



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37384-2000

April 26, 2001

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

Gentlemen:

In the Matter of ) Docket Nos. 50-327  
Tennessee Valley Authority ) 50-328

**SEQUOYAH NUCLEAR PLANT - 2000 ANNUAL RADIOACTIVE EFFLUENT  
RELEASE REPORT (ARERR)**

Enclosed is the ARERR for the period of January 1 to  
December 31, 2000. This report (Enclosure 1) is being  
submitted in accordance with Sequoyah Technical  
Specification (TS) 6.9.1.8.

In addition, in accordance with TS 6.1.14.3, a complete copy  
of the Offsite Dose Calculation Manual (Enclosure 3) is  
submitted with marked revisions implemented during calendar  
year 2000. The Offsite Dose Calculation Manual also  
requires that a Radiological Impact Assessment (Enclosure 2)  
be submitted for the same reporting period.

Please direct questions concerning this issue to me at (423)  
843-7170 or J. D. Smith at (423) 843-6672.

Sincerely,

Pedro Salas  
Licensing and Industry Affairs Manager

Enclosures  
cc: See page 2

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cc (Enclosures):

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ENCLOSURE 1

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

SEQUOYAH NUCLEAR PLANT

2000

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
SUPPLEMENTAL INFORMATION  
2000**

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
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(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 ( $\mu\text{Ci/ml}$ ) 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  $\mu\text{Ci/ml}$  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.

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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. Therefore, the average beta and gamma energies (E) for gaseous effluents as described in Regulatory Guide 1.21, "Measuring, Evaluation, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," are not applicable.

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.

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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		<u>Units</u>
1st Half	2nd Half	

**A. Liquid (Radwaste only)**

1. Number of releases	59	96	Each
2. Total time period of releases	9527	12521	Minutes
3. Maximum time period of release	295	303	Minutes
4. Average time period of releases	161	130	Minutes
5. Minimum time period for release	43	1	Minutes
6. Average dilution stream flow during	17571	22123	CFS

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

1. Number of releases	75	80	Each
2. Total time period of releases	27034	97191	Minutes
3. Maximum time period for release	960	40536	Minutes
4. Average time period for releases	360	1215	Minutes
5. Minimum time period for release	4	10	Minutes

VI. ABNORMAL RELEASES

<u>Value</u>		<u>Units</u>
<u>1st</u> <u>Half</u>	<u>2nd</u> <u>Half</u>	

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



EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
 LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

A. <u>Fission and Activation Products</u>	<u>Unit</u>	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>	<u>%Error</u>
1. Total Released	Curies	9.47E-02	3.90E-02	2.69E-02	9.66E-02	≤1.8E+01
2. Average diluted concentration during period	μCi/ml	4.02E-07	5.98E-07	1.42E-07	4.48E-07	
3. Percent of Applicable Limit	%	*	*	*	*	
B. <u>Tritium</u>						
1. Total Released	Curies	9.03E+02	7.48E+01	7.47E+02	5.57E+02	≤1.8E+01
2. Average diluted concentration during period	μCi/ml	3.82E-03	1.15E-03	3.94E-03	2.58E-03	
3. Percent of Applicable Limit	%	*	*	*	*	
C. <u>Dissolved and Entrained Gases</u>						
1. Total Released	Curies	3.30E-01	1.44E-02	1.46E+00	7.32E-01	≤3.9E+01
2. Average diluted concentration during period	μCi/ml	1.40E-06	2.20E-07	7.68E-06	3.40E-06	
3. Percent of Applicable Limit	%	*	*	*	1.70E+00	
D. <u>Gross Alpha</u>						
1. Total Released	Curies	0.00E-01	0.00E-01	0.00E-01	0.00E-01	≤2.0E+01
E. <u>Volume of Waste Released</u>	Liters	2.38E+06	8.39E+05	1.84E+06	2.43E+06	≤4.0E+00
F. <u>Volume of Dilution Water for Period</u>	Liters	2.34E+08	6.44E+07	1.88E+08	2.13E+08	≤1.1E+01

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT**  
**2000**  
**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		Batch Mode	
		Quarter	Quarter	Quarter	Quarter
		1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>
1. Strontium-89	Ci	0.00E-01	0.00E-01	8.04E-05	0.00E-01
2. Strontium-90	Ci	0.00E-01	0.00E-01	3.14E-05	0.00E-01
3. Iron-55	Ci	0.00E-01	0.00E-01	2.40E-02	5.61E-03
4. Manganese-54	Ci	0.00E-01	0.00E-01	7.99E-04	1.91E-04
5. Cobalt-58	Ci	0.00E-01	0.00E-01	2.09E-02	1.21E-02
6. Iron-59	Ci	0.00E-01	0.00E-01	1.09E-03	3.66E-04
7. Cobalt-60	Ci	0.00E-01	0.00E-01	1.01E-02	2.78E-03
8. Zinc-65	Ci	0.00E-01	0.00E-01	6.37E-05	0.00E-01
9. Molybdenum-99	Ci	0.00E-01	0.00E-01	1.94E-05	0.00E-01
10. Iodine-131	Ci	0.00E-01	0.00E-01	7.33E-04	0.00E-01
11. Cesium-134	Ci	0.00E-01	0.00E-01	2.32E-03	4.33E-04
12. Cesium-137	Ci	0.00E-01	0.00E-01	3.37E-03	8.23E-04
13. Cesium-138	Ci	0.00E-01	0.00E-01	0.00E-01	1.36E-05
14. Cerium-144	Ci	0.00E-01	0.00E-01	6.73E-04	1.81E-04
15. Antimony-125	Ci	0.00E-01	0.00E-01	9.37E-03	8.88E-03
16. Cobalt-57	Ci	0.00E-01	0.00E-01	2.49E-04	7.18E-05
17. Chromium-51	Ci	0.00E-01	0.00E-01	3.46E-03	3.21E-03
18. Niobium-95	Ci	0.00E-01	0.00E-01	4.80E-04	9.81E-04

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**LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE**

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
		<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>
19. Zirconium-95	Ci	0.00E-01	0.00E-01	3.62E-04	5.37E-04
20. Technetium-99m	Ci	0.00E-01	0.00E-01	1.94E-05	0.00E-01
21. Iodine-132	Ci	0.00E-01	0.00E-01	9.67E-04	0.00E-01
22. Tellurium-132	Ci	0.00E-01	0.00E-01	7.56E-04	0.00E-01
23. Antimony-124	Ci	0.00E-01	0.00E-01	7.81E-04	8.00E-04
24. Lanthanum-140	Ci	0.00E-01	0.00E-01	2.41E-04	0.00E-01
25. Sodium-24	Ci	0.00E-01	0.00E-01	3.98E-06	0.00E-01
26. Silver-110m	Ci	0.00E-01	0.00E-01	6.74E-03	9.06E-04
27. Ruthenium-103	Ci	0.00E-01	0.00E-01	2.06E-04	1.62E-04
28. Tin-113	Ci	0.00E-01	0.00E-01	2.31E-04	1.40E-04
29. Barium-140	Ci	0.00E-01	0.00E-01	6.26E-05	0.00E-01
30. Copper-64	Ci	0.00E-01	0.00E-01	3.11E-04	0.00E-01
31. Tellurium-129m	Ci	0.00E-01	0.00E-01	6.24E-03	8.60E-04
<b>Total for Period</b>	Ci	0.00E-01	0.00E-01	9.47E-02	3.91E-02

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
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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

Dissolved and Entrained Noble Gases

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
		<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>
1. Xenon-133	Ci	0.00E-01	0.00E-01	3.17E-01	1.43E-02
2. Xenon-133m	Ci	0.00E-01	0.00E-01	1.41E-03	4.87E-05
3. Xenon-135	Ci	0.00E-01	0.00E-01	2.59E-04	0.00E-01
4. Xenon-131m	Ci	0.00E-01	0.00E-01	8.84E-03	0.00E-01
5. Krypton-85	Ci	0.00E-01	0.00E-01	2.15E-03	0.00E-01
6. Argon-41	Ci	0.00E-01	0.00E-01	2.11E-05	4.29E-06
<b>Total for Period</b>	Ci	0.00E-01	0.00E-01	3.30E-01	1.44E-02

