

TENNESSEE VALLEY AUTHORITY

RADIOLOGICAL HEALTH STAFF

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RADIOLOGICAL IMPACT ASSESSMENT

SEQUOYAH NUCLEAR PLANT

JANUARY - DECEMBER 1982

TVA/POWER/RHS

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Introduction

Potential doses to individuals and populations have been calculated for the time period January 1 through December 31, 1982 in compliance with the requirements of Radiological Effluent Technical Specification 6.9.1.9. Dose calculations are based on Regulatory Guides 1.109, 1.111, and 1.113 to determine compliance with the dose objectives contained in 10 CFR 50 Appendix I and 40 CFR 190. The dose calculations have been made using the measured releases listed in tables 1-2 as input in the Gaseous Effluent Licensing Code (for gaseous releases) and the Quarterly Water Assessment Code (for liquid releases). Dispersion of radioactive effluents in the environment has been calculated using meteorological data and river flow data measured during this period.

Meteorological Data

Meteorological data were measured, and average quarterly joint frequency distributions (JFDs) for ground-level releases were calculated. The ground-level JFD was derived from windspeeds and directions measured 10 meters above ground-level and from the vertical temperature gradient between 10 and 45 meters.

The windspeeds were divided into nine windspeed ranges. For calculational purposes, calms were distributed into the lowest windspeed range (0-0.5 mph) according to the directional probabilities in the 0.6-1.4 mph range. The quarterly JFDs are listed in tables 3 through 6 for ground-level releases.

Gaseous Effluents

Ground-level dispersion models were applied to all releases. Radionuclides in gaseous effluents were assumed to be released continuously. Dose estimates for external air exposures were made at the site boundary. External doses to the skin and total body were estimated for the nearest resident in each sector. Internal doses were estimated for real receptors due to the ingestion, inhalation, and external exposure pathways. The milk ingestion doses were calculated for farms where milk is consumed without commercial preparation. All receptor locations and points of interest are listed in table 2a. Doses are given in tables 7 through 10 for these individual exposure pathways at the maximum exposure locations.

Population doses were calculated for an estimated 1,057,010 persons living within a 50-mile radius of the plant site. Population doses were calculated assuming that each individual consumes vegetables and meat produced within the sector annulus in which he resides. Doses from milk ingestion were calculated from data on milk production within 50 miles of the plant site. Doses from external pathways, inhalation, and beef and vegetable ingestion are based on the 50-mile human population distribution. Population dose estimates for the gaseous effluents are presented in table 11.

Liquid Effluents

Doses from liquid effluents were calculated using measured hydraulic data. The average river flows at the plant site were 61,480 cubic feet per second (cfs) for the first quarter, 15,550 cfs for the second quarter, 30,280 cfs for the third quarter, and 43,340 cfs for the fourth quarter. Radioactivity concentrations in the Tennessee River were calculated assuming that releases in liquid effluents were continuous.

Doses were calculated for recreation, consumption of fish, and drinking water from public water supplies between the plant site and the mouth of the Tennessee River. The maximum individual dose from drinking water was assumed to be that calculated at the nearest downstream public water supply (C. F. Industries, Inc.). The maximum potential recreation dose was calculated for a location immediately downstream from the plant outfall. Dose estimates for the liquid effluents are presented in tables 12 through 15.

Direct Radiation

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around SQN. During the preoperational period from August 1975 to January 1980, these levels averaged approximately 23 mR/quarter at onsite stations and 19 mR/quarter offsite. These data reflect a difference of 2-5 mR/quarter (average approximately 4 mR/quarter) between onsite and offsite radiation levels. These higher values measured onsite may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plant, or other influences.

Analysis of environmental TLD data for the period of November 1981 to November 1982 showed that external gamma radiation levels averaged approximately 18.1 mR/quarter at onsite stations and 15.8 mR/quarter offsite. This indicates that there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents. Fluctuations in natural background dose rates and in TLD readings tend to mask any small increments which may be due to plant operations.

Dose Summary

Doses calculated for this year result from the low-level effluent releases of units 1 and 2. For gaseous effluents released in the first quarter, the maximum gamma and beta air doses were calculated to be 0.02 and 0.13 mrad, respectively. During the second quarter, the gamma and beta air doses were 0.16 and 0.71 mrad. For the third quarter, the gamma and beta air doses were 0.20 mrad and 1.10 mrad. During the fourth quarter the gamma and beta air doses were 0.04 mrad and 0.20 mrad.

These quarterly doses are well below the annual air dose guidelines (as specified in Appendix I to 10 CFR 50) of 20 and 40 mrad for gamma and beta radiation, respectively, for two reactor units. The maximum doses from air submersion to the skin and total body during the first quarter were calculated to be 0.03 and 0.02 mrem. During the second quarter, the skin and total body submersion doses were 0.25 and 0.13 mrem, respectively. For the third quarter these doses were 0.20 mrem and 0.10 mrem for the skin and total body. And for the fourth quarter these doses were 0.06 mrem and 0.03 mrem for the skin and total body. These compare with annual dose guidelines of 30 mrem to the skin and 10 mrem to the total body. Internal doses to the maximum exposed organ were estimated to be 0.01, 0.12, 0.003, and 0.008 mrem for the first, second, third, and fourth quarters, respectively. These compare with the annual dose guideline of 30 mrem to the maximum exposed organ. The maximum exposed individual was determined based on actual existing pathways. Therefore, these doses were calculated with consideration of ingestion of meat, milk, and vegetables, inhalation, and exposures to external sources of radiation.

For liquid effluents released in the first quarter, the maximum individual doses to the adult total body and the maximum exposed organ (child bone) were calculated to be 0.09 and 0.14 mrem, respectively. In the second quarter, the maximum doses to the total body and bone were calculated to be 0.14 and 0.68 mrem, respectively. In the third quarter, the maximum doses to the total body and bone were calculated to be 0.22 and 0.35 mrem, respectively. In the fourth quarter, the maximum doses to the total body and bone were calculated to be 1.5 and 1.8 mrem, respectively. Summing the maximum doses for the four quarters, total calculated doses of 2.0 mrem to the total body and 3.0 mrem to the bone were determined. These compare with annual dose guidelines as specified in Appendix I to 10 CFR 50 of 6 and 20 mrem to the total body and maximum exposed organ (bone), respectively, for two units.

Maximum organ doses to the population from gaseous effluents during the first quarter were estimated to be 0.10 man-rem to the bone and 0.099 man-rem to the liver. For the second quarter, population doses were 0.68 man-rem to the lung and 0.66 man-rem to the gastro-intestinal tract. For the third quarter, these doses were 0.48 and 0.49 man-rem for the total body and thyroid, respectively. For the fourth quarter, these doses were 0.12 man-rem for the total body and 0.15 man-rem for the thyroid.

From liquid releases during the first quarter, the total population along the Tennessee River was estimated to receive 0.43 man-rem to the total body and 2.8 to the maximum exposed organ (gastro-intestinal tract). For the second quarter, the Tennessee River population was estimated to receive 5.5 man-rem to the total body and 23 man-rem to the maximum organ (bone). For the third quarter, the total population along the Tennessee River was estimated to receive 4.1 man-rem to the total body and 8.7 man-rem to the maximum organ (bone). For the fourth quarter, the Tennessee River population was estimated to receive 3.2 man-rem to the total body and 8.8 man-rem to the maximum organ (gastro-intestinal tract).

Population doses can be compared to the natural background dose to the 1,057,010 persons living within 50 miles of the plant of about 159,500 man-rem/yr (based on an average individual background dose of about 150 mrem/yr).

To determine compliance with 40 CFR 190, the annual dose contributions to the maximum individual from SQN radioactive effluents and all other nearby uranium fuel-cycle sources have been considered. No nearby fuel-cycle facilities other than SQN have been identified which would significantly expose the maximum individual. The dose to the maximum individual has been conservatively estimated by: first, summing the total body air submersion dose, the critical organ dose from gaseous effluents, and the critical organ dose from liquid effluents (direct radiation, as reported above, is not identifiable over background levels) for each quarter; then, taking the sum for each quarter and summing over four quarters. Using this method the total dose to the maximum individual for the twelve consecutive months in 1982 has been calculated to be 3.4 mrem. This is below the limit of 40 CFR 190 (25 mrem/yr).

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

For the purposes of determining plant performance over its operational period a summary of the quarterly doses for the past three years is presented in table 16.

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

TABLE 1

SEQUOYAH NUCLEAR PLANT GASEOUS EFFLUENT RELEASES - 1982

| Nuclide | 1st Quarter (Ci) | 2nd Quarter (Ci) | 3rd Quarter (Ci) | 4th Quarter (Ci) |
|---------|-----------------------|---------------------|---------------------|---------------------|
| Xe-131m | 1.97(-1) ^a | 5.03(-1) | 5.32(-1) | 1.07(+1) |
| Xe-133 | 5.54(+2) | 1.75(+3) | 2.51(+3) | 4.74(+2) |
| Xe-133m | 1.08(+0) | 5.24(+1) | 4.46(+1) | 4.51(+0) |
| Xe-135 | 1.82(+1) | 1.45(+2) | 1.23(+2) | 1.00(+1) |
| Xe-135m | - | - | - | - |
| Xe-138 | - | - | - | - |
| I-131 | 7.22(-6) | 8.78(-6) | 2.32(-4) | 7.32(-4) |
| I-133 | - | 9.66(-7) | 1.11(-6) | 2.46(-4) |
| Ar-41 | 1.63(-1) | 1.18(+1) | 1.84(+0) | 9.91(-1) |
| Cr-51 | - | - | - | - |
| Mn-54 | - | 2.08(-3) | - | 1.31(-5) |
| Co-58 | - | 1.13(-1) | - | 6.54(-3) |
| Co-60 | - | - | - | 2.65(-5) |
| Sr-89 | 1.71(-6) | - | 2.49(-7) | 4.19(-8) |
| Sr-90 | 5.95(-6) | 9.98(-7) | - | - |
| Tc-99m | 3.54(-8) | - | - | 2.19(-6) |
| Nb-95 | - | - | - | - |
| Rb-88 | - | 5.70(-3) | - | - |
| Kr-85m | 8.34(-2) | 7.89(+0) | 8.80(+0) | 5.17(-3) |
| Kr-85 | 1.66(-1) | 5.12(-1) | 6.16(-2) | 5.70(-1) |
| Kr-87 | - | 8.28(-5) | 2.84(-3) | - |
| Kr-88 | - | 9.44(-4) | 8.32(-3) | - |
| Ce-144 | 2.79(-7) | - | - | - |

