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. 50-3Tennessee 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 Qffsite 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.

Licen mg 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. lodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than eight days:

- Less than or equal to 1500 mremlyear 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-i 31, Iodine-I 33, tritium, and radionud ides 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. Li~uid Effluents

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

(Standards for Protection Against Radiation), Appendix B, Table 2, Column 2, for radionuclides other than dissolved or entrained noble gases.

For dissolved or entrained noble gases, the concentration shall be limited to 2.0 E-04 microcuries/milliliter (~CiIml) 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. Liciuids

*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 uCi/mI is applied. This ECL is based on the Xe-i 35 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 mremlyear to the total body.

- Less than or equal to 3000 mrem/year to skin.

b. Iodine-i 31, Iodine-i 33, 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.

Ill. 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.OOE-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

1-131 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. lodines 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.

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

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

C. Liquid Effluents

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

Total gamma isotopic activity concentrations are determined on each batch of

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

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

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

V. BATCH	Value 1st Half	2nd Half	Units
A. Liquid (Radwaste onlv)			
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

B. Gaseous (Batches only1 containment purges1 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	Value 1st Half	2nd Half	Units
A. Liquid			
Number of Releases	0	0	

Total Activity Released	0.00E-01	0.00E-01	Ci
B. Gaseous			
Number of Releases	0	0	
Total Activity Released	0.00E-01	0.00E-01	Ci

E1-5

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

2000

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

A. Fission and Activation Products	Unit	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	%Error
1. Total Released	Curies	9.47E-02	3.90E-02	2.69E-02	9.66E-02	<1 .8E+O1
2. Average diluted concentration during period	~CiIml	4.02E-07	5.98E-07	1 .42E-07	4~48E-O7	
3. Percent of Applicable Limit	*	*	*	*		
B. Tritium						
1. Total Released	Cures	9.03E+02	7.48E+O1	7.47E+02	5.57E+02	<1.8E+O1
2. Average diluted concentration during period	~Cilml	3~82E-O3	1.15E-03	3.94E-03	2.58E-03	
3. Percent of Applicable Limit	*	*	*	*		
C. Dissolved and Entrained Gases						
1. Total Released	Curies	3.30E-O11	.44E-02	1 .46E+OO	7.32E-01	<3.9E+O1
2. Average diluted concentration during period	~CiIml	1 .40E-06	2.20E-07	7.68E-06	3.40E-06	
3. Percent of Applicable Limit	*	*	*	1 .70E+OO		
D. GrossAlDha						

1. Total Released Curies O.OOE-O1 O.OOE-01 O.OOE-O1 O.OOE-01 <2.OE+O1

E. VolumeofWaste Released Liters 2.38E+068.39E+051.84E+06 2.43E+06 <4.OE+OO

F. Volume of Dilution WaterforPeriod Liters 2.34E+08 6.44E+07 1.88E+OB 2.13E+08 <1.1E+O1

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

E1-6
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.OOE-01)

Required by ODCMIOthers

Fission and Activation Products

Nuclide	Unit	Continuous Mode Quarter 1st	Continuous Mode Quarter 2nd	Batch Mode Quarter	Batch Mode Quarter 2nd
1. Strontium-89	Ci	0.OOE-01	0.00E~01	8.04E-05	0.OOE-01
2. Strontium-90	Ci	0.OOE-01	0.OOE-01	3.14E-05	0.OOE-01
3. Iron-55	Ci	0.OOE-01	0.OOE-01	2.40E-02	5.61E-03
4. Manganese-54	Ci	0.OOE-01	0.OOE-01	7.99E-04	1.91E-04
5. Cobalt-58	Ci	0.OOE-01	0.OOE-01	2.09E-02	1.21E-02
6. Iron-59	Ci	0.OOE-01	0.OOE-01	1.09E-03	3.66E-04
7. Cobalt-60	Ci	0.OOE-01	0.OOE-01	1.O1E-02	2.78E-03
8. Zinc-65	Ci	0.OOE-01	0.OOE-01	6.37E-05	0.OOE-01
9. Molybdenum-99	Ci	0.OOE-01	0.OOE-01	1.94E-05	0.OOE-01
10. Iodine-131	Ci	0.OOE-01	0.OOE-01	7.33E-04	0.OOE-01
11. Cesium-134	Ci	0.OOE-01	0.OOE-01	2.32E-03	4.33E-04
12. Cesium-137	Ci	0.OOE-01	0.OOE-01	3.37E-03	8.23E-04
13. Cesium-138	Ci	0.OOE-01	O.OOE-01	O.OOE-01	1.36E-05
14. Cerium-144	Ci	0.OOE-01	0.OOE-01	6.73E-04	1.BIE-04
15. Antimony-125	Ci	0.OOE-01	0.OOE-01	9.37E-03	8.88E-03
16. Cobalt-57	Ci	0.OOE-01	0.OOE-01	2.49E-04	7.18E-05
17. Chromium-Si	Ci	0.OOE-01	0.OOE-01	3.46E-03	3.21E-03
18. Niobium-95	Ci	0.OOE-01	0.OOE-01	4.80E-04	9.81E-04