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT**  
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**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		Batch Mode	
		Quarter	Quarter	Quarter	Quarter
		3 <sup>rd</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
1. Strontium-89	Ci	0.00E-01	0.00E-01	2.74E-05	0.00E-01
2. Strontium-90	Ci	0.00E-01	0.00E-01	9.92E-06	0.00E-01
3. Iron-55	Ci	0.00E-01	0.00E-01	8.01E-03	7.59E-04
4. Manganese-54	Ci	0.00E-01	0.00E-01	2.57E-04	5.06E-04
5. Cobalt-58	Ci	0.00E-01	8.92E-04	4.47E-03	1.91E-02
6. Iron-59	Ci	0.00E-01	0.00E-01	0.00E-01	3.61E-04
7. Cobalt-60	Ci	0.00E-01	0.00E-01	4.87E-03	6.99E-03
8. Zinc-65	Ci	0.00E-01	0.00E-01	7.99E-06	0.00E-01
9. Ruthenium-103	Ci	0.00E-01	0.00E-01	5.96E-06	0.00E-01
10. Iodine-131	Ci	0.00E-01	0.00E-01	2.80E-05	3.86E-04
11. Cesium-134	Ci	0.00E-01	7.68E-03	1.21E-03	6.37E-03
12. Cesium-137	Ci	0.00E-01	5.34E-03	2.30E-03	1.27E-02
13. Rubidium-86	Ci	0.00E-01	0.00E-01	6.11E-05	0.00E-01
14. Cerium-144	Ci	0.00E-01	0.00E-01	9.29E-05	8.42E-05
15. Antimony-125	Ci	0.00E-01	0.00E-01	5.79E-03	1.61E-02
16. Cobalt-57	Ci	0.00E-01	0.00E-01	7.79E-05	8.93E-05
17. Chromium-51	Ci	0.00E-01	0.00E-01	1.77E-05	3.75E-03
18. Niobium-95	Ci	0.00E-01	0.00E-01	2.58E-04	2.46E-04
19. Zirconium-95	Ci	0.00E-01	0.00E-01	2.68E-05	2.49E-04

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LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE**

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
		<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
20. Antimony-124	Ci	0.00E-01	0.00E-01	1.56E-04	4.38E-04
21. Lanthanum-140	Ci	0.00E-01	0.00E-01	8.89E-5	1.70E-04
22. Silver-110m	Ci	0.00E-01	0.00E-01	2.24E-03	4.75E-03
23. Barium-140	Ci	0.00E-01	0.00E-01	0.00E-01	2.43E-05
24. Tellurium-132	Ci	0.00E-01	0.00E-01	4.52E-06	8.87E-06
25. Tin-113	Ci	0.00E-01	0.00E-01	1.06E-05	6.52E-06
<b>Total for Period</b>		0.00E-01	1.39E-02	2.69E-02	7.22E-02

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
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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

Dissolved and Entrained Noble Gases

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
		<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
1. Xenon-133	Ci	0.00E-01	0.00E-01	1.40E+00	7.04E-01
2. Xenon-133m	Ci	0.00E-01	0.00E-01	7.74E-03	4.70E-03
3. Xenon-135	Ci	0.00E-01	0.00E-01	1.02E-03	9.49E-04
4. Xenon-131m	Ci	0.00E-01	0.00E-01	2.57E-02	1.74E-02
5. Krypton-85	Ci	0.00E-01	0.00E-01	2.51E-02	4.37E-03
<b>Total for Period</b>	Ci	0.00E-01	0.00E-01	1.45E+00	7.32E-01

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT**  
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**TABLE A**  
**LIQUID "TYPICAL LLD" EVALUATION<sup>(1)</sup>**

<u>Nuclide</u>	<u>ODCM LLD</u>	$\Delta t^{(2)}$		
		<u>1 hr</u>	<u>8 hr</u>	<u>32 hr</u>
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)

<u>Nuclide</u>	<u>ODCM LLD</u>	<u>Typical LLD</u>
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  $\mu\text{Ci/ml}$ .  
(2)  $\Delta t$  is the time between sample collection and counting time.  
(3) T ½ too short.



**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES  
(GROUND LEVEL RELEASES)**

<u>Summation of All Releases</u>	<u>Unit</u>	<u>1<sup>st</sup> Qtr</u>	<u>2<sup>nd</sup> Qtr</u>	<u>3<sup>rd</sup> Qtr</u>	<u>4<sup>th</sup> Qtr</u>	<u>%Error</u>
<b>A. <u>Noble Gases</u></b>						
1. Total Released	Ci	7.35E+01	3.12E+01	2.48E+01	1.13E+02	≤1.1E+01
2. Average Release Rate of Period	μCi/sec	9.35E+00	3.97E+01	3.12E+01	1.42E+01	
3. Percent of Limit	%	*	*	*	*	
<b>B. <u>Iodines</u></b>						
1. Total Iodine-131	Ci	7.20E-05	0.00E-01	0.00E-01	8.42E-05	≤1.3E+01
2. Average Release Rate for Period	μCi/sec	9.16E-06	0.00E-01	0.00E-01	2.80E-03	
3. Percent of Limit	%	*	*	*	*	
<b>C. <u>Particulates</u></b>						
1. Particulates with half-lives >8 days	Ci	1.63E-06	0.00E-01	0.00E-01	8.68E-06	≤1.6E+01
2. Average Release Rate for Period	μCi/sec	2.07E-07	0.00E-01	0.00E-01	1.09E-06	
3. Percent of Limit	%	*	*	*	*	
4. Gross Alpha Radio-activity	Ci	0.00E-01	0.00E-01	0.00E-01	0.00E-01	≤2.1E+01
<b>D. <u>Tritium</u></b>						
1. Total Release	Ci	2.25E+01	1.07E+01	1.15E+01	1.79E+01	≤1.5E+01
2. Average Release Rate for Period	μCi/sec	2.87E+00	1.36E+00	1.44E+00	2.25E+00	
3. Percent of Limit	%	*	*	*	*	

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT**  
**2000**  
**GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES**  
**(GROUND LEVEL RELEASES)**

1. Noble Gases

Required by  
ODCM/Others

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
		<u>1st</u>	<u>2nd</u>	<u>1st</u>	<u>2nd</u>
1. Krypton-88	Ci	0.00E-01	0.00E-01	2.45E-01	0.00E-01
2. Xenon-133	Ci	1.38E-02	1.27E-02	6.61E+01	2.93E+01
3. Xenon-133m	Ci	0.00E-01	0.00E-01	1.22E+00	4.26E-01
4. Xenon-135	Ci	9.69E-04	4.04E-03	3.42E+00	2.98E-01
5. Krypton-85	Ci	0.00E-01	0.00E-01	9.31E-01	2.97E-01
6. Argon-41	Ci	0.00E-01	0.00E-01	7.17E-01	5.17E-01
7. Krypton-85m	Ci	0.00E-01	0.00E-01	1.49E+01	0.00E-01
8. Xenon-131m	Ci	0.00E-01	0.00E-01	6.59E-01	3.65E-01
<b>Total for Period</b>	Ci	1.47E-02	1.67E-02	7.35E+01	3.12E+01

2. Iodines

1. Iodine-131	Ci	7.20E-05	0.00E-01
2. Iodine-132	Ci	3.96E-04	0.00E-01
3. Iodine-133	Ci	0.00E-01	0.00E-01
<b>Total for Period</b>	Ci	4.68E-04	0.00E-01

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES  
(GROUND LEVEL RELEASES)**

3. Particulates

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>
		<u>1st</u>	<u>2nd</u>
1. Cobalt-58	Ci	1.63E-06	0.00E-01
<b>Total for Period</b>	Ci	1.63E-06	0.00E-01