a. $1.97(-1) = 1.97 \times 10^{-1}$

TABLE 2

SEQUOYAH NUCLEAR PLANT LIQUID EFFLUENTS - 1982

| Nuclide | Activity(μ Ci/Quarter) | | | |
|---------|-----------------------------|--------|-------|--------|
| | First | Second | Third | Fourth |
| H-3 | 1.7E8 ^a | 3.2E8 | 3.4E8 | 9.3E7 |
| Na-24 | 3.7E5 | 5.3E4 | 2.0E3 | 9.9E0 |
| P-32 | 2.2E4 | 9.0E4 | 3.3E4 | 4.2E4 |
| Cr-51 | 4.3E5 | 9.1E3 | 4.9E3 | 2.4E5 |
| Mn-54 | 3.5E4 | 9.1E3 | 2.8E4 | 1.0E5 |
| Fe-55 | 3.2E4 | 0.0 | 5.1E4 | 1.5E6 |
| Fe-59 | 5.6E4 | 3.8E3 | 2.9E2 | 3.5E4 |
| Co-57 | 4.2E2 | 0.0 | 7.6E2 | 9.9E3 |
| Co-58 | 6.6E5 | 9.3E4 | 8.3E5 | 3.3E6 |
| Co-60 | 7.3E4 | 1.6E4 | 8.5E4 | 1.2E6 |
| Zn-65 | 2.6E3 | 0.0 | 0.0 | 8.6E3 |
| Kr-85 | 0.0 | 1.7E5 | 4.4E3 | 0.0 |
| Kr-85m | 0.0 | 2.5E2 | 4.5E2 | 0.0 |
| Sr-89 | 8.9E4 | 0.0 | 6.7E3 | 6.1E3 |
| Sr-90 | 0.0 | 3.0E3 | 0.0 | 0.0 |
| Sr-92 | 0.0 | 0.0 | 0.0 | 1.2E3 |
| Y-91m | 0.0 | 6.1E3 | 0.0 | 0.0 |
| Zr-95 | 2.8E4 | 3.3E2 | 2.2E2 | 3.7E4 |
| Nb-95 | 2.8E4 | 3.3E2 | 2.2E2 | 3.7E4 |
| Nb-97 | 0.0 | 0.0 | 0.0 | 9.0E2 |
| Nb-97m | 0.0 | 0.0 | 1.0E0 | 0.0 |
| Mo-99 | 0.0 | 0.0 | 9.7E2 | 0.0 |
| Tc-99m | 2.9E0 | 2.0E2 | 1.7E3 | 3.6E0 |
| Ru-103 | 0.0 | 0.0 | 0.0 | 3.1E2 |
| Ru-106 | 0.0 | 2.7E2 | 0.0 | 0.0 |
| Ag-110m | 0.0 | 0.0 | 0.0 | 9.9E3 |
| Sb-124 | 0.0 | 0.0 | 3.5E3 | 2.6E3 |
| I-131 | 1.7E3 | 2.7E4 | 6.4E4 | 9.0E3 |
| I-133 | 2.9E2 | 4.9E3 | 2.9E3 | 1.1E2 |
| I-135 | 0.0 | 0.0 | 2.6E2 | 0.0 |
| Te-132 | 0.0 | 9.3E0 | 0.0 | 0.0 |
| Xe-133 | 7.8E3 | 7.4E4 | 3.9E4 | 1.1E5 |

^a. 1.7E8 = 1.7×10^8

TABLE 2 (Contd.)

SEQUOYAH NUCLEAR PLANT LIQUID EFFLUENTS - 1982

| <u>Nuclide</u> | <u>Activity(μCi/Quarter)</u> | | | |
|----------------|---|---------------|--------------|---------------|
| | <u>First</u> | <u>Second</u> | <u>Third</u> | <u>Fourth</u> |
| Xe-133m | 0.0 | 0.0 | 1.9E2 | 0.0 |
| Xe-135 | 4.9E3 | 2.4E4 | 3.7E4 | 2.9E2 |
| Cs-134 | 1.3E3 | 1.2E3 | 1.6E4 | 1.7E3 |
| Cs-136 | 0.0 | 0.0 | 5.1E2 | 0.0 |
| Cs-137 | 4.4E3 | 5.0E4 | 3.5E4 | 5.0E3 |
| Ce-144 | 5.4E3 | 1.1E4 | 4.5E2 | 0.0 |
| W-187 | 1.4E3 | 9.1E3 | 2.2E2 | 0.0 |
| Total | 1.8E8 | 3.2E8 | 3.5E8 | 9.9E7 |

TABLE 2A

RECEPTOR LOCATIONS AND POINTS OF INTEREST

| POINT | SECTOR | DISTANCE (M) | ELEVATION (M) | CHI-OVER-Q (S/M+33) | O-OVER-Q (I/M+2) |
|---------------------------|--------|-----------------|------------------|------------------------|---------------------|
| 1 LAND SITE BOUNDARY | N | 950. | -6. | 4.05E-06 | 1.09E-08 |
| 2 LAND SITE BOUNDARY | NNE | 2260. | -6. | 1.78E-06 | 4.33E-09 |
| 3 LAND SITE BOUNDARY | NE | 1910. | -6. | 2.05E-06 | 5.73E-09 |
| 4 LAND SITE BOUNDARY | ENE | 1680. | -6. | 6.70E-07 | 1.28E-09 |
| 5 LAND SITE BOUNDARY | E | 1570. | -6. | 5.62E-07 | 1.19E-09 |
| 6 LAND SITE BOUNDARY | ESE | 1460. | -6. | 7.23E-07 | 1.10E-09 |
| 7 LAND SITE BOUNDARY | SE | 1460. | -6. | 6.22E-07 | 1.64E-09 |
| 8 LAND SITE BOUNDARY | SSE | 1550. | -6. | 1.53E-06 | 3.44E-09 |
| 9 LAND SITE BOUNDARY | S | 1570. | -6. | 3.98E-06 | 9.77E-09 |
| 10 LAND SITE BOUNDARY | SSW | 1840. | -6. | 5.14E-06 | 1.14E-08 |
| 11 LAND SITE BOUNDARY | SW | 2470. | -6. | 9.78E-07 | 1.59E-09 |
| 12 LAND SITE BOUNDARY | WSW | 910. | -6. | 1.40E-06 | 1.46E-09 |
| 13 LAND SITE BOUNDARY | W | 670. | -6. | 1.77E-06 | 1.46E-09 |
| 14 LAND SITE BOUNDARY | WNW | 660. | -6. | 1.54E-06 | 1.76E-09 |
| 15 LAND SITE BOUNDARY | NW | 660. | -6. | 2.82E-06 | 3.21E-09 |
| 16 LAND SITE BOUNDARY | NNW | 730. | -6. | 5.9E-06 | 1.65E-08 |
| 17 RESIDENT, GARDEN | N | 1344. | 0. | 2.39E-06 | 6.22E-09 |
| 18 RESIDENT, GARDEN | NNE | 2810. | 0. | 1.29E-06 | 2.99E-09 |
| 19 RESIDENT, GARDEN | NE | 3438. | 55. | 8.61E-07 | 2.10E-09 |
| 20 RESIDENT, GARDEN, BEEF | ENE | 2187. | 12. | 4.55E-07 | 8.24E-10 |
| 21 RESIDENT | E | 1812. | 0. | 4.53E-07 | 9.45E-10 |
| 22 RESIDENT | ESE | 1812. | 43. | 5.22E-07 | 7.96E-10 |
| 23 RESIDENT | SE | 1719. | 0. | 4.86E-07 | 1.26E-09 |
| 24 RESIDENT | SSE | 2250. | 24. | 8.91E-07 | 1.85E-09 |
| 25 RESIDENT, GARDEN | S | 2375. | 0. | 2.20E-06 | 4.39E-09 |
| 26 RESIDENT | SSW | 2250. | 0. | 3.87E-06 | 8.12E-09 |
| 27 RESIDENT | SW | 2969. | 0. | 7.53E-07 | 1.13E-09 |
| 28 RESIDENT | WSW | 1067. | 17. | 1.10E-06 | 1.12E-09 |
| 29 RESIDENT, GARDEN | W | 938. | 6. | 1.06E-06 | 8.42E-10 |
| 30 RESIDENT, GARDEN | WNW | 1812. | 12. | 3.51E-07 | 3.39E-10 |
| 31 RESIDENT, GARDEN | NW | 1148. | 12. | 1.14E-06 | 1.23E-09 |
| 32 RESIDENT | NNW | 781. | 0. | 5.30E-06 | 1.48E-08 |
| 33 GARDEN | E | 2656. | 12. | 2.57E-07 | 4.94E-10 |
| 34 GARDEN | ESE | 2031. | 37. | 4.42E-07 | 6.51E-10 |
| 35 GARDEN | SE | 2062. | 3. | 5.72E-07 | 9.27E-10 |
| 36 GARDEN, BEEF | SSE | 2344. | 30. | 8.39E-07 | 1.72E-09 |
| 37 GARDEN | SSW | 2750. | 0. | 2.90E-06 | 5.77E-09 |
| 38 GARDEN | SW | 3438. | 0. | 6.17E-07 | 9.78E-10 |
| 39 GARDEN | WSW | 1067. | 17. | 1.10E-06 | 1.12E-09 |
| 40 GARDEN | NNW | 1875. | 15. | 1.41E-06 | 3.54E-09 |
| 41 BEEF | NNE | 2600. | 2. | 1.45E-06 | 3.41E-09 |
| 42 BEEF | NE | 3438. | 0. | 8.61E-07 | 2.10E-09 |
| 43 BEEF | E | 2187. | 12. | 3.43E-07 | 6.87E-10 |
| 44 BEEF | ESE | 3125. | 55. | 2.34E-07 | 3.12E-10 |
| 45 BEEF | SE | 2656. | 85. | 2.55E-07 | 6.03E-10 |
| 46 BEEF | S | 6553. | 46. | 5.30E-07 | 7.44E-10 |
| 47 BEEF | W | 700. | 0. | 1.65E-06 | 1.36E-09 |
| 48 BEEF | WSW | 2062. | 12. | 4.16E-07 | 3.82E-10 |
| 49 BEEF | WNW | 700. | 0. | 1.41E-06 | 1.60E-09 |
| 50 BEEF | NW | 688. | 0. | 2.64E-06 | 3.00E-09 |
| 51 BEEF | NNW | 1524. | 2. | 1.92E-06 | 4.96E-09 |
| 52 MILK COW ADULT | N | 4219. | 0. | 4.42E-07 | 8.99E-10 |
| 53 MILK COW ADULT | NNE | 4531. | 6. | 6.48E-07 | 1.31E-09 |
| 54 MILK COW ADULT | NE | 5625. | 61. | 4.25E-07 | 8.83E-10 |
| 55 MILK COW ADULT | SSW | 3594. | 0. | 1.99E-06 | 3.64E-09 |
| 56 MILK COW ADULT | WNW | 1875. | 18. | 3.35E-07 | 3.20E-10 |
| 57 MILK COW ADULT | NW | 2031. | 6. | 5.12E-07 | 5.10E-10 |

TABLE 3

SEQUOYAH NUCLEAR PLANT METEOROLOGICAL DATA
GROUND-LEVEL JOINT
FREQUENCY DISTRIBUTION IN PERCENT
FIRST QUARTER 1982

STABILITY CLASS A

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.250 | 0.050 | 0.0 | 0.0 | 0.301 |
| NNE | 0.0 | 0.0 | 0.0 | 0.200 | 0.150 | 0.701 | 0.100 | 0.0 | 0.0 | 1.152 |
| NE | 0.0 | 0.0 | 0.100 | 0.150 | 0.401 | 0.301 | 0.0 | 0.0 | 0.0 | 0.952 |
| 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 | 0.050 | 0.0 | 0.050 | 0.100 | 0.0 | 0.0 | 0.200 |
| S | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.100 | 0.100 | 0.0 | 0.0 | 0.250 |
| SSW | 0.0 | 0.0 | 0.0 | 0.150 | 0.100 | 0.952 | 0.0 | 0.0 | 0.0 | 1.202 |
| SW | 0.0 | 0.0 | 0.050 | 0.0 | 0.100 | 0.401 | 0.100 | 0.0 | 0.0 | 0.651 |
| WSW | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.050 | 0.0 | 0.0 | 0.100 |
| W | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| WNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.250 | 0.0 | 0.0 | 0.0 | 0.301 |
| NNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.150 | 1.002 | 0.0 | 0.0 | 0.0 | 1.152 |
| TOTALS | 0.0 | 0.0 | 0.150 | 0.601 | 1.052 | 4.057 | 0.501 | 0.0 | 0.0 | 6.361 |

STABILITY CLASS B

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.150 |
| NNE | 0.0 | 0.0 | 0.050 | 0.0 | 0.301 | 0.150 | 0.050 | 0.0 | 0.0 | 0.551 |
| NE | 0.0 | 0.0 | 0.0 | 0.250 | 0.351 | 0.200 | 0.0 | 0.0 | 0.0 | 0.801 |
| ENE | 0.0 | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| E | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.050 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.200 |
| SSW | 0.0 | 0.0 | 0.0 | 0.100 | 0.301 | 0.351 | 0.050 | 0.0 | 0.0 | 0.801 |
| SW | 0.0 | 0.0 | 0.0 | 0.050 | 0.250 | 0.250 | 0.0 | 0.0 | 0.0 | 0.551 |
| WSW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.050 |
| W | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.050 |
| WNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.050 | 0.050 | 0.0 | 0.0 | 0.150 |
| TOTALS | 0.0 | 0.0 | 0.100 | 0.601 | 1.453 | 1.202 | 0.250 | 0.0 | 0.0 | 3.606 |