E1-7

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

2000

LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

Nuclide	Unit	Continuous Mode Quarter 2nd	Continuous Mode Quarter 1st	Batch Mode Quarter 2nd	
19. Zirconium-95	Ci	0.OOE-01	0.OOE-01	3.62E-04	5.37E-04
20. Technetium-99m	Ci	0.OOE-01	0.OOE-01	1.94E-05	0.OOE-01
21. Iodine-132	Ci	0.OOE-01	0.OOE-01	9.67E-04	0OOE-01
22. Tellurium-132	Ci	0.OOE-01	0.ODE-01	7~56E-04	0.OOE-01
23. Antimony-124	Ci	0.OOE-01	0.OOE-01	7.81E-04	B.OOE-04
24. Lanthanum-140	Ci	0.OOE-01	0.OOE-01	2.41E-04	0.OOE-01
25. Sodium-24	Ci	0~00E-01	0.OOE-01	3.955-06	0.005-01
26. Silver-hOrn	Ci	0.00E-01	0.00E-01	6.74E-03	9.06E-04
27. Ruthenium-103	Ci	0.OOE-01	0.005-01	2.065-04	1.62E-04
28. Tin-113	Ci	0.OOE-01	0.OOE-01	2.31E-04	1.40E-04
29. Barium-140	Ci	0.OOE-01	0.OOE-01	6.26E-05	0.005-01
30. Copper-64	Ci	0.00E-01	0.00E-01	3.1IE-04	0.00E-01
31. Tellurium-129m	Ci	0.00E-01	0.OOE-01	6.24E-03	8.60E-04
Total for Period	Ci	0.005-01	0.OOE-01	9.475-02	3.915-02

LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuci ides reported as O.OOE-Oi)

Required by ODCMIOthers

Dissolved and Entrained Noble Gases

		Continuous Mode		Batch Mode	
Nuclide	Unit	Quarter jst	Quarter 2nd	Quarter 1st	Quarter 2nd
1.Xenon-133	Ci	O.OOE-O1	O,OOE-O1	3.17E-O1	i.43E-02
2.Xenon-133m	Ci	O.OOE-O1	O.OOE-O1	1.41E-03	4.57E-05
3.Xenon-135	Ci	O.OOE-O1	O.OOE-O1	2.59E-04	O.OOE-O1
4.Xenon-131m	Ci	O.OOE-O1	O.OOE-O1	8.84E-03	O.OOE-O1
5.Krypton-85	Ci	O.OOE-O1	O.OOE-O1	2.15E-03	O.OOE-O1
6.Argon-41	Ci	O.OOE-O1	O.OOE-O1	2.11E-05	4.29E-06
Total for Period	Ci	O.OOE-O1	O.OOE-O1	3.30E-O1	1 .44E-02

