

TENNESSEE VALLEY AUTHORITY

RADIOLOGICAL IMPACT ASSESSMENT REPORT

SEQUOYAH NUCLEAR PLANT

JANUARY THROUGH DECEMBER 1993

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**Radiological Impact Assessment
Sequoyah Nuclear Plant
January - December 1993**

I. INTRODUCTION

Potential doses to maximum individuals and the population around Sequoyah are calculated for each quarter as required in Section 5.2 of the Offsite Dose Calculation Manual (ODCM). Measured plant releases for the reporting period are used to estimate these doses. Dispersion of radioactive effluents in the environment is estimated using meteorological data and riverflow data measured during the period. In this report, the doses resulting from releases are described and compared to limits established for Sequoyah.

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 NRC 10 CFR Part 20 limits which govern the concentrations of radioactivity and exposures permissible in unrestricted areas. This ensures that radioactive effluent releases are As Low As Reasonably Achievable.

The limits for doses in an unrestricted area from airborne noble gases releases are:

Less than or equal to 5 mrad per quarter and
10 mrad per year (per reactor unit) for gamma radiation,

- and -

Less than or equal to 10 mrad per quarter and
20 mrad per year (per reactor unit) for beta radiation.

The limit for the dose to a member of the general public at in an unrestricted area from iodines and particulates released in airborne effluents is:

Less than or equal to 7.5 mrem per quarter and
15 mrem per year (per reactor unit) to any organ.

The limit for doses to a member of the general public from radioactive material in liquid effluents released to unrestricted areas, is:

Less than or equal to 1.5 mrem per quarter and
3 mrem per year (per reactor unit) to the total body,

- and -

Less than or equal to 5 mrem per quarter and
10 mrem per year (per reactor unit) to any organ

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

Less than or equal to 25 mrem per year to the total body,

Less than or equal to 75 mrem per year to the thyroid,

- and -

Less than or equal to 25 mrem per year to any other organ.

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III. DOSE CALCULATIONS

Estimated doses to 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. Many of these factors are obtained from NUREG/CR-1004. The values chosen will tend to overestimate the dose to this "maximum" person. The expected dose to actual individuals is lower. The calculated doses are presented in Tables 1 through 9.

IV. DOSES FROM AIRBORNE EFFLUENTS

For airborne effluents, 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 which is then eaten by milk and beef animals.

Airborne Release Points

All releases from Sequoyah 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 46 meters, and is presented in Tables 10, 11, 12, and 13.

Meteorological Data

Meteorological variables at Sequoyah are measured continuously. Measurements collected include wind speed, wind direction, and temperature at heights of 10, 46 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 joint frequency distribution 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 0.7 m/s (1.5 mph). Stability classes are determined from the vertical temperature difference between two measurement levels.

External Exposure Dose

Dose estimates for maximum external air exposures (gamma-air and beta-air doses) are made for points at and beyond the unrestricted area boundary as described in the SQN ODCM.

Submersion Dose

External doses to the skin and total body, due to submersion in a cloud of noble gases, are estimated for the nearest residence in each sector.

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Organ Dose

Doses to organs due to releases of airborne effluents are estimated for the inhalation, ground contamination, and ingestion pathways. The ingestion pathway is further divided into four possible contributing pathways: ingestion of cow/goat milk, ingestion of beef, and ingestion of vegetables. Doses from applicable pathways are calculated for each real 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 is consumed without commercial preparation and vegetable ingestion is included only for those locations where a garden is identified. To conservatively account for beef ingestion, a beef ingestion dose equal to that for the highest site 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.

Doses 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 concentrations of radioactivity in the Tennessee River are estimated by a computer model which uses measured hydraulic data downstream of Sequoyah. 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 use factors determined by TVA. The models that are used to estimate doses, as well as the parameters input to the models, are described in detail in the Sequoyah Nuclear Plant ODCM.

Liquid Release Points and River Data

Radioactivity concentrations in the Tennessee River are calculated assuming that releases in liquid effluents are continuous. All routine liquid releases from Sequoyah, located at Tennessee River Mile 484, 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 six tenths 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, at Tennessee River Mile 471.0.

Doses are calculated for locations between the plant site and the mouth of the Tennessee River. The maximum potential recreation dose is calculated for a location immediately downstream from the plant outfall. The maximum 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 (Chickamauga Dam). The maximum individual dose from drinking water is assumed to be that calculated at the nearest downstream public water supply (E. I. DuPont). This could be interpreted as indicating that the maximum individual, as assumed for liquid releases from Sequoyah, is an individual who obtains all of his drinking water at E. I. DuPont, consumes fish caught from the Tennessee River between SQN and Chickamauga Dam, and spends 500 hours per year on the shoreline just below the outfall from Sequoyah. Dose

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estimates for the maximum 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 for highest exposed organ due to airborne effluents are calculated for an estimated 1,060,000 persons living within a 50-mile radius of the plant site. Ingestion population doses are calculated assuming that each individual consumes milk, vegetables, and meat produced with the sector annulus in which he/she resides. Doses from external pathways and inhalation are based on the 50-mile human population distribution.

Population doses for total body and the maximum exposed organ 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 actual recreational data on the number of shoreline visits at downstream locations.

Population dose estimates for airborne and liquid effluents are presented in Tables 1 through 8.

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VII. DIRECT RADIATION

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around SQN. The quarterly gamma radiation levels determined from these TLDs for the period of November 1992 to November 1993 showed that external gamma radiation levels averaged approximately 15.4 mR/quarter at onsite stations and approximately 13.8 mR/quarter at offsite stations, or approximately 1.6 mR/quarter higher onsite than at offsite stations. This is consistent with levels reported at TVA's non operating nuclear power plant construction sites where the average radiation levels onsite are generally 2-6 mR/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other undetermined influences. Fluctuations in natural background dose rates and in TLD readings tend to mask any small increments which may be due to plant operations. Thus, there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents.

VIII. DOSE TO MEMBERS OF THE PUBLIC INSIDE THE SITE BOUNDARY

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

IX. TOTAL DOSE

To determine compliance with 40 CFR 190, annual total dose contributions to the maximum individual from SQN 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 estimated 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 environmental monitoring program. 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 environmental monitoring program. This dose is compared to the 40 CFR 190 limit for thyroid dose to determine compliance.

Cumulative annual total doses are presented in Table 9.

