047	0.237	0.664	0.780	1.985	0.621	0.176	0.029	4.539
SSE	0.000	0.000	0.047	0.474	0.993	1.738	1.423	0.179	0.025	4.880
S	0.000	0.000	0.332	0.284	0.507	0.879	1.232	0.326	0.012	3.573
SSW	0.000	0.000	0.047	0.522	0.230	0.417	0.309	0.000	0.000	1.525
SW	0.000	0.000	0.142	0.332	0.185	0.375	0.155	0.035	0.000	1.224
WSW	0.000	0.000	0.000	0.379	0.094	0.081	0.076	0.000	0.000	0.630
W	0.000	0.000	0.142	0.237	0.092	0.253	0.079	0.000	0.000	0.803
WNW	0.000	0.000	0.047	0.237	0.047	0.464	0.077	0.000	0.000	0.873
NW	0.000	0.000	0.047	0.142	0.277	0.168	0.039	0.000	0.000	0.673
NNW	0.000	0.000	0.000	0.142	0.274	0.790	0.234	0.000	0.000	1.440
SUBTOTAL	0.000	0.095	1.849	5.216	5.516	11.453	5.302	0.753	0.066	30.250

TOTAL HOURS OF VALID OBSERVATIONS 2109.000
TOTAL HOURS OF ELEVATED RELEASES 1808.940
TOTAL HOURS OF STABILITY CLASS E 715.810
TOTAL HOURS OF ELEVATED STABILITY CLASS E 637.980

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.047	0.090	0.083	0.000	0.000	0.000	0.220
NNE	0.000	0.000	0.000	0.000	0.182	0.169	0.000	0.000	0.000	0.350
NE	0.000	0.000	0.000	0.047	0.044	0.125	0.000	0.000	0.000	0.217
ENE	0.000	0.000	0.047	0.047	0.000	0.130	0.000	0.000	0.000	0.225
E	0.000	0.000	0.000	0.000	0.089	0.126	0.000	0.000	0.000	0.215
ESE	0.000	0.000	0.000	0.000	0.138	0.085	0.000	0.000	0.000	0.223
SE	0.000	0.000	0.047	0.237	0.179	0.210	0.077	0.000	0.000	0.751
SSE	0.000	0.047	0.000	0.047	0.320	0.670	0.078	0.000	0.000	1.163
S	0.000	0.000	0.000	0.047	0.135	0.338	0.000	0.000	0.000	0.520
SSW	0.000	0.000	0.000	0.000	0.045	0.167	0.000	0.000	0.000	0.212
SW	0.000	0.000	0.047	0.000	0.092	0.128	0.000	0.000	0.000	0.267
WSW	0.000	0.000	0.095	0.000	0.046	0.043	0.000	0.000	0.000	0.183
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	0.047	0.000	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.047	0.092	0.000	0.000	0.000	0.000	0.139
SUBTOTAL	0.000	0.047	0.237	0.522	1.544	2.274	0.156	0.000	0.000	4.779

TOTAL HOURS OF VALID OBSERVATIONS	2109.000
TOTAL HOURS OF ELEVATED RELEASES	1808.940
TOTAL HOURS OF STABILITY CLASS F	158.730
TOTAL HOURS OF ELEVATED STABILITY CLASS F	100.790

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.090	0.000	0.000	0.000	0.000	0.090
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	0.047	0.000	0.047	0.041	0.000	0.000	0.000	0.136
SE	0.000	0.000	0.047	0.237	0.138	0.043	0.000	0.000	0.000	0.466
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	0.047	0.000	0.000	0.000	0.000	0.000	0.047
W	0.000	0.000	0.000	0.000	0.000	0.000	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
SUBTOTAL	0.000	0.000	0.095	0.284	0.275	0.084	0.000	0.000	0.000	0.739

TOTAL HOURS OF VALID OBSERVATIONS	2109.000
TOTAL HOURS OF ELEVATED RELEASES	1808.940
TOTAL HOURS OF STABILITY CLASS G	40.120
TOTAL HOURS OF ELEVATED STABILITY CLASS G	15.580

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990525

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 19

Joint Frequency Distribution in Percent
for Split Level Releases
(Elevated Portion)
Second Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF ELEVATED RELEASES 1650.960
TOTAL HOURS OF STABILITY CLASS A 20.800
TOTAL HOURS OF ELEVATED STABILITY CLASS A 0.000

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.044	0.000	0.000	0.044
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.044	0.000	0.000	0.044

TOTAL HOURS OF VALID OBSERVATIONS	1807.000
TOTAL HOURS OF ELEVATED RELEASES	1650.960
TOTAL HOURS OF STABILITY CLASS B	9.540
TOTAL HOURS OF ELEVATED STABILITY CLASS B	0.800

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.049	0.000	0.000	0.000	0.049
WSW	0.000	0.000	0.000	0.000	0.055	0.099	0.000	0.000	0.000	0.153
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.055	0.148	0.000	0.000	0.000	0.203

TOTAL HOURS OF VALID OBSERVATIONS	1807.000
TOTAL HOURS OF ELEVATED RELEASES	1650.960
TOTAL HOURS OF STABILITY CLASS C	14.770
TOTAL HOURS OF ELEVATED STABILITY CLASS C	3.660

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.111	0.219	0.815	0.228	0.000	0.000	1.373
NNE	0.000	0.000	0.055	0.221	0.583	1.258	0.409	0.000	0.000	2.527
NE	0.000	0.000	0.000	0.387	0.430	0.873	0.410	0.000	0.000	2.100
ENE	0.000	0.000	0.000	0.000	0.105	0.050	0.000	0.000	0.000	0.156
E	0.000	0.000	0.000	0.055	0.055	0.196	0.092	0.000	0.000	0.398
ESE	0.000	0.000	0.166	0.719	0.851	1.804	0.045	0.000	0.000	3.586
SE	0.000	0.000	0.719	1.162	0.696	1.930	0.810	0.113	0.000	5.430
SSE	0.000	0.000	0.609	0.443	1.183	2.494	1.753	0.217	0.000	6.698
S	0.000	0.055	0.553	0.775	0.861	1.737	1.533	0.096	0.000	5.610
SSW	0.000	0.000	0.609	0.498	0.531	1.411	0.501	0.042	0.000	3.592
SW	0.000	0.000	0.443	0.609	0.693	0.728	0.228	0.035	0.000	2.735
WSW	0.000	0.000	0.387	1.051	0.695	1.115	0.090	0.100	0.011	3.449
W	0.000	0.000	0.166	0.277	0.429	1.110	0.273	0.116	0.000	2.371
WNW	0.000	0.000	0.055	0.553	0.368	1.314	0.494	0.000	0.000	2.785
NW	0.000	0.000	0.000	0.443	0.583	0.937	0.680	0.000	0.000	2.643
NNW	0.000	0.000	0.055	0.221	0.317	0.485	0.090	0.000	0.000	1.168
SUBTOTAL	0.000	0.055	3.818	7.526	8.599	18.257	7.636	0.718	0.011	46.621

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF ELEVATED RELEASES 1650.960
TOTAL HOURS OF STABILITY CLASS D 896.810
TOTAL HOURS OF ELEVATED STABILITY CLASS D 842.450

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.002	0.000	0.221	0.166	0.638	0.872	0.046	0.000	0.000	1.945
NNE	0.001	0.000	0.111	0.332	0.318	1.167	0.138	0.000	0.000	2.067
NE	0.001	0.000	0.055	0.332	0.366	0.386	0.044	0.000	0.000	1.185
ENE	0.002	0.000	0.166	0.277	0.162	0.245	0.000	0.000	0.000	0.851
E	0.003	0.000	0.277	0.111	0.319	0.398	0.000	0.000	0.000	1.108
ESE	0.003	0.055	0.221	0.941	1.008	1.296	0.000	0.000	0.000	3.524
SE	0.010	0.166	0.775	1.771	1.864	1.224	0.137	0.086	0.000	6.032
SSE	0.005	0.055	0.387	0.719	0.847	1.818	0.628	0.167	0.025	4.652
S	0.010	0.000	0.885	0.609	0.640	0.540	0.494	0.274	0.009	3.461
SSW	0.004	0.000	0.332	0.498	0.370	0.444	0.046	0.018	0.000	1.711
SW	0.004	0.166	0.221	0.332	0.325	0.586	0.137	0.000	0.000	1.772
WSW	0.003	0.055	0.221	0.498	0.213	0.631	0.090	0.044	0.000	1.756
W	0.004	0.000	0.332	0.221	0.270	0.239	0.000	0.044	0.000	1.109
WNW	0.001	0.000	0.111	0.332	0.215	0.147	0.000	0.000	0.000	0.805
NW	0.001	0.000	0.055	0.055	0.051	0.438	0.000	0.000	0.000	0.600
NNW	0.002	0.055	0.166	0.221	0.214	0.490	0.092	0.000	0.000	1.240
SUBTOTAL	0.055	0.553	4.538	7.416	7.820	10.920	1.852	0.632	0.034	33.819

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF ELEVATED RELEASES 1650.960
TOTAL HOURS OF STABILITY CLASS E 648.590
TOTAL HOURS OF ELEVATED STABILITY CLASS E 611.110

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.055	0.055	0.053	0.586	0.000	0.000	0.000	0.749
NNE	0.000	0.000	0.055	0.221	0.000	0.716	0.091	0.000	0.000	1.084
NE	0.000	0.000	0.000	0.111	0.108	0.475	0.138	0.000	0.000	0.832
ENE	0.000	0.000	0.111	0.221	0.211	0.192	0.000	0.000	0.000	0.735
E	0.000	0.000	0.000	0.055	0.210	0.544	0.000	0.000	0.000	0.810
ESE	0.000	0.000	0.111	0.332	0.270	0.245	0.000	0.000	0.000	0.957
SE	0.000	0.055	0.111	0.443	0.270	0.050	0.000	0.000	0.000	0.929
SSE	0.000	0.000	0.332	0.221	0.108	0.051	0.000	0.000	0.000	0.712
S	0.000	0.000	0.277	0.166	0.055	0.049	0.000	0.000	0.000	0.546
SSW	0.000	0.055	0.111	0.000	0.268	0.049	0.000	0.000	0.000	0.484
SW	0.000	0.055	0.111	0.055	0.106	0.152	0.000	0.000	0.000	0.479
WSW	0.000	0.000	0.000	0.055	0.000	0.000	0.000	0.000	0.000	0.055
W	0.000	0.000	0.055	0.000	0.055	0.000	0.000	0.000	0.000	0.111
WNW	0.000	0.000	0.111	0.000	0.054	0.000	0.000	0.000	0.000	0.164
NW	0.000	0.000	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.055
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.166	1.494	1.937	1.767	3.109	0.229	0.000	0.000	8.702