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES  
(GROUND LEVEL RELEASES)**

1. Noble Gases

Nuclide	Unit	Continuous Mode		Batch Mode	
		Quarter	Quarter	Quarter	Quarter
		3rd	4th	3rd	4th
1. Krypton-88	Ci	0.00E-01	0.00E-01	0.00E-01	8.22E-05
2. Xenon-133	Ci	8.23E-01	2.16E+00	2.21E+01	1.01E+02
3. Xenon-133m	Ci	0.00E-01	0.00E-01	2.03E-01	1.07E+00
4. Xenon-135	Ci	2.29E-01	2.27E-01	1.88E-01	6.38E-01
5. Xenon-138	Ci	0.00E-01	0.00E-01	0.00E-01	0.00E-01
6. Krypton-85	Ci	0.00E-01	0.00E-01	6.38E-01	1.04E+00
7. Argon-41	Ci	0.00E-01	0.00E-01	0.00E-01	1.57E-01
8. Krypton-85m	Ci	0.00E-01	0.00E-01	0.00E-01	8.81E-03
9. Xenon-131m	Ci	0.00E-01	0.00E-01	3.92E-01	6.71E+00
10. Xenon-135m	Ci	0.00E-01	0.00E-01	0.00E-01	0.00E-01
<b>Total for Period</b>	Ci	<b>1.05E+00</b>	<b>2.39E+00</b>	<b>2.37E+01</b>	<b>1.11E+02</b>

2. Iodines

1. Iodine-131	Ci	0.00E-01	8.42E-05
2. Iodine-133	Ci	0.00E-01	8.71E-07
<b>Total for Period</b>	Ci	<b>0.00E-01</b>	<b>8.51E-05</b>

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES  
(GROUND LEVEL RELEASES)**

3. Particulates

<u>Nuclide</u>	<u>Unit</u>	<u>Continuous Mode</u>	
		<u>Quarter</u>	<u>Quarter</u>
		<u>3rd</u>	<u>4th</u>
1. Cobalt-58	Ci	0.00E-01	8.68E-06
<b>Total for Period</b>	Ci	0.00E-01	8.68E-06

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT**  
**2000**  
**TABLE B**  
**GASEOUS "TYPICAL" LLD EVALUATION<sup>(1)</sup>**

Noble Gas

<u>Nuclide</u>	<u>ODCM LLD</u>	<u><math>\Delta t^{(2)}</math></u>	
		<u>1 hr</u>	<u>1.5 hr</u>
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<sup>(3)</sup>

		<u><math>\Delta t^{(2)}</math></u>		
		<u>1 hr</u>	<u>24 hr</u>	<u>7.0 da</u>
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
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(1) LLD values are in  $\mu\text{Ci/ml}$ .

(2)  $\Delta t$  is the time between sample collection and counting time.

(3) LLD based on sample time + 30 min. sample to analysis.

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT**  
**2000**  
**TABLE B**  
**GASEOUS "TYPICAL" LLD EVALUATION<sup>(1)</sup>**

<u>Nuclide</u>	<u>ODCM LLD</u>	<u>Typical LLD</u>
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  $\mu\text{Ci/cc}$ .

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

**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
SOLID WASTE (RADIOACTIVE SHIPMENTS)**

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

<u>1. Type of Waste</u>	<u>Unit</u>	<u>12 Month Period</u>	<u>Est. Tot. Error %</u>
a. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.	m <sup>3</sup> Ci	None None	N/A N/A
b. Dry Active Waste, Compressible Waste Contaminated Equipment, etc.	m <sup>3</sup> Ci	4.00E+01 9.22E-01	+5.00E-01 +1.00E-02
c. Irradiated Components, Control Rods, etc.	m <sup>3</sup> Ci	None None	N/A N/A
d. Other: Mechanical Filters	m <sup>3</sup> Ci	None None	N/A N/A

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

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

	<u>Curies</u>	<u>Percent</u>
None	N/A	N/A

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

	<u>Curies</u>	<u>Percent</u>
1. Chromium-51	7.58E-02	8.21
2. Iron-55	2.02E-01	21.88
3. Cobalt-58	4.13E-01	44.81
4. Cobalt-60	7.50E-02	8.14
5. Nickel-63	1.76E-02	1.91
6. Zirconium-95	3.11E-02	3.37
7. Niobium-95	4.72E-02	5.12
8. Silver-110m	3.64E-03	3.90E-01
9. Cesium-134	1.58E-02	1.71
10. Cesium-137	1.51E-02	1.64



**EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT  
2000  
SOLID WASTE (RADIOACTIVE SHIPMENTS)**

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

c. Irradiated Components	<u>Curies</u>	<u>Percent</u>
None	N/A	N/A
d. Other: Mechanical Filters	<u>Curies</u>	<u>Percent</u>
None	N/A	N/A

3. Solid Waste Disposition

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

<u>Number of Shipments</u>	<u>Type</u>	<u>Quantity</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None		N/A	N/A	N/A

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

<u>Number of Shipments</u>	<u>Type</u>	<u>Quantity</u>	<u>Mode of Transportation</u>	<u>Destination</u>
74*		A-LSA	Motor Freight	Barnwell, SC
*74 of the shipments were shipped by a waste processor.				

c. Irradiated components, control rods, etc.

<u>Number of Shipments</u>	<u>Type</u>	<u>Quantity</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None		N/A	N/A	N/A

d. Other: Mechanical Filters

<u>Number of Shipments</u>	<u>Type</u>	<u>Quantity</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None		N/A	N/A	N/A

4. Irradiated Fuel Shipments (Disposition)

<u>Number of Shipments</u>	<u>Type</u>	<u>Quantity</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None		N/A	N/A	N/A

5. Solidification of Waste

Was solidification performed? NO

If yes, solidification media: N/A

ENCLOSURE 2

RADIOLOGICAL IMPACT ASSESSMENT REPORT

SEQUOYAH NUCLEAR PLANT

JANUARY - DECEMBER 2000

## 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 (E. I. DuPont). This could be interpreted as indicating that the maximum individual, as assumed for liquid releases from Sequoyah, is an individual who obtains all of his drinking water at E. I. DuPont, consumes fish caught from the Tennessee River between SQN and Chickamauga Dam, and spends 500 hours per year on the shoreline just below the outfall from Sequoyah. Dose 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 14.8 mR/quarter at onsite (at or near the site boundary) stations and approximately 13.50 mR/quarter at offsite stations, or approximately 1.30 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 readings were 912, 470, and 201 mrem. Using these values, and subtracting an annual background value of 59 mrem/year, and multiplying by the ratio of the occupancy times, the external doses are 205, 104, and 65 mrem. The two highest TLD readings were located in an area near the RWSTs which are controlled as RCAs. Therefore, the highest dose to a member of the public inside the unrestricted area boundary is 65-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 2**  
**Doses from Airborne Effluents**  
**Second Quarter**

**Individual Doses**

<b>Pathway</b>	<b>Dose</b>	<b>Quarterly Limit</b>	<b>Percent of Limit</b>	<b>Location Sector/Distance</b>
<b>External</b>				
Gamma Air	3.24E-03 mrad	5 mrad	0.0648	N/950
Beta Air	7.31E-03 mrad	10 mrad	0.731	N/950
<b>Submersion</b>				
Total Body	1.78E-03 mrad	10 mrad	0.0178	NNW/841
Skin	3.85E-03 mrad	10 mrad	0.0385	NNW/841
<b>Organ Doses</b>				
Child/Thyroid	1.13E-02 mrem	7.5 mrem	0.151	NNW/841
Child/Total Body	1.13E-02 mrem	7.5 mrem	0.151	NNW/841

**Population Doses**

Total Body Dose                      4.60E-02 man-rem

Maximum Organ Dose (organ)      4.60E-02 man-rem (thyroid, liver, bone, GIT, 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 6**  
**Doses from Liquid Effluents**  
**Second Quarter**