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Table 1
 Doses from Airborne Effluents
 First Quarter

Individual Doses

Pathway	Dose (mrad)	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	5.44E-03	5 mrad	<1 %	SSW 1840 meters
Beta Air	1.06E-02	10 mrad	<1 %	SSW 1840 meters
Submersion				
Total Body	4.63E-03	10 mrad	<1 %	SSW 2591 meters
Skin	9.72E-03	10 mrad	<1 %	SSW 2591 meters
Organ Doses				
Child/Thyroid	2.57E-02	7.5 mrad	<1 %	SSW 2591 meters
Child/Thyroid	2.57E-02	7.5 mrad	<1 %	SSW 2591 meters
Child/Total Body	2.57E-02	7.5 mrad	<1 %	SSW 2591 meters

Population Doses

Total Body Dose 2.09E-01 man-rem

Maximum Organ Dose (organ) 2.09E-01 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 person-rem/year (based on 90 mrem/yr for natural background).

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Table 2
Doses from Airborne Effluents
Second Quarter

Individual Doses

Pathway	Dose (mrad)	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	6.52E-03	5 mrad	<1 %	N 950 meters
Beta Air	2.17E-03	10 mrad	<1 %	N 950 meters
Submersion				
Total Body	1.08E-03	10 mrad	<1 %	NNW 895 meters
Skin	2.59E-03	10 mrad	<1 %	NNW 895 meters
Organ Doses				
Child/Thyroid	1.26E-03	7.5 mrad	<1 %	SSW 2591 meters
Child/Thyroid	1.26E-03	7.5 mrad	<1 %	SSW 2591 meters
Child/Total Body	1.26E-03	7.5 mrad	<1 %	SSW 2591 meters

Population Doses

Total Body Dose 1.69E-02 man-rem

Maximum Organ Dose (organ) 1.69E-02 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 person-rem/year (based on 90 mrem/yr for natural background).

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Table 3
Doses from Airborne Effluents
Third Quarter

Individual Doses

Pathway	Dose (mrad)	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	0.0	5 mrad	0 %	N/A
Beta Air	0.0	10 mrad	0 %	N/A
Submersion				
Total Body	0.0	10 mrad	0 %	N/A
Skin	0.0	10 mrad	0 %	N/A
Organ Doses				
Child/GI Tract	5.53E-03	7.5 mrad	<1 %	NNW 991 meters
Child/Thyroid	5.50E-03	7.5 mrad	<1 %	NNW 991 meters
Child/Total Body	5.50E-03	7.5 mrad	<1 %	NNW 991 meters

Population Doses

Total Body Dose 4.17E-02 man-rem

Maximum Organ Dose (organ) 4.17E-02 man-rem (GI Tract)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 person-rem/year (based on 90 mrem/yr for natural background).

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Table 4
Doses from Airborne Effluents
Fourth Quarter

Individual Doses

Pathway	Dose (mrad)	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	1.46E-04	5 mrad	<1 %	N 950 meters
Beta Air	1.64E-04	10 mrad	<1 %	N 950 meters
Submersion				
Total Body	6.72E-05	10 mrad	<1 %	SSW 2591 meters
Skin	1.20E-04	10 mrad	<1 %	SSW 2591 meters
Organ Doses				
Child/Thyroid	1.76E-05	7.5 mrad	<1 %	SSW 2591 meters
Child/Thyroid	1.76E-05	7.5 mrad	<1 %	SSW 2591 meters
Child/Total Body	1.76E-05	7.5 mrad	<1 %	SSW 2591 meters

Population Doses

Total Body Dose 3.34E-04 man-rem

Maximum Organ Dose (organ) 3.34E-04 man-rem (thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 person-rem/year (based on 90 mrem/yr for natural background).

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Table 5
 Doses from Liquid Effluents
 First Quarter

Individual Doses (rem)

Age Group	Organ	Dose Pathway	Dose (mrem)	Quarterly Limit	Percent of Limit
Adult	Total Body	Water Ingestion	5.9E-04		
		Fish Ingestion	5.0E-03		
		Recreation	3.5E-04		
		Total	5.9E-03	1.5 mrem	<1%
Adult	Liver	Water Ingestion	6.1E-04		
		Fish Ingestion	6.9E-03		
		Recreation	3.5E-04		
		Total	7.9E-03	5 mrem	<1%
Child	Thyroid	Water Ingestion	7.7E-04		
		Fish Ingestion	5.6E-05		
		Recreation	3.5E-04		
		Total	1.2E-03	5 mrem	<1%

Average Riverflow past SQN (cubic feet per second): 52,933

Population Doses

Total Body Dose 8.4E-02 man-rem

Maximum Organ Dose (organ) 9.3E-02 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

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Table 6
 Doses from Liquid Effluents
 Second Quarter

Individual Doses (rem)

Age Group	Organ	Dose Pathway	Dose (mrem)	Quarterly Limit	Percent of Limit
Adult	Total Body	Water Ingestion	5.4E-04		
		Fish Ingestion	2.4E-02		
		Recreation	3.0E-03		
		Total	2.8E-02	1.5 mrem	1.9%
Teen	Liver	Water Ingestion	5.3E-04		
		Fish Ingestion	3.5E-02		
		Recreation	3.0E-03		
		Total	3.9E-02	5 mrem	<1%
Child	Thyroid	Water Ingestion	3.5E-04		
		Fish Ingestion	1.7E-05		
		Recreation	3.0E-03		
		Total	3.4E-03	5 mrem	<1%

Average Riverflow past SQN (cubic feet per second): 24,987

Population Doses

Total Body Dose 3.0E-01 man-rem

Maximum Organ Dose (organ) 3.4E-01 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

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Table 7
Doses from Liquid Effluents
Third Quarter

Individual Doses (rem)

Age Group	Organ	Dose Pathway	Dose (mrem)	Quarterly Limit	Percent of Limit
Adult	Total Body	Water Ingestion	5.1E-04		
		Fish Ingestion	2.5E-02		
		Recreation	3.6E-03		
		Total	2.9E-02	1.5 mrem	1.9%
Teen	Liver	Water Ingestion	5.2E-04		
		Fish Ingestion	3.6E-02		
		Recreation	3.6E-03		
		Total	4.0E-02	5 mrem	<1%
Child	Thyroid	Water Ingestion	2.8E-04		
		Fish Ingestion	5.9E-06		
		Recreation	3.6E-03		
		Total	3.9E-03	5 mrem	<1%

Average Riverflow past SQN (cubic feet per second): 25,441

Population Doses

Total Body Dose 4.3E-01 man-rem

Maximum Organ Dose (organ) 4.8E-01 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

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Table 8
 Doses from Liquid Effluents
 Fourth Quarter