TOTAL HOURS OF VALID OBSERVATIONS 1807.000
TOTAL HOURS OF ELEVATED RELEASES 1650.960
TOTAL HOURS OF STABILITY CLASS F 171.480
TOTAL HOURS OF ELEVATED STABILITY CLASS F 157.240

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.054	0.190	0.046	0.000	0.000	0.290
NNE	0.000	0.000	0.000	0.000	0.000	0.143	0.181	0.000	0.000	0.324
NE	0.000	0.000	0.000	0.055	0.163	0.245	0.138	0.000	0.000	0.602
ENE	0.000	0.000	0.000	0.000	0.055	0.049	0.000	0.000	0.000	0.103
E	0.000	0.000	0.000	0.000	0.053	0.000	0.000	0.000	0.000	0.053
ESE	0.000	0.000	0.000	0.166	0.000	0.000	0.000	0.000	0.000	0.166
SE	0.000	0.055	0.000	0.000	0.105	0.000	0.000	0.000	0.000	0.160
SSE	0.000	0.000	0.055	0.055	0.000	0.000	0.000	0.000	0.000	0.111
S	0.000	0.000	0.055	0.055	0.000	0.000	0.000	0.000	0.000	0.111
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	0.055	0.000	0.000	0.000	0.000	0.000	0.055
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
SUBTOTAL	0.000	0.055	0.111	0.387	0.431	0.627	0.365	0.000	0.000	1.976

TOTAL HOURS OF VALID OBSERVATIONS	1807.000
TOTAL HOURS OF ELEVATED RELEASES	1650.960
TOTAL HOURS OF STABILITY CLASS G	45.010
TOTAL HOURS OF ELEVATED STABILITY CLASS G	35.700

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19990809

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 20

Joint Frequency Distribution in Percent
for Split Level Releases
(Elevated Portion)
Third Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF ELEVATED RELEASES 1954.660
TOTAL HOURS OF STABILITY CLASS A 28.220
TOTAL HOURS OF ELEVATED STABILITY CLASS A 0.000

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.044	0.000	0.000	0.000	0.044
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.044	0.000	0.000	0.000	0.044

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF ELEVATED RELEASES 1954.660
TOTAL HOURS OF STABILITY CLASS B 9.200
TOTAL HOURS OF ELEVATED STABILITY CLASS B 0.910

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7<'DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.040	0.157	0.000	0.000	0.198
NNE	0.000	0.000	0.000	0.000	0.000	0.289	0.308	0.062	0.000	0.660
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	0.048	0.000	0.000	0.000	0.000	0.000	0.048
SW	0.000	0.000	0.000	0.048	0.048	0.043	0.000	0.000	0.000	0.139
WSW	0.000	0.000	0.000	0.000	0.000	0.089	0.000	0.000	0.000	0.089
W	0.000	0.000	0.000	0.000	0.046	0.131	0.000	0.000	0.000	0.177
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
SUBTOTAL	0.000	0.000	0.000	0.096	0.094	0.592	0.466	0.062	0.000	1.310

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF ELEVATED RELEASES 1954.660
TOTAL HOURS OF STABILITY CLASS C 32.990
TOTAL HOURS OF ELEVATED STABILITY CLASS C 27.280

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5<'DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.096	0.336	0.684	1.523	1.133	0.076	0.000	3.847
NNE	0.000	0.000	0.048	0.240	0.466	1.560	0.625	0.152	0.000	3.091
NE	0.000	0.048	0.048	0.144	0.186	1.484	0.312	0.000	0.000	2.222
ENE	0.000	0.048	0.000	0.000	0.187	0.083	0.000	0.000	0.000	0.318
E	0.000	0.000	0.096	0.288	0.094	0.042	0.000	0.000	0.000	0.520
ESE	0.000	0.000	0.096	0.528	0.699	0.343	0.000	0.000	0.000	1.666
SE	0.000	0.048	0.912	2.880	1.122	1.137	0.316	0.000	0.000	6.416
SSE	0.000	0.000	1.296	1.488	0.841	0.948	0.238	0.000	0.000	4.811
S	0.000	0.000	0.672	1.200	0.562	0.924	0.197	0.000	0.000	3.556
SSW	0.000	0.000	0.528	1.104	0.827	1.300	0.119	0.000	0.000	3.879
SW	0.000	0.000	0.288	0.720	0.789	0.339	0.000	0.000	0.000	2.136
WSW	0.000	0.000	0.144	1.008	0.801	0.468	0.000	0.000	0.000	2.421
W	0.000	0.000	0.192	0.384	1.564	1.112	0.000	0.000	0.000	3.252
WNW	0.000	0.000	0.048	0.144	0.323	1.705	0.000	0.000	0.000	2.219
NW	0.000	0.000	0.048	0.240	0.694	0.770	0.039	0.026	0.000	1.818
NNW	0.000	0.000	0.096	0.240	0.138	0.638	0.236	0.025	0.000	1.373
SUBTOTAL	0.000	0.144	4.609	10.946	9.977	14.376	3.214	0.279	0.000	43.546

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF ELEVATED RELEASES 1954.660
TOTAL HOURS OF STABILITY CLASS D 934.570
TOTAL HOURS OF ELEVATED STABILITY CLASS D 907.060

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.336	0.240	0.558	1.668	0.437	0.000	0.000	3.240
NNE	0.000	0.096	0.288	0.336	0.277	1.174	0.825	0.000	0.000	2.997
NE	0.000	0.144	0.384	0.096	0.412	1.292	0.118	0.000	0.000	2.446
ENE	0.000	0.000	0.192	0.384	0.090	0.334	0.000	0.000	0.000	1.000
E	0.000	0.000	0.192	0.528	0.282	0.299	0.000	0.000	0.000	1.301
ESE	0.000	0.048	0.336	0.624	0.138	0.773	0.040	0.000	0.000	1.959
SE	0.000	0.048	1.008	1.680	1.633	0.854	0.039	0.000	0.000	5.262
SSE	0.000	0.048	0.816	0.960	0.869	0.596	0.157	0.000	0.000	3.447
S	0.000	0.048	0.816	1.248	0.141	0.471	0.197	0.000	0.000	2.922
SSW	0.000	0.048	0.624	0.672	0.232	0.257	0.000	0.017	0.000	1.850
SW	0.000	0.048	0.432	0.624	0.137	0.044	0.040	0.000	0.000	1.325
WSW	0.000	0.000	0.576	0.960	0.233	0.086	0.000	0.000	0.000	1.855
W	0.000	0.000	0.336	0.672	0.695	0.130	0.000	0.000	0.000	1.833
WNW	0.000	0.000	0.240	0.336	0.231	0.253	0.000	0.000	0.000	1.061
NW	0.000	0.048	0.240	0.336	0.416	0.174	0.040	0.000	0.000	1.253
NNW	0.000	0.000	0.288	0.432	0.319	0.258	0.000	0.000	0.000	1.297
SUBTOTAL	0.000	0.576	7.105	10.130	6.663	8.664	1.893	0.017	0.000	35.048

TOTAL HOURS OF VALID OBSERVATIONS 2083.000
TOTAL HOURS OF ELEVATED RELEASES 1954.660
TOTAL HOURS OF STABILITY CLASS E 757.850
TOTAL HOURS OF ELEVATED STABILITY CLASS E 730.060

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.048	0.144	0.144	0.230	0.597	0.039	0.000	0.000	1.202
NNE	0.000	0.000	0.096	0.096	0.322	1.129	0.273	0.000	0.000	1.916
NE	0.000	0.000	0.000	0.144	0.373	0.762	0.040	0.000	0.000	1.319
ENE	0.000	0.048	0.000	0.192	0.324	0.590	0.000	0.000	0.000	1.155
E	0.000	0.048	0.096	0.048	0.000	0.299	0.000	0.000	0.000	0.491
ESE	0.000	0.000	0.048	0.144	0.186	0.212	0.000	0.000	0.000	0.590
SE	0.000	0.048	0.192	0.240	0.424	0.042	0.000	0.000	0.000	0.946
SSE	0.000	0.000	0.240	0.288	0.046	0.044	0.000	0.000	0.000	0.618
S	0.000	0.000	0.288	0.192	0.095	0.000	0.000	0.000	0.000	0.575
SSW	0.000	0.000	0.144	0.384	0.233	0.000	0.000	0.000	0.000	0.761
SW	0.000	0.000	0.096	0.192	0.139	0.000	0.000	0.000	0.000	0.427
WSW	0.000	0.000	0.144	0.240	0.091	0.000	0.000	0.000	0.000	0.475
W	0.000	0.000	0.240	0.240	0.047	0.088	0.000	0.000	0.000	0.615
WNW	0.000	0.000	0.096	0.192	0.000	0.041	0.000	0.000	0.000	0.329
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	0.096	0.048	0.048	0.088	0.000	0.000	0.000	0.279
SUBTOTAL	0.000	0.192	1.920	2.784	2.556	3.893	0.352	0.000	0.000	11.699

TOTAL HOURS OF VALID OBSERVATIONS	2083.000
TOTAL HOURS OF ELEVATED RELEASES	1954.660
TOTAL HOURS OF STABILITY CLASS F	262.700
TOTAL HOURS OF ELEVATED STABILITY CLASS F	243.680

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
NNE	0.000	0.000	0.000	0.096	0.047	0.501	0.157	0.000	0.000	0.801
NE	0.000	0.000	0.000	0.000	0.139	0.299	0.039	0.000	0.000	0.477
ENE	0.000	0.000	0.000	0.000	0.000	0.127	0.039	0.000	0.000	0.166
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	0.046	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.000	0.096	0.046	0.000	0.000	0.000	0.000	0.142
SSE	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.048	0.048	0.048	0.000	0.000	0.000	0.000	0.144
SSW	0.000	0.000	0.096	0.000	0.095	0.000	0.000	0.000	0.000	0.191
SW	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
WSW	0.000	0.000	0.000	0.000	0.046	0.000	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	0.000	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	0.042	0.000	0.000	0.000	0.042
SUBTOTAL	0.000	0.000	0.144	0.288	0.556	0.968	0.236	0.000	0.000	2.193

TOTAL HOURS OF VALID OBSERVATIONS	2083.000
TOTAL HOURS OF ELEVATED RELEASES	1954.660
TOTAL HOURS OF STABILITY CLASS G	57.470
TOTAL HOURS OF ELEVATED STABILITY CLASS G	45.670

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 19991110□□□□□□□□□

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 21

Joint Frequency Distribution in Percent
for Split Level Releases
(Elevated Portion)
Fourth Quarter

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF ELEVATED RELEASES 1825.270
TOTAL HOURS OF STABILITY CLASS A 23.220
TOTAL HOURS OF ELEVATED STABILITY CLASS A 0.000