2000
LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuclides reported as 0.OOE-01)

Required by CDCMIOthers

Fission and Activation Products

Nuclide	Unit	Continuous Mode Quarter 3rd	Continuous Mode Quarter 4th	Batch Mode Quarter 3rd	Batch Mode Quarter 4t~
1. Strontium-89	Ci	0.OOE-01	0.OOE-01	2.74E-05	0.OOE-01
2. Strontium-90	Ci	0.OOE-01	0.OOE-01	9.92E-06	0.OOE-01
3. Iron-55	Ci	0OOE-01	0.OOE-01	8.O1E-03	7.59E-04
4. Manganese-54	Ci	0.OOE-01	0.OOE-01	2.57E-04	5.06E-04
5. Cobalt-58	Ci	0.OOE-01	8.92E-04	4.47E-03	1.91E-02
6. Iron-59	Ci	0.OOE-01	0.OOE-01	0.OOE-01	3.61E-04
7. Cobalt-60	Ci	0.OOE-01	0.OOE-01	4.87E-03	6.99E-03
8. Zinc-65	Ci	0.OOE-01	0.OOE-01	7.99E-06	0.OOE-01
9. Ruthenium-103	Ci	0.OOE-01	0.OOE-01	5.96E-06	0.OOE-01
10. lodine-131	Ci	0.OOE-01	0.OOE-01	2.80E-05	3.86E-04
11. Cesium-134	Ci	0.OOE-01	7.68E-03	1.21E-03	6.37E-03
12. Cesium-137	Ci	0.OOE-01	5.34E-03	2.30E-03	1.27E-02
13. Rubidium-86	Ci	0.OOE-01	0.OOE-01	6.11E-05	0.OOE-01
14. Cerium-144	Ci	0.OOE-01	0.OOE-01	9.29E-05	8~42E-05
15. Antimony-125	Ci	0.OOE-01	0.OOE-01	5.79E-03	1.61E-02
16. Cobalt-57	Ci	0.OOE-01	0.OOE-01	7.79E-05	8.93E-05
17. Chromium-Si	Ci	0.OOE-01	0.OOE-01	1.77E-05	3.75E-03
18. Niobium-95	Ci	0.OOE-0l	0.OOE-01	2.58E-04	2.46E-04
19. Zirconium-95	Ci	0.OOE-0l	0.OOE-01	2.68E-05	2.49E-04

	Continuous Mode Quarter	Batch Mode Quarter	Batch Mode Quarter

Nuclide		Unit	3rd	4th	3rd	4th
20.	Antimony-124	Ci	0OOE-01	0.OOE-01	1.56E-04	4.38E-04
21.	Lanthanum-140	Ci	0.OOE-01	0.OOE-01	8.89E-5	1.70E-04
22.	Silver-ibm	Ci	0.OOE-01	0.OOE-01	2.24E-03	4.75E-03
23.	Barium-140	Ci	0.OOE-01	0.OOE-01	0~00E-01	2.43E-05
24.	Tellurium-132	Ci	0.OOE-01	0.OOE-01	4.52E-06	8.87E-06
25.	Tin-113	Ci	0.OOE-01	0.OOE-01	1.06E-05	6.52E-06
Total for Period			0.OOE-01	1 .39E-02	2.69E-02	7.22E-02

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EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
2000
LIQUID EFFLUENTS - TOTAL PLANT DISCHARGE

G. Nuclide Summary (Note: Refer to Table A for ODCM nuclides reponted as O.OOE-O1)

Required by CDCM~Cthers

Dissolved and Entrained Noble Gases

	Continuous Mode		Batch Mode	
	Quarter	Quarter	Quarter	Quarter

Nuclide	Unit	3rd	4th	3rd	4th
1.Xenon-133	Ci	O.OOE-O1	O.OOE-O1	1.40E+OO	7.04E-O1
2.Xenon-133m	Ci	O.OOE-O1	O.OOE-O1	7.74E-03	4.70E-03
3.Xenon-135	Ci	O.OOE-O1	O.OOE-O1	1.02E-03	9.49E-04
4.Xenon-131m	Ci	O.OOE-O1	O.OOE-O1	2.57E-02	1.74E-02
5.Krypton-55	Ci	O.OOE-O1	O.OOE-O1	2.51E-02	4.37E~O3
Total for Period	Ci	O.OOE-O1	O.OOE-O11	.45E+OO	7~32E-O1

E1-12

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

2000

TABLE A

LIQUID "TYPICAL LLD" EVALUATION~~~

At~2~

Nuclide	ODCM LLD	1 hr	8 hr		32 hr
Manganese-54	5.OE-07	3.36E-08	3.36E-08		3.375-08
Cobalt~58	5.OE-07	2.53E-08	2.54E-08		2.56E-08
lron-59	5.OE-07	5.26E-08	5.29E-08		5.37E-08
Cobalt-60	5.OE-07	4.63E-08	4.63E-08		4.645-08
Zinc-65	5.05-07	2.95E-08	2.95E-08		2.965-08
Molybdenum-99	5.OE-07	1.555-07	1.67E-07		2.15E-07
Cesium-134	5.OE-07	1.91E-08	1.91E-08		1.925-08
Cesium-137	5.05-07	3.87E-08	3.87E-08		3.875-08
Cerium-141	5.OE-07	2.80E-08	2.81E-08		2.875-08
Cerium-144	5.OE-06	1.11E-07	1.12E-07		1.125-07
lodine-131	1.OE-06	2.28E-08	2.34E-08		2.555-08
krypton-87	1.OE-05	1.16E-07	5.25E-07		(3)
Krypton-88	1 .OE-05	9.95E-08	5.49E-07		(3)