Individual Doses (rem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	Water Ingestion	3.1E-04		
		Fish Ingestion	3.0E-03		
		Recreation	3.3E-03		
		Total	6.6E-03	1.5 mrem	<1%
Teen	Liver	Water Ingestion	2.4E-04		
		Fish Ingestion	4.3E-03		
		Recreation	3.3E-03		
		Total	7.8E-03	5 mrem	<1%
Child	Thyroid	Water Ingestion	3.6E-04		
		Fish Ingestion	1.5E-05		
		Recreation	3.3E-03		
		Total	3.7E-03	5 mrem	<1%

Average Riverflow past SQN (cubic feet per second): 27,468

Population Doses

Total Body Dose 1.9E-01 man-rem

Maximum Organ Dose (organ) 2.0E-01 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

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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	4.63E-03	1.08E-03	0.0	6.72E-05	
Critical organ dose (air)	2.57E-02	1.26E-03	5.53E-03	1.76E-05	
Total body dose (liquid)	5.9E-03	2.8E-02	2.9E-02	6.6E-03	
Maximum organ dose (liquid)	7.9E-03	3.9E-02	4.0E-02	7.8E-03	
Direct Radiation Dose	0.0	0.0	0.0	0.0	
Total	4.4E-02	6.9E-02	7.5E-02	1.4E-02	
Cumulative Total Dose (Total body or any other organ) mrem					2.0E-01
<i>Annual Dose Limit (mrem)</i>					2.50E+01
Percent of Limit					<1%
Thyroid Dose (mrem)					
Total body air submersion	4.63E-03	1.08E-03	0.0	6.72E-05	
Thyroid dose (airborne)	2.57E-02	1.26E-03	5.5E-03	1.76E-05	
Total body dose (liquid)	5.9E-03	2.8E-02	2.9E-02	6.6E-03	
Thyroid dose (liquid)	1.2E-03	3.4E-03	3.9E-03	3.7E-03	
Direct Radiation Dose	0.0	0.0	0.0	0.0	
Total	3.7E-02	3.4E-02	3.8E-02	1.0E-02	
Cumulative Total Dose (Thyroid) mrem					1.2E-01
<i>Annual Dose Limit (mrem)</i>					7.50E+01
Percent of Limit					<1%

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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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.058
SW	0.0	0.0	0.0	0.0	0.058	0.115	0.0	0.0	0.0	0.173
WSW	0.0	0.0	0.0	0.0	0.0	0.230	0.0	0.0	0.0	0.230
W	0.0	0.0	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.058
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.058	0.115	0.0	0.0	0.0	0.173
SUBTOTAL	0.0	0.0	0.0	0.0	0.173	0.460	0.058	0.0	0.0	0.690

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	1786
TOTAL HOURS OF STABILITY CLASS A	13
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	12
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	1738
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

LATE PRINTED: 04/29/93

MEAN WIND SPEED = 9.5 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE 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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.0	0.0	0.0	0.0	0.058	0.058	0.0	0.0	0.0	0.115
NNE	0.0	0.0	0.058	0.0	0.0	0.230	0.0	0.0	0.0	0.288
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.058
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.058
WSW	0.0	0.0	0.0	0.0	0.0	0.115	0.058	0.0	0.0	0.173
W	0.0	0.0	0.0	0.0	0.0	0.115	0.0	0.0	0.0	0.115
WNW	0.0	0.0	0.0	0.0	0.058	0.058	0.0	0.0	0.0	0.115
NW	0.0	0.0	0.0	0.0	0.058	0.058	0.0	0.0	0.0	0.115
NNW	0.0	0.0	0.0	0.0	0.058	0.173	0.0	0.0	0.0	0.230
SUBTOTAL	0.0	0.0	0.058	0.058	0.288	0.806	0.058	0.0	0.0	1.266

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	1786
TOTAL HOURS OF STABILITY CLASS B	24
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	22
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	1738
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

DATE PRINTED: 04/29/93

MEAN WIND SPEED = 8.3 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE 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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.115	0.058	0.173	0.0	0.0	0.0	0.345
NE	0.0	0.0	0.0	0.058	0.345	0.0	0.0	0.0	0.0	0.403
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.058
SSW	0.0	0.0	0.0	0.0	0.173	0.058	0.0	0.0	0.0	0.230
SW	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.058
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.058
WNW	0.0	0.0	0.0	0.0	0.058	0.058	0.0	0.0	0.0	0.115
NW	0.0	0.0	0.0	0.0	0.115	0.058	0.0	0.0	0.0	0.173
NNW	0.0	0.0	0.0	0.058	0.058	0.115	0.0	0.0	0.0	0.230
SUBTOTAL	0.0	0.0	0.0	0.288	0.863	0.518	0.0	0.0	0.0	1.669

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	1786
TOTAL HOURS OF STABILITY CLASS C	31
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	29
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	1738
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

DATE PRINTED: 04/29/93

MEAN WIND SPEED = 7.0 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE 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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.039	0.345	0.748	1.841	1.669	1.036	0.115	0.0	0.0	5.793
NNE	0.070	0.173	1.784	4.661	2.877	3.049	0.0	0.0	0.0	12.613
NE	0.039	0.230	0.863	0.921	0.403	0.345	0.0	0.0	0.0	2.801
ENE	0.023	0.173	0.460	0.115	0.0	0.0	0.0	0.0	0.0	0.771
E	0.012	0.115	0.230	0.058	0.0	0.0	0.0	0.0	0.0	0.415
ESE	0.002	0.058	0.0	0.115	0.0	0.0	0.0	0.0	0.0	0.175
SE	0.010	0.058	0.230	0.115	0.0	0.0	0.0	0.0	0.0	0.413
SSE	0.018	0.058	0.460	0.288	0.0	0.115	0.0	0.0	0.0	0.939
S	0.033	0.173	0.748	0.518	0.345	0.0	0.0	0.0	0.0	1.817
SSW	0.084	0.230	2.129	2.014	1.151	0.345	0.0	0.0	0.0	5.953
SW	0.037	0.173	0.863	1.266	0.518	0.173	0.0	0.0	0.0	3.029
WSW	0.006	0.0	0.173	0.460	0.288	0.345	0.0	0.0	0.0	1.272
W	0.004	0.058	0.058	0.345	0.748	0.633	0.0	0.0	0.0	1.845
WNW	0.0	0.0	0.0	0.403	0.633	0.058	0.0	0.0	0.0	1.093
NW	0.008	0.058	0.173	0.403	0.690	0.058	0.0	0.0	0.0	1.389
NNW	0.016	0.115	0.345	0.921	1.381	0.230	0.0	0.0	0.0	3.008
SUBTOTAL	0.403	2.014	9.264	14.442	10.702	6.387	0.115	0.0	0.0	43.326

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1786
 TOTAL HOURS OF STABILITY CLASS D 763
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 753
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1738
 TOTAL HOURS CALM 7