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.000	0.000	0.042
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.000	0.000	0.042

TOTAL HOURS OF VALID OBSERVATIONS	2020.000
TOTAL HOURS OF ELEVATED RELEASES	1825.270
TOTAL HOURS OF STABILITY CLASS B	9.640
TOTAL HOURS OF ELEVATED STABILITY CLASS B	0.840

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.046	0.087	0.000	0.000	0.000	0.133
NNE	0.000	0.000	0.000	0.000	0.000	0.296	0.082	0.000	0.000	0.378
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	0.042	0.039	0.000	0.000	0.081
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	0.046	0.000	0.000	0.000	0.046
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	0.081	0.000	0.000	0.081
SUBTOTAL	0.000	0.000	0.000	0.000	0.046	0.469	0.202	0.000	0.000	0.717

TOTAL HOURS OF VALID OBSERVATIONS	2020.000
TOTAL HOURS OF ELEVATED RELEASES	1825.270
TOTAL HOURS OF STABILITY CLASS C	23.940
TOTAL HOURS OF ELEVATED STABILITY CLASS C	14.490

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.050	0.099	0.149	0.618	1.756	1.089	0.144	0.000	3.903
NNE	0.000	0.000	0.149	0.149	0.799	2.769	1.014	0.141	0.000	5.020
NE	0.000	0.000	0.050	0.149	0.285	0.876	0.123	0.000	0.000	1.482
ENE	0.000	0.000	0.099	0.050	0.094	0.129	0.000	0.000	0.000	0.371
E	0.000	0.000	0.198	0.198	0.243	0.085	0.039	0.000	0.000	0.763
ESE	0.000	0.000	0.149	0.248	0.475	0.262	0.000	0.000	0.000	1.133
SE	0.000	0.000	0.495	0.842	0.951	2.089	1.049	0.246	0.000	5.672
SSE	0.000	0.000	0.594	0.248	0.284	1.239	0.726	0.158	0.008	3.257
S	0.000	0.050	0.446	0.248	0.046	0.759	0.765	0.100	0.000	2.412
SSW	0.000	0.000	0.495	0.248	0.000	0.735	0.118	0.000	0.000	1.596
SW	0.000	0.000	0.347	0.248	0.094	0.220	0.402	0.039	0.000	1.350
WSW	0.000	0.000	0.149	0.297	0.484	0.439	0.765	0.166	0.000	2.299
W	0.000	0.000	0.149	0.347	0.279	1.333	0.404	0.078	0.000	2.589
WNW	0.000	0.050	0.396	0.198	0.284	1.122	0.487	0.000	0.000	2.536
NW	0.000	0.000	0.099	0.446	0.093	0.998	0.122	0.167	0.039	1.963
NNW	0.000	0.050	0.198	0.248	0.239	0.958	1.122	0.081	0.030	2.924
SUBTOTAL	0.000	0.198	4.109	4.307	5.266	15.768	8.225	1.319	0.077	39.269

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF ELEVATED RELEASES 1825.270
TOTAL HOURS OF STABILITY CLASS D 850.760
TOTAL HOURS OF ELEVATED STABILITY CLASS D 793.230

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.050	0.099	0.000	0.330	1.812	0.243	0.034	0.000	2.566
NNE	0.000	0.099	0.099	0.248	0.286	2.291	0.163	0.000	0.000	3.185
NE	0.000	0.000	0.248	0.149	0.190	1.081	0.041	0.000	0.000	1.708
ENE	0.000	0.000	0.050	0.149	0.244	0.304	0.080	0.036	0.000	0.862
E	0.000	0.000	0.149	0.297	0.287	0.573	0.000	0.000	0.000	1.305
ESE	0.000	0.050	0.149	0.594	0.283	1.175	0.000	0.000	0.000	2.250
SE	0.000	0.050	0.495	1.139	2.282	3.121	0.281	0.095	0.000	7.463
SSE	0.000	0.000	0.396	0.495	0.710	1.748	0.965	0.114	0.012	4.440
S	0.000	0.000	0.495	0.495	0.572	0.439	0.080	0.000	0.000	2.081
SSW	0.000	0.050	0.149	0.297	0.192	0.353	0.041	0.000	0.000	1.081
SW	0.000	0.000	0.198	0.545	0.812	0.128	0.000	0.022	0.000	1.704
WSW	0.000	0.050	0.347	0.248	0.337	0.088	0.000	0.000	0.000	1.069
W	0.000	0.000	0.000	0.297	0.573	0.223	0.000	0.000	0.000	1.094
WNW	0.000	0.000	0.000	0.248	0.148	0.177	0.000	0.000	0.000	0.572
NW	0.000	0.050	0.149	0.198	0.139	0.085	0.121	0.000	0.000	0.742
NNW	0.000	0.000	0.099	0.149	0.191	0.647	0.570	0.035	0.006	1.697
SUBTOTAL	0.000	0.396	3.119	5.545	7.575	14.246	2.585	0.335	0.018	33.819

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF ELEVATED RELEASES 1825.270
TOTAL HOURS OF STABILITY CLASS E 733.780
TOTAL HOURS OF ELEVATED STABILITY CLASS E 683.140

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.001	0.050	0.000	0.000	0.000	0.346	0.000	0.000	0.000	0.397
NNE	0.000	0.000	0.000	0.000	0.000	0.523	0.041	0.000	0.000	0.564
NE	0.003	0.000	0.099	0.149	0.048	0.602	0.081	0.000	0.000	0.981
ENE	0.003	0.000	0.099	0.050	0.142	0.220	0.041	0.000	0.000	0.554
E	0.000	0.000	0.000	0.050	0.238	0.178	0.000	0.000	0.000	0.465
ESE	0.001	0.000	0.050	0.050	0.242	0.487	0.000	0.000	0.000	0.829
SE	0.007	0.000	0.248	0.495	0.338	0.576	0.000	0.000	0.000	1.664
SSE	0.010	0.050	0.297	0.149	0.246	0.355	0.000	0.000	0.000	1.106
S	0.010	0.050	0.297	0.545	0.191	0.439	0.000	0.000	0.000	1.531
SSW	0.004	0.050	0.099	0.545	0.236	0.264	0.000	0.000	0.000	1.197
SW	0.007	0.050	0.198	0.446	0.287	0.319	0.000	0.000	0.000	1.307
WSW	0.000	0.000	0.000	0.248	0.096	0.000	0.000	0.000	0.000	0.344
W	0.000	0.000	0.000	0.149	0.049	0.000	0.000	0.000	0.000	0.198
WNW	0.001	0.000	0.050	0.149	0.094	0.000	0.000	0.000	0.000	0.293
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.001	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.051
SUBTOTAL	0.050	0.248	1.485	3.020	2.204	4.309	0.163	0.000	0.000	11.479

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF ELEVATED RELEASES 1825.270
TOTAL HOURS OF STABILITY CLASS F 262.120
TOTAL HOURS OF ELEVATED STABILITY CLASS F 231.880

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.004	0.050	0.050	0.000	0.000	0.043	0.000	0.000	0.000	0.146
NNE	0.000	0.000	0.000	0.000	0.000	0.168	0.122	0.000	0.000	0.290
NE	0.000	0.000	0.000	0.050	0.144	0.173	0.041	0.000	0.000	0.407
ENE	0.000	0.000	0.000	0.050	0.050	0.045	0.041	0.000	0.000	0.185
E	0.000	0.000	0.000	0.050	0.000	0.089	0.000	0.000	0.000	0.139
ESE	0.000	0.000	0.000	0.149	0.049	0.132	0.000	0.000	0.000	0.329
SE	0.028	0.000	0.693	0.693	0.339	0.092	0.000	0.000	0.000	1.845
SSE	0.006	0.050	0.099	0.495	0.046	0.000	0.000	0.000	0.000	0.696
S	0.008	0.099	0.099	0.099	0.046	0.000	0.000	0.000	0.000	0.351
SSW	0.002	0.000	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.101
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.002	0.000	0.050	0.050	0.000	0.000	0.000	0.000	0.000	0.101
W	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	0.099
WNW	0.000	0.000	0.000	0.149	0.000	0.000	0.000	0.000	0.000	0.149
NW	0.000	0.000	0.000	0.198	0.000	0.000	0.000	0.000	0.000	0.198
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.050	0.198	1.040	2.129	0.673	0.742	0.204	0.000	0.000	5.034

TOTAL HOURS OF VALID OBSERVATIONS 2020.000
TOTAL HOURS OF ELEVATED RELEASES 1825.270
TOTAL HOURS OF STABILITY CLASS G 116.540
TOTAL HOURS OF ELEVATED STABILITY CLASS G 101.690

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.67 METER LEVEL
WIND SPEED MEASURED AT 45.67 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 20000209

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 22

Joint Frequency Distribution in Percent
for Elevated Releases
First Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.048	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.048
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
SUBTOTAL	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048	0.000	0.095

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS A	2
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	2
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 14.15

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.048	0.048
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	0.048	0.095	0.000	0.000	0.000	0.000	0.143
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	0.048	0.000	0.000	0.048
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
SUBTOTAL	0.000	0.000	0.000	0.048	0.095	0.000	0.048	0.000	0.048	0.239

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS B	6
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	5
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 13.74

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.095	0.095
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	0.048	0.048	0.000	0.000	0.000	0.000	0.095
WSW	0.000	0.000	0.000	0.048	0.095	0.000	0.095	0.000	0.000	0.239
W	0.000	0.000	0.000	0.000	0.095	0.048	0.048	0.000	0.000	0.191
WNW	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.048	0.000	0.143
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.095
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.048
SUBTOTAL	0.000	0.000	0.000	0.095	0.239	0.095	0.191	0.143	0.143	0.906

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS C	19
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	19
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 15.11

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.191	0.382	1.765	2.672	0.811	0.000	5.821
NNE	0.000	0.000	0.095	0.334	0.429	2.242	1.670	0.525	0.000	5.296
NE	0.000	0.000	0.095	0.191	0.620	1.574	1.050	0.048	0.000	3.578
ENE	0.000	0.000	0.239	0.048	0.191	1.002	0.286	0.000	0.000	1.765
E	0.000	0.000	0.095	0.429	0.095	0.334	0.525	0.000	0.048	1.527
ESE	0.000	0.000	0.191	0.477	0.620	0.286	0.811	0.906	0.239	3.531
SE	0.000	0.000	0.000	0.382	0.429	0.286	0.239	0.286	2.242	3.865
SSE	0.000	0.000	0.286	0.239	0.095	0.668	0.763	0.286	0.143	2.481
S	0.000	0.000	0.286	0.095	0.286	1.240	2.004	1.670	0.429	6.011
SSW	0.000	0.048	0.143	0.286	0.334	0.620	1.336	1.240	0.239	4.246
SW	0.000	0.048	0.239	0.286	0.334	0.334	0.334	0.048	0.048	1.670
WSW	0.000	0.000	0.048	0.143	0.143	0.668	0.429	0.048	0.095	1.574
W	0.000	0.000	0.143	0.382	0.334	0.239	0.906	0.573	0.143	2.719
WNW	0.000	0.000	0.000	0.095	0.095	1.097	1.288	1.670	0.334	4.580
NW	0.000	0.000	0.048	0.191	0.143	0.859	1.718	1.527	0.286	4.771
NNW	0.000	0.000	0.000	0.191	0.143	1.336	1.956	0.954	0.143	4.723
SUBTOTAL	0.000	0.095	1.908	3.960	4.676	14.552	17.987	10.592	4.389	58.158