TABLE 3 (CONT'D)

STABILITY CLASS C

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.45 | 2.40 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.050 | 0.0 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.200 |
| NNE | 0.0 | 0.0 | 0.100 | 0.050 | 0.250 | 0.451 | 0.0 | 0.0 | 0.0 | 0.851 |
| NE | 0.0 | 0.0 | 0.200 | 0.391 | 0.501 | 0.050 | 0.0 | 0.0 | 0.0 | 1.052 |
| ENE | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SSE | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.100 |
| S | 0.0 | 0.0 | 0.050 | 0.0 | 0.050 | 0.150 | 0.0 | 0.0 | 0.0 | 0.250 |
| SSW | 0.0 | 0.0 | 0.050 | 0.050 | 0.301 | 0.301 | 0.0 | 0.0 | 0.0 | 0.753 |
| SW | 0.0 | 0.0 | 0.0 | 0.100 | 0.200 | 0.150 | 0.0 | 0.0 | 0.0 | 0.451 |
| WSW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.100 |
| W | 0.0 | 0.0 | 0.0 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.150 |
| WNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.0 | 0.050 | 0.050 | 0.150 | 0.0 | 0.0 | 0.0 | 0.250 |
| TOTALS | 0.0 | 0.0 | 0.551 | 0.701 | 1.553 | 1.553 | 0.050 | 0.0 | 0.0 | 4.404 |

STABILITY CLASS D

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|--------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.008 | 0.050 | 0.551 | 1.302 | 1.453 | 2.104 | 0.0 | 0.0 | 0.0 | 5.468 |
| NNE | 0.008 | 0.050 | 1.503 | 2.615 | 2.354 | 3.216 | 0.100 | 0.0 | 0.0 | 9.846 |
| NE | 0.055 | 0.351 | 1.252 | 0.651 | 0.250 | 0.100 | 0.0 | 0.0 | 0.0 | 2.660 |
| ENE | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| E | 0.016 | 0.100 | 0.200 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.317 |
| ESE | 0.0 | 0.0 | 0.150 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.150 |
| SE | 0.0 | 0.0 | 0.150 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.200 |
| SSE | 0.008 | 0.050 | 0.050 | 0.150 | 0.250 | 0.050 | 0.0 | 0.0 | 0.0 | 0.559 |
| S | 0.008 | 0.050 | 0.250 | 0.301 | 0.100 | 0.351 | 0.0 | 0.0 | 0.0 | 1.060 |
| SSW | 0.016 | 0.100 | 1.302 | 1.102 | 1.102 | 1.753 | 0.0 | 0.0 | 0.0 | 5.375 |
| SW | 0.016 | 0.100 | 0.751 | 1.102 | 1.102 | 0.902 | 0.200 | 0.0 | 0.0 | 4.173 |
| WSW | 0.016 | 0.100 | 0.150 | 0.250 | 0.050 | 0.250 | 0.150 | 0.0 | 0.0 | 0.968 |
| W | 0.0 | 0.0 | 0.0 | 0.100 | 0.0 | 0.150 | 0.050 | 0.0 | 0.0 | 0.301 |
| WNW | 0.0 | 0.0 | 0.0 | 0.250 | 0.351 | 0.250 | 0.0 | 0.0 | 0.0 | 0.851 |
| NW | 0.0 | 0.0 | 0.200 | 0.351 | 0.200 | 0.451 | 0.0 | 0.0 | 0.0 | 1.202 |
| NNW | 0.0 | 0.0 | 0.301 | 0.451 | 1.202 | 2.404 | 0.0 | 0.0 | 0.0 | 4.358 |
| TOTALS | 0.151 | 0.952 | 6.862 | 8.725 | 8.415 | 11.981 | 0.501 | 0.0 | 0.0 | 37.586 |

TABLE 3 (CONT'D)

STABILITY CLASS E

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.74 | 2.40 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.026 | 0.250 | 1.102 | 0.701 | 0.751 | 0.250 | 0.0 | 0.0 | 0.0 | 3.081 |
| NNE | 0.021 | 0.200 | 2.254 | 1.853 | 0.551 | 0.100 | 0.0 | 0.0 | 7.0 | 4.980 |
| NE | 0.005 | 0.050 | 0.501 | 0.551 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.107 |
| ENE | 0.005 | 0.050 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.205 |
| E | 0.005 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.055 |
| ESE | 0.005 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.055 |
| SE | 0.016 | 0.150 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.317 |
| SSE | 0.010 | 0.100 | 0.250 | 0.200 | 0.100 | 0.100 | 0.050 | 0.0 | 0.0 | 0.811 |
| S | 0.005 | 0.050 | 0.351 | 0.301 | 0.751 | 0.351 | 0.150 | 0.0 | 0.0 | 1.958 |
| SSW | 0.005 | 0.050 | 1.402 | 1.653 | 2.003 | 0.651 | 0.0 | 0.0 | 0.0 | 5.765 |
| SW | 0.005 | 0.050 | 1.102 | 2.765 | 2.254 | 1.002 | 0.0 | 0.0 | 0.0 | 7.174 |
| WSW | 0.005 | 0.050 | 0.301 | 0.301 | 0.100 | 0.250 | 0.100 | 0.0 | 0.0 | 1.107 |
| W | 0.005 | 0.050 | 0.401 | 0.250 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.806 |
| WNW | 0.005 | 0.050 | 0.100 | 0.351 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.606 |
| NW | 0.026 | 0.250 | 0.501 | 0.200 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 1.024 |
| NNW | 0.0 | 0.0 | 0.301 | 0.351 | 0.351 | 0.200 | 0.0 | 0.0 | 0.0 | 1.202 |
| TOTALS | 0.149 | 1.453 | 8.765 | 9.577 | 6.962 | 3.055 | 0.301 | 0.0 | 0.0 | 30.262 |

STABILITY CLASS F

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.74 | 2.40 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.351 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.401 |
| NNE | 0.017 | 0.200 | 1.302 | 0.551 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.071 |
| NE | 0.013 | 0.150 | 0.451 | 0.150 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.165 |
| ENE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| E | 0.009 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.109 |
| ESE | 0.009 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.109 |
| SE | 0.004 | 0.050 | 0.100 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.204 |
| SSE | 0.009 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.159 |
| S | 0.017 | 0.200 | 0.301 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.618 |
| SSW | 0.004 | 0.050 | 1.002 | 0.651 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 1.757 |
| SW | 0.004 | 0.050 | 1.152 | 2.254 | 0.301 | 0.0 | 0.0 | 0.0 | 0.0 | 3.761 |
| WSW | 0.004 | 0.050 | 0.150 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.305 |
| W | 0.004 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.104 |
| WNW | 0.004 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.054 |
| NW | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| NNW | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| TOTALS | 0.098 | 1.152 | 5.359 | 3.857 | 0.451 | 0.050 | 0.0 | 0.0 | 0.0 | 10.967 |

TABLE 3 (CONT'D)

| STABILITY CLASS G | | | | | | | | | | |
|---|------|-------|-------|-------|-------|------|------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.49 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.200 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.200 |
| NNE | 0.0 | 0.100 | 0.001 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.002 |
| NE | 0.0 | 0.100 | 0.601 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.701 |
| ENE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| E | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| ESE | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| SE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SSE | 0.0 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.150 |
| S | 0.0 | 0.0 | 0.301 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.301 |
| SSW | 0.0 | 0.150 | 0.001 | 0.791 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.653 |
| SW | 0.0 | 0.050 | 1.002 | 0.002 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 2.054 |
| WSW | 0.0 | 0.100 | 0.200 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.301 |
| W | 0.0 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| WNW | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NNW | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| TOTALS | 0.0 | 0.751 | 4.257 | 1.793 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 6.912 |

TABLE 4

SEQUOYAH NUCLEAR PLANT METEOROLOGICAL DATA
GROUND-LEVEL JOINT
FREQUENCY DISTRIBUTION IN PERCENT
SECOND QUARTER 1982

STABILITY CLASS A

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.49 | 2.80 | 4.45 | 6.91 | 9.50 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.251 | 0.201 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.603 |
| NNE | 0.0 | 0.0 | 0.251 | 1.225 | 1.175 | 0.613 | 0.0 | 0.0 | 0.0 | 3.264 |
| NE | 0.0 | 0.0 | 0.362 | 0.813 | 0.613 | 0.251 | 0.0 | 0.0 | 0.0 | 2.039 |
| ENE | 0.0 | 0.0 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| E | 0.0 | 0.0 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 |
| ESE | 0.0 | 0.0 | 0.0 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 |
| SE | 0.0 | 0.0 | 0.100 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.251 |
| SSE | 0.0 | 0.0 | 0.0 | 0.251 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.301 |
| S | 0.0 | 0.0 | 0.050 | 0.251 | 0.151 | 0.151 | 0.0 | 0.0 | 0.0 | 0.603 |
| SSW | 0.0 | 0.0 | 0.151 | 0.813 | 1.547 | 0.412 | 0.0 | 0.0 | 0.0 | 2.962 |
| SW | 0.0 | 0.0 | 0.0 | 0.362 | 0.713 | 0.201 | 0.0 | 0.0 | 0.0 | 1.275 |
| WSW | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 | 0.0 | 0.201 | 0.0 | 0.0 | 0.301 |
| W | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.201 |
| WNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.100 |
| NW | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.512 | 0.0 | 0.0 | 0.0 | 0.562 |
| NNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 | 0.100 | 0.0 | 0.0 | 0.0 | 0.201 |
| TOTALS | 0.0 | 0.0 | 1.265 | 4.514 | 4.542 | 2.440 | 0.251 | 0.0 | 0.0 | 13.064 |

STABILITY CLASS B

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|------|-------|-------|-------|-------|-------|-------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.49 | 2.80 | 4.45 | 6.91 | 9.50 | 13.00 | TOTALS |
| N | 0.002 | 0.0 | 0.050 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.201 |
| NNE | 0.002 | 0.0 | 0.050 | 0.251 | 0.251 | 0.201 | 0.0 | 0.0 | 0.0 | 0.755 |
| NE | 0.007 | 0.0 | 0.151 | 0.301 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.610 |
| ENE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| E | 0.007 | 0.0 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 |
| ESE | 0.0 | 0.0 | 0.0 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 |
| SE | 0.005 | 0.0 | 0.100 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.256 |
| SSE | 0.0 | 0.0 | 0.0 | 0.151 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.201 |
| S | 0.002 | 0.0 | 0.050 | 0.412 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.514 |
| SSW | 0.013 | 0.0 | 0.251 | 0.713 | 0.251 | 0.0 | 0.050 | 0.0 | 0.0 | 1.278 |
| SW | 0.003 | 0.0 | 0.050 | 0.713 | 0.301 | 0.0 | 0.0 | 0.050 | 0.0 | 1.168 |
| WSW | 0.003 | 0.0 | 0.050 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.154 |
| W | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.151 |
| WNW | 0.002 | 0.0 | 0.050 | 0.050 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.153 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.002 | 0.0 | 0.050 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.153 |
| TOTALS | 0.048 | 0.0 | 1.004 | 3.043 | 1.205 | 0.552 | 0.050 | 0.050 | 0.0 | 5.953 |