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

DATE PRINTED: 04/29/93

MEAN WIND SPEED = 5.0 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE 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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.413	0.690	3.280	1.554	0.806	0.115	0.115	0.0	0.0	6.973
NNE	0.389	0.978	2.762	2.877	0.921	0.460	0.0	0.0	0.0	8.387
NE	0.072	0.345	0.345	0.058	0.058	0.058	0.0	0.0	0.0	0.935
ENE	0.012	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.127
E	0.006	0.058	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.121
ESE	0.018	0.058	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.191
SE	0.012	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.127
SSE	0.042	0.288	0.115	0.058	0.0	0.0	0.0	0.0	0.0	0.502
S	0.084	0.288	0.518	0.460	0.345	0.115	0.0	0.0	0.0	1.810
SSW	0.222	0.173	1.956	1.784	0.978	0.230	0.058	0.0	0.0	5.400
SW	0.228	0.575	1.611	1.784	1.093	0.288	0.0	0.0	0.0	5.579
WSW	0.048	0.115	0.345	0.230	0.345	0.288	0.0	0.0	0.0	1.371
W	0.048	0.0	0.460	0.575	0.288	0.0	0.0	0.0	0.0	1.371
WNW	0.072	0.173	0.518	0.173	0.173	0.0	0.0	0.0	0.0	1.108
NW	0.090	0.230	0.633	0.460	0.173	0.115	0.0	0.0	0.0	1.701
NNW	0.144	0.460	0.921	0.978	0.288	0.115	0.0	0.0	0.0	2.906
SUBTOTAL	1.899	4.661	13.579	11.047	5.466	1.784	0.173	0.0	0.0	38.667

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	1786
TOTAL HOURS OF STABILITY CLASS E	685
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	671
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	1738
TOTAL HOURS CALM	33

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

DATE PRINTED: 04/29/93

MEAN WIND SPEED = 3.6 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE 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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.109	0.173	0.633	0.173	0.0	0.0	0.0	0.0	0.0	1.087
NNE	0.281	0.518	1.554	0.288	0.0	0.0	0.0	0.0	0.0	2.640
NE	0.062	0.173	0.288	0.0	0.0	0.0	0.0	0.0	0.0	0.523
ENE	0.016	0.058	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.131
E	0.008	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065
ESE	0.008	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065
SE	0.008	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065
SSE	0.008	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065
S	0.070	0.0	0.518	0.0	0.0	0.0	0.0	0.0	0.0	0.588
SSW	0.148	0.115	0.978	0.058	0.0	0.0	0.0	0.0	0.0	1.299
SW	0.101	0.230	0.518	0.173	0.115	0.058	0.0	0.0	0.0	1.195
WSW	0.008	0.058	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.123
W	0.023	0.058	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.196
WNW	0.023	0.058	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.196
NW	0.008	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.065
NNW	0.039	0.0	0.288	0.0	0.0	0.0	0.0	0.0	0.0	0.327
SUBTOTAL	0.921	1.669	5.121	0.690	0.173	0.058	0.0	0.0	0.0	8.631

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	1786
TOTAL HOURS OF STABILITY CLASS F	157
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	150
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	1738
TOTAL HOURS CALM	16

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

DATE PRINTED: 04/29/93

MEAN WIND SPEED = 2.1 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE 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)

SEQUOYAH NUCLEAR PLANT

JAN 1, 93 - MAR 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.034	0.0	0.173	0.0	0.0	0.0	0.0	0.0	0.0	0.206
NNE	0.438	0.345	1.899	0.058	0.0	0.0	0.0	0.0	0.0	2.739
NE	0.180	0.460	0.460	0.0	0.0	0.0	0.0	0.0	0.0	1.100
ENE	0.034	0.115	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.206
E	0.011	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.069
ESE	0.045	0.230	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.275
SE	0.011	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.069
SSE	0.011	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.069
S	0.056	0.230	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.344
SSW	0.079	0.173	0.230	0.058	0.0	0.0	0.0	0.0	0.0	0.539
SW	0.011	0.0	0.058	0.058	0.0	0.0	0.0	0.0	0.0	0.126
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.011	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.069
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBTOTAL	0.921	1.726	2.992	0.173	0.0	0.0	0.0	0.0	0.0	5.811

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1786
 TOTAL HOURS OF STABILITY CLASS G 113
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 101
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1738
 TOTAL HOURS CALM 16

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON LAPSE RATE MEASURED BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT THE 9.73 METER LEVEL

DATE PRINTED: 04/29/93

MEAN WIND SPEED = 1.6 MPH

NOTE: TOTALS AND SUBTOTALS ABOVE ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Sequoyah Nuclear Plant
January - December 1993

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.000	0.145	0.000	0.000	0.000	0.145
NNE	0.000	0.000	0.048	0.386	0.145	0.097	0.000	0.000	0.000	0.676
NE	0.000	0.000	0.048	0.242	0.000	0.000	0.000	0.000	0.000	0.290
ENE	0.000	0.000	0.097	0.048	0.000	0.000	0.000	0.000	0.000	0.145
E	0.000	0.000	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.097
ESE	0.000	0.000	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.097
SE	0.000	0.000	0.000	0.048	0.000	0.048	0.000	0.000	0.000	0.097
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	0.048	0.048	0.097	0.000	0.000	0.000	0.000	0.193
SSW	0.000	0.000	0.000	0.097	0.097	0.290	0.000	0.000	0.000	0.483
SW	0.000	0.000	0.000	0.338	0.338	0.000	0.000	0.000	0.000	0.676
WSW	0.000	0.000	0.000	0.000	0.048	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	0.000	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.097
NNW	0.000	0.000	0.000	0.000	0.000	0.145	0.000	0.000	0.000	0.145
SUBTOTAL	0.000	0.000	0.435	1.208	0.773	0.773	0.000	0.000	0.000	3.188

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2120
TOTAL HOURS OF STABILITY CLASS A	67
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	66
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2070
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2-AUG-93

MEAN WIND SPEED = 6.07

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.048	0.048	0.145	0.000	0.000	0.000	0.242
NNE	0.000	0.000	0.145	0.242	0.048	0.097	0.000	0.000	0.000	0.531
NE	0.000	0.000	0.193	0.000	0.048	0.000	0.000	0.000	0.000	0.242
ENE	0.000	0.000	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.097
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	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.048
SSE	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048
S	0.000	0.000	0.000	0.048	0.048	0.048	0.000	0.000	0.000	0.145
SSW	0.000	0.000	0.048	0.338	0.386	0.193	0.000	0.000	0.000	0.966
SW	0.000	0.000	0.048	0.483	0.145	0.097	0.000	0.000	0.000	0.773
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	0.048	0.000	0.000	0.000	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	0.048	0.000	0.000	0.000	0.048
NNW	0.000	0.000	0.000	0.000	0.048	0.097	0.000	0.000	0.000	0.145
SUBTOTAL	0.000	0.000	0.628	1.159	0.773	0.821	0.000	0.000	0.000	3.382