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS D	1235
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	1219
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 14.30

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.620	0.716	0.095	0.000	1.431
NNE	0.000	0.048	0.048	0.048	0.000	0.906	1.384	0.239	0.000	2.672
NE	0.000	0.000	0.048	0.048	0.095	0.811	1.097	0.143	0.000	2.242
ENE	0.000	0.000	0.000	0.095	0.382	0.668	0.573	0.191	0.000	1.908
E	0.000	0.000	0.000	0.000	0.143	0.477	0.239	0.048	0.048	0.954
ESE	0.000	0.000	0.000	0.286	0.095	0.382	0.429	0.191	0.000	1.384
SE	0.000	0.000	0.048	0.191	0.525	0.906	1.002	0.668	0.382	3.721
SSE	0.000	0.000	0.048	0.095	0.095	0.859	2.385	0.906	0.668	5.057
S	0.000	0.000	0.048	0.143	0.191	1.813	1.479	1.193	0.477	5.344
SSW	0.000	0.000	0.095	0.048	0.095	1.384	0.906	0.477	0.000	3.006
SW	0.000	0.000	0.048	0.191	0.334	0.906	0.429	0.239	0.000	2.147
WSW	0.000	0.000	0.000	0.048	0.143	0.334	0.239	0.095	0.000	0.859
W	0.000	0.000	0.000	0.143	0.191	0.334	0.095	0.000	0.000	0.763
WNW	0.000	0.000	0.048	0.095	0.334	0.477	0.429	0.095	0.000	1.479
NW	0.000	0.000	0.000	0.143	0.143	0.191	0.191	0.048	0.000	0.716
NNW	0.000	0.000	0.000	0.048	0.048	0.286	0.382	0.191	0.000	0.954
SUBTOTAL	0.000	0.048	0.429	1.622	2.815	11.355	11.975	4.819	1.574	34.637

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS E	729
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	726
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 13.57

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.048	0.095	0.000	0.000	0.143
NNE	0.000	0.000	0.000	0.000	0.000	0.143	0.095	0.000	0.000	0.239
NE	0.000	0.000	0.000	0.000	0.000	0.143	0.334	0.048	0.000	0.525
ENE	0.000	0.000	0.000	0.000	0.000	0.095	0.000	0.000	0.000	0.095
E	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.095
ESE	0.000	0.000	0.000	0.000	0.000	0.286	0.000	0.000	0.000	0.286
SE	0.000	0.000	0.048	0.000	0.000	0.429	0.095	0.000	0.000	0.573
SSE	0.000	0.000	0.048	0.000	0.000	0.143	0.429	0.239	0.000	0.859
S	0.000	0.000	0.000	0.000	0.048	0.286	0.477	0.000	0.000	0.811
SSW	0.000	0.000	0.000	0.095	0.048	0.095	0.668	0.000	0.000	0.906
SW	0.000	0.048	0.000	0.000	0.000	0.095	0.191	0.000	0.000	0.334
WSW	0.000	0.000	0.000	0.000	0.048	0.000	0.095	0.000	0.000	0.143
W	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.048
WNW	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048
NW	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048
NNW	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048
SUBTOTAL	0.000	0.048	0.095	0.095	0.191	1.956	2.529	0.286	0.000	5.200

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS F	109
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	109
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 12.61

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

JAN 1, 1999 - MAR 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.095	0.048	0.000	0.000	0.143
SE	0.000	0.000	0.000	0.000	0.048	0.286	0.048	0.000	0.000	0.382
SSE	0.000	0.000	0.000	0.000	0.000	0.143	0.048	0.000	0.000	0.191
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	0.048	0.000	0.000	0.000	0.048
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.048	0.573	0.143	0.000	0.000	0.763

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2116
TOTAL HOURS OF STABILITY CLASS G	16
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	16
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2096
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990525

MEAN WIND SPEED = 11.01

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 23

Joint Frequency Distribution in Percent
for Elevated Releases
Second Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS A	0
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	0
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 0.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.047	0.000	0.047
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.047

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS B	1
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	1
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 21.40

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.047	0.000	0.000	0.047
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	0.093	0.000	0.234	0.047	0.374
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.047	0.093	0.047	0.234	0.047	0.467

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS C	10
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	10
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 18.23

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.047	0.093	0.187	0.561	0.935	0.093	0.000	1.916
NNE	0.000	0.000	0.000	0.093	0.187	1.121	0.701	0.000	0.000	2.103
NE	0.000	0.000	0.047	0.280	0.280	0.748	0.888	0.000	0.000	2.243
ENE	0.000	0.000	0.000	0.047	0.093	0.140	0.000	0.000	0.000	0.280
E	0.000	0.000	0.000	0.093	0.047	0.093	0.093	0.000	0.000	0.327
ESE	0.000	0.000	0.187	0.327	0.421	0.841	1.028	0.280	0.000	3.084
SE	0.000	0.047	0.374	0.514	0.561	1.402	1.776	0.935	0.093	5.701
SSE	0.000	0.000	0.374	0.467	0.701	1.495	1.682	0.935	0.140	5.794
S	0.000	0.000	0.280	0.234	0.514	1.542	2.196	0.374	0.047	5.187
SSW	0.000	0.000	0.280	0.234	0.374	1.308	1.355	0.748	0.000	4.299
SW	0.000	0.000	0.421	0.374	0.280	1.168	1.402	0.280	0.374	4.299
WSW	0.000	0.000	0.187	0.607	0.467	0.841	0.794	0.140	0.607	3.645
W	0.000	0.000	0.234	0.467	0.514	1.215	1.075	0.701	0.280	4.486
WNW	0.000	0.000	0.047	0.234	0.607	1.776	1.075	0.701	0.140	4.579
NW	0.000	0.000	0.000	0.421	0.654	1.262	0.654	0.327	0.000	3.318
NNW	0.000	0.047	0.093	0.093	0.187	0.561	0.561	0.093	0.000	1.636
SUBTOTAL	0.000	0.093	2.570	4.579	6.075	16.075	16.215	5.607	1.682	52.897

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS D	1134
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	1132
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 12.02

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.001	0.000	0.047	0.093	0.327	0.467	0.748	0.000	0.000	1.683
NNE	0.003	0.000	0.187	0.093	0.047	0.701	1.075	0.187	0.000	2.292
NE	0.002	0.047	0.093	0.140	0.093	0.561	0.654	0.047	0.000	1.637
ENE	0.003	0.047	0.187	0.047	0.234	0.514	0.467	0.000	0.000	1.499
E	0.001	0.000	0.093	0.093	0.000	0.140	0.000	0.000	0.000	0.328
ESE	0.001	0.000	0.047	0.093	0.327	0.514	0.981	0.093	0.047	2.103
SE	0.002	0.000	0.140	0.374	0.748	2.430	1.495	0.234	0.140	5.563
SSE	0.006	0.047	0.421	0.093	0.654	1.869	1.028	0.421	0.187	4.726
S	0.003	0.047	0.187	0.280	0.187	1.355	1.215	0.935	0.047	4.256
SSW	0.004	0.000	0.280	0.140	0.374	0.607	0.514	0.140	0.047	2.107
SW	0.006	0.000	0.421	0.140	0.374	0.607	0.701	0.374	0.187	2.810
WSW	0.004	0.000	0.280	0.093	0.140	0.607	1.168	0.234	0.047	2.574
W	0.003	0.047	0.140	0.047	0.047	0.561	0.467	0.047	0.000	1.358
WNW	0.003	0.093	0.093	0.093	0.327	0.327	0.140	0.000	0.000	1.077
NW	0.005	0.000	0.327	0.047	0.234	0.187	0.467	0.000	0.000	1.266
NNW	0.001	0.000	0.093	0.093	0.047	0.234	0.421	0.047	0.000	0.936
SUBTOTAL	0.047	0.327	3.037	1.963	4.159	11.682	11.542	2.757	0.701	36.215

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS E	778
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	775
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 11.36

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.047	0.000	0.000	0.000	0.140	0.187	0.000	0.000	0.374
NNE	0.000	0.000	0.047	0.047	0.000	0.047	0.514	0.280	0.000	0.935
NE	0.000	0.047	0.047	0.000	0.000	0.000	0.374	0.467	0.047	0.981
ENE	0.000	0.000	0.047	0.047	0.000	0.047	0.327	0.047	0.000	0.514
E	0.000	0.000	0.000	0.047	0.187	0.093	0.093	0.000	0.000	0.421
ESE	0.000	0.000	0.000	0.000	0.280	0.280	0.514	0.000	0.000	1.075
SE	0.000	0.000	0.047	0.000	0.047	0.514	0.140	0.000	0.000	0.748
SSE	0.000	0.000	0.234	0.093	0.047	0.374	0.047	0.000	0.000	0.794
S	0.000	0.047	0.000	0.093	0.140	0.374	0.093	0.000	0.000	0.748
SSW	0.000	0.000	0.047	0.047	0.140	0.093	0.093	0.000	0.000	0.421
SW	0.000	0.000	0.000	0.093	0.047	0.140	0.234	0.047	0.000	0.561
WSW	0.000	0.000	0.047	0.047	0.047	0.187	0.140	0.000	0.000	0.467
W	0.000	0.000	0.047	0.047	0.047	0.047	0.000	0.000	0.000	0.187
WNW	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.093
NNW	0.000	0.000	0.000	0.093	0.000	0.047	0.000	0.000	0.000	0.140
SUBTOTAL	0.000	0.140	0.607	0.701	0.981	2.430	2.757	0.841	0.047	8.505

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS F	182
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	182
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 11.26

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

APR 1, 1999 - JUN 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.047
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.234	0.047	0.327
NE	0.000	0.000	0.000	0.047	0.000	0.000	0.047	0.187	0.000	0.280
ENE	0.000	0.000	0.000	0.000	0.047	0.047	0.234	0.234	0.000	0.561
E	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
SE	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.000	0.000	0.000	0.140	0.047	0.000	0.000	0.187
S	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.047
SSW	0.000	0.000	0.000	0.187	0.000	0.000	0.000	0.000	0.000	0.187
SW	0.000	0.000	0.047	0.000	0.047	0.000	0.000	0.000	0.000	0.093
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
SUBTOTAL	0.000	0.000	0.047	0.280	0.093	0.280	0.467	0.654	0.047	1.869

