# ENCLOSURE 1

# ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

# SEQUOYAH NUCLEAR PLANT

# 2005

## SUPPLEMENTAL INFORMATION

I. REGULATORY LIMITS

A. Gaseous Effluents

1. Dose rates due to radioactivity released in gaseous effluents from the site to areas at and beyond the unrestricted area boundary shall be limited to the following:

   a. Noble gases:
      - Less than or equal to 500 mrem/year to the total body.
      - Less than or equal to 3000 mrem/year to the skin.

   b. Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than eight days:
      - Less than or equal to 1500 mrem/year to any organ.

2. Air dose due to noble gases released in gaseous effluents to areas at and beyond the unrestricted area boundary shall be limited to the following:

   a. Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation during any calendar quarter.

   b. Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation during any calendar year.

3. Dose to a member of the public from Iodine-131, Iodine-133, tritium, and radionuclides in particulate form with half-lives greater than eight days in gaseous effluents released to areas at and beyond the unrestricted area boundary shall be limited to the following:

   a. Less than or equal to 7.5 mrem to any organ during any calendar quarter.

   b. Less than or equal to 15 mrem to any organ during any calendar year.

B. Liquid Effluents

1. The annual average concentration of radioactivity released in liquid effluents to unrestricted areas shall be limited to the concentrations specified in Title 10 of the Code of Federal Regulations, Part 20

(Standards for Protection Against Radiation), Appendix B, Table 2, Column 2, for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2.0 E-04 microcuries/milliliter (μCi/ml) total activity.

2. The dose or dose commitment to a member of the public from radioactivity in liquid effluents released to unrestricted areas shall be limited to:

   a. Less than or equal to 1.5 mrem to the total body and less than or equal to 5 mrem to any organ during any calendar quarter.

   b. Less than or equal to 3 mrem to the total body and less than or equal to 10 mrem to any organ during any calendar year.

II. EFFLUENT CONCENTRATION LIMITS

A. Liquids

*1. The Effluent Concentration Limits (ECL) for liquids are those listed in 10 CFR 20, Appendix B, Table 2, Column 2. For dissolved and entrained gases, the ECL of 2.0E-04 μCi/ml is applied. This ECL is based on the Xe-135 concentration in air (submersion dose) converted to an equivalent concentration in water as discussed in the International Commission on Radiological Protection (ICRP), Publication 2.

*These values are used as applicable limits for liquid and gaseous effluents.

B. Gaseous

*1. The maximum permissible dose rates for gaseous releases are defined in plant Offsite Dose Calculation Manual (ODCM).

   a. Noble gas dose rate at the unrestricted area boundary:

      - Less than or equal to 500 mrem/year to the total body.
      - Less than or equal to 3000 mrem/year to skin.

   b. Iodine-131, Iodine-133, tritium, and particulates with half-lives greater than eight days dose rate at the unrestricted area boundary:

      - Less than or equal to 1500 mrem/year to any organ.

*These values are used as applicable limits for liquid and gaseous effluents.

## SUPPLEMENTAL INFORMATION

III. AVERAGE ENERGY

Sequoyah's ODCM limits the dose equivalent rates due to the release of noble gases to less than or equal to 500 mrem/year to the total body and less than or equal to 3000 mrem/year to the skin. The use of dose rate is in accordance with NUREG-0133, "Preparation of Radiological Effluent Technical Specifications for Nuclear Power Plants". Since the release rate is not used for effluent control, the average energy discussed in Regulatory Guide 1.21 (used for release rate control) is not included in this report.

IV. MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY

NOTE: Every effort is made to ensure that effluent releases from Sequoyah are conducted such that all ODCM Lower Limit of Detection (LLD) values are met. Whenever an analysis does not identify a radioisotope, an "0.00E-01 Ci" is recorded for the release. This does not necessarily mean that no activity was released for that particular radionuclide, but that the concentration was below the ODCM and analysis LLD. Refer to Tables A and B for estimates of these typical LLD values.

A. Fission and Activation Gases

Airborne effluent gaseous activity is continuously monitored and recorded. Additional grab samples from the shield building, auxiliary building, service building, and condenser vacuum exhausts are taken and analyzed at least monthly to determine the quantity of noble gas activity released for the month based on the average vent flow rates recorded for the sample period. Also, noble gas samples are collected and evaluated for the shield and auxiliary buildings following startup, shutdown, or rated thermal power change exceeding 15 percent within one hour (sampling is only required if the dose equivalent I-131 concentration in the primary coolant or the noble gas activity monitor shows that the containment activity has increased more than a factor of 3).

The quantity of noble gases released through the shield and auxiliary building exhausts due to purging or venting of containment and releases of waste gas decay tanks are also determined.

The total noble gas activity released for the month is then determined by summing of the activity released from each vent for the sampling periods.

B. Iodines and Particulates

Iodine and particulate activity is continuously sampled. Charcoal and particulate samples are taken from the shield and auxiliary building exhausts and analyzed at least weekly to determine the total activity released from the plant based on the average vent flow rates recorded for sampling period.

## SUPPLEMENTAL INFORMATION

Also, particulate and charcoal samples are taken from the auxiliary and shield building exhausts once per 24 hours for 2 days following startup, shutdown, or a rated thermal power change exceeding 15 percent within 1 hour. The quantity of iodine and particulate released from each vent during each sampling period is then determined using the average vent flow rates recorded for the sampling period and activity concentration.

The total particulate and iodine activity released for the month is then determined by summing all activity released from the shield and auxiliary building exhausts for the sampling periods.

C. Liquid Effluents

Batch (Radwaste and during periods of primary to secondary leakage, condensate regenerants to cooling tower blowdown)

Total gamma isotopic activity concentrations are determined on each batch of liquid effluent prior to release. The total activity of a released batch is determined by summing each nuclide's concentration and multiplying by the total volume discharged. The total activity released during a month is then determined by summing the activity content of each batch discharged during the month.

Continuous Releases and Periodic Continuous Releases (Condensate regenerants, turbine building sump, and steam generator blowdown)

Total gamma isotopic activity concentration is determined daily on a composite sample from the condensate system and turbine building sump and weekly for steam generator blowdown. The total activity of the continuous release is determined by summing each nuclide's concentration and multiplying by the total volume discharged. The total activity released during the month is then determined by summing the activity content of each daily and weekly composite for the month.

V. BATCH

| | Value | | |
|---|---|---|---|
| | 1st Half | 2nd Half | Units |
| A. Liquid (Radwaste only) | | | |
| 1. Number of releases | 103 | 47 | Each |
| 2. Total time period of releases | 17357 | 7180 | Minutes |
| 3. Maximum time period of release | 512 | 315 | Minutes |
| 4. Average time period of releases | 168.51 | 152.77 | Minutes |
| 5. Minimum time period for release | 25.0 | 40 | Minutes |
| 6. Average dilution stream flow during release periods | 32844.5 | 28976.5 | CFS |

## SUPPLEMENTAL INFORMATION

B. Gaseous (Batches only, containment purges, containment vents, and waste decay tanks)

| | | | |
|---|---|---|---|
| 1. Number of releases | 130 | 77 | Each |
| 2. Total time period of releases | 43119 | 26981 | Minutes |
| 3. Maximum time period for release | 5150 | 1205 | Minutes |
| 4. Average time period for releases | 331.69 | 350.40 | Minutes |
| 5. Minimum time period for release | 45.0 | 30.0 | Minutes |

VI. ABNORMAL RELEASES

| | Value 1st Half | Value 2nd Half | Units |
|---|---|---|---|
| A. Liquid | | | |
| Number of Releases | 0 | 0 | |
| Total Activity Released | 0.00E-01 | 0.00E-01 | Ci |
| B. Gaseous | | | |
| Number of Releases | 0 | 0 | |
| Total Activity Released | 0.00E-01 | 0.00E-01 | Ci |

# LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

| | Unit | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | %Error |
|---|---|---|---|---|---|---|
| **A. Fission and Activation Products** | | | | | | |
| 1. Total Released | Curies | 4.95E-02 | 1.97E-01 | 1.99E-02 | 2.20E-02 | 18% |
| 2. Average diluted concentration during period | µCi/ml | 2.95E-08 | 1.38E-07 | 1.16E-08 | 1.29E-08 | |
| 3. Percent of Applicable Limit | % | * | * | * | * | |
| **B. Tritium** | | | | | | |
| 1. Total Released | Curies | 4.47E+02 | 7.40E+02 | 3.85E+01 | 2.55E+02 | 18% |
| 2. Average diluted concentration during period | µCi/ml | 2.67E-04 | 5.17E-04 | 2.25E-05 | 1.50E-04 | |
| 3. Percent of Applicable Limit | % | * | * | * | * | |
| **C. Dissolved and Entrained Gases** | | | | | | |
| 1. Total Released | Curies | 5.77E-03 | 6.28E-01 | 6.31E-03 | 5.91E-02 | 39% |
| 2. Average diluted concentration during period | µCi/ml | 3.44E-09 | 4.39E-07 | 3.69E-09 | 3.47E-08 | |
| 3. Percent of Applicable Limit | % | 1.72E-03 | 2.20E-01 | 1.85E-03 | 1.74E-02 | |
| **D. Gross Alpha** | | | | | | |
| 1. Total Released | Curies | 0.00E-01 | 0.00E-01 | 0.00E-01 | 0.00E-01 | |
| **E. Volume of Waste Released** | Liters | 5.74E+07 | 4.11E+07 | 5.06E+07 | 5.27E+07 | 4% |
| **F. Volume of Dilution Water for Period** | Liters | 1.62E+09 | 1.39E+09 | 1.66E+09 | 1.65E+09 | 4% |

*Applicable limits are expressed in terms of dose. See Tables 1 thru 4.

# LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuclides reported as 0.00E-01)

Required by ODCM/Others
Fission and Activation Products

| Nuclide | Unit | Continuous Mode Quarter 1st | Continuous Mode Quarter 2nd | Batch Mode Quarter 1st | Batch Mode Quarter 2nd |
|---|---|---|---|---|---|
| 1. Silver-110M | Ci | 0.00E-01 | 0.00E-01 | 1.01E-03 | 3.15E-03 |
| 2. Cerium-144 | Ci | 0.00E-01 | 0.00E-01 | 3.19E-05 | 0.00E-01 |
| 3. Cobalt-57 | Ci | 0.00E-01 | 0.00E-01 | 3.37E-04 | 5.34E-04 |
| 4. Cobalt-58 | Ci | 0.00E-01 | 0.00E-01 | 3.10E-02 | 1.00E-01 |
| 5. Cobalt-60 | Ci | 0.00E-01 | 0.00E-01 | 5.92E-03 | 1.18E-02 |
| 6. Chromium-51 | Ci | 0.00E-01 | 0.00E-01 | 3.61E-04 | 8.84E-03 |
| 7. Cesium-134 | Ci | 0.00E-01 | 0.00E-01 | 2.82E-04 | 0.00E-01 |
| 8. Cesium-137 | Ci | 0.00E-01 | 0.00E-01 | 7.74E-04 | 2.43E-05 |
| 9. Cesium-138 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 2.17E-05 |
| 10. Iron-55 | Ci | 0.00E-01 | 0.00E-01 | 7.29E-03 | 2.88E-02 |
| 11. Iron-59 | Ci | 0.00E-01 | 0.00E-01 | 3.46E-04 | 2.18E-03 |
| 12. Iodine-131 | Ci | 0.00E-01 | 0.00E-01 | 1.07E-03 | 1.98E-04 |
| 13. Iodine-133 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 2.33E-05 |
| 14. Iodine-134 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 6.17E-05 |
| 15. Manganese-54 | Ci | 0.00E-01 | 0.00E-01 | 1.22E-04 | 1.22E-03 |
| 16. Sodium-24 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 7.84E-07 |
| 17. Niobium-95 | Ci | 0.00E-01 | 0.00E-01 | 1.18E-04 | 2.03E-03 |
| 18. Antimony-124 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 4.05E-03 |
| 19. Antimony-125 | Ci | 0.00E-01 | 0.00E-01 | 7.98E-04 | 3.33E-02 |
| 20. Strontium-91 | Ci | 0.00E-01 | 0.00E-01 | 9.92E-06 | 0.00E-01 |
| 21. Technetium-99M | Ci | 0.00E-01 | 0.00E-01 | 3.99E-06 | 0.00E-01 |
| 22. Tellurium-132 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 8.95E-06 |
| 23. Zinc-65 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 1.13E-04 |
| 24. Zirconium-95 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 8.32E-04 |
| **Total for Period** | **Ci** | **0.00E-01** | **0.00E-01** | **4.95E-02** | **1.97E-01** |

## LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuclides reported as 0.00E-01)

Required by ODCM/Others

| Nuclide | Unit | Continuous Mode Quarter 1st | Continuous Mode Quarter 2nd | Batch Mode Quarter 1st | Batch Mode Quarter 2nd |
|---|---|---|---|---|---|
| Tritium | | | | | |
| H-3 | Ci | 1.60E-01 | 9.69E-02 | 4.47E+02 | 7.40E+02 |
| Dissolved and Entrained Noble Gases | | | | | |
| 1. Argon-41 | Ci | 0.00E-01 | 0.00E-01 | 2.93E-04 | 7.51E-04 |
| 2. Krypton-85M | Ci | 0.00E-01 | 0.00E-01 | 7.77E-08 | 2.09E-05 |
| 3. Xenon-131M | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 1.05E-02 |
| 4. Xenon-133 | Ci | 0.00E-01 | 0.00E-01 | 5.47E-03 | 6.12E-01 |
| 5. Xenon-133M | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 3.51E-03 |
| 6. Xenon-135 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 1.03E-03 |
| **Total for Period** | Ci | **0.00E-01** | **0.00E-01** | **5.77E-03** | **6.28E-01** |

## LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuclides reported as 0.00E-01)

Required by ODCM/Others

Fission and Activation Products

| Nuclide | Unit | Continuous Mode Quarter 3rd | Continuous Mode Quarter 4th | Batch Mode Quarter 3rd | Batch Mode Quarter 4th |
|---|---|---|---|---|---|
| 1. Silver-110M | Ci | 0.00E-01 | 0.00E-01 | 7.67E-04 | 4.77E-04 |
| 2. Cobalt-57 | Ci | 0.00E-01 | 0.00E-01 | 1.02E-04 | 1.19E-04 |
| 3. Cobalt-58 | Ci | 0.00E-01 | 0.00E-01 | 1.08E-02 | 7.36E-03 |
| 4. Cobalt-60 | Ci | 0.00E-01 | 0.00E-01 | 1.66E-03 | 2.86E-03 |
| 5. Chromium-51 | Ci | 0.00E-01 | 0.00E-01 | 5.96E-05 | 8.35E-05 |
| 6. Cesium-134 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 7.62E-05 |
| 7. Cesium-137 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 4.03E-04 |
| 8. Iron-55 | Ci | 0.00E-01 | 0.00E-01 | 2.26E-03 | 3.60E-03 |
| 9. Iron-59 | Ci | 0.00E-01 | 0.00E-01 | 6.26E-06 | 0.00E-01 |
| 10. Iodine-131 | Ci | 0.00E-01 | 0.00E-01 | 9.03E-06 | 0.00E-01 |
| 11. Manganese--54 | Ci | 0.00E-01 | 0.00E-01 | 6.29E-05 | 1.32E-04 |
| 12. Sodium-24 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 1.31E-06 |
| 13. Niobium-95 | Ci | 0.00E-01 | 0.00E-01 | 3.56E-05 | 5.30E-05 |
| 14. Antimony-124 | Ci | 0.00E-01 | 0.00E-01 | 2.52E-04 | 2.48E-04 |
| 15. Antimony-125 | Ci | 0.00E-01 | 0.00E-01 | 3.86E-03 | 6.45E-03 |
| 16. Zinc-65 | Ci | 0.00E-01 | 0.00E-01 | 1.04E-04 | 1.10E-04 |
| 17. Zirconium-95 | Ci | 0.00E-01 | 0.00E-01 | 8.77E-06 | 0.00E-01 |
| **Total for Period** | **Ci** | **0.00E-01** | **0.00E-01** | **1.99E-02** | **2.20E-02** |

# LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuclides reported as 0.00E-01)

Required by ODCM/Others

| Nuclide | Unit | Continuous Mode Quarter 3rd | Continuous Mode Quarter 4th | Batch Mode Quarter 3rd | Batch Mode Quarter 4th |
|---|---|---|---|---|---|
| H-3 | Ci | 1.40E-01 | 2.08E-01 | 3.84E+01 | 2.55E+02 |
| Dissolved and Entrained Noble Gases | | | | | |
| 1. Kr-85 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 1.83E-03 |
| 2. Xe-131M | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 1.50E-03 |
| 3. Xenon-133 | Ci | 0.00E-01 | 0.00E-01 | 6.30E-03 | 5.57E-02 |
| 4. Xenon-133M | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 5.33E-05 |
| 5. Xenon-135 | Ci | 0.00E-01 | 0.00E-01 | 5.97E-06 | 1.15E-05 |
| Total for Period | **Ci** | **0.00E-01** | **0.00E-01** | **6.31E-03** | **5.91E-02** |

## TABLE A
## LIQUID "TYPICAL LLD" EVALUATION[1]

| Nuclide | ODCM LLD | □t[2] 1 hr | 8 hr | 32 hr |
|---|---|---|---|---|
| Manganese-54 | 5.0E-07 | 3.36E-08 | 3.36E-08 | 3.37E-08 |
| Cobalt-58 | 5.0E-07 | 2.53E-08 | 2.54E-08 | 2.56E-08 |
| Iron-59 | 5.0E-07 | 5.26E-08 | 5.29E-08 | 5.37E-08 |
| Cobalt-60 | 5.0E-07 | 4.63E-08 | 4.63E-08 | 4.64E-08 |
| Zinc-65 | 5.0E-07 | 2.95E-08 | 2.95E-08 | 2.96E-08 |
| Molybdenum-99 | 5.0E-07 | 1.55E-07 | 1.67E-07 | 2.15E-07 |
| Cesium-134 | 5.0E-07 | 1.91E-08 | 1.91E-08 | 1.92E-08 |
| Cesium-137 | 5.0E-07 | 3.87E-08 | 3.87E-08 | 3.87E-08 |
| Cerium-141 | 5.0E-07 | 2.80E-08 | 2.81E-08 | 2.87E-08 |
| Cerium-144 | 5.0E-06 | 1.11E-07 | 1.12E-07 | 1.12E-07 |
| Iodine-131 | 1.0E-06 | 2.28E-08 | 2.34E-08 | 2.55E-08 |
| Krypton-87 | 1.0E-05 | 1.16E-07 | 5.25E-07 | (3) |
| Krypton-88 | 1.0E-05 | 9.95E-08 | 5.49E-07 | (3) |
| Xenon-133 | 1.0E-05 | 4.19E-08 | 4.36E-08 | 4.98E-08 |
| Xenon-133m | 1.0E-05 | 1.42E-07 | 1.55E-07 | 2.13E-07 |
| Xenon-135 | 1.0E-05 | 2.06E-08 | 3.50E-08 | 2.17E-07 |
| Xenon-138 | 1.0E-05 | 8.37E-06 | (3) | (3) |

| Nuclide | ODCM LLD | Typical LLD |
|---|---|---|
| Tritium | 1.0E-05 | 1.2E-06 |
| Gross Alpha | 1.0E-07 | 2.0E-08 |
| Strontium-89/90 | 5.0E-08 | 3.8E-08/1.4E-08 |
| Iron-55 | 1.0E-06 | 1.3E-08 |

NOTES: (1) LLD values are in µCi/ml.
(2) □t is the time between sample collection and counting time.
(3) T ½ too short.

## GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES
## (GROUND LEVEL RELEASES)

| Summation of All Releases | Unit | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | %Error |
|---|---|---|---|---|---|---|
| A. Noble Gases | | | | | | |
| 1. Total Released | Ci | 9.03E+00 | 6.76E+00 | 5.41E+00 | 7.77E+01 | 11% |
| 2. Average Release Rate of Period | µCi/sec | 1.16E+01 | 8.60E-01 | 6.80E-01 | 9.77E+01 | |
| 3. Percent of Limit | % | * | * | * | * | |
| B. Iodines | | | | | | |
| 1. Total Iodine-131 | Ci | 6.53.E-05 | 8.03E-05 | 9.46E-06 | 0.00E-01 | 13% |
| 2. Average Release Rate for Period | µCi/sec | 8.40E-06 | 1.02E-05 | 1.19E-06 | 0.00E-01 | |
| 3. Percent of Limit | % | * | * | * | * | |
| C. Particulates | | | | | | |
| 1. Particulates with half-lives >8 days | Ci | 0.00E-01 | 8.55E-06 | 0.00E-01 | 0.00E-01 | 16% |
| 2. Average Release Rate for Period | µCi/sec | 0.00E-01 | 1.09E-06 | 0.00E-01 | 0.00E-01 | |
| 3. Percent of Limit | % | * | * | * | * | |
| 4. Gross Alpha Radio-activity | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 0.00E-01 | |
| D. Tritium | | | | | | |
| 1. Total Release | Ci | 1.92E+01 | 2.65E+01 | 1.15+01 | 1.21E+01 | 15% |
| 2. Average Release Rate for Period | µCi/sec | 2.48E-01 | 3.37E+00 | 1.45E+00 | 1.52E+00 | |
| 3. Percent of Limit | % | * | * | * | * | |

*Applicable limits are expressed in terms of dose. See Tables 5 thru 8.

# GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES
# (GROUND LEVEL RELEASES)

1. Noble Gases

Required by
ODCM/Others

| | Nuclide | Unit | Continuous Mode Quarter 1st | Continuous Mode Quarter 2nd | Batch Mode Quarter 1st | Batch Mode Quarter 2nd |
|---|---|---|---|---|---|---|
| 1. | Krypton-85M | Ci | 0.00E-01 | 0.00E-01 | 8.76E-05 | 0.00E-01 |
| 2. | Krypton-88 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 7.10E-04 |
| 3. | Xenon-133M | Ci | 0.00E-01 | 0.00E-01 | 1.97E-02 | 1.44E-02 |
| 4. | Xenon-135 | Ci | 0.00E-01 | 0.00E-01 | 1.15E-01 | 5.83E-02 |
| 5. | Krypton-85 | Ci | 0.00E-01 | 0.00E-01 | 2.12E-01 | 1.07E-01 |
| 6. | Xenon-131M | Ci | 0.00E-01 | 0.00E-01 | 5.57E-02 | 1.46E-01 |
| 7. | Argon-41 | Ci | 0.00E-01 | 0.00E-01 | 4.15E+00 | 1.77E+00 |
| 8. | Xenon-133 | Ci | 0.00E-01 | 0.00E-01 | 4.48E+00 | 4.66E+00 |
| | **Total for Period** | **Ci** | **0.00E-01** | **0.00E-01** | **9.03E+00** | **6.76E+00** |
| **2.** | **Iodines** | | | | | |
| | Iodine-133 | Ci | 1.60E-04 | 7.86E-05 | 0.00E-01 | 0.00E-01 |
| | Iodine-131 | Ci | 6.53E-05 | 8.03E-05 | 0.00E-01 | 0.00E-01 |
| | **Total for Period** | **Ci** | **2.25E-04** | **1.59E-04** | **0.00E-01** | **0.00E-01** |
| **3.** | **Particulates** | | | | | |
| 1. | Bromine-82 | Ci | 0.00E-01 | 4.97E-06 | 0.00E-01 | 0.00E-01 |
| 2. | Cobalt-58 | | 0.00E-01 | 8.55E-06 | 0.00E-01 | 0.00E-01 |
| | **Total for Period** | **Ci** | **0.00E-01** | **1.35E-05** | **0.00E-01** | **0.00E-01** |
| **4.** | **Tritium** | Ci | 1.60E+01 | 2.58E+01 | 3.23E+00 | 6.52E-01 |
| | **Total for Period** | **Ci** | **1.60E+01** | **2.58E+01** | **3.23E+00** | **6.52E-01** |

NOTE: Refer to Table B for ODCM nuclides reported as 0.00E-01.

# GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES
# (GROUND LEVEL RELEASES)

1. Noble Gases

| Required by ODCM/Others Nuclide | Unit | Continuous Mode Quarter 3rd | Continuous Mode Quarter 4th | Batch Mode Quarter 3rd | Batch Mode Quarter 4th |
|---|---|---|---|---|---|
| 1. Krypton-87 | Ci | 0.00E-01 | 0.00E-01 | 1.32E-03 | 0.00E-01 |
| 2. Krypton-88 | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 5.42E-04 |
| 3. Krypton-85M | Ci | 0.00E-01 | 0.00E-01 | 0.00E-01 | 9.69E-04 |
| 4. Xenon-133M | Ci | 0.00E-01 | 0.00E-01 | 3.18E-02 | 1.84E-02 |
| 5. Xenon-135 | Ci | 0.00E-01 | 0.00E-01 | 6.52E-02 | 3.50E-02 |
| 6. Xenon-131M | Ci | 0.00E-01 | 0.00E-01 | 1.41E-01 | 1.10E-01 |
| 7. Argon-41 | Ci | 0.00E-01 | 0.00E-01 | 1.31E+00 | 3.31E-01 |
| 8. Krypton-85 | Ci | 0.00E-01 | 0.00E-01 | 3.69E-01 | 4.76E-01 |
| 9. Xenon-133 | Ci | 0.00E-01 | 7.33E+01 | 3.49E+00 | 3.37E+00 |
| **Total for Period** | **Ci** | **0.00E-01** | **7.33E+01** | **5.41E+00** | **4.34E+00** |

2. **Iodines**

| | | | | | |
|---|---|---|---|---|---|
| 1. Iodine-131 | Ci | 9.46E-06 | 0.00E-01 | 0.00E-01 | 0.00E-01 |
| **Total for Period** | **Ci** | **9.46E-06** | **0.00E-01** | **0.00E-01** | **0.00E-01** |

3. **Particulates**

| | | | | | |
|---|---|---|---|---|---|
| | Ci | | | | |
| **Total for Period** | | **0.00E-01** | **0.00E-01** | **0.00E-01** | **0.00E-01** |
| | Ci | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 4. **Tritium** | Ci | 1.07E+01 | 1.17E+01 | 8.19E-01 | 3.66E-01 |
| **Total for Period** | **Ci** | **1.07E+01** | **1.17E+01** | **8.19E-01** | **3.66E-01** |

NOTE: Refer to Table B for ODCM nuclides reported as 0.00E-01.

# TABLE B
# GASEOUS "TYPICAL" LLD EVALUATION[1]

Noble Gas

| | | □t[2] | | |
|---|---|---|---|---|
| Nuclide | ODCM LLD | 1 hr | 1.5 hr | |
| Krypton-87 | 1.0E-04 | 2.08E-06 | 2.73E-06 | |
| Krypton-88 | 1.0E-04 | 1.61E-06 | 1.81E-06 | |
| Xenon-133 | 1.0E-04 | 6.61E-07 | 6.63E-07 | |
| Xenon-133m | 1.0E-04 | 2.34E-06 | 2.35E-06 | |
| Xenon-135 | 1.0E-04 | 3.43E-07 | 3.56E-07 | |
| Xenon-138 | 1.0E-04 | 1.40E-04 | 6.10E-04 | |
| Particulate Sample[3] | | 1 hr | 24 hr | 7.0 da |
| Manganese-54 | 1.0E-10 | 7.47E-12 | 3.12E-13 | 4.48E-14 |
| Cobalt-58 | 1.0E-10 | 5.62E-12 | 2.35E-13 | 3.46E-14 |
| Iron-59 | 1.0E-10 | 1.20E-11 | 5.02E-13 | 7.49E-14 |
| Cobalt-60 | 1.0E-10 | 1.07E-11 | 4.46E-13 | 6.38E-14 |
| Zinc-65 | 1.0E-10 | 6.71E-12 | 2.80E-13 | 4.03E-14 |
| Molybdenum-99 | 1.0E-10 | 3.43E-11 | 1.61E-12 | 4.70E-13 |
| Cesium-134 | 1.0E-10 | 4.25E-12 | 1.77E-13 | 2.54E-14 |
| Cesium-137 | 1.0E-10 | 8.48E-12 | 3.54E-13 | 5.05E-14 |
| Cerium-141 | 1.0E-10 | 5.10E-12 | 2.15E-13 | 3.26E-14 |
| Cerium-144 | 1.0E-10 | 2.01E-11 | 8.33E-13 | 1.20E-13 |
| Iodine-131 | 1.0E-10 | 4.76E-12 | 2.07E-13 | 3.77E-14 |
| Charcoal Sample | | | | |
| Iodine-131 | 1.0E-11 | 7.25E-12 | 3.15E-13 | 5.74E-14 |

(1) LLD values are in μCi/ml.
(2) □t is the time between sample collection and counting time.
(3) LLD based on sample time + 30 min. sample to analysis.

## TABLE B
## GASEOUS "TYPICAL" LLD EVALUATION[1]

| Nuclide | ODCM LLD | Typical LLD |
|---|---|---|
| Tritium | 1.0E-06 | 1.0E-11 |
| Gross Alpha | 1.0E-11 | 1.5E-14 |
| Strontium-89 | 1.0E-11 | 1.0E-14 |
| Strontium-90 | 1.0E-11 | 1.0E-15 |

NOTES: (1) LLD values are in μCi/cc.

(2) □t for noble gases is the time from sampling to analysis.
□t for charcoal and particulate samples is the midpoint of sampling to analysis.

## SOLID WASTE (RADIOACTIVE SHIPMENTS)

A. Solid Waste Shipped Offsite for Burial or Disposal (not Irradiated Fuel)

| 1. Type of Waste | Unit | 12 Month Period | Est. Tot. Error % |
|---|---|---|---|
| a. Spent Resins, Filter Sludges, Evaporator Bottoms, etc. | $m^3$ | 6.81E+00 | ±1.00E-02 |
| | Ci | 2.20E+02 | ±5.00E+00 |
| b. Dry Active Waste, Compressible Waste Contaminated Equipment, etc. | $m^3$ | 2.87E+01 | ±1.00E-01 |
| | Ci | 1.67E+00 | ±5.00E-02 |
| c. Irradiated Components, Control Rods, etc. | $m^3$ | None | N/A |
| | Ci | None | N/A |
| d. Other: Mechanical Filters | $m^3$ | 3.41E+00 | ±1.00E-02 |
| | Ci | 4.13E+01 | ±1.00E+00 |

2. Estimate of Major Nuclide Composition (by type of waste)

a. Spent resins, filter sludges, evaporator bottoms, etc. (nuclides determined by measurement)

| | | Curies | Percent |
|---|---|---|---|
| 1. | Hydrogen-3 | 4.87E-02 | 0.02 |
| 2. | Carbon-14 | 7.18E-01 | 0.33 |
| 3. | Manganese-54 | 2.89E+00 | 1.32 |
| 4. | Iron-55 | 2.47E+01 | 11.25 |
| 5. | Cobalt-57 | 7.12E-01 | 0.32 |
| 6. | Cobalt-58 | 3.30E+00 | 1.50 |
| 7. | Nickel-59 | 1.47E+00 | 0.67 |
| 8. | Cobalt-60 | 4.75E+01 | 21.63 |
| 9. | Nickel-63 | 1.17E+02 | 53.38 |
| 10. | Zinc-65 | 1.87E-01 | 0.09 |
| 11. | Strontium-89 | 1.12E-03 | 0.00 |
| 12. | Strontium-90 | 4.54E-02 | 0.02 |
| 13. | Silver-108m | 4.22E-02 | 0.02 |
| 14. | Silver-110m | 2.01E+00 | 0.91 |
| 15. | Antimony-125 | 1.02E+00 | 0.47 |
| 16. | Cesium-134 | 3.86E+00 | 1.76 |
| 17. | Cesium-137 | 1.38E+01 | 6.29 |
| 18. | Cerium-144 | 5.51E-03 | 0.00 |
| 19. | Plutonium-238 | 8.53E-04 | 0.00 |
| 20. | Plutonium-239/240 | 3.92E-04 | 0.00 |
| 21. | Plutonium-241 | 2.59E-02 | 0.01 |
| 22. | Americium-241 | 4.06E-04 | 0.00 |
| 23. | Curium-242 | 1.17E-04 | 0.00 |
| 24. | Curium-243/244 | 2.70E-03 | 0.00 |

## SOLID WASTE (RADIOACTIVE SHIPMENTS)

2. Estimate of Major Nuclide Composition (by type of waste) (Cont.)

b. Dry active waste, compressible waste, contaminated equipment, etc. (nuclides determined by estimate)

| | | Curies | Percent |
|---|---|---|---|
| 1. | Carbon-14 | 7.52E-04 | 0.05 |
| 2. | Chromium-51 | 3.13E-02 | 1.87 |
| 3. | Manganese-54 | 2.01E-02 | 1.20 |
| 4. | Iron-55 | 4.29E-01 | 25.70 |
| 5. | Cobalt-57 | 5.78E-04 | 0.04 |
| 6. | Cobalt-58 | 1.69E-01 | 10.09 |
| 7. | Iron-59 | 2.13E-03 | 0.13 |
| 8. | Cobalt-60 | 8.05E-01 | 48.20 |
| 9. | Nickel-63 | 7.34E-02 | 4.39 |
| 10. | Zinc-65 | 3.61E-04 | 0.02 |
| 11. | Zirconium-95 | 4.73E-02 | 2.83 |
| 12. | Niobium-95 | 7.18E-02 | 4.30 |
| 13. | Silver-110m | 1.56E-03 | 0.09 |
| 14. | Tin-113 | 1.86E-03 | 0.11 |
| 15. | Antimony-125 | 4.88E-03 | 0.29 |
| 16. | Cesium-134 | 3.33E-04 | 0.02 |
| 17. | Cesium-137 | 7.32E-03 | 0.44 |
| 18. | Cerium-144 | 7.14E-04 | 0.04 |
| 19. | Plutonium-238 | 4.90E-05 | 0.00 |
| 20. | Plutonium-239/240 | 6.44E-05 | 0.00 |
| 21. | Plutonium-241 | 3.00E-03 | 0.18 |
| 22. | Americium-241 | 6.02E-05 | 0.00 |
| 23. | Plutonium-243/244 | 8.41E-05 | 0.01 |

| c. Irradiated Components | Curies | Percent |
|---|---|---|
| None | N/A | N/A |