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2120
TOTAL HOURS OF STABILITY CLASS B	72
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	70
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2070
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2-AUG-93

MEAN WIND SPEED = 5.79

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	CALM	WIND SPEED(MPH)								TOTAL	
		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		
N	0.000	0.000	0.000	0.000	0.193	0.097	0.000	0.000	0.000	0.000	0.290
NNE	0.000	0.000	0.000	0.338	0.580	0.193	0.000	0.000	0.000	0.000	1.111
NE	0.000	0.000	0.097	0.145	0.145	0.145	0.000	0.000	0.000	0.000	0.531
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.145	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.193
SSE	0.000	0.000	0.048	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.145
S	0.000	0.000	0.097	0.097	0.000	0.145	0.000	0.000	0.000	0.000	0.338
SSW	0.000	0.000	0.097	0.628	0.676	0.193	0.000	0.000	0.000	0.000	1.594
SW	0.000	0.000	0.097	0.773	0.435	0.000	0.000	0.000	0.000	0.000	1.304
WSW	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.048	0.048	0.048	0.000	0.000	0.000	0.000	0.145
SUBTOTAL	0.000	0.000	0.028	2.174	2.174	0.821	0.000	0.000	0.000	0.000	5.797

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2120
TOTAL HOURS OF STABILITY CLASS C	123
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	120
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2070
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2-AUG-93

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.003	0.000	0.580	0.676	0.531	0.242	0.000	0.000	0.000	2.032
NNE	0.004	0.145	0.821	1.304	0.821	0.531	0.000	0.000	0.000	3.628
NE	0.007	0.097	1.498	1.014	0.048	0.000	0.000	0.000	0.000	2.664
ENE	0.004	0.145	0.628	0.193	0.000	0.000	0.000	0.000	0.000	0.970
E	0.002	0.048	0.290	0.097	0.000	0.000	0.000	0.000	0.000	0.436
ESE	0.002	0.048	0.386	0.145	0.000	0.097	0.000	0.000	0.000	0.678
SE	0.002	0.048	0.290	0.145	0.097	0.048	0.000	0.000	0.000	0.630
SSE	0.003	0.193	0.386	0.290	0.097	0.290	0.048	0.000	0.000	1.307
S	0.006	0.193	1.111	1.014	0.386	0.628	0.097	0.000	0.000	3.436
SSW	0.008	0.000	1.739	3.430	1.594	0.531	0.000	0.000	0.000	7.303
SW	0.005	0.145	0.918	2.415	1.063	0.628	0.000	0.000	0.000	5.174
WSW	0.001	0.048	0.242	0.193	0.290	0.193	0.000	0.000	0.000	0.968
W	0.000	0.048	0.048	0.097	0.145	0.048	0.000	0.000	0.000	0.387
WNW	0.001	0.000	0.145	0.242	0.290	0.048	0.000	0.000	0.000	0.725
NW	0.000	0.048	0.048	0.048	0.338	0.193	0.000	0.000	0.000	0.677
NNW	0.001	0.000	0.242	0.435	0.435	0.048	0.000	0.000	0.000	1.161
SUBTOTAL	0.048	1.208	9.372	11.739	6.135	3.527	0.145	0.000	0.000	32.174

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2120
TOTAL HOURS OF STABILITY CLASS D	684
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	666
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2070
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2-AUG-93

MEAN WIND SPEED = 4.64

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.379	0.821	2.415	0.918	0.242	0.000	0.000	0.000	0.000	4.775
NNE	0.384	1.014	2.271	0.821	0.097	0.000	0.000	0.000	0.000	4.587
NE	0.130	0.483	0.628	0.097	0.000	0.000	0.000	0.000	0.000	1.338
ENE	0.034	0.193	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.324
E	0.017	0.048	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.162
ESE	0.023	0.097	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.216
SE	0.051	0.290	0.145	0.145	0.048	0.048	0.000	0.000	0.000	0.727
SSE	0.062	0.290	0.242	0.435	0.338	0.676	0.097	0.000	0.000	2.139
S	0.283	0.483	1.932	0.725	0.483	0.870	0.000	0.000	0.000	4.775
SSW	0.367	0.290	2.850	1.159	0.676	0.193	0.000	0.000	0.000	5.536
SW	0.316	0.435	2.271	1.159	0.435	0.435	0.000	0.000	0.000	5.051
WSW	0.090	0.242	0.531	0.097	0.048	0.097	0.000	0.000	0.000	1.105
W	0.062	0.145	0.386	0.242	0.097	0.000	0.000	0.000	0.000	0.932
WNW	0.068	0.193	0.386	0.048	0.000	0.048	0.000	0.000	0.000	0.744
NW	0.079	0.145	0.531	0.048	0.048	0.145	0.000	0.000	0.000	0.997
NNW	0.119	0.483	0.531	0.435	0.242	0.048	0.000	0.000	0.000	1.858
SUBTOTAL	2.464	5.652	15.411	6.329	2.754	2.560	0.097	0.000	0.000	35.266

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2120
TOTAL HOURS OF STABILITY CLASS E	747
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	730
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2070
TOTAL HOURS CALM	51

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2-AUG-93

MEAN WIND SPEED = 3.25

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	CALM	WIND SPEED(MPH)								TOTAL
		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	
N	0.296	0.290	1.932	0.242	0.000	0.000	0.000	0.000	0.000	2.760
NNE	0.451	1.304	2.077	0.145	0.000	0.000	0.000	0.000	0.000	3.977
NE	0.129	0.676	0.290	0.000	0.000	0.000	0.000	0.000	0.000	1.095
ENE	0.032	0.242	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.274
E	0.013	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.110
ESE	0.045	0.290	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.323
SE	0.054	0.193	0.290	0.000	0.000	0.000	0.000	0.000	0.000	0.548
SSE	0.045	0.097	0.242	0.048	0.000	0.000	0.060	0.000	0.000	0.432
S	0.090	0.290	0.386	0.097	0.000	0.000	0.000	0.000	0.000	0.863
SSW	0.206	0.193	1.353	0.193	0.000	0.000	0.000	0.000	0.000	1.945
SW	0.142	0.145	0.918	0.097	0.000	0.000	0.000	0.000	0.000	1.301
WSW	0.019	0.000	0.145	0.048	0.000	0.000	0.000	0.000	0.000	0.213
W	0.026	0.048	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.219
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.026	0.048	0.145	0.097	0.000	0.000	0.000	0.000	0.000	0.316
NNW	0.058	0.145	0.290	0.145	0.000	0.000	0.000	0.000	0.000	0.638
SUBTOTAL	1.643	4.058	8.261	1.111	0.000	0.000	0.000	0.000	0.000	15.072