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2146
TOTAL HOURS OF STABILITY CLASS G	41
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	40
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2140
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19990809

MEAN WIND SPEED = 14.46

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 24

Joint Frequency Distribution in Percent
for Elevated Releases
Third Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS A	0
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	0
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 0.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.048	0.000	0.000	0.000	0.048
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS B	1
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	1
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 10.60

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.048	0.386	0.048	0.000	0.483
NNE	0.000	0.000	0.000	0.000	0.000	0.193	0.097	0.290	0.000	0.579
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	0.145	0.000	0.048	0.000	0.000	0.193
WSW	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048
W	0.000	0.000	0.000	0.000	0.048	0.241	0.000	0.000	0.000	0.290
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.193	0.531	0.531	0.338	0.000	1.593

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS C	33
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	33
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 13.65

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.097	0.145	0.097	0.435	1.835	1.835	0.579	0.097	5.118
NNE	0.000	0.000	0.000	0.145	0.579	1.593	1.014	0.290	0.048	3.670
NE	0.000	0.000	0.048	0.097	0.097	1.497	0.338	0.097	0.000	2.173
ENE	0.000	0.000	0.048	0.000	0.145	0.241	0.048	0.000	0.000	0.483
E	0.000	0.000	0.097	0.097	0.193	0.097	0.000	0.000	0.000	0.483
ESE	0.000	0.000	0.048	0.483	0.338	0.483	0.241	0.000	0.000	1.593
SE	0.000	0.000	0.386	2.028	1.400	1.642	1.014	0.193	0.048	6.712
SSE	0.000	0.048	0.483	0.531	0.773	1.207	0.483	0.000	0.000	3.525
S	0.000	0.000	0.869	0.724	0.338	0.821	0.435	0.000	0.000	3.187
SSW	0.000	0.000	0.579	0.676	0.531	1.014	1.062	0.048	0.000	3.911
SW	0.000	0.000	0.628	0.579	0.097	0.724	0.773	0.000	0.000	2.801
WSW	0.000	0.000	0.145	0.724	0.724	0.628	0.290	0.000	0.000	2.511
W	0.000	0.000	0.145	0.386	1.400	1.642	0.241	0.000	0.000	3.815
WNW	0.000	0.000	0.048	0.097	0.531	2.463	0.193	0.000	0.000	3.332
NW	0.000	0.000	0.048	0.048	0.531	1.014	0.145	0.048	0.048	1.883
NNW	0.000	0.000	0.097	0.241	0.145	0.724	0.435	0.097	0.000	1.738
SUBTOTAL	0.000	0.145	3.815	6.953	8.257	17.624	8.547	1.352	0.241	46.934

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS D	1001
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	972
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 9.12

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.003	0.048	0.097	0.048	0.338	0.676	1.545	0.579	0.000	3.335
NNE	0.000	0.000	0.000	0.193	0.290	0.724	1.449	0.917	0.048	3.621
NE	0.000	0.000	0.000	0.048	0.097	0.724	1.207	0.338	0.000	2.414
ENE	0.005	0.048	0.145	0.145	0.048	0.097	0.386	0.048	0.000	0.922
E	0.002	0.000	0.097	0.097	0.145	0.097	0.048	0.000	0.000	0.485
ESE	0.005	0.048	0.145	0.241	0.338	0.435	0.290	0.048	0.000	1.550
SE	0.007	0.048	0.241	0.724	0.773	1.787	1.255	0.097	0.000	4.932
SSE	0.010	0.000	0.435	0.483	0.869	1.738	0.483	0.000	0.000	4.018
S	0.009	0.048	0.338	0.821	0.338	0.579	0.435	0.097	0.000	2.665
SSW	0.014	0.000	0.579	0.290	0.676	0.579	0.241	0.000	0.048	2.428
SW	0.011	0.048	0.435	0.241	0.290	0.435	0.241	0.048	0.000	1.750
WSW	0.012	0.048	0.483	0.290	0.290	0.435	0.000	0.000	0.000	1.558
W	0.003	0.048	0.097	0.676	0.386	0.966	0.000	0.000	0.000	2.176
WNW	0.008	0.048	0.290	0.386	0.579	0.338	0.097	0.000	0.000	1.746
NW	0.006	0.097	0.145	0.386	0.531	0.531	0.048	0.000	0.000	1.744
NNW	0.001	0.000	0.048	0.193	0.145	0.338	0.241	0.000	0.000	0.967
SUBTOTAL	0.097	0.531	3.573	5.263	6.132	10.478	7.967	2.173	0.097	36.311

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS E	784
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	752
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	2

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 9.44

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.003	0.000	0.048	0.145	0.048	0.097	0.435	0.097	0.000	0.872
NNE	0.003	0.000	0.048	0.048	0.000	0.145	0.821	0.483	0.097	1.644
NE	0.000	0.000	0.000	0.048	0.097	0.435	0.676	0.193	0.000	1.449
ENE	0.000	0.000	0.000	0.048	0.145	0.193	0.435	0.193	0.000	1.014
E	0.008	0.000	0.145	0.048	0.193	0.386	0.145	0.000	0.000	0.925
ESE	0.003	0.048	0.000	0.193	0.193	0.435	0.145	0.000	0.000	1.017
SE	0.000	0.000	0.000	0.048	0.097	0.145	0.290	0.000	0.000	0.579
SSE	0.000	0.000	0.000	0.048	0.048	0.338	0.097	0.000	0.000	0.531
S	0.003	0.000	0.048	0.097	0.145	0.386	0.048	0.000	0.000	0.727
SSW	0.003	0.000	0.048	0.097	0.193	0.386	0.193	0.000	0.000	0.920
SW	0.005	0.000	0.097	0.097	0.097	0.145	0.097	0.000	0.000	0.536
WSW	0.003	0.000	0.048	0.048	0.048	0.048	0.000	0.000	0.000	0.196
W	0.008	0.000	0.145	0.193	0.193	0.386	0.000	0.000	0.000	0.925
WNW	0.008	0.000	0.145	0.193	0.097	0.097	0.000	0.000	0.000	0.539
NW	0.003	0.000	0.048	0.193	0.048	0.097	0.000	0.000	0.000	0.389
NNW	0.003	0.000	0.048	0.000	0.048	0.193	0.000	0.000	0.000	0.292
SUBTOTAL	0.048	0.048	0.869	1.545	1.690	3.911	3.380	0.966	0.097	12.554

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS F	264
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	260
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 10.59

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

JUL 1, 1999 - SEP 30, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.048	0.097	0.145	0.000	0.290
NE	0.000	0.000	0.000	0.000	0.000	0.241	0.290	0.290	0.000	0.821
ENE	0.000	0.000	0.048	0.048	0.048	0.097	0.193	0.097	0.000	0.531
E	0.000	0.000	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.097
ESE	0.000	0.000	0.048	0.000	0.048	0.048	0.000	0.000	0.000	0.145
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	0.097	0.000	0.000	0.000	0.097
S	0.000	0.000	0.000	0.000	0.048	0.097	0.000	0.000	0.000	0.145
SSW	0.000	0.000	0.000	0.000	0.000	0.145	0.048	0.000	0.000	0.193
SW	0.000	0.000	0.000	0.048	0.000	0.048	0.000	0.000	0.000	0.097
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	0.048	0.048	0.000	0.000	0.000	0.097
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	0.048	0.000	0.000	0.048
SUBTOTAL	0.000	0.000	0.097	0.097	0.193	0.917	0.724	0.531	0.000	2.559

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS G	53
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	53
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2071
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 19991110

MEAN WIND SPEED = 12.98

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Browns Ferry Nuclear Plant
January - December 1999

Table 25

Joint Frequency Distribution in Percent
for Elevated Releases
Fourth Quarter

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS A	0
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	0
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2020
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 0.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.000	0.000	0.050
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
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.000	0.000	0.050

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS B	1
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	1
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2020
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 13.40

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.149	0.149	0.000	0.000	0.297
NNE	0.000	0.000	0.000	0.000	0.000	0.099	0.198	0.000	0.000	0.297
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	0.050	0.000	0.050
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.000	0.000	0.050
W	0.000	0.000	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.050
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	0.099	0.000	0.000	0.099
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.297	0.495	0.050	0.000	0.842

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS C	17
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	17
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2020
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 13.36

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.198	0.099	0.149	1.733	2.277	0.396	0.000	4.851
NNE	0.000	0.000	0.099	0.050	0.297	2.723	1.634	0.297	0.000	5.099
NE	0.000	0.000	0.099	0.050	0.099	0.743	0.396	0.000	0.000	1.386
ENE	0.000	0.000	0.099	0.050	0.000	0.149	0.099	0.000	0.000	0.396
E	0.000	0.000	0.149	0.149	0.149	0.099	0.099	0.050	0.000	0.693
ESE	0.000	0.000	0.198	0.149	0.446	0.693	0.495	0.198	0.000	2.178
SE	0.000	0.000	0.446	0.446	0.297	1.337	1.733	0.941	0.594	5.792
SSE	0.000	0.000	0.248	0.198	0.149	0.842	1.337	0.446	0.149	3.366
S	0.000	0.000	0.297	0.149	0.050	0.693	1.089	0.149	0.000	2.426
SSW	0.000	0.000	0.347	0.099	0.050	0.446	0.495	0.297	0.000	1.733
SW	0.000	0.050	0.347	0.248	0.000	0.248	0.297	0.347	0.000	1.535
WSW	0.000	0.000	0.248	0.396	0.297	0.446	0.545	0.644	0.149	2.723
W	0.000	0.050	0.099	0.198	0.347	0.792	1.485	0.347	0.050	3.366
WNW	0.000	0.050	0.297	0.099	0.347	1.287	0.891	0.149	0.000	3.119
NW	0.000	0.000	0.099	0.347	0.149	0.941	0.347	0.248	0.495	2.624
NNW	0.000	0.050	0.149	0.297	0.198	0.792	1.188	0.644	0.198	3.515
SUBTOTAL	0.000	0.198	3.416	3.020	3.020	13.960	14.406	5.149	1.634	44.802

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS D	942
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	905
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2020
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 12.34