TABLE 4 (CONT'D)

| STABILITY CLASS C | | | | | | | | | | |
|---|-------|------|-------|-------|-------|-------|-------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.003 | 0.0 | 0.100 | 0.100 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.253 |
| NNE | 0.001 | 0.0 | 0.050 | 0.100 | 0.251 | 0.151 | 0.0 | 0.0 | 0.0 | 0.553 |
| NE | 0.011 | 0.0 | 0.412 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.523 |
| ENE | 0.001 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.101 |
| E | 0.001 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.101 |
| ESE | 0.004 | 0.0 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.155 |
| SE | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SSE | 0.004 | 0.0 | 0.151 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.305 |
| S | 0.001 | 0.0 | 0.050 | 0.301 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.352 |
| SSW | 0.007 | 0.0 | 0.201 | 0.402 | 0.100 | 0.100 | 0.0 | 0.0 | 0.0 | 0.871 |
| SW | 0.004 | 0.0 | 0.301 | 0.763 | 0.201 | 0.201 | 0.0 | 0.0 | 0.0 | 1.474 |
| WSW | 0.003 | 0.0 | 0.100 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.204 |
| W | 0.003 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.154 |
| WNW | 0.0 | 0.0 | 0.0 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.151 |
| NNW | 0.001 | 0.0 | 0.050 | 0.050 | 0.100 | 0.100 | 0.0 | 0.0 | 0.0 | 0.302 |
| TOTALS | 0.048 | 0.0 | 1.767 | 2.279 | 0.954 | 0.403 | 0.050 | 0.0 | 0.0 | 5.702 |

| STABILITY CLASS D | | | | | | | | | | |
|---|------|-------|-------|-------|-------|-------|-------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.050 | 0.713 | 0.412 | 0.251 | 0.251 | 0.0 | 0.0 | 0.0 | 1.677 |
| NNE | 0.0 | 0.050 | 0.763 | 1.024 | 1.175 | 1.024 | 0.0 | 0.0 | 0.0 | 4.037 |
| NE | 0.0 | 0.050 | 0.713 | 0.301 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.064 |
| ENE | 0.0 | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| E | 0.0 | 0.050 | 0.251 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.351 |
| ESE | 0.0 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| SE | 0.0 | 0.0 | 0.251 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.351 |
| SSE | 0.0 | 0.0 | 0.562 | 0.362 | 0.151 | 0.462 | 0.0 | 0.0 | 0.0 | 1.536 |
| S | 0.0 | 0.100 | 1.275 | 1.687 | 0.412 | 0.613 | 0.0 | 0.0 | 0.0 | 4.087 |
| SSW | 0.0 | 0.0 | 1.426 | 2.249 | 1.326 | 1.547 | 0.0 | 0.0 | 0.0 | 6.587 |
| SW | 0.0 | 0.050 | 1.074 | 1.426 | 0.914 | 0.151 | 0.050 | 0.0 | 0.0 | 3.665 |
| WSW | 0.0 | 0.0 | 0.663 | 0.462 | 0.151 | 0.050 | 0.050 | 0.0 | 0.0 | 1.376 |
| W | 0.0 | 0.050 | 0.251 | 0.050 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.502 |
| WNW | 0.0 | 0.050 | 0.151 | 0.201 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.452 |
| NW | 0.0 | 0.0 | 0.151 | 0.151 | 0.201 | 0.050 | 0.100 | 0.0 | 0.0 | 0.653 |
| NNW | 0.0 | 0.100 | 0.412 | 0.251 | 0.412 | 0.100 | 0.0 | 0.0 | 0.0 | 1.275 |
| TOTALS | 0.0 | 0.653 | 8.756 | 8.676 | 5.141 | 4.388 | 0.201 | 0.0 | 0.0 | 27.916 |

TABLE 4 (CONT'D)

STABILITY CLASS F

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|-------|--------|-------|-------|-------|-------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.80 | 2.40 | 4.45 | 6.91 | 9.50 | 12.00 | TOTALS |
| N | 0.003 | 0.100 | 1.637 | 1.888 | 0.412 | 0.100 | 0.0 | 0.0 | 0.0 | 4.140 |
| NNE | 0.021 | 0.663 | 2.791 | 7.613 | 0.962 | 0.100 | 0.0 | 0.0 | 0.0 | 4.560 |
| NE | 0.0 | 0.0 | 0.512 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.613 |
| ENE | 0.002 | 0.050 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.203 |
| E | 0.007 | 0.201 | 0.251 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.459 |
| ESE | 0.005 | 0.151 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.256 |
| SE | 0.005 | 0.151 | 0.412 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.567 |
| SSE | 0.010 | 0.301 | 0.251 | 0.050 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.763 |
| S | 0.004 | 0.251 | 1.376 | 0.412 | 0.201 | 0.100 | 0.100 | 0.0 | 0.0 | 2.440 |
| SSW | 0.007 | 0.201 | 2.039 | 0.413 | 0.713 | 0.251 | 0.050 | 0.0 | 0.0 | 4.074 |
| SW | 0.003 | 0.100 | 1.737 | 1.275 | 0.251 | 0.151 | 0.0 | 0.0 | 0.0 | 3.517 |
| WSW | 0.005 | 0.151 | 0.464 | 0.301 | 0.362 | 0.100 | 0.050 | 0.0 | 0.0 | 1.433 |
| W | 0.003 | 0.100 | 0.763 | 0.151 | 0.151 | 0.050 | 0.0 | 0.0 | 0.0 | 1.210 |
| WNW | 0.007 | 0.201 | 0.201 | 0.100 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.650 |
| NW | 0.004 | 0.251 | 0.362 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.771 |
| NNW | 0.002 | 0.050 | 0.713 | 0.663 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 1.470 |
| TOTALS | 0.036 | 2.422 | 14.064 | 5.517 | 2.751 | 1.004 | 0.211 | 0.0 | 0.0 | 27.561 |

STABILITY CLASS F

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|-------|--------|-------|------|------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.80 | 2.40 | 4.45 | 6.91 | 9.50 | 12.00 | TOTALS |
| N | 0.002 | 0.100 | 2.249 | 0.512 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.414 |
| NNE | 0.011 | 0.462 | 4.350 | 0.201 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.524 |
| NE | 0.004 | 0.151 | 0.464 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.119 |
| ENE | 0.001 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.051 |
| E | 0.006 | 0.251 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.257 |
| ESE | 0.003 | 0.151 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.204 |
| SE | 0.002 | 0.100 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.253 |
| SSE | 0.004 | 0.151 | 0.301 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.456 |
| S | 0.003 | 0.100 | 0.512 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.616 |
| SSW | 0.005 | 0.201 | 0.412 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.764 |
| SW | 0.0 | 0.0 | 0.774 | 0.201 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.175 |
| WSW | 0.002 | 0.100 | 0.301 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.504 |
| W | 0.002 | 0.100 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.203 |
| WNW | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.001 | 0.050 | 0.151 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.252 |
| NNW | 0.002 | 0.100 | 0.301 | 0.201 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.605 |
| TOTALS | 0.048 | 2.069 | 11.267 | 1.967 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.950 |

TABLE 4 (CONT'D)

| STABILITY CLASS G | | | | | | | | | | |
|---|-------|-------|-------|-------|------|------|------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.43 | 4.45 | 6.91 | 9.50 | 13.00 | TOTALS |
| N | 0.012 | 0.0 | 0.201 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.213 |
| NNE | 0.016 | 0.151 | 1.074 | 0.151 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.392 |
| NE | 0.011 | 0.201 | 0.813 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.025 |
| ENE | 0.007 | 0.151 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.209 |
| E | 0.015 | 0.100 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.165 |
| ESE | 0.015 | 0.201 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.316 |
| SE | 0.015 | 0.201 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.266 |
| SSE | 0.003 | 0.201 | 0.412 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.616 |
| S | 0.003 | 0.050 | 0.100 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.154 |
| SSW | 0.0 | 0.050 | 0.151 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.251 |
| SW | 0.0 | 0.0 | 0.251 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.301 |
| WSW | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTALS | 0.097 | 1.305 | 3.304 | 0.251 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.958 |

TABLE 5

SEQUOYAH NUCLEAR PLANT METEOROLOGICAL DATA
GROUND-LEVEL JOINT
FREQUENCY DISTRIBUTION IN PERCENT
THIRD QUARTER 1982

| STABILITY CLASS A | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.140 | 0.319 | 0.230 | 0.050 | 0.0 | 0.0 | 0.0 | 0.779 |
| NNE | 0.0 | 0.0 | 0.459 | 1.877 | 0.639 | 0.140 | 0.0 | 0.0 | 0.0 | 3.115 |
| NE | 0.0 | 0.0 | 0.599 | 0.549 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 1.198 |
| ENE | 0.0 | 0.0 | 0.319 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.459 |
| E | 0.0 | 0.0 | 0.409 | 0.140 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.599 |
| ESE | 0.0 | 0.0 | 0.090 | 0.090 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| SE | 0.0 | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| SSE | 0.0 | 0.0 | 0.050 | 0.409 | 0.549 | 0.0 | 0.0 | 0.0 | 0.0 | 1.009 |
| S | 0.0 | 0.0 | 0.0 | 0.639 | 0.549 | 0.050 | 0.0 | 0.0 | 0.0 | 1.238 |
| SSW | 0.0 | 0.0 | 0.050 | 0.599 | 1.278 | 0.050 | 0.0 | 0.0 | 0.0 | 1.977 |
| SW | 0.0 | 0.0 | 0.050 | 0.819 | 0.499 | 0.230 | 0.0 | 0.0 | 0.0 | 1.597 |
| WSW | 0.0 | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| W | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.0 | 0.090 | 0.0 | 0.140 | 0.0 | 0.0 | 0.0 | 0.230 |
| TOTALS | 0.0 | 0.0 | 2.206 | 5.940 | 3.943 | 0.659 | 0.0 | 0.0 | 0.0 | 12.748 |

| STABILITY CLASS B | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.090 | 0.140 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.319 |
| NNE | 0.0 | 0.0 | 0.409 | 0.549 | 0.050 | 0.090 | 0.0 | 0.0 | 0.0 | 1.098 |
| NE | 0.0 | 0.0 | 0.499 | 0.140 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.689 |
| ENE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| E | 0.0 | 0.0 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| ESE | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| SE | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SSE | 0.0 | 0.0 | 0.050 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| S | 0.0 | 0.0 | 0.140 | 0.459 | 0.319 | 0.0 | 0.0 | 0.0 | 0.0 | 0.918 |
| SSW | 0.0 | 0.0 | 0.140 | 0.819 | 0.270 | 0.0 | 0.0 | 0.0 | 0.0 | 1.228 |
| SW | 0.0 | 0.0 | 0.050 | 0.499 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.779 |
| WSW | 0.0 | 0.0 | 0.090 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| W | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| WNW | 0.0 | 0.0 | 0.090 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| NW | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.050 | 0.0 | 0.140 | 0.050 | 0.0 | 0.0 | 0.0 | 0.240 |
| TOTALS | 0.0 | 0.0 | 2.026 | 2.945 | 1.198 | 0.140 | 0.0 | 0.0 | 0.0 | 6.349 |

TABLE 5 (CONT'D)

STABILITY CLASS C

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.40 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.140 | 0.050 | 0.150 | 0.0 | 0.0 | 0.0 | 0.0 | 0.360 |
| NNE | 0.0 | 0.0 | 0.639 | 0.549 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 1.328 |
| NE | 0.0 | 0.0 | 0.549 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.549 |
| ENE | 0.0 | 0.0 | 0.230 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.280 |
| E | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| ESE | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SE | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| SSE | 0.0 | 0.0 | 0.050 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.280 |
| S | 0.0 | 0.0 | 0.180 | 0.459 | 0.050 | 0.090 | 0.0 | 0.0 | 0.0 | 0.779 |
| SSW | 0.0 | 0.0 | 0.369 | 0.689 | 0.270 | 0.0 | 0.0 | 0.0 | 0.0 | 1.328 |
| SW | 0.0 | 0.0 | 0.140 | 0.729 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.959 |
| WSW | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| W | 0.0 | 0.0 | 0.090 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| 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 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| NNW | 0.0 | 0.0 | 0.030 | 0.140 | 0.090 | 0.090 | 0.0 | 0.0 | 0.0 | 0.409 |
| TOTALS | 0.0 | 0.0 | 2.625 | 3.095 | 0.918 | 0.180 | 0.0 | 0.0 | 0.0 | 6.818 |