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2120
 TOTAL HOURS OF STABILITY CLASS F 317
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 312
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2070
 TOTAL HOURS CALM 34

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 1.76

DATE PRINTED: 2-AUG-93

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)

SEQUOYAH NUCLEAR PLANT

APR 1, 93 - JUN 30, 93

WIND DIRECTION	CALM	WIND SPEED(MPH)										TOTAL	
		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				
N	0.047	0.145	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.240
NNE	0.291	0.290	0.918	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.547
NE	0.058	0.193	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.300
ENE	0.035	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.180
E	0.035	0.097	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.180
ESE	0.023	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.120
SE	0.058	0.242	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.300
SSE	0.093	0.386	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.480
S	0.105	0.145	0.290	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.540
SSW	0.105	0.048	0.386	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.540
SW	0.081	0.145	0.193	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.516
WSW	0.000	0.000	0.000	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	0.000	0.000	0.000
WNW	0.023	0.000	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.120
NW	0.012	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.966	1.932	2.077	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.121

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2120
 TOTAL HOURS OF STABILITY CLASS G 110
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 106
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2070
 TOTAL HOURS CALM 20

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 1.40

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

DATE PRINTED: 2-AUG-93

**Radiological Impact Assessment
Sequoyah Nuclear Plant
January - December 1993**

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.552	0.552	0.138	0.000	0.000	0.000	1.243
NNE	0.000	0.000	0.322	1.427	0.690	0.092	0.000	0.000	0.000	2.531
NE	0.000	0.000	0.552	0.920	0.276	0.000	0.000	0.000	0.000	1.749
ENE	0.000	0.000	0.184	0.184	0.000	0.000	0.000	0.000	0.000	0.368
E	0.000	0.000	0.092	0.276	0.000	0.000	0.000	0.000	0.000	0.368
ESE	0.000	0.000	0.230	0.184	0.000	0.000	0.000	0.000	0.000	0.414
SE	0.000	0.000	0.046	0.368	0.046	0.000	0.000	0.000	0.000	0.460
SSE	0.000	0.000	0.138	0.322	0.046	0.046	0.000	0.000	0.000	0.552
S	0.000	0.000	0.230	0.552	0.322	0.184	0.000	0.000	0.000	1.289
SSW	0.000	0.000	0.092	1.703	1.611	0.046	0.000	0.000	0.000	3.451
SW	0.000	0.000	0.138	1.565	1.335	0.092	0.000	0.000	0.000	3.129
WSW	0.000	0.000	0.000	0.046	0.184	0.000	0.000	0.000	0.000	0.230
W	0.000	0.000	0.000	0.184	0.276	0.000	0.000	0.000	0.000	0.460
WNW	0.000	0.000	0.000	0.046	0.138	0.138	0.000	0.000	0.000	0.322
NW	0.000	0.000	0.046	0.184	0.046	0.230	0.000	0.000	0.000	0.506
NNW	0.000	0.000	0.000	0.138	0.276	0.138	0.000	0.000	0.000	0.552
SUBTOTAL	0.000	0.000	2.071	8.652	5.798	1.104	0.000	0.000	0.000	17.625

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2189
TOTAL HOURS OF STABILIT. CLASS A	384
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	383
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 21-OCT-93

MEAN WIND SPEED = 5.17

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		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	
N	0.000	0.046	0.230	0.092	0.000	0.000	0.000	0.000	0.000	0.368
NNE	0.000	0.046	0.644	0.000	0.000	0.000	0.000	0.000	0.000	0.690
NE	0.000	0.552	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.736
ENE	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.138
E	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.138
ESE	0.000	0.046	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.230
SE	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SSE	0.000	0.092	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.230
S	0.000	0.138	0.414	0.000	0.046	0.000	0.000	0.000	0.000	0.598
SSW	0.000	0.138	1.473	0.276	0.000	0.000	0.000	0.000	0.000	1.887
SW	0.000	0.092	0.276	0.046	0.000	0.000	0.000	0.000	0.000	0.414
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.046	0.046	0.138	0.092	0.000	0.000	0.000	0.000	0.322
NW	0.000	0.000	0.184	0.000	0.138	0.000	0.000	0.000	0.000	0.322
NNW	0.000	0.046	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	1.473	3.866	0.690	0.276	0.000	0.000	0.000	0.000	6.305

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2189
 TOTAL HOURS OF STABILITY CLASS B 137
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 137
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2173
 TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 4.44

DATE PRINTED: 21-OCT-93

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	WIND SPEED(MPH)										TOTAL
	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		
N	0.000	0.000	0.000	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.230
NNE	0.000	0.000	0.184	0.276	0.092	0.000	0.000	0.000	0.000	0.000	0.552
NE	0.000	0.046	0.414	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.690
ENE	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
E	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
ESE	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SE	0.000	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	0.184	0.046	0.046	0.046	0.000	0.000	0.000	0.000	0.276
S	0.000	0.000	0.184	0.230	0.046	0.046	0.000	0.000	0.000	0.000	0.322
SSW	0.000	0.000	0.184	0.690	0.138	0.092	0.000	0.000	0.000	0.000	0.552
SW	0.000	0.000	0.092	0.414	0.138	0.000	0.000	0.000	0.000	0.000	1.012
WSW	0.000	0.000	0.000	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.644
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
WNW	0.000	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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.046	0.092	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	0.046	1.887	2.117	0.690	0.184	0.000	0.000	0.000	0.000	4.924

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2189
 TOTAL HOURS OF STABILITY CLASS C 107
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 107
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2173
 0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 4.13