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.099	0.050	0.050	0.149	0.842	1.782	0.248	0.000	3.218
NNE	0.000	0.099	0.198	0.000	0.000	0.545	2.376	0.149	0.000	3.366
NE	0.000	0.050	0.099	0.099	0.099	0.446	0.941	0.099	0.000	1.832
ENE	0.000	0.000	0.149	0.000	0.149	0.446	0.347	0.099	0.050	1.238
E	0.000	0.000	0.149	0.149	0.099	0.297	0.050	0.000	0.000	0.743
ESE	0.000	0.000	0.149	0.149	0.297	0.446	0.792	0.347	0.000	2.178
SE	0.000	0.000	0.099	0.248	0.198	1.634	2.921	0.941	0.050	6.089
SSE	0.000	0.000	0.198	0.149	0.198	2.970	1.733	0.594	0.198	6.040
S	0.000	0.050	0.198	0.495	0.248	0.891	0.743	0.050	0.000	2.673
SSW	0.000	0.000	0.099	0.149	0.297	0.594	0.545	0.099	0.000	1.782
SW	0.000	0.000	0.050	0.297	0.050	0.594	0.545	0.000	0.050	1.584
WSW	0.000	0.050	0.050	0.149	0.099	1.040	0.149	0.000	0.000	1.535
W	0.000	0.000	0.099	0.099	0.347	0.644	0.198	0.000	0.000	1.386
WNW	0.000	0.000	0.050	0.099	0.149	0.396	0.297	0.000	0.000	0.990
NW	0.000	0.000	0.000	0.149	0.050	0.050	0.050	0.297	0.000	0.594
NNW	0.000	0.000	0.149	0.050	0.099	0.198	0.594	0.545	0.099	1.733
SUBTOTAL	0.000	0.347	1.782	2.327	2.525	12.030	14.059	3.465	0.446	36.980

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2059
TOTAL HOURS OF STABILITY CLASS E 749
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 747
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2020
TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 12.13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS F (1.5< DELTA T<= 4.0 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.050	0.099	0.000	0.000	0.149	0.198	0.000	0.495
NNE	0.000	0.000	0.000	0.000	0.000	0.050	0.347	0.000	0.000	0.396
NE	0.000	0.000	0.050	0.050	0.000	0.000	0.594	0.297	0.000	0.990
ENE	0.000	0.000	0.000	0.000	0.149	0.248	0.198	0.099	0.000	0.693
E	0.000	0.000	0.000	0.050	0.000	0.099	0.149	0.000	0.000	0.297
ESE	0.000	0.000	0.000	0.050	0.149	0.297	0.248	0.000	0.000	0.743
SE	0.000	0.000	0.050	0.050	0.050	0.396	0.644	0.050	0.000	1.238
SSE	0.000	0.000	0.050	0.050	0.050	0.594	0.297	0.000	0.000	1.040
S	0.000	0.000	0.099	0.099	0.000	0.495	0.198	0.000	0.000	0.891
SSW	0.000	0.000	0.000	0.198	0.099	0.495	0.644	0.000	0.000	1.436
SW	0.000	0.000	0.050	0.198	0.446	0.446	0.891	0.000	0.000	2.030
WSW	0.000	0.000	0.000	0.099	0.297	0.446	0.198	0.000	0.000	1.040
W	0.000	0.050	0.050	0.000	0.149	0.198	0.050	0.000	0.000	0.495
WNW	0.000	0.050	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.149
NW	0.000	0.000	0.000	0.000	0.000	0.050	0.000	0.000	0.000	0.050
NNW	0.000	0.000	0.000	0.050	0.000	0.099	0.000	0.000	0.000	0.149
SUBTOTAL	0.000	0.099	0.396	0.990	1.386	4.010	4.604	0.644	0.000	12.129

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS F	245
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	245
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2020
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 11.33

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/100 M)

Browns Ferry Nuclear Plant

OCT 1, 1999 - DEC 31, 1999

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.050	0.050	0.050	0.000	0.050	0.000	0.000	0.198
NNE	0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.149	0.000	0.198
NE	0.000	0.099	0.000	0.000	0.000	0.000	0.248	0.149	0.000	0.495
ENE	0.000	0.000	0.050	0.000	0.000	0.000	0.099	0.050	0.000	0.198
E	0.000	0.000	0.050	0.050	0.149	0.000	0.000	0.000	0.000	0.248
ESE	0.000	0.000	0.099	0.149	0.050	0.099	0.099	0.000	0.000	0.495
SE	0.000	0.000	0.000	0.000	0.099	0.000	0.149	0.000	0.000	0.248
SSE	0.000	0.000	0.050	0.050	0.099	0.248	0.099	0.000	0.000	0.545
S	0.000	0.000	0.050	0.149	0.149	0.396	0.000	0.000	0.000	0.743
SSW	0.000	0.000	0.000	0.050	0.099	0.099	0.050	0.000	0.000	0.297
SW	0.000	0.000	0.000	0.000	0.198	0.099	0.000	0.000	0.000	0.297
WSW	0.000	0.000	0.099	0.050	0.099	0.099	0.000	0.000	0.000	0.347
W	0.000	0.000	0.050	0.099	0.000	0.050	0.000	0.000	0.000	0.198
WNW	0.000	0.000	0.050	0.099	0.000	0.099	0.000	0.000	0.000	0.248
NW	0.000	0.000	0.000	0.050	0.000	0.198	0.000	0.000	0.000	0.248
NNW	0.000	0.050	0.050	0.000	0.050	0.050	0.000	0.000	0.000	0.198
SUBTOTAL	0.000	0.198	0.594	0.792	1.040	1.436	0.792	0.347	0.000	5.198

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2059
TOTAL HOURS OF STABILITY CLASS G	105
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	105
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2020
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: Browns Ferry Nuclear Plant
STABILITY BASED ON DELTA-T BETWEEN 45.30 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 92.63 METER LEVEL

DATE PRINTED: 20000209

MEAN WIND SPEED = 8.66

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

ENCLOSURE 3

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
1999

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999

I. Regulatory and BFN ODCM Limits

A. Fission and Activation Gases in Gaseous Effluent:

The release of fission and activation gases is regulated by the dose limits of 10 CFR 50, Appendix I and BFN Offsite Dose Calculation Manual (ODCM). 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 millirad (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. Iodines and Particulates with Half-Lives Greater than Eight Days in Gaseous Effluents:

The release of iodines and particulates in gaseous effluent is regulated by the dose limits of 10 CFR 50 Appendix I and the BFN ODCM. The dose to a member of the public from radioiodines, radioactive materials in particulate form, and radionuclides other than noble gases with half-lives greater than eight days in gaseous effluent released per unit to areas at and beyond the site boundary shall be limited to any organ during any calendar quarter to $\leq$ 7.5 millirem (mrem), and during any calendar year to $\leq$ 15 mrem.

C. Liquid Effluents

The release of radioactive liquid effluents is regulated by the dose limits of 10 CFR 50, Appendix I and the BFN ODCM. 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.

II. Limitation on Dose Rate

A. Fission and Activation Gases in Gaseous Effluent:

1. The instantaneous release rate of fission and activation gases is based on the dose rate limits of 10 CFR 20.1301 and the BFN ODCM. 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 $\leq$ 500 mrem per year to the total body and $\leq$ 3000 mrem per year to the skin.

2. The BFN ODCM Section 7.2 determines the maximum noble gas release rate.

II. Limitations on Dose Rate (Continued)

B. Iodines and Particulates with Half-Lives Greater than Eight Days in gaseous effluents:

1. The instantaneous release rate of particulates and iodines is regulated by the dose rate limits of the BFN ODCM. 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 $\leq$ 1500 mrem per year to any organ.

2. The BFN ODCM Section 7.3 determines the maximum particulate and iodine dose rates.

C. 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 10 CFR 20.1001 - 20.2402, Appendix B, Table 2, 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 μCi per milliliter (ml) total activity.

III. Measurements and Approximations of Total Radioactivity

A. Fission and Activation Gases:

1. Noble gases in the building vent and stack (elevated) gaseous effluents 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 vent flow is calculated for each release. Gas grab samples of input streams to the stack are taken and analyzed weekly. Gas grab samples of in-service vents are taken and analyzed monthly. The specific noble gas activity concentrations and total volume of the gases are used to calculate the total curies and noble gases released.

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

III. Measurements and Approximations of Total Radioactivity (continued)

B. 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.

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.

C. 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.

3. The Radioactive Gaseous and Liquid Waste Monitoring Sampling and Analysis Program is specified in ODCM Sections 1/2.2.1 and 1/2.2.2

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
SUPPLEMENTAL INFORMATION
1999

IV. Batch

A. Liquid

	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1. Number of batches released	Each	0	0	24	13
2. Total time for batches released	Minutes	0	0	6676	3554
3. Maximum time period for a batch release	Minutes	0	0	315	302
4. Average time period for a batch release	Minutes	0	0	278	273
5. Minimum time period for a batch release	Minutes	0	0	195	244
6. Average stream flow during period of release into a flowing stream	Cubic feet per second	0	0	34028	24329

B. Gaseous

None

C. Abnormal/Unplanned Releases*

Type	Number of Releases	Total Activity Releases (Curies)
Liquid	None	None
Gaseous	None	None

* An explanation of any liquid or gaseous abnormal/unexplained release shall be documented in the summary.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES
YEAR 1999

	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Error %
A. Fission and Activation Products (Does not include tritium, gases, Alpha)						
1. Total Release	Curies	NR*	NR	1.83E-02	6.57E-02	9
2. Average Diluted Concentration Released During Period	µCi/ml	NR	NR	6.27E-10	3.79E-09	
3. Percent of Applicable Limit	%	**	**	**	**	
B. Tritium						
1. Total Releases	Curies	NR	NR	7.28E+00	3.44E+00	6
2. Average Diluted Concentration Released During Period	µCi/ml	NR	NR	2.50E-07	1.99E-07	
3. Percent of Applicable Limit	%	**	**	**	**	
C. Dissolved and Entrained Noble Gases						
1. Total Releases	Curies	NR	NR	1.28E-03	2.10E-03	8
2. Average Diluted Concentration Released During Period	µCi/ml	NR	NR	4.38E-11	1.21E-10	
3. Percent of Applicable Limit	%	**	**	**	**	
D. Gross Alpha Radioactivity						
1. Total Releases	Curies	NR	NR	ND***	ND	48
2. Average Diluted Concentration Released During Period	µCi/ml	NR	NR	ND	ND	
E. Volume of Liquid Waste to Discharge Canal (Prior to dilution)	Liters	NR	NR	3.01E+06	1.77E+06	3
F. Volume of Dilution Water for Period	Liters	NR	NR	2.91E+10	1.73E+10	10
G. Total CCW	gigagallons	NR	NR	1.99E+02	1.99E+02	

*NR -- No liquid releases were made in the 1st and 2nd quarters.
**The applicable limit is expressed in terms of dose. See Enclosure 1, Tables 5 through 8.
***ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
LIQUID RELEASES FOR YEAR 1999 - BATCH MODE