2. Estimate of Major Nuclide Composition (by type of waste) (Cont.)

d. Other: Mechanical Filters

| | | Curies | Percent |
|---|---|---|---|
| 1. | Hydrogen-3 | 1.97E-02 | 0.05 |
| 2. | Carbon-14 | 7.46E-01 | 1.81 |
| 3. | Chromium-51 | 5.62E-06 | 0.00 |
| 4. | Manganese-54 | 1.95E-01 | 0.47 |
| 5. | Iron-55 | 1.97E+01 | 47.67 |
| 6. | Cobalt-57 | 2.98E-02 | 0.07 |
| 7. | Cobalt-58 | 5.25E-01 | 1.27 |
| 8. | Iron-59 | 1.37E-03 | 0.00 |
| 9. | Nickel-59 | 1.01E-02 | 0.02 |
| 10. | Cobalt-60 | 2.20E+00 | 5.32 |
| 11. | Nickel-63 | 1.38E+00 | 3.34 |
| 12. | Zinc-65 | 2.25E-02 | 0.05 |
| 13. | Strontium-89 | 1.25E-05 | 0.00 |
| 14. | Zirconium-95 | 8.62E-03 | 0.02 |
| 15. | Niobium-95 | 1.12E-02 | 0.03 |
| 16. | Technetium-99 | 1.20E-03 | 0.00 |
| 17. | Ruthenium-103 | 6.52E-07 | 0.00 |
| 18. | Silver-110m | 1.23E-01 | 0.30 |
| 19. | Tin-113 | 5.66E-03 | 0.01 |
| 20. | Iodine-131 | 1.50E-19 | 0.00 |
| 21. | Antimony-124 | 3.64E-05 | 0.00 |
| 22. | Antimony-125 | 2.49E-02 | 0.06 |
| 23. | Cesium-134 | 5.11E+00 | 12.36 |
| 24. | Cesium-136 | 3.56E-13 | 0.00 |
| 25. | Cesium-137 | 1.12E+01 | 27.10 |
| 26. | Barium/Lanthanum-140 | 1.80E-13 | 0.00 |
| 27. | Cerium-144 | 8.96E-03 | 0.02 |
| 28. | Plutonium-241 | 3.52E-03 | 0.01 |
| 29. | Curium-242 | 9.44E-05 | 0.00 |
| 30. | Curium-243/244 | 1.70E-04 | 0.00 |

## SOLID WASTE (RADIOACTIVE SHIPMENTS)

3. Solid Waste Disposition

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

| Number of Shipments | Type Quantity | Mode of Transportation | Destination |
|---|---|---|---|
| 2 | Type B | Motor Freight | Chem-Nuclear Barnwell, SC |

b. Dry active waste, compressible waste, contaminated equipment, etc.

| Number of Shipments | Type Quantity | Mode of Transportation | Destination |
|---|---|---|---|
| 37* | A-LSA | Motor Freight | Envirocare near Clive, Utah |
| 1 | A-LSA | Motor Freight | Chem-Nuclear Barnwell, SC |

*37 of the shipments were shipped by a waste processor.

c. Irradiated components, control rods, etc.

| Number of Shipments | Type Quantity | Mode of Transportation | Destination |
|---|---|---|---|
| None | N/A | N/A | N/A |

d. Other: Mechanical Filters and Tank Residue

| Number of Shipments | Type Quantity | Mode of Transportation | Destination |
|---|---|---|---|
| 1 | B-LSA II | Motor Freight | Chem-Nuclear Barnwell, SC |

4. Irradiated Fuel Shipments (Disposition)

| Number of Shipments | Type Quantity | Mode of Transportation | Destination |
|---|---|---|---|
| None | N/A | N/A | N/A |

5. Solidification of Waste

Was solidification performed? No
If yes, solidification media:

## Independent Spent Storage Installation

SQN implemented use of an independent spent storage installation (ISFSI) on July13, 2004. The ISFSI is located on site, within the protected area and is designed to hold 90 spent fuel canisters. The ISFSI is considered part of plant operations for the purposes of the radiological environmental monitoring program.

SQN ISFSI TS 5.4a states "The HI-Storm 100 Cask system does not create any radioactive material or have any radioactive waste treatment systems. Therefore, specific operating procedures for the control of radioactive effluents are not required. Specification 3.1.1, Multi-Purpose Canister (MPC) provides assurances that there are no radioactive effluents from spent fuel storage canister."

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

| | |
|---|---|
| Total Body | =25 mrem/year |
| Thyroid | =75 mrem/year |
| Any other organ | =25 mrem/year |

The SQN ISFSI is considered part of the SQN site and part of plant operations and any radioactive release is included in this report as total site releases. These releases are within 40 CFR 190 limits and 10 CFR 72.104 limits.

# ENCLOSURE 2

# RADIOLOGICAL IMPACT ASSESSMENT REPORT

# SEQUOYAH NUCLEAR PLANT

# JANUARY - DECEMBER 2005

## INTRODUCTION

Potential doses to maximum individuals and the population around Sequoyah Nuclear Plant (SQN) 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 SQN.

## DOSE LIMITS

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

The limits for doses in unrestricted areas 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 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.

## DOSE CALCULATIONS

Estimated doses to the public are determined using computer models: 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.

## 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 and subsequently eaten by milk and beef animals.

### *Airborne Discharge Points*

Releases from SQN 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 are presented for each quarter in Attachment 1.0.

### *Meteorological Data*

Meteorological variables at SQN 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 JFD gives the percentage of the time in a quarter that the wind is blowing out of a particular upwind compass sector in a particular range of wind speeds for a given stability Class A through G. The wind speeds are divided into nine wind speed ranges. Calms are distributed by direction in proportion to the distribution of noncalm wind directions less than 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 dose (gamma-air and beta-air doses) are made for points at and beyond the unrestricted area boundary as described in the SQN ODCM. The highest of these doses is then selected.

*Submersion Dose*

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

*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 unrestricted area boundary location is added to each identified receptor. For ground contamination, the dose added to the organ dose being calculated is the total body dose calculated for that location, i.e., it is assumed that the dose to an individual organ is equal to the total body dose.

Doses from airborne effluents are presented in Tables 1 through 4.

**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 SQN. 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 SQN ODCM.

*Liquid Release Points and River Data*

Radioactivity concentrations in the Tennessee River are calculated assuming that releases in liquid effluents are continuous. Routine liquid releases from SQN, 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 one-fifth of the water which flows past the plant. The QWATA code makes the assumption that this mixing condition holds true until the water is completely mixed at the first downstream dam, at Tennessee River Mile 471.0.

Doses are calculated for locations within a 50-mile radius downstream of the plant site. The maximum potential recreation dose is calculated for a location immediately downstream from the plant 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 (East Side Utilities). 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 East Side Utilities, 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 estimates for the maximum individual due to liquid effluents for each quarter in the period are presented in Tables 5 through 8, along with the average river flows past the plant site for the periods.

Population doses are calculated assuming that each individual consumes milk, vegetables, and meat produced within the sector annulus in which he resides. Doses from external pathways and inhalation are based on the 50-mile human population distribution.

**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. Doses from external pathways and inhalation are based on the 50-mile human population distribution.

Ingestion 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.

**DIRECT RADIATION**

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around SQN as part of the offsite Environmental Radiological Monitoring Program. The quarterly gamma radiation levels determined from these TLDs during this reporting period averaged approximately 15.25 mR/quarter at onsite (at or near the site boundary) stations and approximately 14.00 mR/quarter at offsite stations, or approximately 1.25 mR/quarter higher onsite than at offsite stations. This difference is consistent with levels measured for preoperation and construction phases of the TVA nuclear plant site where the average radiation levels onsite were generally 2-6 mR/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other

undetermined influences. Fluctuations in natural background dose rates and in TLD readings tend to mask any small increments which may be due to plant operations. Thus, there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents.

## DOSE TO A MEMBER OF THE PUBLIC INSIDE THE UNRESTRICTED AREA BOUNDARY

As stated in the SQN Offsite Dose Calculation Manual, an evaluation of the dose to a member of the public inside the unrestricted area boundary is performed for a hypothetical TVA employee who works just outside the restricted area fence for an entire work year (2000/8760 hours). Results from onsite TLD measurements for the calendar year in question indicate that the highest onsite TLD reading was 250 mrem. Using this value, and subtracting an annual background value of 62 mrem/year, and multiplying by the ratio of the occupancy times, the external dose was 42.92 mrem. The doses due to radioactive effluents released to the atmosphere calculated in this report would not add a significant amount to this measured dose. This dose is well below the 10 CFR 20 annual limit of 100 mrem.

## TOTAL DOSE

To determine compliance with 40 CFR 190, annual total dose contributions to the maximum individual from SQN radioactive effluents and 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.

**Table 1**
**Doses from Airborne Effluents**
**First Quarter**

**Individual Doses**

| Pathway | Dose | Quarterly Limit | Percent of Limit | Location Sector/Distance |
|---|---|---|---|---|
| | | | | |
| **External** | | | | |
| Gamma Air | 5.38E-03 mrad | 5 mrad | <1 | N/950 |
| Beta Air | 2.63E-03 mrad | 10 mrad | <1 | N/950 |
| | | | | |
| **Submersion** | | | | |
| Total Body | 3.23E-03 mrad | 10 mrad | <1 | SSW/2134 |
| Skin | 4.93E-03 mrad | 10 mrad | <1 | SSW/2134 |
| | | | | |
| **Organ Doses** | | | | |
| Child/Thyroid | 9.75E-03 mrem | 7.5 mrem | <1 | N/1829 |
| Child/Total Body | 9.36E-03 mrem | 7.5 mrem | <1 | N/1829 |

**Population Doses**

Total Body Dose 2.67E-02 man-rem

Maximum Organ Dose (organ) 2.79E-02 man-rem (thyroid)

*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).*

**Table 2**
**Doses from Airborne Effluents**
**Second Quarter**

**Individual Doses**

| Pathway | Dose | Quarterly Limit | Percent of Limit | Location Sector/Distance |
|---|---|---|---|---|
| | | | | |
| **External** | | | | |
| Gamma Air | 4.30E-03 mrad | 5 mrad | <1 | NW/660 |
| Beta Air | 2.80E-03 mrad | 10 mrad | <1 | NW/660 |
| | | | | |
| **Submersion** | | | | |
| Total Body | 2.70E-03 mrad | 10 mrad | <1 | NNW/841 |
| Skin | 4.25E-03 mrad | 10 mrad | <1 | NNW/841 |
| | | | | |
| **Organ Doses** | | | | |
| Child/Thyroid | 1.61E-02 mrem | 7.5 mrem | <1 | S/2093 |
| Child/Total Body | 1.55E-02 mrem | 7.5 mrem | <1 | S/2093 |

**Population Doses**

Total Body Dose 4.26E-02 man-rem

Maximum Organ Dose (organ) 4.41E-02 man-rem (thyroid)

*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).*

**Table 3**
**Doses from Airborne Effluents**
**Third Quarter**

**Individual Doses**

| Pathway | Dose | Quarterly Limit | Percent of Limit | Location Sector/Distance |
|---|---|---|---|---|
| | | | | |
| **External** | | | | |
| Gamma Air | 2.18E-03 mrad | 5 mrad | <1 | S/1570 |
| Beta Air | 1.57E-03 mrad | 10 mrad | <1 | S/1570 |
| | | | | |
| Submersion | | | | |
| Total Body | 1.65E-03 mrad | 10 mrad | <1 | S/1786 |
| Skin | 2.68E-03 mrad | 10 mrad | <1 | S/1786 |
| | | | | |
| **Organ Doses** | | | | |
| Child/Thyroid | 1.08E-02 mrem | 7.5 mrem | <1 | S/2093 |
| Child/Total Body | 1.06E-02 mrem | 7.5 mrem | <1 | S/2093 |

**Population Doses**

Total Body Dose 1.53E-02 man-rem

Maximum Organ Dose (organ) 1.55E-02 man-rem (thyroid)

*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).*

## Table 4
## Doses from Airborne Effluents
## Fourth Quarter

**Individual Doses**

| Pathway | Dose | Quarterly Limit | Percent of Limit | Location Sector/Distance |
|---|---|---|---|---|
| | | | | |
| **External** | | | | |
| Gamma Air | 4.91E-03 mrad | 5 mrad | <1 | SSW/1840 |
| Beta Air | 1.36E-02 mrad | 10 mrad | <1 | SSW/1840 |
| | | | | |
| **Submersion** | | | | |
| Total Body | 3.34E-03 mrad | 10 mrad | <1 | SSW/2134 |
| Skin | 7.74E-03 mrad | 10 mrad | <1 | SSW/2134 |
| | | | | |
| **Organ Doses** | | | | |
| Child/Thyroid | 1.01E-02 mrem | 7.5 mrem | <1 | S/2093 |
| Child/Total Body | 1.01E-02 mrem | 7.5 mrem | <1 | S/2093 |