**Individual Doses (mrem)**

<b>Age Group</b>	<b>Organ</b>	<b>Dose</b>	<b>Quarterly Limit</b>	<b>Percent of Limit</b>
Adult	Total Body	1.10E-03	1.5 mrem	< 1 %
Teen	GIT	1.50E-03	5 mrem	< 1 %
Child	Thyroid	7.50E-04	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 17,460

**Population Doses**

Total Body Dose                      6.10E-02 man-rem

Maximum Organ Dose (organ)    6.50E-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)**

<b>Age Group</b>	<b>Organ</b>	<b>Dose</b>	<b>Quarterly Limit</b>	<b>Percent of Limit</b>
Adult	Total Body	1.40E-02	1.5 mrem	< 1 %
Teen	Liver	1.80E-02	5 mrem	< 1 %
Child	Thyroid	4.20E-03	5 mrem	< 1 %

Average River flow past SQN (cubic feet per second): 20,852

**Population Doses**

Total Body Dose                      3.40E-01 man-rem

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

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

Table 9

Total Dose from Fuel Cycle

Dose	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
<b>Total Body or any Organ (except thyroid)</b>					
Total body air submersion	5.02E-03	1.78E-03	1.44E-03	6.32E-03	
Critical organ dose (air)	2.65E-02	1.13E-02	6.26E-03	2.35E-02	
Total body dose (liquid)	7.40E-03	1.10E-03	4.40E-03	1.40E-02	
Maximum organ dose (liquid)	9.30E-03	1.50E-03	5.40E-03	1.80E-02	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
<b>Total</b>	<b>4.82E-02</b>	<b>1.57E-02</b>	<b>1.75E-02</b>	<b>6.18E-02</b>	
<b>Cumulative Total Dose (Total body or any other organ) mrem</b>					<b>1.43E-01</b>
<b>Annual Dose Limit (mrem)</b>					<b>25</b>
<b>Percent of Limit</b>					<b>0.6 %</b>
<b>Thyroid Dose (mrem)</b>					
Total body air submersion	5.02E-03	1.78E-03	1.44E-03	6.32E-03	
Thyroid dose (airborne)	2.72E-02	1.13E-02	6.26E-03	2.42E-02	
Total body dose (liquid)	7.40E-03	1.10E-03	4.40E-03	1.40E-02	
Thyroid dose (liquid)	6.80E-03	7.50E-04	4.10E-03	4.20E-03	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
<b>Total</b>	<b>4.64E-02</b>	<b>1.49E-02</b>	<b>1.62E-02</b>	<b>4.87E-02</b>	
<b>Cumulative Total Dose (Thyroid) mrem</b>					<b>1.26E-01</b>
<b>Annual Dose Limit (mrem)</b>					<b>75</b>
<b>Percent of Limit</b>					<b>&lt; .1 %</b>



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, 2000 - MAR 31, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.104	0.363	0.000	0.000	0.000	0.466
NNE	0.000	0.000	0.000	0.000	1.191	1.088	0.000	0.000	0.000	2.279
NE	0.000	0.000	0.052	0.414	0.518	0.259	0.000	0.000	0.000	1.243
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	0.052	0.000	0.000	0.000	0.000	0.000	0.052
SSE	0.000	0.000	0.000	0.000	0.000	0.104	0.000	0.000	0.000	0.104
S	0.000	0.000	0.000	0.000	0.104	0.259	0.000	0.000	0.000	0.363
SSW	0.000	0.000	0.000	0.000	0.414	0.259	0.000	0.000	0.000	0.673
SW	0.000	0.000	0.000	0.104	0.673	0.104	0.000	0.000	0.000	0.880
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	0.052	0.000	0.000	0.000	0.000	0.052
NW	0.000	0.000	0.000	0.000	0.104	0.052	0.000	0.000	0.000	0.155
NNW	0.000	0.000	0.000	0.000	0.000	0.207	0.000	0.000	0.000	0.207
SUBTOTAL	0.000	0.000	0.052	0.570	3.159	2.693	0.000	0.000	0.000	6.473

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS A 141  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 125  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 7.31

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, 2000 - MAR 31, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.052	0.363	0.207	0.000	0.000	0.000	0.621
NNE	0.000	0.000	0.000	0.259	0.621	0.311	0.000	0.000	0.000	1.191
NE	0.000	0.000	0.052	0.155	0.259	0.052	0.000	0.000	0.000	0.518
ENE	0.000	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.052
E	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.052
ESE	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.052
SE	0.000	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.052
SSE	0.000	0.000	0.000	0.000	0.000	0.052	0.000	0.000	0.000	0.052
S	0.000	0.000	0.000	0.000	0.207	0.104	0.000	0.000	0.000	0.311
SSW	0.000	0.000	0.000	0.311	0.311	0.104	0.000	0.000	0.000	0.725
SW	0.000	0.000	0.000	0.259	0.207	0.000	0.000	0.000	0.000	0.466
WSW	0.000	0.000	0.000	0.000	0.155	0.104	0.000	0.000	0.000	0.259
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	0.104	0.000	0.104	0.000	0.000	0.000	0.207
NW	0.000	0.000	0.000	0.000	0.104	0.155	0.000	0.000	0.000	0.259
NNW	0.000	0.000	0.000	0.000	0.104	0.104	0.000	0.000	0.000	0.207
SUBTOTAL	0.000	0.000	0.155	1.243	2.330	1.295	0.000	0.000	0.000	5.023

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS B 104  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 97  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 6.38

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

JAN 1, 2000 - MAR 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.052	0.000	0.570	0.259	0.000	0.000	0.000	0.880
NNE	0.000	0.000	0.052	0.311	0.466	0.052	0.000	0.000	0.000	0.880
NE	0.000	0.000	0.207	0.104	0.207	0.000	0.000	0.000	0.000	0.518
ENE	0.000	0.000	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.104
E	0.000	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.052
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	0.052	0.000	0.052	0.000	0.000	0.000	0.104
SSE	0.000	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.052
S	0.000	0.000	0.052	0.155	0.259	0.052	0.000	0.000	0.000	0.518
SSW	0.000	0.000	0.052	0.414	0.311	0.104	0.000	0.000	0.000	0.880
SW	0.000	0.000	0.000	0.155	0.052	0.000	0.000	0.000	0.000	0.207
WSW	0.000	0.000	0.000	0.052	0.000	0.052	0.000	0.000	0.000	0.104
W	0.000	0.000	0.000	0.104	0.052	0.000	0.000	0.000	0.000	0.155
WNW	0.000	0.000	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.052
NW	0.000	0.000	0.000	0.052	0.052	0.052	0.000	0.000	0.000	0.155
NNW	0.000	0.000	0.000	0.104	0.155	0.155	0.000	0.000	0.000	0.414
SUBTOTAL	0.000	0.000	0.518	1.605	2.175	0.777	0.000	0.000	0.000	5.075

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS C 113  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 98  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 5.79

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

JAN 1, 2000 - MAR 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.052	0.621	1.761	2.330	0.880	0.000	0.000	0.000	5.645
NNE	0.000	0.000	0.829	1.709	1.191	1.864	0.000	0.000	0.000	5.593
NE	0.000	0.052	0.829	0.518	0.155	0.052	0.000	0.000	0.000	1.605
ENE	0.000	0.000	0.207	0.052	0.000	0.000	0.000	0.000	0.000	0.259
E	0.000	0.104	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.311
ESE	0.000	0.052	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.259
SE	0.000	0.000	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.207
SSE	0.000	0.104	0.414	0.207	0.052	0.052	0.000	0.000	0.000	0.829
S	0.000	0.104	0.880	0.880	0.311	0.363	0.000	0.000	0.000	2.538
SSW	0.000	0.052	1.295	2.641	1.916	0.621	0.000	0.000	0.000	6.525
SW	0.000	0.000	0.880	1.916	0.518	0.052	0.000	0.000	0.000	3.366
WSW	0.000	0.052	0.363	0.259	0.104	0.104	0.000	0.000	0.000	0.880
W	0.000	0.000	0.155	0.207	0.155	0.155	0.000	0.000	0.000	0.673
WNW	0.000	0.000	0.104	0.363	0.311	0.207	0.000	0.000	0.000	0.984
NW	0.000	0.000	0.052	0.363	0.932	0.363	0.000	0.000	0.000	1.709
NNW	0.000	0.052	0.311	1.295	1.968	1.502	0.000	0.000	0.000	5.127
SUBTOTAL	0.000	0.621	7.561	12.170	9.943	6.214	0.000	0.000	0.000	36.510