Xenon-133	1.OE-05	4.195-08	4.365-08	4.98E-08
Xenon-133m	1.OE-05	1.42E-07	1.55E-07	2.13E-07
Xenon-135	1.OE-05	2.065-08	3.50E-08	2.17E-07
Xenon-138	1.0E-05	8.37E-06(3)		(3)

Nuclide	ODCM LLD	Tvoical LLD
Tritium	1.05-05	1 .2E-06
Gross Alpha	1 .0E-07	2.OE-08
Strontium-89190	5.OE-08	3.8E-08/1 .4E-08
lron-55	1.0E-06	1.3E-08

NOTES:(1) LLD values are in ~Ci/rnI.

(2. At is the time between sample collection and counting time.

(3. T1Atooshort.

E1-13

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

2000

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

(GROUND LEVEL RELEASES)

Summation of All Releases	Unit	1st Qtr	2nd Qtr	3rd Qtr	41h Qtr	%Error
A. Noble Gases						
1.Total Released	Ci	7.35E+O1	3.12E+O1	2.48E+O1	1.13E+02	<1.1E+O1
2.Average Release Rate of Period	uCilsec	9.35E+OO	3.97E+O1	3.12E+O1	1 .42E+01	
3.	Percent of Limit	%	*	*	*	*
B. lodines						
1.Total Iodine-I 31	Ci	7.20E-05	O.OOE-O1	O.OOE-O1	8.42E-05	<1.3E+O1
2.Average Release Rate for Period	~CiIsec	9.16E-06	O.OOE-O1	O.OOE-O1	2.80E-03	
3.	Percent of Limit	%	*	*	*	*
C. Particulates						
1.Particulates with half-lives >8 days	Ci	1 .63E-06	O.OOE-O1	O.OOE-O1	8.68E-06	<1 .6E+O1
2.Average Release Rate for Period	uCi~sec	2.07E-07	O.OOE-O1	O.OOE-O11	.09E-06	
3. Percent of Limit	%	*	*	*	*	
4. GrossAlpha	Ci	O.OOE-O1	O.()OE-O1	O.OOE-O1	O.OOE-O1	<2.1E+O1
Radio-activity						
D. Tritium						
1.Total Release	Ci	2.25E+O1	1.07E+O1	1.15E+O1	1.79E+O1	<1.5E+01
2.Average Release Rate for Period	~Ci/sec	2.87E+OOI	.36E+OO	1 .44E+OO	2.25E+OO	
3. Percent of Limit	%	*	*	*	*	

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

E1-14

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

2000

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

(GROUND LEVEL RELEASES)

1. Noble Gases

Required by ODCMIOthers

Nuclide	Unit	Continuous Mode Quarter 1st	Continuous Mode Quarter 2nd	Batch Mode Quarter 1st	Batch Mode Quarter 2nd
1.krypton-88	Ci	O.OOE-O1	O.OOE-O1	2.45E-O1	O.OOE-O1
2.Xenon-133	Ci	1.35E-02	1.27E-02	6.61E+O1	2.93E+O1
3. Xenon-133m	Ci	O.OOE-O1	O.OOE-O1	1.22E+OO	4.26E-O1
4. Xenon-135	Ci	9.69E-04	4.04E-03	3.42E+OO	2.98E-O1
5. krypton-85	Ci	O.OOE-Oi	O.OOE-O1	9.31E-O1	2.97E-O1
6. Argon-41	Ci	O.OOE-O1	O.OOE-O1	7.17E-O1	5.17E-O1
7. krypton-85m	Ci	O.OOE-O1	O.OOE-O11	.49E+O1	O.OOE-O1
8. Xenon-131m	Ci	O.OOE-O1	O.OOE-O1	6.59E-O1	3.65E-O1
Total for Period		Ci	1.47E-02	1.67E-02	7.35E+O1 3.12E+O1

2. lodines

1. Iodine-131	Ci	7.20E-05	O.OOE-O1	
2. Iodine-132	Ci	3.96E-04	O.OOE-O1	
3. lodine-133	Ci	O.OOE-O1	O.OOE-O1	
Total for Period		Ci	4.68E-04	O.OOE-O1

NOTE: Refer to Table B for ODCM nuclides reported as O.OOE-O1.