**Population Doses**

Total Body Dose 2.01E-02 man-rem

Maximum Organ Dose (organ) 2.01E-02 man-rem (thyroid, liver, bone, GI, lung, kidney)

*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).*

**Table 5**
**Doses from Liquid Effluents**
**First Quarter**

**Individual Doses (mrem)**

| Age Group | Organ | Dose | Quarterly Limit | Percent of Limit |
|---|---|---|---|---|
| | | | | |
| Child | Total Body | 1.50E-03 | 1.5 mrem | < 1 % |
| | | | | |
| Child | Liver | 1.70E-03 | 5 mrem | < 1 % |
| | | | | |
| Child | Thyroid | 1.60E-03 | 5 mrem | < 1 % |
| | | | | |

Average Riverflow past SQN (cubic feet per second): 40,477

**Population Doses**

Total Body Dose 1.20E-01 man-rem

Maximum Organ Dose (organ) 1.20E-01 man-rem (Bone, GIT, Thyroid, Liver, Kidney, Lung))

*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).*

**Table 6**
**Doses from Liquid Effluents**
**Second Quarter**

**Individual Doses (mrem)**

| Age Group | Organ | Dose | Quarterly Limit | Percent of Limit |
|---|---|---|---|---|
| | | | | |
| Child | Total Body | 4.20E-03 | 1.5 mrem | < 1 % |
| | | | | |
| Adult | GIT | 5.5E-03 | 5 mrem | < 1 % |
| | | | | |
| Child | Thyroid | 4.20E-03 | 5 mrem | <.1 % |
| | | | | |

Average Riverflow past SQN (cubic feet per second): 25,212

**Population Doses**

Total Body Dose 3.50E-01 man-rem

Maximum Organ Dose (organ) 3.60E-01 man-rem (GIT)

*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).*

## Table 7
## Doses from Liquid Effluents
## Third Quarter

**Individual Doses (mrem)**

| Age Group | Organ | Dose | Quarterly Limit | Percent of Limit |
|---|---|---|---|---|
| | | | | |
| Child | Total Body | 2.10E-04 | 1.5 mrem | < 1 % |
| | | | | |
| Adult | GIT | 2.30E-04 | 5 mrem | < 1 % |
| | | | | |
| Child | Thyroid | 2.10E-04 | 5 mrem | < 1 % |
| | | | | |

Average Riverflow past SQN (cubic feet per second): 32,643

**Population Doses**

Total Body Dose 1.90E-02 man-rem

Maximum Organ Dose (organ) 2.00E-02 man-rem (GIT)

*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).*

Table 8
Doses from Liquid Effluents
Fourth Quarter

**Individual Doses (mrem)**

| Age Group | Organ | Dose | Quarterly Limit | Percent of Limit |
|---|---|---|---|---|
| | | | | |
| Child | Total Body | 1.40E-03 | 1.5 mrem | < 1 % |
| | | | | |
| Child | Liver | 1.50E-03 | 5 mrem | < 1 % |
| | | | | |
| Child | Thyroid | 1.30E-03 | 5 mrem | < 1 % |
| | | | | |

Average River flow past SQN (cubic feet per second): 25,310

**Population Doses**

Total Body Dose 1.10E-01 man-rem

Maximum Organ Dose (organ) 1.10E-01 man-rem (GIT)

*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).*

## 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 | 3.23E-03 | 2.70E-03 | 1.65E-03 | 3.34E-03 | |
| Critical organ dose (air) | 2.79E-02 | 4.41E-02 | 1.55E-02 | 2.01E-02 | |
| Total body dose (liquid) | 1.50E-03 | 4.20E-03 | 2.10E-04 | 1.40E-03 | |
| Maximum organ dose (liquid) | 1.70E-03 | 5.50E-03 | 2.30E-04 | 1.50E-03 | |
| Direct Radiation Dose | 0.00E-00 | 0.00E-00 | 0.00E-00 | 0.00E-00 | |
| **Total** | **3.43E-02** | **5.65E-02** | **1.76E-02** | **2.63E-02** | |
| **Cumulative Total Dose (Total body or any other organ) mrem** | | | | | **1.35E-01** |
| ***Annual Dose Limit (mrem)*** | | | | | **25** |
| **Percent of Limit** | | | | | **0.54** |
| **Thyroid Dose (mrem)** | | | | | |
| Total body air submersion | 3.23E-03 | 2.70E-03 | 1.65E-03 | 3.34E-03 | |
| Thyroid dose (airborne) | 9.75E-03 | 1.61E-02 | 1.08E-02 | 1.01E-02 | |
| Total body dose (liquid) | 1.50E-03 | 4.20E-03 | 2.10E-04 | 1.40E-03 | |
| Thyroid dose (liquid) | 1.60E-03 | 4.20E-03 | 2.10E-04 | 1.30E-03 | |
| Direct Radiation Dose | 0.00E-00 | 0.00E-00 | 0.00E-00 | 0.00E-00 | |
| **Total** | **1.61E-02** | **2.72E-02** | **1.29E-02** | **1.61E-02** | |
| **Cumulative Total Dose (Thyroid) mrem** | | | | | **7.23E-02** |
| ***Annual Dose Limit (mrem)*** | | | | | **75** |
| **Percent of Limit** | | | | | **0.10** |

# Attachment 1.0

## Joint Frequency Distribution Tables

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, 2005 - MAR 31, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 | 0.188 | 0.000 | 0.000 | 0.000 | 0.329 |
| NNE | 0.000 | 0.000 | 0.000 | 0.141 | 0.564 | 0.752 | 0.000 | 0.000 | 0.000 | 1.457 |
| NE | 0.000 | 0.000 | 0.000 | 0.094 | 0.188 | 0.141 | 0.000 | 0.000 | 0.000 | 0.423 |
| ENE | 0.000 | 0.000 | 0.000 | 0.188 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.235 |
| E | 0.000 | 0.000 | 0.000 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| ESE | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| S | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| SSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.376 | 0.329 | 0.000 | 0.000 | 0.000 | 0.705 |
| SW | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.282 | 0.000 | 0.000 | 0.000 | 0.329 |
| 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 | 0.188 | 0.000 | 0.000 | 0.000 | 0.188 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.047 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 | 0.376 | 0.094 | 0.000 | 0.000 | 0.611 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.047 |
| SUBTOTAL | 0.000 | 0.000 | 0.000 | 0.517 | 1.598 | 2.303 | 0.141 | 0.000 | 0.000 | 4.558 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2128 |
| TOTAL HOURS OF STABILITY CLASS A | 97 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A | 97 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2128 |
| 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: 2005/06/02

MEAN WIND SPEED = 7.78

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

JAN 1, 2005 - MAR 31, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.047 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.235 |
| NNE | 0.000 | 0.000 | 0.000 | 0.235 | 0.423 | 0.329 | 0.000 | 0.000 | 0.000 | 0.987 |
| NE | 0.000 | 0.000 | 0.000 | 0.094 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.188 |
| ENE | 0.000 | 0.000 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 |
| E | 0.000 | 0.000 | 0.000 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| ESE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| S | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSW | 0.000 | 0.000 | 0.000 | 0.047 | 0.611 | 0.094 | 0.000 | 0.000 | 0.000 | 0.752 |
| SW | 0.000 | 0.000 | 0.000 | 0.047 | 0.235 | 0.094 | 0.000 | 0.000 | 0.000 | 0.376 |
| WSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.094 | 0.000 | 0.000 | 0.000 | 0.141 |
| 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 | 0.047 | 0.000 | 0.000 | 0.000 | 0.047 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 | 0.376 | 0.047 | 0.000 | 0.000 | 0.517 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.000 | 0.000 | 0.141 | 0.611 | 1.598 | 1.081 | 0.047 | 0.000 | 0.000 | 3.477 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2128 |
| TOTAL HOURS OF STABILITY CLASS B | 74 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B | 74 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2128 |
| 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: 2005/06/02

MEAN WIND SPEED = 6.77

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

JAN 1, 2005 - MAR 31, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.094 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.235 |
| NNE | 0.000 | 0.000 | 0.047 | 0.188 | 0.094 | 0.376 | 0.000 | 0.000 | 0.000 | 0.705 |
| NE | 0.000 | 0.000 | 0.047 | 0.329 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.423 |
| ENE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| E | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ESE | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| SE | 0.000 | 0.000 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.188 |
| 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 | 0.094 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.235 |
| SSW | 0.000 | 0.000 | 0.000 | 0.094 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.188 |
| SW | 0.000 | 0.000 | 0.000 | 0.141 | 0.235 | 0.000 | 0.000 | 0.000 | 0.000 | 0.376 |
| WSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 | 0.000 | 0.000 | 0.000 | 0.094 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.141 | 0.141 | 0.000 | 0.000 | 0.329 |
| NW | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.141 | 0.000 | 0.000 | 0.000 | 0.188 |
| NNW | 0.000 | 0.000 | 0.000 | 0.047 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.141 |
| SUBTOTAL | 0.000 | 0.000 | 0.188 | 1.175 | 0.846 | 0.846 | 0.141 | 0.000 | 0.000 | 3.195 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2128
TOTAL HOURS OF STABILITY CLASS C 68
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 68
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2128
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: 2005/06/02

MEAN WIND SPEED = 6.60

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

JAN 1, 2005 - MAR 31, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.094 | 0.987 | 1.175 | 1.457 | 1.222 | 0.000 | 0.000 | 0.000 | 4.934 |
| NNE | 0.000 | 0.000 | 1.457 | 2.256 | 2.679 | 2.867 | 0.000 | 0.000 | 0.000 | 9.258 |
| NE | 0.000 | 0.047 | 1.034 | 0.329 | 0.282 | 0.047 | 0.000 | 0.000 | 0.000 | 1.739 |
| ENE | 0.000 | 0.047 | 0.329 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.423 |
| E | 0.000 | 0.047 | 0.282 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.329 |
| ESE | 0.000 | 0.047 | 0.188 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.235 |
| SE | 0.000 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.188 |
| SSE | 0.000 | 0.000 | 0.141 | 0.141 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.329 |
| S | 0.000 | 0.000 | 0.611 | 0.705 | 0.188 | 0.423 | 0.000 | 0.000 | 0.000 | 1.927 |
| SSW | 0.000 | 0.047 | 1.551 | 2.773 | 0.987 | 0.329 | 0.000 | 0.000 | 0.000 | 5.686 |
| SW | 0.000 | 0.047 | 0.799 | 2.444 | 0.752 | 0.470 | 0.000 | 0.000 | 0.000 | 4.511 |
| WSW | 0.000 | 0.000 | 0.329 | 0.752 | 0.282 | 0.282 | 0.000 | 0.000 | 0.000 | 1.645 |
| W | 0.000 | 0.047 | 0.188 | 0.235 | 0.235 | 0.282 | 0.000 | 0.000 | 0.000 | 0.987 |
| WNW | 0.000 | 0.141 | 0.000 | 0.188 | 0.376 | 0.893 | 0.047 | 0.000 | 0.000 | 1.645 |
| NW | 0.000 | 0.094 | 0.188 | 0.470 | 0.752 | 0.940 | 0.094 | 0.000 | 0.000 | 2.538 |
| NNW | 0.000 | 0.141 | 0.470 | 0.094 | 0.470 | 1.222 | 0.094 | 0.000 | 0.000 | 2.491 |
| SUBTOTAL | 0.000 | 0.846 | 8.694 | 11.607 | 8.459 | 8.976 | 0.282 | 0.000 | 0.000 | 38.863 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2128
TOTAL HOURS OF STABILITY CLASS D 827
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 827
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2128
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: 2005/06/02