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS D 806  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 705  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 5.23

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

JAN 1, 2000 - MAR 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.414	1.502	1.605	0.518	0.000	0.000	0.000	0.000	4.039
NNE	0.000	0.259	2.279	0.984	0.518	0.000	0.000	0.000	0.000	4.039
NE	0.000	0.207	0.311	0.207	0.000	0.000	0.000	0.000	0.000	0.725
ENE	0.000	0.104	0.155	0.000	0.000	0.000	0.000	0.000	0.000	0.259
E	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.052
ESE	0.000	0.311	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.414
SE	0.000	0.155	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.259
SSE	0.000	0.104	0.104	0.155	0.207	0.207	0.000	0.000	0.000	0.777
S	0.000	0.311	0.932	1.191	0.311	0.777	0.000	0.000	0.000	3.521
SSW	0.000	0.259	1.813	2.071	0.621	0.207	0.000	0.000	0.000	4.972
SW	0.000	0.104	1.346	1.709	0.104	0.104	0.000	0.000	0.000	3.366
WSW	0.000	0.052	0.414	0.104	0.000	0.000	0.000	0.000	0.000	0.570
W	0.000	0.000	0.311	0.052	0.052	0.000	0.000	0.000	0.000	0.414
WNW	0.000	0.000	0.207	0.259	0.052	0.000	0.000	0.000	0.000	0.518
NW	0.000	0.052	0.414	0.207	0.052	0.052	0.000	0.000	0.000	0.777
NNW	0.000	0.155	0.829	0.259	0.000	0.052	0.000	0.000	0.000	1.295
SUBTOTAL	0.000	2.486	10.875	8.804	2.434	1.398	0.000	0.000	0.000	25.997

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS E 559  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 502  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 3.68

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, 2000 - MAR 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.259	1.139	0.259	0.000	0.000	0.000	0.000	0.000	1.657
NNE	0.000	0.621	3.418	0.259	0.000	0.000	0.000	0.000	0.000	4.298
NE	0.000	0.466	0.725	0.000	0.000	0.000	0.000	0.000	0.000	1.191
ENE	0.000	0.155	0.155	0.000	0.000	0.000	0.000	0.000	0.000	0.311
E	0.000	0.104	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.207
ESE	0.000	0.259	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.311
SE	0.000	0.155	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.363
SSE	0.000	0.259	0.311	0.052	0.000	0.000	0.000	0.000	0.000	0.621
S	0.000	0.000	0.829	0.000	0.000	0.000	0.000	0.000	0.000	0.829
SSW	0.000	0.052	0.725	0.104	0.000	0.000	0.000	0.000	0.000	0.880
SW	0.000	0.000	0.932	0.518	0.000	0.000	0.000	0.000	0.000	1.450
WSW	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.052
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	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.052
NW	0.000	0.000	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.052
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	2.330	8.752	1.191	0.000	0.000	0.000	0.000	0.000	12.273

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS F 256  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 237  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 2.22

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, 2000 - MAR 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL	
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5		
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.016	0.311	2.330	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.657
NE	0.006	0.259	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.938
ENE	0.003	0.363	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.573
E	0.002	0.207	0.052	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.261
ESE	0.003	0.363	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.469
SE	0.002	0.363	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.365
SSE	0.004	0.518	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.729
S	0.008	0.311	0.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.250
SSW	0.006	0.000	0.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.938
SW	0.002	0.052	0.207	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.364
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.001	0.000	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.104
SUBTOTAL	0.052	2.745	5.748	0.104	0.000	0.000	0.000	0.000	0.000	0.000	8.648

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS G 189  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 167  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1931  
 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: 20000526

MEAN WIND SPEED = 1.79

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, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.046	0.184	0.230	0.000	0.000	0.000	0.460
NE	0.000	0.000	0.000	0.000	0.138	0.092	0.000	0.000	0.000	0.230
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
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	0.138	0.046	0.000	0.000	0.000	0.000
S	0.000	0.000	0.046	0.414	0.460	0.276	0.000	0.000	0.000	1.196
SSW	0.000	0.000	0.000	0.874	2.208	0.782	0.000	0.000	0.000	3.864
SW	0.000	0.000	0.000	0.690	0.368	0.092	0.000	0.000	0.000	1.150
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
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	0.092	0.000	0.000	0.000	0.092
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	0.046	2.116	3.496	1.610	0.000	0.000	0.000	7.268

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS A 158  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 158  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 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: 20000814

MEAN WIND SPEED = 6.38

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, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
NNE	0.000	0.000	0.000	0.138	0.138	0.230	0.000	0.000	0.000	0.506
NE	0.000	0.000	0.092	0.276	0.138	0.000	0.000	0.000	0.000	0.506
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	0.000	0.046	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.046	0.092	0.046	0.046	0.000	0.000	0.000	0.230
S	0.000	0.000	0.000	0.368	0.230	0.138	0.000	0.000	0.000	0.736
SSW	0.000	0.000	0.138	0.966	0.828	0.046	0.000	0.000	0.000	1.978
SW	0.000	0.000	0.230	0.506	0.046	0.000	0.000	0.000	0.000	0.782
WSW	0.000	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.184
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	0.046	0.000	0.046	0.000	0.000	0.000	0.092
NW	0.000	0.000	0.000	0.000	0.000	0.184	0.000	0.000	0.000	0.184
NNW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	0.000	0.598	2.714	1.472	0.690	0.000	0.000	0.000	5.474

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS B 119  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 119  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 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: 20000814

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

APR 1, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.230	0.184	0.092	0.000	0.000	0.000	0.506
NNE	0.000	0.000	0.138	0.138	0.368	0.092	0.000	0.000	0.000	0.736
NE	0.000	0.000	0.000	0.414	0.046	0.000	0.000	0.000	0.000	0.460
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	0.000	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	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.000	0.000	0.184	0.000	0.046	0.000	0.000	0.000	0.230
S	0.000	0.000	0.138	0.276	0.276	0.046	0.000	0.000	0.000	0.736
SSW	0.000	0.000	0.322	1.104	0.368	0.138	0.000	0.000	0.000	1.932
SW	0.000	0.000	0.276	0.460	0.230	0.046	0.000	0.000	0.000	1.012
WSW	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.092
W	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.092
NW	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.092
NNW	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	0.000	1.150	2.852	1.564	0.690	0.000	0.000	0.000	6.256

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS C 136  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 136  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 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: 20000814