CURIES Isotope		Quarter	Quarter	Quarter	Quarter
Req'd by Regulatory Guide 1.21)		1	2	3	4
1.	Ba-140	NR*	NR	ND**	ND
2.	Ce-141	NR	NR	ND	ND
3.	Co-58	NR	NR	ND	3.93E-05
4.	Co-60	NR	NR	2.88E-03	3.11E-03
5.	Cr-51	NR	NR	ND	ND
6.	Cs-134	NR	NR	3.56E-03	2.11E-02
7.	Cs-137	NR	NR	5.81E-03	3.29E-02
8.	Fe-59	NR	NR	ND	ND
9.	I-131	NR	NR	ND	ND
10.	La-140	NR	NR	ND	ND
11.	Mn-54	NR	NR	3.72E-04	5.03E-04
12.	Mo-99	NR	NR	ND	ND
13.	Nb-95	NR	NR	ND	ND
14.	Sr-89	NR	NR	ND	ND
15.	Sr-90	NR	NR	ND	ND
16.	Tc-99m	NR	NR	ND	ND
17.	Xe-133	NR	NR	1.00E-03	1.49E-03
18.	Xe-135	NR	NR	2.73E-04	6.12E-04
19.	Zn-65	NR	NR	2.13E-03	2.93E-03
20.	Zr-95	NR	NR	ND	ND

*NR -- No liquid releases were made during the 1st and 2nd quarters.
**ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
LIQUID RELEASES FOR YEAR 1999 - BATCH MODE

CURIES Isotope Others (Not Required by REG Guide 1.21)		Quarter 1	Quarter 2	Quarter 3	Quarter 4
1.	F-18	NR*	NR	1.56E-05	6.77E-05
2.	Na-24	NR	NR	ND**	2.08E-04
3.	Fe-55	NR	NR	ND	6.35E-05
4.	Sr-92	NR	NR	5.89E-04	3.35E-04
5.	Zr-97	NR	NR	2.00E-05	1.38E-05
6.	Nb-97	NR	NR	1.37E-03	1.25E-03
7.	Ag-110M	NR	NR	1.45E-03	1.00E-03
8.	Sb-122	NR	NR	7.26E-05	2.16E-03

*NR -- No liquid releases were made during the 1st and 2nd quarters.
**ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASE
YEAR 1999

	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Error %
A. Fission and Activation Gases						
1. Total Releases	Ci	6.21E+00	1.36E+01	3.70E+01	5.69E+01	45
2. Average Release Rate for Period	µCi/sec	7.99E-01	1.73E+00	4.65E+00	7.15E+00	
3. Percent of Applicable limit	%	*	*	*	*	
B. Iodines						
1. Total Iodine-131	Ci	1.15E-03	1.00E-03	1.02E-03	1.33E-03	36
2. Average Release Rate for Period	µCi/sec	1.48E-04	1.27E-04	1.28E-04	1.68E-04	
3. Percent of Applicable Limit	%	*	*	*	*	
C. Particulates						
1. Particulates with half-lives > eight days	Ci	9.75E-04	9.43E-04	5.90E-04	4.94E-04	35
2. Average release rate for period	µCi/sec	1.25E-04	1.20E-04	7.43E-05	6.22E-05	
3. Percent of Applicable limit	%	*	*	*	*	
4. Gross alpha radioactivity	Ci	ND**	ND	ND	ND	
D. Tritium						
1. Total release	Ci	2.52E+01	1.31E+01	1.09E+01	1.13E+01	21
2. Average release rate for period	µCi/sec	3.25E+00	1.67E+00	1.37E+00	1.42E+00	
3. Percent of Applicable Limit	%	*	*	*	*	

*Applicable Limits are expressed in terms of dose. See Enclosure 1, Tables 1 through 4.
**ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - ELEVATED RELEASE

	CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1.	**Fission Gases**				
	KR-85M	1.12E+00	1.80E+00	1.63E+00	6.99E+00
	KR-85	ND*	ND	ND	ND
	KR-87	1.07E-02	ND	3.51E-02	8.14E-02
	KR-88	6.32E-01	1.09E+00	6.50E-01	2.62E+00
	XE-133	3.00E+00	3.54E+00	3.00E+00	4.09E+01
	XE-135M	ND	ND	1.23E+00	ND
	XE-135	4.78E-01	4.39E-01	4.39E-01	1.43E+00
	XE-138	ND	ND	4.70E+00	ND
	Others (specify)				
	N-13	9.22E-01	3.23E+00	2.17E+01	1.70E+00
	Ar-41	4.77E-02	3.52E+00	3.57E+00	3.14E+00
	Total for Period	6.21E+00	1.36E+01	3.70E+01	5.69E+01
2.	**Iodines**				
	I-131	1.31E-04	1.61E-04	7.75E-05	1.81E-04
	I-132	ND	ND	ND	ND
	I-133	4.83E-04	6.01E-04	2.89E-04	4.24E-04
	I-134	ND	ND	ND	ND
	I-135	ND	ND	ND	ND
	Total for Period	6.14E-04	7.62E-04	3.67E-04	6.05E-04

*ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - ELEVATED RELEASE

	CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
3.	**Particulates***				
	Sr-89	2.47E-05	2.04E-05	1.27E-05	2.75E-05
	Sr-90	ND**	ND	ND	ND
	Cs-134	ND	ND	ND	ND
	Cs-137	ND	ND	ND	ND
	Ba-140	2.75E-05	8.20E-06	4.48E-06	ND
	La-140	1.86E-06	1.12E-06	ND	ND
	Others (specify)				
	Rb-89	ND	ND	ND	2.25E-02
	Sr-91	ND	ND	ND	3.53E-05
	Y-91M	2.60E-04	1.03E-04	5.42E-05	2.57E-04
	Cs-138	ND	ND	4.06E-04	2.95E-02
	Ba-139	2.04E-03	1.77E-02	8.10E-03	3.50E-02
	Total for Period*	2.35E-03	1.78E-02	8.58E-03	8.73E-02
4.	**Tritium**	4.07E-01	2.08E-01	7.71E-01	5.47E-01

*Includes all nuclides, even those with less than an eight day half-life.
**ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - GROUND RELEASE

CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Fission Gases				
Kr-85M	ND*	ND	ND	ND
Kr-85	ND	ND	ND	ND
Kr-87	ND	ND	ND	ND
Kr-88	ND	ND	ND	ND
Xe-133	ND	ND	ND	ND
Xe-135M	ND	ND	ND	ND
Xe-135	ND	ND	ND	ND
Xe-138	ND	ND	ND	ND
Total for Period	ND	ND	ND	ND
2. Iodines				
I-131	1.28E-04	1.88E-04	1.57E-04	3.65E-04
I-132	ND	ND	ND	ND
I-133	9.07E-04	7.48E-04	9.66E-04	1.31E-03
I-134	ND	ND	ND	ND
I-135	ND	ND	ND	ND
Total for Period	1.03E-03	9.36E-04	1.12E-03	1.67E-03

*ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - GROUND RELEASE

	CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
3.	**Particulates***				
	Sr-89	ND**	ND	ND	ND
	Sr-90	ND	ND	ND	ND
	Cs-134	ND	ND	ND	ND
	Cs-137	ND	ND	ND	ND
	Ba-140	ND	ND	ND	ND
	La-140	ND	ND	ND	ND
	Others (specify)				
	Mn-54	ND	5.19E-06	ND	ND
	Cr-51	ND	7.01E-06	ND	ND
	Co-60	ND	5.45E-06	ND	ND
	Ba-139	ND	ND	1.26E-03	2.51E-03
	Total for Period*	ND	1.76E-05	1.26E-03	2.51E-03
4.	**Tritium**	3.94E+00	2.44E+00	2.02E+00	2.63E+00

*Include all nuclides even those with less than an eight day half-life.
**ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - MIXED MODE RELEASE*

	CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1.	**Fission Gases**				
	Kr-85M	ND**	ND	ND	ND
	Kr-85	ND	ND	ND	ND
	Kr-87	ND	ND	ND	ND
	Kr-88	ND	ND	ND	ND
	Xe-133	ND	ND	ND	ND
	Xe-135M	ND	ND	ND	ND
	Xe-135	ND	ND	ND	ND
	Xe-138	ND	ND	ND	ND
	Others(specify)				
	NONE				
	Total for Period	ND	ND	ND	ND
2.	**Iodines**				
	I-131	8.89E-04	6.52E-04	7.85E-04	7.87E-04
	I-132	ND	ND	1.66E-03	ND
	I-133	7.76E-03	4.83E-03	6.41E-03	3.24E-03
	I-134	ND	ND	ND	ND
	I-135	ND	ND	ND	ND
	Total for Period	8.65E-03	5.48E-03	8.86E-03	4.03E-03

*The Reactor Building and Radwaste Building are treated as split-level releases.
**ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - MIXED MODE RELEASE*

CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
3. Particulates**				
Sr-89	ND***	ND	ND	2.66E-05
Sr-90	ND	ND	ND	ND
Cs-134	9.20E-05	9.42E-05	7.71E-05	1.93E-05
Cs-137	2.73E-04	1.54E-04	1.30E-04	5.14E-05
La-140	ND	ND	1.31E-05	ND
Ba-140	ND	3.55E-05	2.35E-05	ND
Others (specify)				
Na-24	ND	1.64E-04	3.72E-04	2.81E-04
Cr-51	4.55E-04	1.09E-04	9.11E-05	9.58E-05
Mn-54	ND	1.92E-04	1.10E-05	ND
Mn-56	ND	ND	3.94E-04	ND
Co-58	ND	1.93E-06	ND	3.02E-06
Fe-59	ND	3.08E-05	ND	ND
Co-60	2.23E-06	1.79E-04	4.69E-05	8.15E-06
Zn-65	3.87E-05	5.00E-05	6.17E-05	4.61E-06

*The Reactor Building and Radwaste Building are treated as split-level releases.
**Includes all nuclides, even those with less than an eight day half-life.
***ND – Not Detected.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
YEAR 1999
GASEOUS EFFLUENTS - MIXED MODE RELEASE*

CURIES	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Particulates (Continued)**				
Others (specify)				
Y-91m	1.01E-04	6.45E-04	9.37E-04	3.28E-04
Sr-91	ND***	3.94E-04	2.93E-04	ND
Sr-92	2.99E-03	ND	ND	1.58E-03
Mo-99	6.92E-05	2.97E-05	8.53E-05	4.84E-05
Tc-99m	6.92E-05	2.97E-05	8.53E-05	4.84E-05
Ag-110m	6.02E-05	5.02E-05	1.32E-04	2.58E-04
Sb-124	1.41E-06	ND	ND	ND
Ba-139	ND	ND	2.31E-02	8.99E-03
Total for Period**	4.15E-03	2.16E-03	2.59E-02	1.17E-02
4. Tritium	2.09E+01	1.05E+01	8.10E+00	8.16E+00

*The Reactor Building and Radwaste Building are treated as split-level releases.
**Includes all nuclides, even those with less than an eight day half-life.
***ND – Not Detected.