MEAN WIND SPEED = 5.54

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

JAN 1, 2005 - MAR 31, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.188 | 1.739 | 1.081 | 0.282 | 0.000 | 0.000 | 0.000 | 0.000 | 3.289 |
| NNE | 0.000 | 0.282 | 2.726 | 2.256 | 0.188 | 0.000 | 0.000 | 0.000 | 0.000 | 5.451 |
| NE | 0.000 | 0.188 | 0.658 | 0.141 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 1.034 |
| ENE | 0.000 | 0.141 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.188 |
| E | 0.000 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| ESE | 0.000 | 0.141 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.188 |
| SE | 0.000 | 0.094 | 0.188 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.282 |
| SSE | 0.000 | 0.141 | 0.423 | 0.047 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.705 |
| S | 0.000 | 0.376 | 1.363 | 0.705 | 0.329 | 0.235 | 0.000 | 0.000 | 0.000 | 3.008 |
| SSW | 0.000 | 0.376 | 2.679 | 1.974 | 0.705 | 0.282 | 0.000 | 0.000 | 0.000 | 6.015 |
| SW | 0.000 | 0.188 | 2.538 | 2.256 | 0.470 | 0.188 | 0.000 | 0.000 | 0.000 | 5.639 |
| WSW | 0.000 | 0.188 | 0.329 | 0.329 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.893 |
| W | 0.000 | 0.000 | 0.235 | 0.047 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.376 |
| WNW | 0.000 | 0.141 | 0.376 | 0.188 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.752 |
| NW | 0.000 | 0.141 | 0.423 | 0.470 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 1.081 |
| NNW | 0.000 | 0.094 | 0.705 | 0.376 | 0.188 | 0.047 | 0.000 | 0.000 | 0.000 | 1.410 |
| SUBTOTAL | 0.000 | 2.773 | 14.474 | 9.868 | 2.444 | 0.846 | 0.000 | 0.000 | 0.000 | 30.404 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2128 |
| TOTAL HOURS OF STABILITY CLASS E | 647 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E | 647 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2128 |
| 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: 2005/06/02

MEAN WIND SPEED = 3.40

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

JAN 1, 2005 - MAR 31, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.047 | 0.423 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.517 |
| NNE | 0.000 | 0.141 | 2.773 | 0.423 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.336 |
| NE | 0.000 | 0.282 | 0.987 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.410 |
| ENE | 0.000 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| E | 0.000 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.188 |
| ESE | 0.000 | 0.141 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.235 |
| SE | 0.000 | 0.235 | 0.235 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.470 |
| SSE | 0.000 | 0.141 | 0.094 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.329 |
| S | 0.000 | 0.235 | 0.799 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.128 |
| SSW | 0.000 | 0.094 | 1.645 | 0.188 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.927 |
| SW | 0.000 | 0.188 | 1.410 | 0.376 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 2.068 |
| WSW | 0.000 | 0.141 | 0.376 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.564 |
| W | 0.000 | 0.047 | 0.188 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.235 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| NW | 0.000 | 0.047 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| NNW | 0.000 | 0.047 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 |
| SUBTOTAL | 0.000 | 1.927 | 9.211 | 1.410 | 0.235 | 0.000 | 0.000 | 0.000 | 0.000 | 12.782 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2128
TOTAL HOURS OF STABILITY CLASS F 272
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 272
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2128
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: 2005/06/02

MEAN WIND SPEED = 2.41

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

JAN 1, 2005 - MAR 31, 2005

| WIND DIRECTION | CALM | WIND SPEED(MPH) 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| NNE | 0.009 | 0.094 | 1.128 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.231 |
| NE | 0.012 | 0.329 | 1.316 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.704 |
| ENE | 0.004 | 0.517 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.615 |
| E | 0.001 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.189 |
| ESE | 0.001 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.095 |
| SE | 0.001 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.142 |
| SSE | 0.001 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.095 |
| S | 0.002 | 0.235 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.284 |
| SSW | 0.008 | 0.235 | 0.846 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.136 |
| SW | 0.006 | 0.094 | 0.752 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.993 |
| WSW | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NW | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| NNW | 0.000 | 0.047 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| SUBTOTAL | 0.047 | 1.880 | 4.511 | 0.282 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.720 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2128
TOTAL HOURS OF STABILITY CLASS G 143
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 143
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2128
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: 2005/06/02

MEAN WIND SPEED = 1.91

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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, 2005 - JUN 30, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.094 | 0.047 | 0.281 | 0.000 | 0.000 | 0.000 | 0.422 |
| NNE | 0.000 | 0.000 | 0.187 | 1.124 | 0.562 | 0.094 | 0.000 | 0.000 | 0.000 | 1.967 |
| NE | 0.000 | 0.000 | 0.422 | 0.796 | 0.562 | 0.187 | 0.000 | 0.000 | 0.000 | 1.967 |
| ENE | 0.000 | 0.000 | 0.281 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.422 |
| E | 0.000 | 0.000 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 |
| ESE | 0.000 | 0.000 | 0.047 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| SE | 0.000 | 0.000 | 0.047 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 |
| SSE | 0.000 | 0.000 | 0.047 | 0.094 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.187 |
| S | 0.000 | 0.000 | 0.094 | 0.187 | 0.187 | 0.000 | 0.000 | 0.000 | 0.000 | 0.468 |
| SSW | 0.000 | 0.000 | 0.187 | 0.984 | 0.234 | 0.094 | 0.000 | 0.000 | 0.000 | 1.499 |
| SW | 0.000 | 0.000 | 0.187 | 0.703 | 0.328 | 0.000 | 0.000 | 0.000 | 0.000 | 1.218 |
| WSW | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 | 0.000 | 0.000 | 0.000 | 0.094 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 | 0.000 | 0.000 | 0.000 | 0.187 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 | 0.000 | 0.000 | 0.000 | 0.141 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.047 |
| SUBTOTAL | 0.000 | 0.000 | 1.546 | 4.356 | 2.014 | 1.171 | 0.000 | 0.000 | 0.000 | 9.087 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2155
TOTAL HOURS OF STABILITY CLASS A 194
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 194
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2135
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: 2005/08/25

MEAN WIND SPEED = 5.20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

APR 1, 2005 - JUN 30, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.094 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 |
| NNE | 0.000 | 0.000 | 0.047 | 0.141 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.234 |
| NE | 0.000 | 0.000 | 0.187 | 0.234 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.468 |
| ENE | 0.000 | 0.000 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 |
| E | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| ESE | 0.000 | 0.000 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 |
| SE | 0.000 | 0.047 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 |
| SSE | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| S | 0.000 | 0.000 | 0.187 | 0.094 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.328 |
| SSW | 0.000 | 0.000 | 0.281 | 0.422 | 0.234 | 0.000 | 0.000 | 0.000 | 0.000 | 0.937 |
| SW | 0.000 | 0.000 | 0.375 | 0.703 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.077 |
| 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 | 0.047 | 0.000 | 0.000 | 0.000 | 0.047 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 | 0.047 | 0.000 | 0.000 | 0.141 |
| NW | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| SUBTOTAL | 0.000 | 0.047 | 1.358 | 2.014 | 0.422 | 0.234 | 0.047 | 0.000 | 0.000 | 4.122 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2155 |
| TOTAL HOURS OF STABILITY CLASS B | 89 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B | 88 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2135 |
| 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: 2005/08/25

MEAN WIND SPEED = 4.44

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, 2005 - JUN 30, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.047 | 0.094 | 0.141 | 0.047 | 0.000 | 0.000 | 0.00C | 0.328 |
| NNE | 0.000 | 0.047 | 0.141 | 0.141 | 0.187 | 0.000 | 0.000 | 0.000 | 0.00C | 0.515 |
| NE | 0.000 | 0.000 | 0.187 | 0.328 | 0.094 | 0.000 | 0.000 | 0.000 | 0.00C | 0.609 |
| ENE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| E | 0.000 | 0.000 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.141 |
| ESE | 0.000 | 0.000 | 0.047 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.141 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| SSE | 0.000 | 0.000 | 0.094 | 0.047 | 0.000 | 0.047 | 0.000 | 0.000 | 0.00C | 0.187 |
| S | 0.000 | 0.000 | 0.094 | 0.281 | 0.000 | 0.141 | 0.000 | 0.000 | 0.00C | 0.515 |
| SSW | 0.000 | 0.000 | 0.094 | 0.562 | 0.187 | 0.000 | 0.000 | 0.000 | 0.00C | 0.843 |
| SW | 0.000 | 0.000 | 0.328 | 0.749 | 0.187 | 0.000 | 0.000 | 0.000 | 0.00C | 1.265 |
| WSW | 0.000 | 0.000 | 0.000 | 0.047 | 0.094 | 0.000 | 0.000 | 0.000 | 0.00C | 0.141 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| WNW | 0.000 | 0.000 | 0.000 | 0.094 | 0.234 | 0.047 | 0.000 | 0.000 | 0.00C | 0.375 |
| NW | 0.000 | 0.000 | 0.000 | 0.047 | 0.187 | 0.141 | 0.000 | 0.000 | 0.00C | 0.375 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 | 0.047 | 0.000 | 0.000 | 0.00C | 0.141 |
| SUBTOTAL | 0.000 | 0.047 | 1.171 | 2.482 | 1.405 | 0.468 | 0.000 | 0.000 | 0.00C | 5.574 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2155 |
| TOTAL HOURS OF STABILITY CLASS C | 119 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C | 119 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2135 |
| 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: 2005/08/25

MEAN WIND SPEED = 4.82

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, 2005 - JUN 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.094 | 0.890 | 0.375 | 0.328 | 0.094 | 0.000 | 0.000 | 0.000 | 1.780 |
| NNE | 0.000 | 0.094 | 1.499 | 1.874 | 0.562 | 0.187 | 0.000 | 0.000 | 0.000 | 4.215 |
| NE | 0.000 | 0.000 | 0.796 | 0.328 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 1.218 |
| ENE | 0.000 | 0.000 | 0.281 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.422 |
| E | 0.000 | 0.000 | 0.234 | 0.141 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.422 |
| ESE | 0.000 | 0.000 | 0.281 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.281 |
| SE | 0.000 | 0.047 | 0.281 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.468 |
| SSE | 0.000 | 0.047 | 0.562 | 0.375 | 0.000 | 0.422 | 0.000 | 0.000 | 0.000 | 1.405 |
| S | 0.000 | 0.000 | 1.686 | 1.358 | 0.141 | 0.141 | 0.000 | 0.000 | 0.000 | 3.326 |
| SSW | 0.000 | 0.187 | 2.576 | 1.920 | 0.187 | 0.000 | 0.000 | 0.000 | 0.000 | 4.871 |
| SW | 0.000 | 0.047 | 2.529 | 2.061 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 5.012 |
| WSW | 0.000 | 0.000 | 0.749 | 0.515 | 0.234 | 0.047 | 0.000 | 0.000 | 0.000 | 1.546 |
| W | 0.000 | 0.000 | 0.234 | 0.281 | 0.187 | 0.328 | 0.000 | 0.000 | 0.000 | 1.030 |
| WNW | 0.000 | 0.047 | 0.281 | 0.281 | 0.375 | 0.515 | 0.000 | 0.000 | 0.000 | 1.499 |
| NW | 0.000 | 0.000 | 0.234 | 0.328 | 0.796 | 0.328 | 0.000 | 0.000 | 0.000 | 1.686 |
| NNW | 0.000 | 0.187 | 0.281 | 0.515 | 0.468 | 0.047 | 0.000 | 0.000 | 0.000 | 1.499 |
| SUBTOTAL | 0.000 | 0.749 | 13.396 | 10.585 | 3.841 | 2.108 | 0.000 | 0.000 | 0.000 | 30.679 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2155
TOTAL HOURS OF STABILITY CLASS D 664
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 655
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2135
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: 2005/08/26