STABILITY CLASS D

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|-------|--------|-------|-------|-------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.40 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.050 | 1.687 | 0.729 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 2.556 |
| NNE | 0.0 | 0.0 | 1.278 | 1.507 | 0.369 | 0.0 | 0.0 | 0.0 | 0.0 | 3.155 |
| NE | 0.0 | 0.050 | 0.599 | 0.040 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.739 |
| ENE | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| E | 0.0 | 0.050 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| ESE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SE | 0.0 | 0.090 | 0.180 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.440 |
| SSE | 0.0 | 0.0 | 0.819 | 0.689 | 0.270 | 0.050 | 0.0 | 0.0 | 0.0 | 1.827 |
| S | 0.0 | 0.050 | 2.286 | 2.426 | 0.319 | 0.050 | 0.0 | 0.0 | 0.0 | 5.131 |
| SSW | 0.0 | 0.090 | 2.516 | 1.877 | 0.689 | 0.090 | 0.0 | 0.0 | 0.0 | 5.261 |
| SW | 0.0 | 0.090 | 1.418 | 1.098 | 0.499 | 0.0 | 0.0 | 0.0 | 0.0 | 3.105 |
| WSW | 0.0 | 0.050 | 0.319 | 0.270 | 0.180 | 0.140 | 0.0 | 0.0 | 0.0 | 0.959 |
| W | 0.0 | 0.0 | 0.499 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.599 |
| WNW | 0.0 | 0.090 | 0.270 | 0.050 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.509 |
| NW | 0.0 | 0.050 | 0.230 | 0.230 | 0.319 | 0.0 | 0.0 | 0.0 | 0.0 | 0.829 |
| NNW | 0.0 | 0.0 | 0.409 | 0.459 | 0.319 | 0.090 | 0.0 | 0.0 | 0.0 | 1.278 |
| TOTALS | 0.0 | 0.659 | 12.788 | 9.653 | 3.155 | 0.469 | 0.0 | 0.0 | 0.0 | 26.724 |

TABLE 5 (CONT'D)

STABILITY CLASS E

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|-------|-------|--------|-------|-------|-------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.006 | 0.779 | 4.253 | 1.418 | 0.270 | 0.0 | 0.0 | 0.0 | 0.0 | 6.724 |
| NNE | 0.006 | 0.779 | 2.695 | 0.868 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 4.898 |
| NE | 0.003 | 0.369 | 0.459 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.832 |
| ENE | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| E | 0.003 | 0.409 | 0.180 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.592 |
| ESE | 0.003 | 0.319 | 0.230 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.602 |
| SE | 0.002 | 0.270 | 0.599 | 0.050 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 1.010 |
| SSE | 0.002 | 0.270 | 0.729 | 0.050 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 1.140 |
| S | 0.003 | 0.369 | 1.647 | 0.549 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.569 |
| SSW | 0.001 | 0.180 | 3.334 | 1.467 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 5.072 |
| SW | 0.002 | 0.230 | 2.426 | 0.918 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 3.716 |
| WSW | 0.003 | 0.369 | 1.048 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 1.520 |
| W | 0.001 | 0.180 | 1.048 | 0.140 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 1.419 |
| WNW | 0.003 | 0.319 | 0.409 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.822 |
| NW | 0.004 | 0.459 | 0.409 | 0.180 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.052 |
| NNW | 0.003 | 0.409 | 1.647 | 0.729 | 0.180 | 0.050 | 0.0 | 0.0 | 0.0 | 3.018 |
| TOTALS | 0.045 | 5.710 | 21.203 | 6.419 | 1.148 | 0.050 | 0.0 | 0.0 | 0.0 | 34.575 |

STABILITY CLASS F

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|-------|--------|-------|------|------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.230 | 4.941 | 0.270 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.441 |
| NNE | 0.0 | 0.459 | 3.793 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.253 |
| NE | 0.0 | 0.230 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.280 |
| ENE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| E | 0.0 | 0.140 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| ESE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SE | 0.0 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| SSE | 0.0 | 0.140 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| S | 0.0 | 0.050 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| SSW | 0.0 | 0.090 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.319 |
| SW | 0.0 | 0.0 | 0.180 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.180 |
| WSW | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| W | 0.0 | 0.050 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.280 |
| WNW | 0.0 | 0.0 | 0.140 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| NW | 0.0 | 0.0 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| NNW | 0.0 | 0.180 | 0.230 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.639 |
| TOTALS | 0.0 | 1.707 | 10.212 | 0.589 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.508 |

TABLE 5 (CONT'D)

STABILITY CLASS G

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|-------|-------|------|------|------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| NNE | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| NE | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTALS | 0.0 | 0.050 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.280 |

TABLE 6

SEQUOYAH NUCLEAR PLANT METEOROLOGICAL DATA
GROUND-LEVEL JOINT
FREQUENCY DISTRIBUTION IN PERCENT
FOURTH QUARTER 1982

STABILITY CLASS A

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.0 | 0.050 | 0.350 | 0.470 | 0.0 | 0.0 | 0.0 | 0.900 |
| NNE | 0.0 | 0.0 | 0.090 | 1.270 | 0.850 | 0.470 | 0.0 | 0.0 | 0.0 | 2.680 |
| NE | 0.0 | 0.0 | 0.240 | 0.240 | 0.970 | 0.0 | 0.0 | 0.0 | 0.0 | 0.650 |
| ENE | 0.0 | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.050 | 0.190 | 0.090 | 0.0 | 0.0 | 0.0 | 0.330 |
| S | 0.0 | 0.0 | 0.050 | 0.050 | 0.190 | 0.090 | 0.0 | 0.0 | 0.0 | 1.380 |
| SSW | 0.0 | 0.0 | 0.050 | 0.240 | 0.420 | 0.120 | 0.0 | 0.0 | 0.0 | 0.870 |
| SW | 0.0 | 0.0 | 0.0 | 0.420 | 0.710 | 0.050 | 0.0 | 0.0 | 0.0 | 1.180 |
| 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 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.0 | 0.050 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| TOTALS | 0.0 | 0.0 | 0.520 | 2.591 | 2.971 | 1.310 | 0.0 | 0.0 | 0.0 | 7.392 |

STABILITY CLASS B

| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|------|------|-------|--------|
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 | 0.190 | 0.0 | 0.0 | 0.0 | 0.180 |
| NNE | 0.0 | 0.0 | 0.140 | 0.190 | 0.140 | 0.330 | 0.0 | 0.0 | 0.0 | 0.800 |
| NE | 0.0 | 0.0 | 0.380 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.520 |
| ENE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SE | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SSE | 0.0 | 0.0 | 0.0 | 0.140 | 0.050 | 0.150 | 0.0 | 0.0 | 0.0 | 0.240 |
| S | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.140 | 0.0 | 0.0 | 0.0 | 0.240 |
| SSW | 0.0 | 0.0 | 0.0 | 0.190 | 0.240 | 0.140 | 0.0 | 0.0 | 0.0 | 0.570 |
| SW | 0.0 | 0.0 | 0.090 | 0.090 | 0.090 | 0.050 | 0.0 | 0.0 | 0.0 | 0.320 |
| WSW | 0.0 | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| W | 0.0 | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| WNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.150 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.050 |
| TOTALS | 0.0 | 0.0 | 0.760 | 1.090 | 0.610 | 0.900 | 0.0 | 0.0 | 0.0 | 3.361 |

TABLE 6 (CONT'D)

| STABILITY CLASS C | | | | | | | | | |
|---|------|------|-------|-------|-------|-------|-------|------|--------------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 TOTALS |
| N | 0.0 | 0.0 | 0.050 | 0.090 | 0.090 | 0.150 | 0.0 | 0.0 | 0.290 |
| NNE | 0.0 | 0.0 | 0.090 | 0.090 | 0.190 | 0.280 | 0.0 | 0.0 | 0.650 |
| NE | 0.0 | 0.0 | 0.290 | 0.090 | 0.050 | 0.0 | 0.0 | 0.0 | 0.420 |
| ENE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| E | 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 |
| SE | 0.0 | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| SSE | 0.0 | 0.0 | 0.0 | 0.090 | 0.0 | 0.190 | 0.140 | 0.0 | 0.320 |
| S | 0.0 | 0.0 | 0.050 | 0.140 | 0.090 | 0.090 | 0.0 | 0.0 | 0.370 |
| SSW | 0.0 | 0.0 | 0.090 | 0.140 | 0.280 | 0.140 | 0.0 | 0.0 | 0.640 |
| SW | 0.0 | 0.0 | 0.090 | 0.420 | 0.380 | 0.090 | 0.0 | 0.0 | 0.980 |
| WSW | 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 |
| WNW | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NW | 0.0 | 0.0 | 0.050 | 0.0 | 0.090 | 0.090 | 0.0 | 0.0 | 0.230 |
| NNW | 0.0 | 0.0 | 0.0 | 0.050 | 0.0 | 0.050 | 0.0 | 0.0 | 0.100 |
| TOTALS | 0.0 | 0.0 | 0.890 | 1.110 | 1.170 | 0.980 | 0.140 | 0.0 | 4.190 |

| STABILITY CLASS D | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|------|--------------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 TOTALS |
| N | 0.0 | 0.0 | 0.750 | 0.750 | 0.610 | 0.740 | 0.0 | 0.0 | 3.050 |
| NNE | 0.005 | 0.090 | 1.560 | 2.540 | 1.560 | 2.070 | 0.090 | 0.0 | 7.910 |
| NE | 0.003 | 0.050 | 0.000 | 0.190 | 0.090 | 0.0 | 0.0 | 0.0 | 1.130 |
| ENE | 0.008 | 0.140 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| E | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| ESE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SE | 0.0 | 0.0 | 0.190 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| SSE | 0.008 | 0.140 | 0.240 | 0.330 | 0.660 | 0.940 | 0.190 | 0.0 | 2.500 |
| S | 0.008 | 0.140 | 1.080 | 0.710 | 0.190 | 0.280 | 0.0 | 0.0 | 2.400 |
| SSW | 0.005 | 0.090 | 1.320 | 1.080 | 0.610 | 0.330 | 0.0 | 0.0 | 3.430 |
| SW | 0.003 | 0.050 | 1.040 | 1.230 | 0.330 | 0.240 | 0.0 | 0.0 | 2.890 |
| WSW | 0.003 | 0.050 | 0.520 | 0.050 | 0.090 | 0.090 | 0.0 | 0.0 | 0.800 |
| W | 0.0 | 0.0 | 0.280 | 0.050 | 0.240 | 0.050 | 0.0 | 0.0 | 0.620 |
| WNW | 0.003 | 0.050 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.100 |
| NW | 0.0 | 0.0 | 0.140 | 0.140 | 0.090 | 0.090 | 0.0 | 0.0 | 0.460 |
| NNW | 0.003 | 0.050 | 0.140 | 0.380 | 0.610 | 0.710 | 0.0 | 0.0 | 1.890 |
| TOTALS | 0.049 | 0.850 | 8.252 | 7.452 | 5.131 | 5.741 | 0.280 | 0.0 | 27.755 |