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

3. Particulates
Required by
ODCMIOthers

		Continuous Mode	
		Quarter	Quarter
Nuclide	Unit	1st	2nd
1. Cobalt-58	Ci	1.63E-06	O.OOE-O1
Total for Period	Ci	1 .63E-06	O.OOE-O1

NOTE: Refer to Table B for ODCM nuclides reported as O.OOE-O1.

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

1. Noble Gases
Required by ODCMIOthers

Nuclide	Unit	Continuous Mode Quarter 3rd	Continuous Mode Quarter 4th	Batch Mode Quarter 3rd	Batch Mode Quarter 4th
1.Krypton-88	Ci	0.OOE-01	0.OOE-01	0.OOE-01	8.22E-05
2.Xenon-133	Ci	8.23E-01	2.16E+00	2.21E+01	1.O1E+02
3.Xenon-133m	Ci	0.OOE-01	0.OOE-01	2.03E-01	1.07E+O0
4.Xenon-135	Ci	2.29E-01	2.27E-01	1.88E-01	6.38E-01
5.Xenon-138	Ci	0.OOE-01	0.OOE-01	0.OOE-01	0.OOE-01
6.Krypton-85	Ci	0.OOE-01	0.OOE-01	6.38E-01	1.04E+00
7.Argon-41	Ci	0.OOE-01	O.OOE-01	0.OOE-011	.57E-01
8.Krypton-85m	Ci	0.OOE-O1	0.OOE-01	0.OOE-01	8.B1E-03
9.Xenon-131m	Ci	O.OOE-O1	0.OOE-01	3.92E-01	6.71E+00
10.Xenon-135m	Ci	0.OOE-O1	0.OOE-01	0.OOE-O1	0.OOE-01
Total for Period	Ci	1 .05E+00	2.39E+00	2.37E+01	1.11 E+02

2. lodines

1.Iodine-131	Ci	O.OOE-O1	8.42E-05	
2.Iodine-133	Ci	0.OOE-O1	8.71E-07	
Total for Period	Ci		0.OOE-01	8.51 E-05

NOTE: Refer to Table B for ODCM nuclides reported as 0.OOE-01.

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

3. Particulates
Required by ODCMIOthers

Nuclide	Unit	Continuous Mode Quarter 3rd	Continuous Mode Quarter 4th
1. Cobalt-58	Ci	O.OOE-O1	8.68E-06
Total for Period	Ci	O.OOE-O1	8.68E-06

NOTE: Refer to Table B for ODCM nuclides reported as O.OOE-O1.

TABLE B
GASEOUS"TYPICAL~’ LLD EVALUATION~1~

Noble Gas				
			At121	
Nuclide	ODCM LLD	1 hr	1.5 hr	
Krypton-87	i.0E-04	2.08E-06	2.73E-06	
Krypton-88	i.0E-04	i.61E-06	i.81E-06	
Xenon-i 33	1 .0E-04	6.61 E-07	6.63E-07	
Xenon-133m	i.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.iOE-04	
Particulate SamnIe131		1 hr	24 hr	7.0 da
Manganese-54	1.0E-10	7.47E-12	3.12E-13	4.48E-i4
Cobalt-58	1 .OE-i 0	5.62E-i 2	2.35E-1 3	3.46E-1 4
lron-59	1.OE-10	i.20E-ii	5.02E-13	7.49E-14
Cobalt-60	i.0E-10	i.07E-1i	4.46E-13	6.38E-14
Zinc-65	i.0E-i0	6.7iE-12	2.80E-13	4.03E-14
Molybdenum-99	1 .0E-i 0	3.43E-i 1	1.61 E-12	4.70E-13
Cesium-134	1.OE-10	4.25E-12	i.77E-13	2.54E-14
Cesium-137	1.0E-i0	8.48E-12	3.54E-i3	5.OSE-14
Cerium-i 41	1 .0E-i 0	5.10E-12	2.i5E-i3	3.26E-14
Cerium-i 44	1 .0E-i 0	2.01 E-1 1	8.33E-13	1 .20E-13
Iodine-i 31	1 .OE-i 0	4.76E-12	2.07E-13	3.77E-14

Charcoal Samole					
Iodine-i 31	1	.0E-i 17.25E-12	3.1	SE-i 3	5.74E-i4

(1) LLD values are in uCi/mI.
(2) At is the time between sample collection and counting time.
(3) LLD based on sample time + 30 mm. sample to analysis.