MEAN WIND SPEED = 4.07

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, 2005 - JUN 30, 2005

| WIND DIRECTION | CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | WIND SPEED (MPH) | | | | | | | | | |
| N | 0.000 | 0.468 | 3.513 | 1.311 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 5.386 |
| NNE | 0.000 | 0.468 | 2.342 | 0.703 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 3.560 |
| NE | 0.000 | 0.328 | 0.422 | 0.234 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.984 |
| ENE | 0.000 | 0.094 | 0.281 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.375 |
| E | 0.000 | 0.234 | 0.234 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.468 |
| ESE | 0.000 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.141 |
| SE | 0.000 | 0.422 | 0.515 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.937 |
| SSE | 0.000 | 0.609 | 0.562 | 0.000 | 0.047 | 0.094 | 0.000 | 0.000 | 0.000 | 1.311 |
| S | 0.000 | 0.281 | 0.937 | 0.234 | 0.515 | 0.234 | 0.000 | 0.000 | 0.000 | 2.201 |
| SSW | 0.000 | 0.328 | 2.998 | 0.703 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 4.169 |
| SW | 0.000 | 0.468 | 2.482 | 0.796 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.747 |
| WSW | 0.000 | 0.141 | 1.077 | 0.187 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 1.499 |
| W | 0.000 | 0.187 | 1.030 | 0.328 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 1.593 |
| WNW | 0.000 | 0.328 | 0.703 | 0.375 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 1.452 |
| NW | 0.000 | 0.234 | 0.375 | 0.422 | 0.187 | 0.047 | 0.000 | 0.000 | 0.000 | 1.265 |
| NNW | 0.000 | 0.328 | 0.890 | 0.328 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 1.639 |
| SUBTOTAL | 0.000 | 5.012 | 18.407 | 5.621 | 1.265 | 0.422 | 0.000 | 0.000 | 0.000 | 30.726 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2155 |
| TOTAL HOURS OF STABILITY CLASS E | 663 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E | 656 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2135 |
| 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: 2005/08/26

MEAN WIND SPEED = 2.70

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, 2005 - JUN 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.468 | 1.920 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 2.436 |
| NNE | 0.000 | 0.515 | 2.998 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.513 |
| NE | 0.000 | 0.562 | 0.749 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.311 |
| ENE | 0.000 | 0.328 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.422 |
| E | 0.000 | 0.422 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.515 |
| ESE | 0.000 | 0.468 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.562 |
| SE | 0.000 | 0.703 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.843 |
| SSE | 0.000 | 0.468 | 0.187 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.656 |
| S | 0.000 | 0.375 | 0.703 | 0.234 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.311 |
| SSW | 0.000 | 0.234 | 1.171 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.405 |
| SW | 0.000 | 0.234 | 0.703 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.937 |
| WSW | 0.000 | 0.094 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.468 |
| W | 0.000 | 0.047 | 0.094 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 |
| WNW | 0.000 | 0.094 | 0.094 | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.234 |
| NW | 0.000 | 0.047 | 0.141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.187 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.000 | 5.059 | 9.555 | 0.328 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 14.988 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2155
TOTAL HOURS OF STABILITY CLASS F 323
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 320
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2135
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: 2005/08/26

MEAN WIND SPEED = 1.89

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, 2005 - JUN 30, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.001 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.095 |
| NNE | 0.005 | 0.094 | 0.422 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.520 |
| NE | 0.006 | 0.187 | 0.422 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.615 |
| ENE | 0.002 | 0.094 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.189 |
| E | 0.003 | 0.234 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.284 |
| ESE | 0.004 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.378 |
| SE | 0.005 | 0.515 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.520 |
| SSE | 0.005 | 0.422 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.520 |
| S | 0.007 | 0.375 | 0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.757 |
| SSW | 0.007 | 0.094 | 0.609 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.709 |
| SW | 0.001 | 0.000 | 0.094 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.095 |
| WSW | 0.000 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.047 |
| W | 0.001 | 0.047 | 0.047 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.095 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.047 | 2.529 | 2.248 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 4.824 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2155
TOTAL HOURS OF STABILITY CLASS G 103
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 103
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2135
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: 2005/08/25

MEAN WIND SPEED = 1.52

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.183 | 0.275 | 0.000 | 0.000 | 0.000 | 0.000 | 0.458 |
| NNE | 0.000 | 0.000 | 0.550 | 1.558 | 1.100 | 0.000 | 0.000 | 0.000 | 0.000 | 3.208 |
| NE | 0.000 | 0.000 | 0.687 | 0.733 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 1.558 |
| ENE | 0.000 | 0.000 | 0.183 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.229 |
| E | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ESE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSE | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| S | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSW | 0.000 | 0.000 | 0.000 | 0.504 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.504 |
| SW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| WSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| W | 0.000 | 0.000 | 0.046 | 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 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.000 | 0.000 | 1.467 | 3.025 | 1.558 | 0.000 | 0.000 | 0.000 | 0.000 | 6.049 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
TOTAL HOURS OF STABILITY CLASS A 132
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 132
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2182
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: 2005/12/05

MEAN WIND SPEED = 4.53

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, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.137 | 0.229 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.367 |
| NNE | 0.000 | 0.000 | 0.458 | 0.779 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 1.375 |
| NE | 0.000 | 0.000 | 1.008 | 0.183 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 1.237 |
| ENE | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| E | 0.000 | 0.000 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.137 |
| 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 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| SSE | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| S | 0.000 | 0.000 | 0.000 | 0.275 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.321 |
| SSW | 0.000 | 0.000 | 0.046 | 0.183 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.275 |
| SW | 0.000 | 0.000 | 0.046 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.137 |
| WSW | 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 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.000 | 0.000 | 1.925 | 1.879 | 0.275 | 0.000 | 0.000 | 0.000 | 0.000 | 4.079 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
TOTAL HOURS OF STABILITY CLASS B 90
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 89
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2182
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: 2005/12/05

MEAN WIND SPEED = 3.76

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, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.229 | 0.367 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.687 |
| NNE | 0.000 | 0.000 | 0.825 | 0.779 | 0.275 | 0.000 | 0.000 | 0.000 | 0.000 | 1.879 |
| NE | 0.000 | 0.000 | 0.504 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.596 |
| ENE | 0.000 | 0.000 | 0.183 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.275 |
| E | 0.000 | 0.000 | 0.229 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.275 |
| ESE | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| SE | 0.000 | 0.000 | 0.092 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.229 |
| SSE | 0.000 | 0.000 | 0.046 | 0.046 | 0.046 | 0.137 | 0.046 | 0.000 | 0.000 | 0.321 |
| S | 0.000 | 0.000 | 0.000 | 0.412 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.412 |
| SSW | 0.000 | 0.000 | 0.046 | 1.329 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 1.467 |
| SW | 0.000 | 0.000 | 0.183 | 0.229 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.412 |
| WSW | 0.000 | 0.000 | 0.046 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| W | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NNW | 0.000 | 0.000 | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| SUBTOTAL | 0.000 | 0.000 | 2.475 | 3.758 | 0.550 | 0.137 | 0.046 | 0.000 | 0.000 | 6.966 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
TOTAL HOURS OF STABILITY CLASS C 152
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 152
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2182
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: 2005/12/05

MEAN WIND SPEED = 4.07

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, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 2.200 | 1.558 | 0.183 | 0.046 | 0.000 | 0.000 | 0.000 | 3.987 |
| NNE | 0.000 | 0.046 | 1.512 | 1.558 | 0.733 | 0.229 | 0.000 | 0.000 | 0.000 | 4.079 |
| NE | 0.000 | 0.046 | 0.642 | 0.367 | 0.137 | 0.092 | 0.000 | 0.000 | 0.000 | 1.283 |
| ENE | 0.000 | 0.046 | 0.642 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.779 |
| E | 0.000 | 0.000 | 0.412 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.458 |
| ESE | 0.000 | 0.000 | 0.458 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.504 |
| SE | 0.000 | 0.092 | 0.687 | 0.183 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 1.054 |
| SSE | 0.000 | 0.000 | 0.917 | 0.367 | 0.367 | 0.596 | 0.275 | 0.000 | 0.000 | 2.521 |
| S | 0.000 | 0.000 | 2.521 | 2.612 | 0.092 | 0.321 | 0.046 | 0.000 | 0.000 | 5.591 |
| SSW | 0.000 | 0.046 | 3.437 | 3.850 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 7.424 |
| SW | 0.000 | 0.000 | 1.237 | 1.237 | 0.000 | 0.229 | 0.000 | 0.000 | 0.000 | 2.704 |
| WSW | 0.000 | 0.092 | 0.504 | 0.229 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.962 |
| W | 0.000 | 0.000 | 0.092 | 0.183 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.275 |
| WNW | 0.000 | 0.046 | 0.183 | 0.092 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.367 |
| NW | 0.000 | 0.000 | 0.229 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.275 |
| NNW | 0.000 | 0.000 | 0.779 | 0.596 | 0.137 | 0.046 | 0.000 | 0.000 | 0.000 | 1.558 |
| SUBTOTAL | 0.000 | 0.412 | 16.453 | 12.970 | 2.016 | 1.650 | 0.321 | 0.000 | 0.000 | 33.822 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
TOTAL HOURS OF STABILITY CLASS D 738
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 738
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2182
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: 2005/12/05

MEAN WIND SPEED = 3.85

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

JUL 1, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.779 | 6.416 | 0.733 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 7.974 |
| NNE | 0.000 | 0.642 | 3.666 | 0.550 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 4.995 |
| NE | 0.000 | 0.367 | 0.550 | 0.183 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 1.192 |
| ENE | 0.000 | 0.183 | 0.229 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.458 |
| E | 0.000 | 0.000 | 0.367 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.412 |
| ESE | 0.000 | 0.458 | 0.367 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.871 |
| SE | 0.000 | 0.183 | 0.458 | 0.046 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.733 |
| SSE | 0.000 | 0.229 | 0.596 | 0.092 | 0.046 | 0.000 | 0.046 | 0.000 | 0.000 | 1.008 |
| S | 0.000 | 0.596 | 2.475 | 0.458 | 0.137 | 0.183 | 0.000 | 0.000 | 0.000 | 3.850 |
| SSW | 0.000 | 0.642 | 2.108 | 0.275 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.025 |
| SW | 0.000 | 0.412 | 1.421 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.833 |
| WSW | 0.000 | 0.596 | 1.146 | 0.275 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 2.016 |
| W | 0.000 | 0.229 | 0.642 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.917 |
| WNW | 0.000 | 0.275 | 0.504 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.871 |
| NW | 0.000 | 0.412 | 0.596 | 0.137 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 1.192 |
| NNW | 0.000 | 0.825 | 2.016 | 0.183 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.025 |
| SUBTOTAL | 0.000 | 6.829 | 23.556 | 3.116 | 0.550 | 0.275 | 0.046 | 0.000 | 0.000 | 34.372 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
TOTAL HOURS OF STABILITY CLASS E 750
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 750
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS. 2182
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: 2005/12/05

MEAN WIND SPEED = 2.31

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, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.229 | 4.170 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 4.537 |
| NNE | 0.000 | 1.146 | 4.995 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.141 |
| NE | 0.000 | 0.504 | 0.367 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.871 |
| ENE | 0.000 | 0.183 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| E | 0.000 | 0.137 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.229 |
| ESE | 0.000 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.137 |
| SE | 0.000 | 0.137 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| SSE | 0.000 | 0.046 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| S | 0.000 | 0.092 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| SSW | 0.000 | 0.046 | 0.412 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.458 |
| SW | 0.000 | 0.092 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| WSW | 0.000 | 0.046 | 0.229 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.275 |
| W | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| WNW | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| NW | 0.000 | 0.000 | 0.183 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.183 |
| NNW | 0.000 | 0.092 | 0.550 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.642 |
| SUBTOTAL | 0.000 | 2.933 | 11.503 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 14.574 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
TOTAL HOURS OF STABILITY CLASS F 318
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 318
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2182
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: 2005/12/05

MEAN WIND SPEED = 1.92

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, 2005 - SEP 30, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NNE | 0.000 | 0.000 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.137 |
| NE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ENE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| E | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ESE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| S | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| WSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.000 | 0.000 | 0.137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.137 |

| | |
|---|---|
| TOTAL HOURS OF VALID STABILITY OBSERVATIONS | 2183 |
| TOTAL HOURS OF STABILITY CLASS G | 3 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G | 3 |
| TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS | 2182 |
| 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: 2005/12/05