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

Sequoyah Nuclear Plant

APR 1, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	1.104	1.472	1.012	0.322	0.000	0.000	0.000	3.910
NNE	0.000	0.046	1.564	2.116	0.874	0.322	0.000	0.000	0.000	4.922
NE	0.000	0.000	0.828	0.322	0.046	0.000	0.000	0.000	0.000	1.196
ENE	0.000	0.046	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.322
E	0.000	0.000	0.184	0.092	0.000	0.000	0.000	0.000	0.000	0.276
ESE	0.000	0.000	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.230
SE	0.000	0.138	0.322	0.138	0.000	0.000	0.000	0.000	0.000	0.598
SSE	0.000	0.092	0.782	0.414	0.000	0.046	0.000	0.000	0.000	1.334
S	0.000	0.046	1.656	2.024	0.644	0.092	0.046	0.000	0.000	4.508
SSW	0.000	0.046	2.254	3.910	1.150	0.506	0.000	0.000	0.000	7.866
SW	0.000	0.000	1.610	1.334	0.552	0.138	0.000	0.000	0.000	3.634
WSW	0.000	0.046	0.690	0.184	0.000	0.046	0.000	0.000	0.000	0.966
W	0.000	0.092	0.230	0.000	0.092	0.046	0.000	0.000	0.000	0.460
WNW	0.000	0.000	0.046	0.046	0.138	0.138	0.000	0.000	0.000	0.368
NW	0.000	0.046	0.368	0.460	0.690	0.276	0.000	0.000	0.000	1.840
NNW	0.000	0.000	0.506	0.552	0.552	0.552	0.000	0.000	0.000	2.162
SUBTOTAL	0.000	0.598	12.649	13.063	5.750	2.484	0.046	0.000	0.000	34.591

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS D 753  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 752  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 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: 20000814

MEAN WIND SPEED = 4.26

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, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.016	0.414	3.450	0.874	0.276	0.000	0.000	0.000	0.000	5.030
NNE	0.007	0.276	1.334	0.552	0.000	0.000	0.000	0.000	0.000	2.169
NE	0.001	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.139
ENE	0.001	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.185
E	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
ESE	0.001	0.138	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.277
SE	0.002	0.322	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.554
SSE	0.003	0.230	0.460	0.000	0.046	0.184	0.000	0.000	0.000	0.923
S	0.011	0.598	1.886	0.736	0.184	0.092	0.000	0.000	0.000	3.506
SSW	0.015	0.506	3.128	1.610	0.736	0.230	0.000	0.000	0.000	6.225
SW	0.015	0.368	3.174	1.012	0.276	0.092	0.000	0.000	0.000	4.937
WSW	0.007	0.322	1.242	0.230	0.000	0.046	0.000	0.000	0.000	1.847
W	0.002	0.138	0.414	0.092	0.000	0.000	0.000	0.000	0.000	0.646
WNW	0.002	0.184	0.322	0.138	0.046	0.000	0.000	0.000	0.000	0.692
NW	0.001	0.092	0.230	0.230	0.092	0.046	0.000	0.000	0.000	0.691
NNW	0.008	0.368	1.426	0.736	0.046	0.000	0.000	0.000	0.000	2.583
SUBTOTAL	0.092	4.278	17.479	6.256	1.702	0.690	0.000	0.000	0.000	30.497

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS E 663  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 663  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 TOTAL HOURS CALM 2

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: 20000814

MEAN WIND SPEED = 2.96

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

APR 1, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.011	0.460	2.622	0.046	0.000	0.000	0.000	0.000	0.000	3.139
NNE	0.011	0.966	1.978	0.000	0.000	0.000	0.000	0.000	0.000	2.955
NE	0.003	0.690	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.923
ENE	0.001	0.276	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.323
E	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.001	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.231
SE	0.001	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.231
SSE	0.003	0.506	0.322	0.000	0.000	0.000	0.000	0.000	0.000	0.831
S	0.002	0.414	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.692
SSW	0.004	0.230	0.782	0.046	0.000	0.000	0.000	0.000	0.000	1.062
SW	0.003	0.000	0.828	0.138	0.000	0.000	0.000	0.000	0.000	0.969
WSW	0.001	0.046	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.231
W	0.001	0.046	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.277
WNW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NW	0.001	0.092	0.230	0.184	0.000	0.000	0.000	0.000	0.000	0.507
NNW	0.003	0.184	0.598	0.000	0.000	0.000	0.000	0.000	0.000	0.785
SUBTOTAL	0.046	4.370	8.372	0.460	0.000	0.000	0.000	0.000	0.000	13.247

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS F 288  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 288  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 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: 20000814

MEAN WIND SPEED = 1.80

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, 2000 - JUN 30, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.138
NNE	0.000	0.046	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.322
NE	0.000	0.092	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.276
ENE	0.000	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.276
E	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
ESE	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SE	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.138	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.138
S	0.000	0.138	0.322	0.000	0.000	0.000	0.000	0.000	0.000	0.276
SSW	0.000	0.000	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.460
SW	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.230
WSW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.184
W	0.000	0.000	0.000	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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	1.150	1.472	0.046	0.000	0.000	0.000	0.000	0.000	2.668

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2175  
 TOTAL HOURS OF STABILITY CLASS G 58  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 58  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174  
 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: 20000814

MEAN WIND SPEED = 1.63

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, 2000 - SEP 12, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.058	0.292	0.000	0.000	0.000	0.000	0.350
NNE	0.000	0.000	0.000	0.467	0.759	0.000	0.000	0.000	0.000	1.226
NE	0.000	0.000	0.117	0.934	0.525	0.000	0.000	0.000	0.000	1.576
ENE	0.000	0.000	0.000	0.467	0.058	0.000	0.000	0.000	0.000	0.525
E	0.000	0.000	0.058	0.117	0.000	0.000	0.000	0.000	0.000	0.175
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	0.117	0.000	0.000	0.000	0.000	0.000	0.117
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	0.409	0.350	0.000	0.000	0.000	0.000	0.759
SSW	0.000	0.000	0.058	1.693	0.584	0.000	0.000	0.000	0.000	2.335
SW	0.000	0.000	0.175	1.226	0.292	0.000	0.000	0.000	0.000	1.693
WSW	0.000	0.000	0.000	0.117	0.000	0.000	0.000	0.000	0.000	0.117
W	0.000	0.000	0.000	0.117	0.117	0.117	0.000	0.000	0.000	0.350
WNW	0.000	0.000	0.000	0.058	0.058	0.058	0.000	0.000	0.000	0.175
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	0.117	0.117	0.000	0.000	0.000	0.234
SUBTOTAL	0.000	0.000	0.409	5.779	3.152	0.292	0.000	0.000	0.000	9.632

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS A 171  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 165  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 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: 20001121

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

JUL 1, 2000 - SEP 12, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.175	0.175	0.000	0.000	0.000	0.000	0.350
NNE	0.000	0.000	0.000	0.292	0.642	0.058	0.000	0.000	0.000	0.992
NE	0.000	0.000	0.175	0.292	0.292	0.058	0.000	0.000	0.000	0.817
ENE	0.000	0.000	0.175	0.058	0.000	0.000	0.000	0.000	0.000	0.234
E	0.000	0.000	0.000	0.117	0.058	0.000	0.000	0.000	0.000	0.175
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	0.117	0.000	0.000	0.000	0.000	0.000	0.000	0.117
SSE	0.000	0.000	0.058	0.175	0.058	0.000	0.000	0.000	0.000	0.292
S	0.000	0.000	0.000	0.409	0.234	0.000	0.000	0.000	0.000	0.642
SSW	0.000	0.000	0.117	0.992	0.175	0.000	0.000	0.000	0.000	1.284
SW	0.000	0.000	0.058	0.350	0.000	0.000	0.000	0.000	0.000	0.409
WSW	0.000	0.000	0.058	0.117	0.000	0.000	0.000	0.000	0.000	0.175
W	0.000	0.000	0.000	0.117	0.058	0.000	0.000	0.000	0.000	0.175
WNW	0.000	0.000	0.000	0.117	0.000	0.000	0.000	0.000	0.000	0.117
NW	0.000	0.000	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.058
NNW	0.000	0.000	0.000	0.058	0.058	0.234	0.000	0.000	0.000	0.350
SUBTOTAL	0.000	0.000	0.759	3.327	1.751	0.350	0.000	0.000	0.000	6.188

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS B 106  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 106  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 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: 20001121