TABLE 6 (CONT'D)

| STABILITY CLASS E | | | | | | | | | | |
|---|-------|-------|--------|-------|-------|-------|-------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.97 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.005 | 0.140 | 2.501 | 1.376 | 0.940 | 0.190 | 0.0 | 0.0 | 0.0 | 5.146 |
| NNE | 0.027 | 0.800 | 2.361 | 1.180 | 0.470 | 0.140 | 0.0 | 0.0 | 0.0 | 4.978 |
| NE | 0.003 | 0.090 | 0.420 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.603 |
| ENE | 0.005 | 0.140 | 0.650 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.195 |
| E | 0.009 | 0.280 | 0.350 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.339 |
| ESE | 0.009 | 0.280 | 0.350 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.339 |
| SE | 0.011 | 0.330 | 0.190 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.621 |
| SSE | 0.005 | 0.140 | 0.610 | 0.570 | 0.570 | 1.130 | 0.190 | 0.0 | 0.0 | 3.216 |
| S | 0.009 | 0.280 | 1.040 | 0.750 | 0.570 | 0.710 | 0.090 | 0.0 | 0.0 | 3.450 |
| SSW | 0.017 | 0.520 | 2.361 | 1.130 | 0.660 | 0.750 | 0.0 | 0.0 | 0.0 | 5.438 |
| SW | 0.011 | 0.330 | 2.401 | 1.841 | 0.850 | 0.390 | 0.0 | 0.0 | 0.0 | 5.812 |
| WSW | 0.0 | 0.0 | 0.850 | 0.280 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.130 |
| W | 0.005 | 0.140 | 0.420 | 0.190 | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.805 |
| WNW | 0.011 | 0.330 | 0.330 | 0.390 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.051 |
| NW | 0.005 | 0.140 | 0.380 | 0.240 | 0.190 | 0.190 | 0.0 | 0.0 | 0.0 | 1.145 |
| NNW | 0.009 | 0.280 | 0.710 | 0.520 | 0.190 | 0.150 | 0.0 | 0.0 | 0.0 | 1.759 |
| TOTALS | 0.141 | 4.221 | 14.723 | 8.632 | 4.441 | 3.541 | 0.330 | 0.0 | 0.0 | 36.029 |

| STABILITY CLASS F | | | | | | | | | | |
|---|------|-------|--------|-------|-------|------|------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.97 | 2.80 | 4.45 | 6.91 | 9.59 | 13.00 | TOTALS |
| N | 0.0 | 0.330 | 3.491 | 0.280 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 4.151 |
| NNE | 0.0 | 0.520 | 3.911 | 0.420 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.851 |
| NE | 0.0 | 0.330 | 0.900 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.230 |
| ENE | 0.0 | 0.140 | 0.350 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| E | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| ESE | 0.0 | 0.090 | 0.350 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| SE | 0.0 | 0.050 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| SSE | 0.0 | 0.190 | 0.330 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.520 |
| S | 0.0 | 0.0 | 0.380 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.470 |
| SSW | 0.0 | 0.050 | 0.940 | 0.330 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.320 |
| SW | 0.0 | 0.050 | 0.710 | 0.280 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.040 |
| WSW | 0.0 | 0.090 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| W | 0.0 | 0.050 | 0.190 | 0.350 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.290 |
| WNW | 0.0 | 0.0 | 0.140 | 0.140 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.280 |
| NW | 0.0 | 0.0 | 0.140 | 0.190 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.330 |
| NNW | 0.0 | 0.190 | 0.750 | 0.420 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.360 |
| TOTALS | 0.0 | 2.130 | 12.133 | 2.200 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 16.514 |

TABLE 6 (CONT'D)

| STABILITY CLASS G | | | | | | | | | | |
|---|------|-------|-------|-------|------|------|------|------|-------|--------|
| WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED | | | | | | | | | | |
| SECTOR | 0.13 | 0.45 | 1.10 | 1.99 | 2.80 | 4.45 | 6.91 | 9.59 | 13.10 | TOTALS |
| N | 0.0 | 0.050 | 0.090 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.230 |
| NNE | 0.0 | 0.090 | 1.560 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.650 |
| NE | 0.0 | 0.090 | 0.610 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.700 |
| ENE | 0.0 | 0.090 | 0.250 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.140 |
| E | 0.0 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.090 |
| ESE | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| SE | 0.0 | 0.140 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.190 |
| SSE | 0.0 | 0.330 | 0.150 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.380 |
| S | 0.0 | 0.090 | 0.280 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.370 |
| SSW | 0.0 | 0.0 | 0.380 | 0.150 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.430 |
| SW | 0.0 | 0.0 | 0.240 | 0.090 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.330 |
| WSW | 0.0 | 0.250 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.100 |
| 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 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NW | 0.0 | 0.0 | 0.050 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.050 |
| NNW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTALS | 0.0 | 1.020 | 1.511 | 0.230 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.761 |

TABLE 7

SEQUOYAH NUCLEAR PLANT - INDIVIDUAL DOSES FROM GASEOUS EFFLUENTS
FIRST QUARTER 1982

| <u>Effluent</u> | <u>Pathway</u> | <u>Guideline*</u> | <u>Point</u> | <u>Dose</u> |
|--------------------------|--------------------------|-------------------|------------------------------|---------------------------|
| Noble gases | T Air dose | 10 | Max. Exp. ¹ | 2.4×10^{-2} mrad |
| | β Air dose | 20 | Max. Exp. ¹ | 1.3×10^{-1} mrad |
| | Total body ² | 5 | Residence ³ | 1.6×10^{-2} mrem |
| | Skin ² | 15 | Residence ³ | 3.2×10^{-2} mrem |
| Iodines/ particulates | | | | |
| | Bone (critical organ) | 15 | Real Pathway ⁴ | 1.3×10^{-2} mrem |

Breakdown of Iodine/Particulate Exposures (mrem)

| | <u>Child</u> | <u>Adult</u> |
|-----------------------------|----------------------|----------------------|
| Beef ingestion ⁵ | 1.5×10^{-5} | 1.8×10^{-5} |
| Inhalation | 4.5×10^{-5} | 3.0×10^{-5} |
| Vegetable ingestion | 1.3×10^{-2} | 5.9×10^{-3} |
| Ground contamination | 1.3×10^{-8} | 1.3×10^{-8} |
| Total | 1.3×10^{-2} | 5.9×10^{-3} |

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

1. Maximum exposure point is at 1,840 meters in the SSW sector.
2. Dose from air submersion.
3. Receptor is at 2,250 meters in the SSW sector.
4. Real pathway location is at 2,750 meters in the SSW sector.
5. Maximum exposure point is at 2,600 meters in the NNE sector.

TABLE 8

SEQUOYAH NUCLEAR PLANT - INDIVIDUAL DOSES FROM GASEOUS EFFLUENTS
SECOND QUARTER 1982

| <u>Effluent</u> | <u>Pathway</u> | <u>Guideline*</u> | <u>Point</u> | <u>Dose</u> |
|--------------------------|------------------------------|-------------------|------------------------------|---------------------------|
| Noble gases | T Air dose | 10 | Max. Exp. ¹ | 1.6×10^{-1} mrad |
| | β Air dose | 20 | Max. Exp. ¹ | 7.1×10^{-1} mrad |
| | Total body ² | 5 | Residence ³ | 1.3×10^{-1} mrem |
| | Skin ² | 15 | Residence ³ | 2.5×10^{-1} mrem |
| Iodines/ particulates | | | | |
| | GI Tract (critical organ) | 15 | Real Pathway ⁴ | 1.2×10^{-1} mrem |

Breakdown of Iodine/Particulate Exposures (mrem)

| | <u>Teen</u> | <u>Adult</u> |
|-----------------------------|----------------------|----------------------|
| Beef ingestion ⁵ | 4.0×10^{-3} | 7.6×10^{-3} |
| Inhalation | 7.8×10^{-4} | 8.8×10^{-4} |
| Vegetable ingestion | 1.0×10^{-1} | 1.0×10^{-1} |
| Ground contamination | 1.5×10^{-2} | 1.5×10^{-2} |
| Total | 1.2×10^{-1} | 1.2×10^{-1} |

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

1. Maximum exposure point is at 730 meters in the NNW sector.
2. Dose from air submersion.
3. Receptor is at 781 meters in the NNW sector.
4. Real pathway location is at 1,344 meters in the N sector.
5. Maximum exposure point is at 688 meters in the NW sector.

TABLE 9

SEQUOYAH NUCLEAR PLANT - INDIVIDUAL DOSES FROM GASEOUS EFFLUENTS
THIRD QUARTER 1982

| <u>Effluent</u> | <u>Pathway</u> | <u>Guideline*</u> | <u>Point</u> | <u>Dose</u> |
|--------------------------|-----------------------------|-------------------|------------------------------|---------------------------|
| Noble gases | T Air dose | 10 | Max. Exp. ¹ | 2.0×10^{-1} mrad |
| | β Air dose | 20 | Max. Exp. ¹ | $1.1 \times 10^{+0}$ mrad |
| | Total body ² | 5 | Residence ³ | 9.5×10^{-2} mrem |
| | Skin ² | 15 | Residence ³ | 2.0×10^{-1} mrem |
| Iodines/ particulates | | | | |
| | Thyroid (critical organ) | 15 | Real Pathway ⁴ | 2.9×10^{-3} mrem |

Breakdown of Iodine/Particulate Exposures (mrem)

| | <u>Child</u> | <u>Adult</u> |
|-----------------------------|----------------------|----------------------|
| Vegetable ingestion | 2.4×10^{-3} | 1.1×10^{-3} |
| Beef ingestion ⁵ | 1.1×10^{-5} | 1.0×10^{-5} |
| Inhalation | 4.4×10^{-4} | 2.2×10^{-4} |
| Ground contamination | 5.2×10^{-7} | 5.2×10^{-7} |
| Total | 2.9×10^{-3} | 1.3×10^{-3} |

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

1. Maximum exposure point is at 1,570 meters in the S sector.
2. Dose from air submersion.
3. Receptor is at 2,375 meters in the S sector.
4. Maximum exposure point is at 1,344 meters in the N sector.
5. Maximum exposure point is at 688 meters in the NW sector.

TABLE 10

SEQUOYAH NUCLEAR PLANT - INDIVIDUAL DOSES FROM GASEOUS EFFLUENTS
FOURTH QUARTER 1982

| <u>Effluent</u> | <u>Pathway</u> | <u>Guideline*</u> | <u>Point</u> | <u>Dose</u> |
|--------------------------|-----------------------------|-------------------|------------------------------|---------------------------|
| Noble gases | γ Air dose | 10 | Max. Exp. ¹ | 3.6×10^{-2} mrad |
| | β Air dose | 20 | Max. Exp. ¹ | 2.0×10^{-1} mrad |
| | Total body ² | 5 | Residence ³ | 2.8×10^{-2} mrem |
| | Skin ² | 15 | Residence ³ | 5.8×10^{-2} mrem |
| Iodines/ particulates | | | | |
| | Thyroid (critical organ) | 15 | Real Pathway ⁴ | 7.7×10^{-3} mrem |

Breakdown of Iodine/Particulate Exposures (mrem)

| | <u>Child</u> | <u>Adult</u> |
|-----------------------------|----------------------|----------------------|
| Vegetable ingestion | 5.3×10^{-3} | 2.5×10^{-3} |
| Beef ingestion ⁵ | 4.0×10^{-5} | 3.6×10^{-5} |
| Inhalation | 1.4×10^{-3} | 6.7×10^{-4} |
| Ground contamination | 9.4×10^{-4} | 9.4×10^{-4} |
| Total | 7.7×10^{-3} | 4.1×10^{-3} |

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

1. Maximum exposure point is at 730 meters in the NNW sector.
2. Dose from air submersion.
3. Receptor is at 781 meters in the NNW sector.
4. Receptor is located at 1,344 meters in the N sector.
5. Pathway is located at 1,524 meters in the NNW sector.