DATE PRINTED: 21-OCT-93

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		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	
N	0.027	0.092	0.782	0.552	0.046	0.046	0.000	0.000	0.000	1.546
NNE	0.042	0.138	1.197	0.690	0.000	0.000	0.000	0.000	0.000	2.066
NE	0.042	0.276	1.058	0.230	0.138	0.000	0.000	0.000	0.000	1.744
ENE	0.009	0.046	0.230	0.046	0.000	0.000	0.000	0.000	0.000	0.331
E	0.003	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.095
ESE	0.003	0.046	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.141
SE	0.009	0.046	0.230	0.046	0.000	0.000	0.000	0.000	0.000	0.377
SSE	0.019	0.184	0.414	0.184	0.092	0.000	0.000	0.000	0.000	0.985
S	0.060	0.092	1.841	1.289	0.414	0.230	0.000	0.000	0.000	3.926
SSW	0.064	0.184	1.887	2.117	0.414	0.092	0.000	0.000	0.000	4.758
SW	0.021	0.092	0.598	0.966	0.322	0.046	0.000	0.000	0.000	2.046
WSW	0.009	0.092	0.184	0.276	0.046	0.000	0.000	0.000	0.000	0.607
W	0.009	0.000	0.276	0.230	0.092	0.030	0.000	0.000	0.000	0.607
WNW	0.000	0.046	0.046	0.184	0.092	0.000	0.000	0.000	0.000	0.371
NW	0.001	0.000	0.046	0.138	0.276	0.046	0.000	0.000	0.000	0.508
NW	0.003	0.000	0.092	0.184	0.184	0.092	0.000	0.000	0.000	0.555
SUBTOTAL	0.322	1.335	9.020	7.179	2.163	0.644	0.000	0.000	0.000	20.663

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2189
 TOTAL HOURS OF STABILITY CLASS D 454
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 449
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2173
 TOTAL HOURS CALM 7

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 3.59

DATE PRINTED: 21-OCT-93

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.356	1.150	3.682	0.506	0.092	0.046	0.000	0.000	0.000	5.832
NNE	0.322	1.104	3.267	0.598	0.000	0.000	0.000	0.000	0.000	5.292
NE	0.075	0.552	0.460	0.000	0.000	0.000	0.000	0.000	0.000	1.087
ENE	0.030	0.230	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.491
E	0.017	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.247
ESE	0.027	0.184	0.134	0.000	0.046	0.000	0.000	0.000	0.000	0.441
SE	0.030	0.176	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.537
SSE	0.081	0.644	0.460	0.092	0.092	0.000	0.000	0.000	0.000	1.370
S	0.183	0.644	1.841	0.368	0.092	0.000	0.000	0.000	0.000	3.128
SSW	0.268	0.966	2.669	0.414	0.184	0.000	0.000	0.000	0.000	4.501
SW	0.169	0.414	1.887	0.874	0.046	0.046	0.000	0.000	0.000	3.437
WSW	0.098	0.230	1.104	0.138	0.000	0.000	0.000	0.000	0.000	1.571
W	0.061	0.368	0.460	0.184	0.092	0.046	0.000	0.000	0.000	1.211
WNW	0.058	0.230	0.552	0.184	0.000	0.000	0.000	0.000	0.000	1.024
NW	0.061	0.414	0.414	0.230	0.000	0.000	0.000	0.000	0.000	1.119
NNW	0.142	0.644	1.289	0.506	0.046	0.000	0.000	0.000	0.000	2.627
SUBTOTAL	1.979	8.191	18.684	4.234	0.690	0.138	0.000	0.000	0.000	33.916

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2189
TOTAL HOURS OF STABILITY CLASS E	745
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	737
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
TOTAL HOURS CALM	43

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 21-OCT-93

MEAN WIND SPEED = 2.19

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	WIND SPEED(MPH)										TOTAL
	0.5-1.4	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			
N	0.176	2.899	0.230	0.046	0.000	0.000	0.000	0.000	0.000	0.000	3.766
NNE	0.230	3.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.556
NE	0.039	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.775
ENE	0.022	0.322	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.436
E	0.007	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.145
ESE	0.010	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.194
SE	0.017	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.339
'E	0.032	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.630
S	0.020	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.388
SSW	0.037	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.773
SW	0.029	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.582
WSW	0.012	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.242
W	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.436
WNW	0.017	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.385
NW	0.027	0.368	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.671
NNW	0.039	0.230	0.322	0.046	0.000	0.000	0.000	0.000	0.000	0.000	1.144
SUBTOTAL	0.736	10.078	0.736	0.138	0.000	0.000	0.000	0.000	0.000	0.000	15.462

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2189
 TOTAL HOURS OF STABILITY CLASS F 338
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 336
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2173
 TOTAL HOURS CALM 16

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 1.92

DATE PRINTED: 21-OCT-93

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)

SEQUOYAH NUCLEAR PLANT

JUL 1, 93 - SEP 30, 93

WIND DIRECTION	CALM	WIND SPEED(MPH)								TOTAL
		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	
N	0.000	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.138
NNE	0.000	0.046	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.184
NE	0.000	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.184
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
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	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SSW	0.000	0.046	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.046
SW	0.000	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.138
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.322	0.690	0.092	0.000	0.000	0.000	0.000	0.000	1.104

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2189
TOTAL HOURS OF STABILITY CLASS G	24
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	24
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 2.06

DATE PRINTED: 21-OCT-93

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Radiological Impact Assessment
Sequoyah Nuclear Plant
January - December 1993

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)

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.046	0.091	0.000	0.000	0.000	0.137
NNE	0.000	0.000	0.046	0.319	0.411	0.137	0.000	0.000	0.000	0.913
NE	0.000	0.000	0.091	0.411	0.000	0.000	0.000	0.000	0.000	0.502
ENE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
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	0.137	0.000	0.000	0.000	0.000	0.000	0.137
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	0.091	0.137	0.000	0.000	0.000	0.000	0.228
SSW	0.000	0.000	0.000	0.000	0.456	0.183	0.000	0.000	0.000	0.639
SW	0.000	0.000	0.046	0.183	0.183	0.091	0.000	0.000	0.000	0.502
WSW	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.091
W	0.000	0.000	0.000	0.000	0.046	0.000	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	0.046	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.046	0.000	0.091	0.000	0.000	0.000	0.137
SUBTOTAL	0.000	0.000	0.228	1.232	1.324	0.639	0.000	0.000	0.000	3.423

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS A	75
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	75
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2191
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 25-JAN-94

MEAN WIND SPEED = 5.87

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PER-CENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	CALM	WIND SPEED (MPH)										TOTAL
		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			
N	0.000	0.000	0.000	0.000	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.228
NNE	0.000	0.183	0.411	0.411	0.228	0.000	0.000	0.000	0.000	0.000	0.000	1.232
NE	0.000	0.046	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.274
ENE	0.000	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.137
E	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SE	0.000	0.000	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	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
S	0.000	0.046	0.091	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.228
SSW	0.000	0.000	0.183	0.137	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.365
SW	0.000	0.000	0.456	0.046	0.046	0.137	0.000	0.000	0.000	0.000	0.000	0.639
WSW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.046	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.137
SUBTOTAL	0.000	0.319	1.689	0.958	0.639	0.000	0.000	0.000	0.000	0.000	0.000	3.606

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2202
 TOTAL HOURS OF STABILITY CLASS B 79
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 79
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191
 TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 5.47