MEAN WIND SPEED = 4.99

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, 2000 - SEP 12, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.117	0.409	0.000	0.000	0.000	0.000	0.525
NNE	0.000	0.000	0.058	1.051	0.525	0.117	0.000	0.000	0.000	1.751
NE	0.000	0.000	0.292	0.467	0.175	0.058	0.000	0.000	0.000	0.992
ENE	0.000	0.000	0.117	0.058	0.000	0.000	0.000	0.000	0.000	0.175
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	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.175
SE	0.000	0.000	0.117	0.058	0.000	0.000	0.000	0.000	0.000	0.175
SSE	0.000	0.000	0.117	0.117	0.117	0.000	0.000	0.000	0.000	0.350
S	0.000	0.000	0.000	0.876	0.117	0.000	0.000	0.000	0.000	0.992
SSW	0.000	0.000	0.117	1.051	0.000	0.000	0.000	0.000	0.000	1.168
SW	0.000	0.000	0.175	0.117	0.058	0.000	0.000	0.000	0.000	0.350
WSW	0.000	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.058
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	0.058	0.000	0.000	0.000	0.000	0.058
NW	0.000	0.000	0.000	0.117	0.000	0.000	0.000	0.000	0.000	0.117
NNW	0.000	0.000	0.000	0.058	0.058	0.000	0.000	0.000	0.000	0.117
SUBTOTAL	0.000	0.000	1.226	4.086	1.518	0.175	0.000	0.000	0.000	7.005

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS C 121  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 120  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 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: 20001121

MEAN WIND SPEED = 4.59

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, 2000 - SEP 12, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.058	0.992	1.576	1.051	0.000	0.000	0.000	0.000	3.678
NNE	0.000	0.000	1.343	3.094	1.343	0.175	0.000	0.000	0.000	5.954
NE	0.000	0.000	1.109	0.642	0.058	0.000	0.058	0.000	0.000	1.868
ENE	0.000	0.058	0.234	0.117	0.000	0.000	0.000	0.000	0.000	0.409
E	0.000	0.000	0.117	0.058	0.000	0.000	0.000	0.000	0.000	0.175
ESE	0.000	0.000	0.175	0.058	0.000	0.000	0.000	0.000	0.000	0.234
SE	0.000	0.175	0.175	0.117	0.000	0.000	0.000	0.000	0.000	0.467
SSE	0.000	0.058	0.292	0.409	0.234	0.000	0.000	0.000	0.000	0.992
S	0.000	0.058	1.985	2.335	0.058	0.000	0.000	0.000	0.000	4.437
SSW	0.000	0.175	2.335	2.860	0.175	0.000	0.000	0.000	0.000	5.546
SW	0.000	0.175	1.693	0.584	0.175	0.000	0.000	0.000	0.000	2.627
WSW	0.000	0.058	0.992	0.234	0.058	0.000	0.000	0.000	0.000	1.343
W	0.000	0.058	0.525	0.350	0.058	0.000	0.000	0.000	0.000	0.992
WNW	0.000	0.058	0.350	0.292	0.058	0.000	0.000	0.000	0.000	0.759
NW	0.000	0.000	0.117	0.234	0.058	0.000	0.000	0.000	0.000	0.409
NNW	0.000	0.000	0.350	0.234	0.234	0.058	0.000	0.000	0.000	0.876
SUBTOTAL	0.000	0.934	12.785	13.193	3.561	0.234	0.058	0.000	0.000	30.765

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS D 531  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 527  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 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: 20001121

MEAN WIND SPEED = 3.75

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, 2000 - SEP 12, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.033	0.876	4.437	2.160	0.058	0.000	0.000	0.000	0.000	7.564
NNE	0.020	0.584	2.627	1.343	0.000	0.000	0.000	0.000	0.000	4.573
NE	0.002	0.000	0.350	0.000	0.000	0.000	0.000	0.000	0.000	0.352
ENE	0.001	0.000	0.117	0.000	0.000	0.000	0.000	0.000	0.000	0.117
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.001	0.117	0.117	0.058	0.000	0.000	0.000	0.000	0.000	0.293
SE	0.001	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.235
SSE	0.005	0.234	0.525	0.000	0.000	0.000	0.000	0.000	0.000	0.764
S	0.016	0.759	1.751	0.000	0.000	0.000	0.000	0.000	0.000	2.526
SSW	0.032	0.992	4.145	0.350	0.000	0.000	0.000	0.000	0.000	5.519
SW	0.020	0.701	2.510	0.876	0.000	0.058	0.000	0.000	0.000	4.165
WSW	0.012	0.292	1.576	0.175	0.058	0.000	0.000	0.000	0.000	2.113
W	0.007	0.409	0.759	0.058	0.058	0.000	0.000	0.000	0.000	1.292
WNW	0.008	0.642	0.701	0.117	0.000	0.000	0.000	0.000	0.000	1.468
NW	0.004	0.117	0.584	0.058	0.000	0.000	0.000	0.000	0.000	0.763
NNW	0.013	0.467	1.635	0.117	0.000	0.000	0.000	0.000	0.000	2.231
SUBTOTAL	0.175	6.421	21.833	5.312	0.175	0.058	0.000	0.000	0.000	33.975

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS E 591  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 582  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 TOTAL HOURS CALM 3

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: 20001121

MEAN WIND SPEED = 2.35

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, 2000 - SEP 12, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.086	0.584	3.678	0.117	0.000	0.000	0.000	0.000	0.000	4.464
NNE	0.063	0.759	2.393	0.000	0.000	0.000	0.000	0.000	0.000	3.216
NE	0.006	0.292	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.298
ENE	0.006	0.234	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.298
E	0.001	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.001	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
SSE	0.001	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.060
S	0.008	0.175	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.417
SSW	0.009	0.117	0.350	0.000	0.058	0.000	0.000	0.000	0.000	0.535
SW	0.011	0.000	0.525	0.000	0.000	0.000	0.000	0.000	0.000	0.536
WSW	0.008	0.117	0.292	0.000	0.000	0.000	0.000	0.000	0.000	0.417
W	0.001	0.000	0.058	0.117	0.000	0.000	0.000	0.000	0.000	0.176
WNW	0.001	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060
NW	0.008	0.117	0.292	0.000	0.000	0.000	0.000	0.000	0.000	0.417
NNW	0.022	0.234	0.876	0.000	0.000	0.000	0.000	0.000	0.000	1.131
SUBTOTAL	0.234	2.802	8.815	0.234	0.058	0.000	0.000	0.000	0.000	12.142

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS F 208  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 208  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 TOTAL HOURS CALM 4

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: 20001121

MEAN WIND SPEED = 1.90

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, 2000 - SEP 12, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL	
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5		
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.058	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.117
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	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	0.000
S	0.000	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.058
SSW	0.000	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.058
SW	0.000	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	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.058
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.058	0.175	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.292

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 1733  
 TOTAL HOURS OF STABILITY CLASS G 5  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 5  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1713  
 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: 20001121

MEAN WIND SPEED = 2.16

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, 2000 - DEC 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.000	0.144	0.000	0.000	0.000	0.144
NNE	0.000	0.000	0.000	0.000	0.144	0.192	0.000	0.000	0.000	0.337
NE	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.000	0.096
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	0.048	0.048	0.000	0.000	0.000	0.000	0.096
SSW	0.000	0.000	0.000	0.000	0.192	0.000	0.000	0.000	0.000	0.192
SW	0.000	0.000	0.000	0.096	0.337	0.000	0.000	0.000	0.000	0.433
WSW	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.048
W	0.000	0.000	0.000	0.000	0.000	0.192	0.000	0.000	0.000	0.192
WNW	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
NW	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.048
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.241	0.866	0.529	0.000	0.000	0.000	1.635

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174  
 TOTAL HOURS OF STABILITY CLASS A 34  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 34  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2079  
 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: 20010216