TABLE 11

SEQUOYAH NUCLEAR PLANT -
GASEOUS EFFLUENT POPULATION DOSES
FIRST QUARTER 1982

| | liver | | | | | bone | | | | |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | INFANT | CHILD | TEEN | ADULT | TOTALS | INFANT | CHILD | TEEN | ADULT | TOTALS |
| SUBMERSION | 3.34E-03 | 2.08E-02 | 1.33E-02 | 6.14E-02 | 9.83E-02 | 3.34E-03 | 2.08E-02 | 1.33E-02 | 6.14E-02 | 9.83E-02 |
| GROUND | 1.71E-09 | 1.07E-08 | 6.79E-09 | 3.15E-08 | 5.06E-08 | 1.71E-09 | 1.07E-08 | 6.79E-09 | 3.15E-08 | 5.06E-08 |
| INHALATION | 1.74E-08 | 2.23E-07 | 1.42E-08 | 3.17E-07 | 6.52E-07 | 5.71E-06 | 1.30E-04 | 5.96E-05 | 2.57E-04 | 4.52E-04 |
| COW MILK | 5.30E-08 | 1.35E-07 | 4.07E-08 | 1.37E-07 | 3.66E-07 | 2.26E-05 | 1.28E-04 | 3.94E-05 | 1.66E-04 | 3.56E-04 |
| BEEF INGESTION | 0.0 | 4.59E-09 | 2.20E-09 | 1.19E-08 | 1.87E-08 | 0.0 | 2.40E-05 | 1.18E-05 | 8.05E-05 | 1.16E-04 |
| VEG INGESTION | 0.0 | 4.60E-08 | 2.24E-08 | 1.15E-07 | 1.83E-07 | 0.0 | 3.61E-04 | 1.80E-04 | 1.16E-03 | 1.70E-03 |
| TOTAL MAN-REM | 3.34E-03 | 2.08E-02 | 1.33E-02 | 6.14E-02 | 9.86E-02 | 3.37E-03 | 2.15E-02 | 1.35E-02 | 6.31E-02 | 1.01E-01 |

SECOND QUARTER 1982

| | g.i. tract | | | | | lung | | | | |
|----------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | INFANT | CHILD | TEEN | ADULT | TOTALS | INFANT | CHILD | TEEN | ADULT | TOTALS |
| SUBMERSION | 1.73E-02 | 1.04E-01 | 6.47E-02 | 3.14E-01 | 5.13E-01 | 1.73E-02 | 1.04E-01 | 6.47E-02 | 3.14E-01 | 5.13E-01 |
| GROUND | 1.34E-03 | 8.37E-03 | 5.33E-03 | 2.47E-02 | 3.47E-02 | 1.44E-03 | 8.37E-03 | 5.33E-03 | 2.47E-02 | 3.47E-02 |
| INHALATION | 4.10E-05 | 1.17E-03 | 1.54E-03 | 7.31E-03 | 9.42E-03 | 2.70E-03 | 5.43E-02 | 2.00E-02 | 6.47E-02 | 1.26E-01 |
| COW MILK | 1.07E-04 | 7.44E-04 | 6.54E-04 | 3.34E-03 | 4.47E-03 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| BEEF INGESTION | 0.0 | 3.90E-03 | 5.05E-03 | 4.25E-02 | 5.14E-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| VEG INGESTION | 0.0 | 5.00E-03 | 3.43E-03 | 3.13E-02 | 3.82E-02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL MAN-REM | 1.84E-02 | 1.25E-01 | 8.51E-02 | 4.28E-01 | 6.57E-01 | 2.16E-02 | 1.55E-01 | 9.40E-02 | 4.08E-01 | 6.78E-01 |

TABLE 11 (CONT'D)
THIRD QUARTER 1982

| | INFANT | CHILD | THYROID TEEN | ADULT | TOTALS | INFANT | CHILD | TOTAL BODY TEEN | ADULT | TOTALS |
|----------------|----------|----------|-----------------|----------|----------|----------|----------|--------------------|----------|----------|
| SUBMERSION | 1.63E-02 | 1.02E-01 | 6.47E-02 | 3.00E-01 | 4.82E-01 | 1.63E-02 | 1.02E-01 | 6.47E-02 | 3.00E-01 | 4.82E-01 |
| GROUND | 3.27E-08 | 2.04E-07 | 1.30E-07 | 6.02E-07 | 9.68E-07 | 3.27E-08 | 2.04E-07 | 1.30E-07 | 6.02E-07 | 9.68E-07 |
| INHALATION | 1.05E-04 | 1.06E-03 | 4.11E-04 | 1.57E-03 | 3.15E-03 | 1.59E-07 | 1.92E-06 | 7.84E-07 | 2.84E-06 | 5.69E-06 |
| COW MILK | 5.30E-04 | 1.36E-03 | 3.61E-04 | 1.37E-03 | 3.61E-03 | 7.11E-07 | 2.34E-06 | 6.66E-07 | 2.39E-06 | 6.11E-06 |
| BEEF INGESTION | 0.0 | 4.05E-05 | 1.72E-05 | 1.05E-04 | 1.62E-04 | 0.0 | 7.08E-08 | 3.21E-08 | 1.85E-07 | 2.89E-07 |
| VEG INGESTION | 0.0 | 4.08E-04 | 1.75E-04 | 1.01E-03 | 1.59E-03 | 0.0 | 7.21E-07 | 3.29E-07 | 1.80E-06 | 2.85E-06 |
| TOTAL MAN-REM | 1.69E-02 | 1.04E-01 | 6.56E-02 | 3.04E-01 | 4.91E-01 | 1.63E-02 | 1.02E-01 | 6.47E-02 | 3.00E-01 | 4.82E-01 |

FOURTH QUARTER 1982

| | INFANT | CHILD | THYROID TEEN | ADULT | TOTALS | INFANT | CHILD | TOTAL BODY TEEN | ADULT | TOTALS |
|----------------|----------|----------|-----------------|----------|----------|----------|----------|--------------------|----------|----------|
| SUBMERSION | 3.92E-03 | 2.44E-02 | 1.56E-02 | 7.21E-02 | 1.16E-01 | 3.92E-03 | 2.44E-02 | 1.56E-02 | 7.21E-02 | 1.16E-01 |
| GROUND | 1.01E-04 | 6.31E-04 | 4.02E-04 | 1.86E-03 | 3.00E-03 | 1.01E-04 | 6.31E-04 | 4.02E-04 | 1.86E-03 | 3.00E-03 |
| INHALATION | 4.84E-04 | 4.91E-03 | 1.88E-03 | 7.13E-03 | 1.44E-02 | 1.06E-06 | 1.52E-05 | 6.31E-06 | 2.39E-05 | 4.65E-05 |
| COW MILK | 1.67E-03 | 4.29E-03 | 1.14E-03 | 4.31E-03 | 1.14E-02 | 8.93E-06 | 3.45E-05 | 1.07E-05 | 4.41E-05 | 9.82E-05 |
| BEEF INGESTION | 0.0 | 1.51E-04 | 6.41E-05 | 3.90E-04 | 6.06E-04 | 0.0 | 1.29E-04 | 5.53E-05 | 3.23E-04 | 5.07E-04 |
| VEG INGESTION | 0.0 | 1.52E-03 | 6.54E-04 | 3.77E-03 | 5.94E-03 | 0.0 | 9.91E-05 | 4.28E-05 | 2.34E-04 | 3.76E-04 |
| TOTAL MAN-REM | 6.18E-03 | 3.59E-02 | 1.97E-02 | 8.95E-02 | 1.51E-01 | 4.03E-03 | 2.53E-02 | 1.61E-02 | 7.45E-02 | 1.20E-01 |

TABLE 12
LIQUID EFFLUENT DOSES
SEQUOYAH NUCLEAR PLANT ROUTINE RELEASES
FIRST QUARTER 1982

| | BONE ===== | GI TRACT == ===== | THYROID ===== | TOTAL BODY ===== | LIVER ===== | SKIN ===== |
|---|---------------|----------------------|------------------|---------------------|----------------|---------------|
| I. WATER INGESTION AT | | | | | | |
| ICI AMERICA, INC. (VAAP) | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 8.1E-03 | 2.5E-03 | 2.5E-03 | 2.1E-03 | 2.1E-03 | 2.1E-03 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 3.4E-03 | 2.7E-03 | 1.6E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 4.5E-01 | 2.5E-01 | 1.6E-01 | 1.6E-01 | 1.6E-01 | 1.6E-01 |
| II. FISH INGESTION FROM | | | | | | |
| CHICKAMAUGA LAKE BELOW SQN | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 3.8E-02 | 1.0E-02 | 2.2E-03 | 2.1E-03 | 4.5E-03 | 2.1E-03 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 2.7E-02 | 3.9E-03 | 3.3E-03 | 3.2E-03 | 4.7E-03 | 3.2E-03 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 2.0E+00 | 2.4E+00 | 2.2E-01 | 2.1E-01 | 3.5E-01 | 2.1E-01 |
| III. RECREATION AT | | | | | | |
| CHICKAMAUGA LAKE BELOW SQN | | | | | | |
| A. SHORELINE INDIVIDUAL (MREM) | 8.4E-02 | 7.4E-02 | 6.7E-02 | 7.8E-02 | 6.6E-02 | 9.3E-02 |
| POPULATION (MAN-REM) | 6.3E-02 | 5.3E-02 | 4.8E-02 | 5.6E-02 | 4.7E-02 | 6.7E-02 |
| B. IN-WATER INDIVIDUAL (MREM) | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.1E-03 | 1.5E-03 |
| POPULATION (MAN-REM) | 2.1E-04 | 1.8E-04 | 1.7E-04 | 1.8E-04 | 1.6E-04 | 2.2E-04 |
| C. ABOVE-WATER INDIVIDUAL (MREM) | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.2E-03 | 1.1E-03 | 1.5E-03 |
| POPULATION (MAN-REM) | 5.5E-04 | 4.7E-04 | 4.4E-04 | 4.8E-04 | 4.2E-04 | 5.8E-04 |
| IV. TOTAL | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 1.4E-01 | 9.0E-02 | 7.4E-02 | 6.4E-02 | 7.4E-02 | 1.0E-01 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 1.2E-01 | 1.2E-01 | 7.4E-02 | 6.5E-02 | 7.4E-02 | 1.3E-01 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 2.5E+00 | 2.8E+00 | 4.4E-01 | 4.3E-01 | 5.6E-01 | 4.4E-01 |

TABLE 13
LIQUID EFFLUENT DOSSES
SEQUOYAH NUCLEAR PLANT ROUTINE RELEASES
SECOND QUARTER 1982

| I. WATER INGESTION AT ICI AMERICA, INC. (VAAP) | | BONE == | GI TRACT == | THYROID ===== | TOTAL BODY ===== | LIVER ===== | SKIN ===== |
|---|---------|------------|----------------|------------------|---------------------|----------------|---------------|
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 3.5E-02 | 1.4E-02 | 3.7E-02 | 1.5E-02 | 1.7E-02 | 1.5E-02 | 1.5E-02 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 1.9E-02 | 1.2E-02 | 2.2E-02 | 1.1E-02 | 1.2E-02 | 1.1E-02 | 1.1E-02 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 2.2E+00 | 1.3E+00 | 2.1E+00 | 1.2E+00 | 1.3E+00 | 1.2E+00 | 1.2E+00 |
| II. FISH INGESTION FROM CHICKAMAUGA LAKE BELOW SON | | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 5.8E-01 | 1.5E-02 | 3.7E-02 | 3.2E-02 | 1.0E-01 | 3.2E-02 | 3.2E-02 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 4.1E-01 | 4.5E-02 | 7.4E-02 | 6.9E-02 | 1.0E-01 | 6.9E-02 | 6.9E-02 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 2.1E+01 | 1.5E+00 | 4.3E+00 | 4.2E+00 | 7.6E+00 | 4.2E+00 | 4.2E+00 |
| III. RECREATION AT CHICKAMAUGA LAKE BELOW SON | | | | | | | |
| A. SHORELINE INDIVIDUAL (MREM) | 6.9E-02 | 5.8E-02 | 5.3E-02 | 6.1E-02 | 5.1E-02 | 7.3E-02 | 7.3E-02 |
| POPULATION (MAN-REM) | 1.4E+01 | 1.2E+01 | 1.1E+01 | 1.3E+01 | 1.1E+01 | 1.5E+01 | 1.5E+01 |
| B. IN-WATER INDIVIDUAL (MREM) | 8.6E-04 | 7.6E-04 | 7.5E-04 | 7.5E-04 | 6.6E-04 | 9.0E-04 | 9.0E-04 |
| POPULATION (MAN-REM) | 3.2E+04 | 2.6E+04 | 2.3E+04 | 2.7E+04 | 2.3E+04 | 3.3E+04 | 3.3E+04 |
| C. ABOVE-WATER INDIVIDUAL (MREM) | 8.4E-04 | 7.5E-04 | 7.4E-04 | 7.4E-04 | 6.4E-04 | 8.8E-04 | 8.8E-04 |
| POPULATION (MAN-REM) | 8.4E+04 | 6.7E+04 | 6.1E+04 | 7.1E+04 | 6.1E+04 | 8.7E+04 | 8.7E+04 |
| IV. TOTAL | | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 6.8E-01 | 9.0E-02 | 1.3E-01 | 1.1E-01 | 1.7E-01 | 1.2E-01 | 1.2E-01 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 5.0E-01 | 1.2E-01 | 1.5E-01 | 1.4E-01 | 1.7E-01 | 1.5E-01 | 1.5E-01 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 2.3E+01 | 2.9E+00 | 6.5E+00 | 5.5E+00 | 9.1E+00 | 5.5E+00 | 5.5E+00 |