MEAN WIND SPEED = 2.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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, 2005 - DEC 31, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.046 | 0.000 | 0.000 | 0.00C | 0.092 |
| NNE | 0.000 | 0.000 | 0.000 | 0.782 | 1.057 | 0.230 | 0.000 | 0.000 | 0.00C | 2.069 |
| NE | 0.000 | 0.000 | 0.046 | 0.322 | 0.322 | 0.000 | 0.000 | 0.000 | 0.00C | 0.690 |
| ENE | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.092 |
| E | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| ESE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| SSE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00C | 0.000 |
| S | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.00C | 0.092 |
| SSW | 0.000 | 0.000 | 0.000 | 0.138 | 0.184 | 0.092 | 0.000 | 0.000 | 0.00C | 0.414 |
| SW | 0.000 | 0.000 | 0.000 | 0.184 | 0.184 | 0.276 | 0.000 | 0.000 | 0.00C | 0.644 |
| WSW | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.092 | 0.000 | 0.000 | 0.00C | 0.138 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.00C | 0.092 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.00C | 0.092 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.00C | 0.092 |
| NNW | 0.000 | 0.000 | 0.000 | 0.046 | 0.046 | 0.092 | 0.000 | 0.000 | 0.00C | 0.184 |
| SUBTOTAL | 0.000 | 0.000 | 0.138 | 1.563 | 2.069 | 0.920 | 0.000 | 0.000 | 0.00C | 4.690 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS A 102
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 102
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 6.12

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

OCT 1, 2005 - DEC 31, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.000 | 0.230 | 0.184 | 0.046 | 0.000 | 0.000 | 0.000 | 0.460 |
| NNE | 0.000 | 0.000 | 0.092 | 0.414 | 0.230 | 0.230 | 0.000 | 0.000 | 0.000 | 0.966 |
| NE | 0.000 | 0.000 | 0.414 | 0.322 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.782 |
| ENE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| E | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ESE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSE | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| S | 0.000 | 0.000 | 0.000 | 0.138 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.138 |
| SSW | 0.000 | 0.000 | 0.000 | 0.230 | 0.230 | 0.046 | 0.000 | 0.000 | 0.000 | 0.506 |
| SW | 0.000 | 0.000 | 0.000 | 0.414 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.552 |
| WSW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.092 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 | 0.046 | 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 |
| NW | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.092 | 0.000 | 0.000 | 0.000 | 0.138 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SUBTOTAL | 0.000 | 0.000 | 0.506 | 1.747 | 0.920 | 0.598 | 0.000 | 0.000 | 0.000 | 3.770 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS B 82
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 82
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 5.38

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

OCT 1, 2005 - DEC 31, 2005

| WIND DIRECTION | CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | WIND SPEED(MPH) | | | | | | | | | |
| N | 0.000 | 0.000 | 0.046 | 0.322 | 0.138 | 0.138 | 0.000 | 0.000 | 0.000 | 0.644 |
| NNE | 0.000 | 0.000 | 0.092 | 0.184 | 0.598 | 0.184 | 0.000 | 0.000 | 0.000 | 1.057 |
| NE | 0.000 | 0.000 | 0.184 | 0.322 | 0.184 | 0.000 | 0.000 | 0.000 | 0.000 | 0.690 |
| ENE | 0.000 | 0.000 | 0.046 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.138 |
| E | 0.000 | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| ESE | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| SE | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| 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 | 0.138 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.230 |
| SSW | 0.000 | 0.000 | 0.092 | 0.552 | 0.046 | 0.092 | 0.000 | 0.000 | 0.000 | 0.782 |
| SW | 0.000 | 0.000 | 0.092 | 0.368 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.598 |
| WSW | 0.000 | 0.000 | 0.092 | 0.092 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.230 |
| W | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| WNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| NW | 0.000 | 0.000 | 0.046 | 0.046 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.138 |
| NNW | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| SUBTOTAL | 0.000 | 0.000 | 0.782 | 2.207 | 1.333 | 0.552 | 0.000 | 0.000 | 0.000 | 4.874 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS C 108
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 106
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 5.08

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

OCT 1, 2005 - DEC 31, 2005

| WIND DIRECTION | WIND SPEED (MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.000 | 0.828 | 1.241 | 1.931 | 0.414 | 0.000 | 0.000 | 0.000 | 4.414 |
| NNE | 0.000 | 0.046 | 1.103 | 2.069 | 2.621 | 0.736 | 0.000 | 0.000 | 0.000 | 6.575 |
| NE | 0.000 | 0.000 | 0.552 | 0.368 | 0.644 | 0.138 | 0.000 | 0.000 | 0.000 | 1.701 |
| ENE | 0.000 | 0.000 | 0.138 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.184 |
| E | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| 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 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| SSE | 0.000 | 0.000 | 0.092 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.184 |
| S | 0.000 | 0.000 | 0.414 | 0.460 | 0.506 | 0.460 | 0.276 | 0.000 | 0.000 | 2.115 |
| SSW | 0.000 | 0.092 | 0.966 | 2.115 | 0.644 | 0.092 | 0.000 | 0.000 | 0.000 | 3.908 |
| SW | 0.000 | 0.000 | 1.057 | 0.874 | 0.276 | 0.138 | 0.000 | 0.000 | 0.000 | 2.345 |
| WSW | 0.000 | 0.000 | 0.552 | 0.184 | 0.138 | 0.092 | 0.000 | 0.000 | 0.000 | 0.966 |
| W | 0.000 | 0.138 | 0.322 | 0.092 | 0.184 | 0.276 | 0.000 | 0.000 | 0.000 | 1.011 |
| WNW | 0.000 | 0.000 | 0.368 | 0.368 | 0.460 | 0.138 | 0.000 | 0.000 | 0.000 | 1.333 |
| NW | 0.000 | 0.046 | 0.368 | 0.874 | 0.460 | 0.598 | 0.000 | 0.000 | 0.000 | 2.345 |
| NNW | 0.000 | 0.000 | 0.322 | 0.690 | 0.874 | 0.230 | 0.000 | 0.000 | 0.000 | 2.115 |
| SUBTOTAL | 0.000 | 0.368 | 7.218 | 9.471 | 8.736 | 3.310 | 0.276 | 0.000 | 0.000 | 29.379 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS D 639
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 639
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 5.04

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, 2005 - DEC 31, 2005

| WIND DIRECTION | CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | WIND SPEED (MPH) | | | | | | | | | |
| N | 0.000 | 0.414 | 3.908 | 1.793 | 0.782 | 0.046 | 0.000 | 0.000 | 0.000 | 6.943 |
| NNE | 0.000 | 0.230 | 4.414 | 2.345 | 0.368 | 0.000 | 0.000 | 0.000 | 0.000 | 7.356 |
| NE | 0.000 | 0.138 | 0.690 | 0.184 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 1.057 |
| ENE | 0.000 | 0.138 | 0.138 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.276 |
| E | 0.000 | 0.046 | 0.092 | 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 | 0.138 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.184 |
| SSE | 0.000 | 0.184 | 0.276 | 0.184 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.690 |
| S | 0.000 | 0.230 | 1.655 | 0.644 | 0.552 | 0.184 | 0.046 | 0.000 | 0.000 | 3.310 |
| SSW | 0.000 | 0.184 | 2.621 | 1.103 | 0.368 | 0.000 | 0.000 | 0.000 | 0.000 | 4.276 |
| SW | 0.000 | 0.138 | 2.529 | 1.195 | 0.598 | 0.138 | 0.000 | 0.000 | 0.000 | 4.598 |
| WSW | 0.000 | 0.046 | 0.874 | 0.414 | 0.184 | 0.046 | 0.000 | 0.000 | 0.000 | 1.563 |
| W | 0.000 | 0.184 | 0.368 | 0.322 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 1.011 |
| WNW | 0.000 | 0.046 | 0.230 | 0.506 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.874 |
| NW | 0.000 | 0.046 | 0.552 | 0.414 | 0.276 | 0.092 | 0.000 | 0.000 | 0.000 | 1.379 |
| NNW | 0.000 | 0.230 | 1.379 | 1.103 | 0.644 | 0.092 | 0.000 | 0.000 | 0.000 | 3.448 |
| SUBTOTAL | 0.000 | 2.345 | 20.046 | 10.207 | 4.000 | 0.690 | 0.046 | 0.000 | 0.000 | 37.333 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS E 813
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 812
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 3.39

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, 2005 - DEC 31, 2005

| WIND DIRECTION | WIND SPEED(MPH) CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| N | 0.000 | 0.184 | 3.356 | 0.414 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 4.000 |
| NNE | 0.000 | 0.414 | 5.609 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 6.115 |
| NE | 0.000 | 0.736 | 0.598 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.333 |
| ENE | 0.000 | 0.414 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.506 |
| E | 0.000 | 0.138 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.230 |
| ESE | 0.000 | 0.046 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| SE | 0.000 | 0.230 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.230 |
| SSE | 0.000 | 0.184 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.276 |
| S | 0.000 | 0.092 | 0.460 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.552 |
| SSW | 0.000 | 0.046 | 1.103 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.149 |
| SW | 0.000 | 0.092 | 0.782 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.874 |
| WSW | 0.000 | 0.046 | 0.368 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.414 |
| W | 0.000 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.138 |
| WNW | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| NW | 0.000 | 0.000 | 0.092 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.230 |
| NNW | 0.000 | 0.092 | 0.598 | 0.138 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.874 |
| SUBTOTAL | 0.000 | 2.897 | 13.333 | 0.736 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 17.103 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS F 372
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 372
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 2.18

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, 2005 - DEC 31, 2005

| WIND DIRECTION | CALM | 0.6-1.4 | 1.5-3.4 | 3.5-5.4 | 5.5-7.4 | 7.5-12.4 | 12.5-18.4 | 18.5-24.4 | >=24.5 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | WIND SPEED(MPH) | | | | | | |
| N | 0.000 | 0.000 | 0.092 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.138 |
| NNE | 0.000 | 0.092 | 0.506 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.598 |
| NE | 0.000 | 0.184 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.276 |
| ENE | 0.000 | 0.138 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.138 |
| E | 0.000 | 0.046 | 0.000 | 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 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| SSE | 0.000 | 0.000 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| S | 0.000 | 0.092 | 0.230 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.322 |
| SSW | 0.000 | 0.046 | 0.552 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.598 |
| SW | 0.000 | 0.046 | 0.276 | 0.138 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.460 |
| WSW | 0.000 | 0.000 | 0.046 | 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 |
| 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 | 0.046 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 |
| NNW | 0.000 | 0.000 | 0.000 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.092 |
| SUBTOTAL | 0.000 | 0.690 | 1.885 | 0.276 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 2.851 |

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2178
TOTAL HOURS OF STABILITY CLASS G 62
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 62
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2175
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: 2006/02/13

MEAN WIND SPEED = 2.16

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Attachment 2.0

Deviations from ODCM Controls/Surveillance Requirements

| Date | ODCM Requiremen | Description of Deviation |
|---|---|---|
| June 29, 2005 | 1/2 1.1.1 Table 1.1-1 Item 3.d Action 33. | Engineering notified Operations that with water flowing over Gate Structure #1 weir the required 15,000gpm dilution flow may not be available even though plant compliance instrument 0-LS-27-225 indicates >15,000 gpm. PM 058610000 for cleaning the blowdown strainer was revised and placed on 48 week frequency. EWR 06-BOP-027-012 was issued. |
| Dec. 20, 2005 | 1.1.2 Table 1.1-2 Item 4.b and c. Action 44 | Radiation Monitor 0-RM-90-101 (Auxiliary Building Stack) was removed from service to perform an IFT. Chemistry did not install back-up sampler within the required 4 hour time. PER 94285. |

Attachment 3.0

Radiation Monitors Inoperable for Greater than 30 days

None

Compliance Instruments Inoperable for grater than 30 days

0-LS-27-225 (Cooling Tower Blowdown Effluent Line) PER 85280.