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

DATE PRINTED: 25-JAN-94

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	WIND SPEED (MPH)										TOTAL
	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			
N	0.000	0.046	0.046	0.228	0.046	0.000	0.000	0.000	0.000	0.365	
NNE	0.000	0.137	0.456	0.274	0.046	0.000	0.000	0.000	0.000	0.913	
NE	0.000	0.228	0.274	0.091	0.000	0.000	0.000	0.000	0.000	0.593	
ENE	0.000	0.137	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.228	
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
ESE	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.137	
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	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091	
S	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046	
SSW	0.000	0.000	0.091	0.091	0.046	0.000	0.000	0.000	0.000	0.228	
SW	0.000	0.183	0.137	0.046	0.228	0.000	0.000	0.000	0.000	0.593	
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	
W	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046	
WNW	0.000	0.046	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.137	
NW	0.000	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.091	
NNW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046	
SUBTOTAL	0.000	0.958	1.232	0.958	0.411	0.000	0.000	0.000	0.000	3.560	

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2202
 TOTAL HOURS OF STABILITY CLASS C 78
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 78
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191
 TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 4.97

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

DATE PRINTED: 25-JAN-94

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.005	0.137	1.187	1.871	1.643	0.730	0.000	0.000	0.000	5.573
NNE	0.005	0.000	1.278	1.506	1.278	0.730	0.000	0.000	0.000	4.797
NE	0.004	0.046	1.004	0.456	0.000	0.000	0.000	0.000	0.000	1.510
ENE	0.003	0.137	0.502	0.046	0.000	0.000	0.000	0.000	0.000	0.687
E	0.001	0.000	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.275
ESE	0.001	0.137	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.229
SE	0.000	0.000	0.046	0.091	0.000	0.000	0.000	0.000	0.000	0.137
SSE	0.002	0.091	0.411	0.091	0.046	0.000	0.000	0.000	0.000	0.641
S	0.005	0.091	1.187	1.232	0.776	0.091	0.000	0.000	0.000	3.383
SSW	0.007	0.137	1.506	3.423	1.095	0.411	0.000	0.000	0.000	6.579
SW	0.007	0.183	1.506	1.506	0.548	0.228	0.000	0.000	0.000	3.977
WSW	0.001	0.137	0.091	0.046	0.000	0.137	0.000	0.000	0.000	0.412
W	0.001	0.091	0.183	0.046	0.091	0.000	0.000	0.000	0.000	0.412
WNW	0.001	0.046	0.137	0.183	0.365	0.228	0.000	0.000	0.000	0.959
NW	0.001	0.091	0.228	0.730	0.411	0.274	0.000	0.000	0.000	1.736
NNW	0.002	0.046	0.548	1.141	1.597	0.822	0.046	0.000	0.000	4.201
SUBTOTAL	0.046	1.369	10.132	12.414	7.850	3.651	0.046	0.000	0.000	35.509

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS D	786
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	778
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2191
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 25-JAN-94

MEAN WIND SPEED = 4.60

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)

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	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	
N	0.059	0.685	2.967	1.050	0.685	0.000	0.000	0.000	0.000	5.445
NNE	0.064	0.822	3.149	0.685	0.183	0.000	0.000	0.000	0.000	4.902
NE	0.013	0.365	0.456	0.137	0.000	0.000	0.000	0.000	0.000	0.972
ENE	0.004	0.091	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.232
E	0.005	0.274	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.370
ESE	0.001	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.093
SE	0.004	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.278
SSE	0.010	0.365	0.228	0.137	0.000	0.046	0.000	0.000	0.000	0.785
S	0.032	0.502	1.461	1.461	0.365	0.091	0.000	0.000	0.000	3.911
SSW	0.061	0.502	3.286	2.282	0.502	0.137	0.000	0.000	0.000	6.770
SW	0.046	0.228	2.602	1.187	0.228	0.046	0.000	0.000	0.000	4.336
WSW	0.021	0.456	0.822	0.274	0.046	0.000	0.000	0.000	0.000	1.618
W	0.010	0.274	0.365	0.183	0.046	0.046	0.000	0.000	0.000	0.923
WNW	0.093	0.183	0.000	0.319	0.046	0.091	0.000	0.000	0.000	0.642
NW	0.012	0.137	0.593	0.548	0.228	0.137	0.000	0.000	0.000	1.655
NNW	0.020	0.183	1.050	0.776	0.411	0.091	0.000	0.000	0.000	2.530
SUBTOTAL	0.365	5.386	17.207	9.083	2.738	0.685	0.000	0.000	0.000	35.463

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS E	780
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	777
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2191
TOTAL HOURS CALM	8

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 25-JAN-94

MEAN WIND SPEED = 3.10

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)

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	CALM	WIND SPEED(MPH)										TOTAL
		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			
N	0.084	0.183	2.282	0.946	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.594
NNE	0.190	0.548	5.066	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.895
NE	0.046	0.593	0.776	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.461
ENE	0.009	0.228	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.283
E	0.006	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.189
ESE	0.003	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.094
SE	0.011	0.274	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.330
SSE	0.009	0.137	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.283
S	0.015	0.137	0.319	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.472
SSW	0.031	0.228	0.685	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.944
SW	0.017	0.137	0.365	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.519
WSW	0.003	0.000	0.091	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.140
W	0.005	0.000	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.187
WNW	0.003	0.000	0.091	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.140
NW	0.003	0.000	0.091	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.186
NNW	0.020	0.137	0.456	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.705
SUBTOTAL	0.456	2.875	10.589	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.423

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2202
 TOTAL HOURS OF STABILITY CLASS F 316
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 316
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191
 TOTAL HOURS CALM 10

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 1.96

DATE PRINTED: 25-JAN-94

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)

SEQUOYAH NUCLEAR PLANT

OCT 1, 93 - DEC 31, 93

WIND DIRECTION	WIND SPEED (MPH)										TOTAL
	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		
N	0.000	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.137
NNE	0.000	0.046	0.958	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.004
NE	0.000	0.046	0.456	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.502
ENE	0.000	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
E	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
ESE	0.000	0.137	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.228
SE	0.000	0.319	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.365
SSE	0.000	0.319	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.365
S	0.000	0.183	0.319	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.502
SSW	0.000	0.000	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.274
SW	0.000	0.000	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.228
WSW	0.000	0.046	0.000	0.000	0.000	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	1.461	2.556	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.016

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2202
 TOTAL HOURS OF STABILITY CLASS G 88
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 88
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191
 TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

MEAN WIND SPEED = 1.74

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROU ED NUMBERS

DATE PRINTED: 25-JAN-94