TABLE 14
LIQUID EFFLUENT DOSES
SEQUOYAH NUCLEAR PLANT ROUTINE RELEASES
THIRD QUARTER 1982

| | BONE ===== | GI TRACT ===== | THYROID ===== | TOTAL BODY ===== | LIVER ===== | SKIN ===== |
|---|---------------|-------------------|------------------|---------------------|----------------|---------------|
| I. WATER INGESTION AT ICI AMERICA, INC. (VAAP) | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 1.2E-02 | 7.8E-03 | 3.7E-02 | 7.4E-03 | 8.5E-03 | 7.4E-03 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 6.6E-03 | 7.3E-03 | 2.0E-02 | 5.7E-03 | 5.8E-03 | 5.7E-03 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 8.3E-01 | 7.7E-01 | 2.1E+00 | 6.6E-01 | 7.0E-01 | 6.6E-01 |
| II. FISH INGESTION FROM CHICKAMAUGA LAKE BELOW SDN | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 1.4E-01 | 4.0E-03 | 1.8E-02 | 1.2E-02 | 4.7E-02 | 1.2E-02 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 9.9E-02 | 1.3E-02 | 4.3E-02 | 3.6E-02 | 5.1E-02 | 3.6E-02 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 7.2E+00 | 7.0E-01 | 3.1E+00 | 2.8E+00 | 4.9E+00 | 2.8E+00 |
| III. RECREATION AT CHICKAMAUGA LAKE BELOW SDN | | | | | | |
| A. SHORELINE INDIVIDUAL (MREM) | 2.0E-01 | 1.7E-01 | 1.5E-01 | 1.8E-01 | 1.5E-01 | 2.1E-01 |
| POPULATION (MAN-REM) | 6.6E-01 | 5.6E-01 | 5.0E-01 | 5.8E-01 | 4.9E-01 | 7.0E-01 |
| B. IN-WATER INDIVIDUAL (MREM) | 1.3E-03 | 9.7E-04 | 8.4E-04 | 1.1E-03 | 9.0E-04 | 1.3E-03 |
| POPULATION (MAN-REM) | 1.4E-03 | 1.1E-03 | 9.2E-04 | 1.1E-03 | 9.8E-04 | 1.4E-03 |
| C. ABOVE-WATER INDIVIDUAL (MREM) | 1.2E-03 | 9.5E-04 | 8.3E-04 | 1.0E-03 | 8.8E-04 | 1.3E-03 |
| POPULATION (MAN-REM) | 3.6E-03 | 2.8E-03 | 2.4E-03 | 3.0E-03 | 2.6E-03 | 3.7E-03 |
| IV. TOTAL | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 3.5E-01 | 1.8E-01 | 2.1E-01 | 2.0E-01 | 2.1E-01 | 2.3E-01 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 3.1E-01 | 1.9E-01 | 2.2E-01 | 2.2E-01 | 2.1E-01 | 2.5E-01 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 8.7E+00 | 2.0E+00 | 5.7E+00 | 4.1E+00 | 6.1E+00 | 4.2E+00 |

TABLE 15
LIQUID EFFLUENT DOSES
SEQUOYAH NUCLEAR PLANT ROUTINE RELEASES
FOURTH QUARTER 1982

| | BONE ===== | GI TRACT == ===== | THYROID ===== | TOTAL BODY ===== | LIVER ===== | SKIN ===== |
|---|---------------|----------------------|------------------|---------------------|----------------|---------------|
| I. WATER INGESTION AT | | | | | | |
| ICI AMERICA, INC. (VAAP) | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 7.6E-03 | 6.3E-03 | 7.0E-03 | 3.9E-03 | 3.0E-03 | 3.9E-03 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 3.3E-03 | 1.1E-02 | 3.6E-03 | 2.1E-03 | 1.8E-03 | 2.1E-03 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 4.4E-01 | 9.4E-01 | 4.2E-01 | 2.6E-01 | 2.2E-01 | 2.6E-01 |
| II. FISH INGESTION FROM | | | | | | |
| CHICKAMAUGA LAKE BELOW SQN | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 9.6E-02 | 2.2E-02 | 6.8E-03 | 6.1E-03 | 1.0E-02 | 6.1E-03 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 6.8E-02 | 9.5E-02 | 6.3E-03 | 7.6E-03 | 1.1E-02 | 7.6E-03 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 4.6E+00 | 5.5E+00 | 5.9E-01 | 5.6E-01 | 8.5E-01 | 5.6E-01 |
| III. RECREATION AT | | | | | | |
| CHICKAMAUGA LAKE BELOW SQN | | | | | | |
| A. SHORELINE INDIVIDUAL (MREM) | 1.7E+00 | 1.5E+00 | 1.3E+00 | 1.5E+00 | 1.3E+00 | 1.8E+00 |
| POPULATION (MAN-REM) | 2.6E+00 | 2.3E+00 | 2.1E+00 | 2.4E+00 | 2.0E+00 | 2.8E+00 |
| B. IN-WATER INDIVIDUAL (MREM) | 5.0E-03 | 4.0E-03 | 3.5E-03 | 4.3E-03 | 3.6E-03 | 5.2E-03 |
| POPULATION (MAN-REM) | 2.7E-03 | 2.2E-03 | 1.9E-03 | 2.3E-03 | 2.0E-03 | 2.8E-03 |
| C. ABOVE-WATER INDIVIDUAL (MREM) | 4.9E-03 | 3.9E-03 | 3.4E-03 | 4.2E-03 | 3.5E-03 | 5.1E-03 |
| POPULATION (MAN-REM) | 7.1E-03 | 5.7E-03 | 5.1E-03 | 6.1E-03 | 5.2E-03 | 7.5E-03 |
| IV. TOTAL | | | | | | |
| A. MAXIMUM INDIVIDUAL CHILD (MREM) | 1.2E+00 | 1.5E+00 | 1.4E+00 | 1.5E+00 | 1.3E+00 | 1.8E+00 |
| B. MAXIMUM INDIVIDUAL ADULT (MREM) | 1.8E+00 | 1.6E+00 | 1.4E+00 | 1.5E+00 | 1.3E+00 | 1.8E+00 |
| C. TENNESSEE RIVER POPULATION (MAN-REM) | 7.7E+00 | 8.8E+00 | 3.1E+00 | 3.2E+00 | 3.1E+00 | 3.6E+00 |

TABLE 16
SEQUOYAH NUCLEAR PLANT
THREE-YEAR SUMMARY OF QUARTERLY DOSES

| Year | Quarter | Air-T (mrad) | Air-β (mrad) | Air Submersion | | Real Pathway Max. Organ (mrem) | Liquids Effluents | |
|------|---------|-----------------------|----------------------|----------------|----------------|--------------------------------------|-------------------|----------------------|
| | | | | Skin (mrem) | T.B. (mrem) | | T.B. (mrem) | Max. Organ (mrem) |
| 1980 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 1.8×10^{-11} | 1.8×10^{-7} | 0 | 0 | 0.02 bone | 0.02 | 0.06 GIT |
| | 3 | 0.01 | 0.01 | 0.02 | 0.01 | 3.1×10^{-7} GIT | 0.35 | 9.1 bone* |
| | 4 | 0.21 | 1.3 | 0.27 | 0.12 | 0.17 bone | 0.53 | 14 bone* |
| 1981 | 1 | 0.23 | 1.3 | 0.35 | 0.18 | 2.8×10^{-4} GIT | 0.28 | 6.9 bone |
| | 2 | 0.06 | 0.28 | 0.10 | 0.05 | 0.03 Thyr. | 0.06 | 0.34 bone** |
| | 3 | 0.28 | 1.5 | 0.44 | 0.22 | 6.4×10^{-4} Thyr. | 0.16 | 0.99 bone |
| | 4 | 0.12 | 0.68 | 0.16 | 0.08 | 3.3×10^{-4} bone | 0.03 | 0.30 bone |
| 1982 | 1 | 0.02 | 0.13 | 0.03 | 0.02 | 0.01 bone | 0.09 | 0.14 bone |
| | 2 | 0.16 | 0.71 | 0.25 | 0.13 | 0.12 GIT | 0.14 | 0.68 bone |
| | 3 | 0.20 | 1.10 | 0.20 | 0.10 | 0.003 Thyr. | 0.22 | 0.35 bone |
| | 4 | 0.04 | 0.20 | 0.06 | 0.03 | 0.008 Thyr. | 1.5 | 1.8 bone |

* The validity of these doses is discussed in TVA report RH-81-2-SQ1, "Radiological Impact Assessment, Sequoyah Nuclear Plant, July - December 1980."

**During 1st Quarter 1981, operation of additional radwaste equipment was initiated to reduce P-32 releases.

ENCLOSURE 3

TABLE I-1GTRR 5 Mw

October 22, 1971

NUCLEAR INSTRUMENTATION

| <u>Instrument Name and Function</u> | <u>Indicator Location</u> | <u>Chamber Type and Location</u> | <u>Scram</u> | | <u>Alarm</u> | |
|---|---------------------------|----------------------------------|--|--|----------------------|--------------------------|
| | | | <u>Circuit Designation</u> | <u>Annunciator Plate</u> | <u>Alarm Circuit</u> | <u>Annunciator Plate</u> |
| Flux Amplifier No.1 power range monitor | CR | UIC (H18) | a. Power Trip No.1 | Power Trip No.1 | | |
| | | | b. Trouble Sig. -Low Voltage -Channel Check Pulse | Low Ion Chamber Voltage | | |
| | | | c. Calib. Sw. | Calib. Sw. | | |
| Flux Amplifier No.2 power range monitor | CR | UIC (H17) | a. Power Trip No.2 | Power Trip No.2 | | |
| | | | b. Trouble Sig. -Low Voltage -Channel Check Pulse | Low Ion Chamber Voltage | | |
| | | | c. Calib. Sw. | Calib. Sw. | | |
| Log N-Period Ampli- fier No.1 intermediate range monitor | CR | CIC (H22B) | Pos. Period | Pos. Period | | |
| | | | Neg. Period | Neg. Period | | |
| | | | Ion Chamber Volt. Chassis Intlk. Calib. Sw. | Low Ion Chamber Volt. Calib. Sw. | | |
| Log N-Period Ampli- fier No.2 intermediate range monitor | CR | CIC (H21B) | Pos. Period | Pos. Period | | |
| | | | Neg. Period | Neg Period | | |
| | | | Ion Chamber Volt. Chassis Intlk. Calib. Sw. | Low Ion Chamber Volt. Calib. Sw. | | |