MEAN WIND SPEED = 6.90

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, 2000 - DEC 31, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.000	0.144	0.000	0.000	0.000	0.144
NNE	0.000	0.000	0.000	0.241	0.289	0.289	0.000	0.000	0.000	0.818
NE	0.000	0.000	0.048	0.096	0.000	0.000	0.000	0.000	0.000	0.144
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	0.096	0.000	0.000	0.000	0.000	0.000	0.096
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	0.048	0.000	0.000	0.000	0.000	0.048
SSW	0.000	0.000	0.000	0.337	0.192	0.000	0.000	0.000	0.000	0.529
SW	0.000	0.000	0.048	0.241	0.096	0.000	0.000	0.000	0.000	0.385
WSW	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.048
W	0.000	0.000	0.000	0.096	0.000	0.000	0.000	0.000	0.000	0.096
WNW	0.000	0.000	0.000	0.048	0.144	0.048	0.000	0.000	0.000	0.241
NW	0.000	0.000	0.000	0.000	0.096	0.000	0.000	0.000	0.000	0.096
NNW	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.048
SUBTOTAL	0.000	0.000	0.096	1.154	0.914	0.529	0.000	0.000	0.000	2.694

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174  
 TOTAL HOURS OF STABILITY CLASS B 56  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 56  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2079  
 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: 20010216

MEAN WIND SPEED = 5.71

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, 2000 - DEC 31, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.096	0.144	0.289	0.000	0.000	0.000	0.529
NNE	0.000	0.000	0.048	0.385	0.337	0.433	0.000	0.000	0.000	1.203
NE	0.000	0.000	0.192	0.144	0.000	0.000	0.000	0.000	0.000	0.337
ENE	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.096
E	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
ESE	0.000	0.000	0.000	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	0.144	0.000	0.000	0.000	0.000	0.000	0.144
SSW	0.000	0.000	0.048	0.673	0.048	0.000	0.000	0.000	0.000	0.770
SW	0.000	0.000	0.241	0.337	0.144	0.000	0.000	0.000	0.000	0.722
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.096
WNW	0.000	0.000	0.000	0.144	0.048	0.000	0.000	0.000	0.000	0.192
NW	0.000	0.000	0.000	0.048	0.241	0.096	0.000	0.000	0.000	0.385
NNW	0.000	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.000	0.096
SUBTOTAL	0.000	0.000	0.577	2.116	1.058	0.866	0.000	0.000	0.000	4.618

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2174
TOTAL HOURS OF STABILITY CLASS C	101
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	96
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2079
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: 20010216

MEAN WIND SPEED = 5.61

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, 2000 - DEC 31, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.192	1.587	1.395	2.020	0.866	0.000	0.000	0.000	6.061
NNE	0.000	0.192	3.078	2.982	1.924	1.876	0.096	0.000	0.000	10.149
NE	0.000	0.096	1.395	0.722	0.048	0.144	0.000	0.000	0.000	2.405
ENE	0.000	0.048	0.433	0.000	0.000	0.000	0.000	0.000	0.000	0.481
E	0.000	0.000	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.192
ESE	0.000	0.096	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.337
SE	0.000	0.048	0.289	0.048	0.000	0.000	0.000	0.000	0.000	0.385
SSE	0.000	0.144	0.433	0.048	0.000	0.000	0.000	0.000	0.000	0.625
S	0.000	0.144	1.154	1.924	0.625	0.096	0.000	0.000	0.000	3.944
SSW	0.000	0.192	2.165	3.127	1.491	0.385	0.000	0.000	0.000	7.359
SW	0.000	0.048	1.443	1.491	0.385	0.096	0.000	0.000	0.000	3.463
WSW	0.000	0.048	0.625	0.337	0.337	0.096	0.000	0.000	0.000	1.443
W	0.000	0.144	0.577	0.241	0.289	0.144	0.000	0.000	0.000	1.395
WNW	0.000	0.144	0.192	0.241	0.433	0.241	0.000	0.000	0.000	1.251
NW	0.000	0.192	0.192	0.337	0.289	0.096	0.000	0.000	0.000	1.106
NNW	0.000	0.048	0.722	0.866	0.770	0.192	0.000	0.000	0.000	2.597
SUBTOTAL	0.000	1.780	14.719	13.757	8.610	4.233	0.096	0.000	0.000	43.194

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174  
 TOTAL HOURS OF STABILITY CLASS D 957  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 898  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2079  
 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: 20010216

MEAN WIND SPEED = 4.45

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, 2000 - DEC 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.030	0.433	2.790	1.732	0.625	0.000	0.000	0.000	0.000	5.610
NNE	0.038	0.770	3.271	1.491	0.144	0.000	0.000	0.000	0.000	5.714
NE	0.008	0.577	0.289	0.048	0.000	0.000	0.000	0.000	0.000	0.922
ENE	0.002	0.144	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.243
E	0.001	0.096	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.146
ESE	0.001	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.097
SE	0.002	0.096	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.194
SSE	0.007	0.577	0.144	0.000	0.000	0.000	0.000	0.000	0.000	0.728
S	0.013	0.577	0.818	0.192	0.048	0.000	0.000	0.000	0.000	1.649
SSW	0.023	0.481	1.924	0.481	0.096	0.144	0.000	0.000	0.000	3.149
SW	0.017	0.241	1.539	0.337	0.000	0.241	0.000	0.000	0.000	2.374
WSW	0.012	0.337	0.914	0.192	0.048	0.144	0.000	0.000	0.000	1.647
W	0.004	0.144	0.241	0.192	0.144	0.000	0.000	0.000	0.000	0.725
WNW	0.003	0.048	0.289	0.048	0.000	0.000	0.000	0.000	0.000	0.388
NW	0.010	0.241	0.866	0.529	0.048	0.000	0.000	0.000	0.000	1.694
NNW	0.020	0.385	1.780	0.192	0.096	0.000	0.000	0.000	0.000	2.474
SUBTOTAL	0.192	5.243	15.103	5.435	1.251	0.529	0.000	0.000	0.000	27.754

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174  
 TOTAL HOURS OF STABILITY CLASS E 599  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 577  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2079  
 TOTAL HOURS CALM 4

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: 20010216

MEAN WIND SPEED = 2.77

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, 2000 - DEC 31, 2000

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.060	0.385	1.780	0.096	0.000	0.000	0.000	0.000	0.000	2.321
NNE	0.170	2.020	4.137	0.096	0.000	0.000	0.000	0.000	0.000	6.424
NE	0.053	1.154	0.770	0.000	0.000	0.000	0.000	0.000	0.000	1.977
ENE	0.017	0.577	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.643
E	0.009	0.337	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.346
ESE	0.017	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.643
SE	0.009	0.337	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.346
SSE	0.017	0.577	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.643
S	0.020	0.241	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.741
SSW	0.027	0.289	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.989
SW	0.015	0.192	0.337	0.000	0.000	0.000	0.000	0.000	0.000	0.544
WSW	0.001	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
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	0.004	0.048	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.148
NNW	0.012	0.241	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.445
SUBTOTAL	0.433	7.071	8.562	0.192	0.000	0.000	0.000	0.000	0.000	16.258

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174  
 TOTAL HOURS OF STABILITY CLASS F 345  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 338  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2079  
 TOTAL HOURS CALM 9

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: 20010216

MEAN WIND SPEED = 1.59

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

OCT 1, 2000 - DEC 31, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH)								TOTAL
		0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.001	0.000	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.097
NNE	0.008	0.241	0.385	0.048	0.000	0.000	0.000	0.000	0.000	0.681
NE	0.014	0.673	0.433	0.000	0.000	0.000	0.000	0.000	0.000	1.120
ENE	0.003	0.192	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.244
E	0.003	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.244
ESE	0.004	0.337	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.341
SE	0.001	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
SSE	0.004	0.289	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.341
S	0.005	0.192	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.390
SSW	0.003	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.244
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.001	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.001	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.048	2.549	1.203	0.048	0.000	0.000	0.000	0.000	0.000	3.848

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174  
 TOTAL HOURS OF STABILITY CLASS G 82  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 80  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2079  
 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: 20010216

MEAN WIND SPEED = 1.29

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Attachment 2.0

Deviations from ODCM Controls/Surveillance Requirements

None

Attachment 3.0

Radiation Monitors Inoperable for Greater than 30 days

None