BROWNS FERRY NUCLEAR PLANT
ANNUAL EFFLUENT AND WASTE DISPOSAL REPORT
1999
SOLID WASTE AND IRRADIATED FUEL

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

1.	Type of Waste	Units	Amount	Error %
a.	Spent resins, filter sludge	m^3	6.21E+01	
	evaporator bottoms, etc.	Ci	6.60E+02	+/-25.0
b.	Dry compressible waste, contaminated	m^3	2.18E+01	
	equipment, etc.	Ci	1.57E+00	+/-25.0
c.	Irradiated components, control rod	m^3	7.20E-01	
	drives	Ci	6.54E+00	
d.	Cartridge filters	m^3	4.19E-01	
		Ci	6.92E+00	+/-25.0

2. Estimate of Major Nuclide Composition by Waste Type

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

	Nuclide		Percentage	Activity (Curies)
1.	$Cobalt^{60}$	(1)	2.71E+01	1.79E+02
2.	$Zinc^{65}$	(1)	2.50E+01	1.65E+02
3.	$Cesium^{137}$	(1)	1.41E+01	9.35E+01
4.	$Cesium^{134}$	(1)	1.21E+01	8.01E+01
5.	$Iron^{55}$	(2)	1.13E+01	7.47E+01
6.	$Manganese^{54}$	(1)	4.54E+00	3.00E+01
7.	$Silver^{110m}$	(1)	3.46E+00	2.29E+01
8.	$Chromium^{51}$	(1)	1.33E+00	8.77E+00
9.	$Nickel^{63}$	(2)	4.11E-01	2.71E+00
10.	$Cobalt^{58}$	(1)	2.90E-01	1.91E+00
11.	$Iron^{59}$	(2)	6.72E-02	4.44E-01
12.	$Technetium^{99}$	(2)	6.37E-02	4.21E-01
13.	$Iodine^{131}$	(1)	4.99E-02	3.30E-01
14.	$Cerium^{144}$	(2)	4.31E-02	2.85E-01
15.	$Carbon^{14}$	(2)	3.10E-02	2.05E-01
16.	$Barium^{140}$	(1)	6.52E-03	4.31E-02
17.	Other		<1.0E-01	<7.4E-02

(1) Measured (2) Calculated

BROWNS FERRY NUCLEAR PLANT
ANNUAL EFFLUENT AND WASTE DISPOSAL REPORT
1999
SOLID WASTE AND IRRADIATED FUEL

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

2. Estimate of Major Nuclide Composition by Waste Type (Continued)

b. Dry compressible waste, contaminated equipment, etc.

	Nuclide		Percentage	Activity (Curies)
1.	$Cobalt^{60}$	(2)	3.97E+01	6.23E-01
2.	$Iron^{55}$	(2)	3.21E+01	5.03E-01
3.	$Cesium^{137}$	(2)	8.11E+00	1.27E-01
4.	$Manganese^{54}$	(2)	4.57E+00	7.17E-02
5.	$Silver^{110m}$	(2)	4.38E+00	6.86E-02
6.	$Zinc^{65}$	(2)	3.88E+00	6.09E-02
7.	$Cesium^{134}$	(2)	3.39E+00	5.31E-02
8.	$Chromium^{51}$	(2)	2.32E+00	3.64E-02
9.	$Nickel^{63}$	(2)	7.80E-01	1.22E-02
10.	$Cobalt^{58}$	(2)	2.50E-01	4.00E-03
11.	$Iron^{59}$	(2)	2.20E-01	3.53E-03
12.	$Antimony^{125}$	(2)	1.00E-01	1.59E-03
13.	$Cerium^{144}$	(2)	4.00E-02	7.03E-04
14.	Other		<1.0E-01	<1.36E-03

c. Irradiated components (control rod drives)

1.	$Iron^{55}$	(2)	4.85E+01	3.17E+00
2.	$Cobalt^{60}$	(2)	3.46E+01	2.26E+00
3.	$Manganese^{54}$	(2)	4.98E+00	3.26E-01
4.	$Cobalt^{58}$	(2)	4.81E+00	3.15E-01
5.	$Cesium^{134}$	(2)	1.82E+00	1.19E-01
6.	$Cesium^{137}$	(2)	1.59E+00	1.04E-01
7.	$Nickel^{63}$	(2)	1.35E+00	8.85E-02
8.	$Silver^{110m}$	(2)	8.60E-01	5.60E-02
9.	$Iron^{59}$	(2)	7.10E-01	4.64E-02
10.	$Zinc^{65}$	(2)	6.90E-01	4.49E-02
11.	$Chromium^{51}$	(2)	1.30E-01	8.56E-03
12.	$Nickel^{59}$	(2)	1.00E-02	5.75E-04
13.	$Strontium^{89}$	(2)	1.00E-02	3.45E-04
14.	Other		<1.0E-01	7.04E-04

(2) Calculated

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

2. Estimate of Major Nuclide Composition by Waste Type (Continued)

d. Cartridge filters

	Nuclide		Percentage	Activity (Curies)
1.	$Zinc^{65}$	(2)	5.75E+01	3.98E+00
2.	$Cobalt^{60}$	(2)	2.30E+01	1.59E+00
3.	$Iodine^{131}$	(2)	4.51E+00	3.12E-01
4.	$Manganese^{54}$	(2)	4.21E+00	2.91E-01
5.	$Cesium^{137}$	(2)	3.54E+00	2.45E-01
6.	$Iron^{55}$	(2)	3.19E+00	2.21E-01
7.	$Silver^{110m}$	(2)	2.50E+00	1.73E-01
8.	$Nickel^{63}$	(2)	4.80E-01	3.30E-02
9.	$Cobalt^{58}$	(2)	4.10E-01	2.90E-02
10.	$Chromium^{51}$	(2)	2.30E-01	1.60E-02
11.	$Barium^{140}$	(2)	1.40E-01	1.00E-02
12.	$Strontium^{89}$	(2)	1.20E-01	9.00E-03
13.	$Iron^{59}$	(2)	5.00E-02	3.00E-03
14.	$Carbon^{14}$	(2)	4.00E-02	3.00E-03
15.	$Technetium^{99}$	(2)	2.00E-02	1.00E-03
16.	Other	(2)	<1.0E-01	<5.0E-03

(2) Calculated

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
1	Sole Use Truck	Tennessee Valley Authority Mixed Waste Storage Facility Muscle Shoals, AL
5	Sole Use Truck	GTS Duratec Oak Ridge, TN
16	Sole Use Truck	Chem Nuclear Systems, Inc., Processing Facility, Barnwell, SC

BROWNS FERRY NUCLEAR PLANT
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1999
SOLID WASTE AND IRRADIATED FUEL

B. Irradiated Fuel Disposition

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

C. Description of Shipments

Number of Shipments	Type Container	Type Quantity	Number of Containers	Container Volume	Waste Type
5	Strong Tight Container (STC)	A-LSA II	8	See Note	DAW
2	HIC/Cask	A-LSA II	2	5.83	Dewatered Resin
1	HIC/Cask	>A-LSA II	1	5.83	Dewatered Resin
1	Drums/Cask	A-LSA II	21	.21	Filters
5	HIC/Cask	A-LSA II	5	4.84	Dewatered Resin
6	HIC/Cask	>A-LSA II	6	3.41	Dewatered Resin
2	Type A Boxes	Type A	3	5.28	Control Rod Drives

Solidification Agents Used: None

Absorbents Used: None

NOTE: **The 5 shipments of waste packaged in strong tight containers consisted of the following:**

Type of STC	Number of Packages	Volume Each Package (m^3)
40' "Sealand"	2	72.5
20' "Sealand"	4	36.3
55 Gallon Drum	1	.21
5 Gallon Drum	1	.019

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
SUMMARY OF ABNORMAL/UNPLANNED RELEASES
1999

The release of radioactive material to the environment from Browns Ferry has been a small fraction of the
10 CFR 20 Appendix B and 10 CFR 50 Appendix I limits. There were no limits exceeded as specified in
10 CFR 20 Appendix B and 10 CFR 50 Appendix I.

No abnormal liquid release occurred in 1999.

During the reporting period, January 1 through December 31, 1999, there was no missed compensatory measures.

ENCLOSURE 4

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

INOPERABLE RADIOLOGICAL EFFLUENT INSTRUMENTATION REPORT
1999

INOPERABLE RADIOLOGICAL EFFLUENT INSTRUMENTATION REPORT

This report is to comply with Browns Ferry Nuclear Plant Offsite Dose Calculation Manual (Offsite Dose Calculation Manual (ODCM)), Sections 1/2.1.1 and 1/2.1.2. The ODCM requires the exertion of best efforts to return inoperable instruments to an operable status within 30 days. Failure to return the inoperable instruments to an operable status requires a description in the Annual Radioactive Effluent Release Report.

During the reporting period, January 1 through December 31, 1999, there were no airborne or liquid radiation monitors inoperable for periods greater than 30 days. However, the liquid radwaste effluent flow rate instrumentation [(77-60 loop) ODCM Table 1.1-1] was out of service from September 17, 1999, until October 26, 1999.

BFN's radwaste liquid release goal is zero release. Radwaste liquid is treated through a Thermex system and recycled to the condensate storage tanks. This recycling of radwaste liquid precludes the need to release any radwaste liquid to the environs. During the first two quarters, no radioactive liquid effluents were released. However, radwaste liquid effluents were released from September 17, 1999, to October 6, 1999 due to the cleanup of an EHC oil leak. These releases were performed in accordance with ODCM 1/2.1.1, Section 1.1.1, Action b. This action allows radioactive liquid effluents to be released without the flow rate instrument being calibrated provided the flow rate is estimated at least once every 4 hours during actual releases.

However, on October 26, 1999, a release was required as a result of extended maintenance on the Thermex system. Because it was a single tank release, this release was not sufficient to calibrate the flow rate instrumentation. Calibration of the radioactive liquid effluent flow rate instrumentation requires two tank releases. Again, the flow rate of this release was estimated once per 4 hours as required by the ODCM.

A PER was written and corrective actions were initiated. Procedures are being revised to allow this monitor to be calibrated off site. This will ensure that the monitor is calibrated and only a functional test will be required which can be performed during a single release.

Some effluent monitors and flow instrumentation were placed in "out-of-service" status because these monitors' effluent streams were isolated. Therefore, these monitors are not included in this report.