TABLE B
GASEOUS '~TYPICAL" LLD EVALUATION~1~

Nuclide	ODCM LLD	Tvoical LLD
Tritium	1.OE-06	1.OE-11
GrossAipha	1.OE-11	1.5E-14
Strontium-89	1.OE-11	1.OE-14
Strontium-90	1.OE-11	1.OE-15

NOTES: (1) LLD values are in uCilcc.

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

E1-20
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
2000
SOLID WASTE (RADIOACTIVE SHIPMENTS)

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

1. Tv~e of Waste	Unit	12 Month Period	Est. Tot. Error %
a.Spent Resins, Filter Sludges, Evaporator	m3	None	N/A
Bottoms, etc.	Ci	None	N/A
b.Dry Active Waste, Compressible Waste	m3		4.OOE+O1 +5.OOE-O1
Contaminated Equipment, etc.	Ci	9.22E-O1	+1 .OOE-02
c. Irradiated Components, Control	m3	None	N/A
Rods, etc.	Ci	None	N/A
d. Other: Mechanical Filters	m3	None	N/A
	Ci	None	N/A

2. Estimate of Maior Nuclide Com~osition (bv tvoe of waste~

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

	Curies	Percent
None	N/A	N/A

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

	Curies	Percent
1. Chromium-Si	7.58E-02	8.21
2. lron-55	2.02E-O1	21.88
3. Cobalt-58	4.13E-O1	44.81
4. Cobalt-60	7.50E-02	8.14
5. Nickel-63	1.76E-02	1.91

6. Zirconium-95	3.1IE-02	3.37	
7. Niobium-95	4.72E-02	5.12	
8. Silver-liOm	3.64E-03	3.90E-O1	
9. Cesium-134	I .58E-02	1.71	
10. Cesium-137		1.51E-02	1.64

SOLID WASTE (RADIOACTIVE SHIPMENTS)

2. Estimate of Major Nuclide Com~osition (bv tv~e of waste) (Cont.)

C. Irradiated Components	Curies	Percent
None	N/A	N/A

d. Other: Mechanical Filters

Curies	Percent
None	N/A	N/A

3. Solid Waste Disposition

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

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

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

Number of Shipments	Tv~e Qua ntitv	Mode of Transportation	Destination
74*	A-LSA	Motor Freight	Barnwell, SC

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

c. Irradiated components, control rods, etc.

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

d. Other: Mechanical Filters

Number of Shipments	TvPe Quantity	Mode of Transportation	Destination

None	N/A	N/A	N/A

4. Irradiated Fuel Shipments (Disposition)

Number of Shipments	TvPe Quantity	Mode of Transportation	Destination
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 Qffsite 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 ODOM 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 mIs (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.

Or~an 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 I 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 'VA. The models that are used to estimate doses, as well as the parameters input to the models, are described in detail in the SQN ODOM.

Li~wd 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 mremlyear, 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 I
Doses from Airborne Effluents
First Quarter

Individual Doses

Pathway	Dose	Limit	Percent of Limit	Location Sector/Distance
External				
Gamma Air	7.65E-03 mrad	5 mrad	0.153	N/950
Beta Air	1.63E-02 mrad	10 mrad	0.163	N/950
Submersion				
Total Body	5.02E-03 mrad	10 mrad	0.502	NNWI841
Skin	1.09E-02 mrad	10 mrad	0.109	NNWI841
Organ Doses				
ChildIThyroid	2.72E-02 mrem	7.5 mrem	0.363	NNWI84l
ChildITotal Body	2.65E-02 mrem	7.5 mrem	0.353	NNW/841

Population Doses

Total Body Dose	I .30E-01 man-rem	
Maximum Organ Dose (organ)	1 .34E-01 man-rem	(thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile

population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

Table 2
Doses from Airborne Effluents
Second Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance
External				
Gamma Air	3.24E-03 mrad	5 mrad	0.0648	N1950
Beta Air	7.31E-03 mrad	10 mrad	0.731	N/950
Submersion				
Total Body	1.78E-03 mrad	10 mrad	0.0178	NNW/841
Skin	3.85E-03 mrad	10 mrad	0.0385	NNWI841
Organ Doses				
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	NNWI841

Poi,ulation Doses

Total Body Dose	4.60E-02 man-rem

Maximum Organ Dose (organ) 4.60E-02 man-rem (thyroid, liver, bone, GIl, 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 3
Doses from Airborne Effluents
Third Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector	Distance
External					
Gamma Air	2.04E-03 mrad	5 mrad	0.048	S/i	570
Beta Air	5.23E-03 mrad	10 mrad	0.0523	S/i	570
Submersion					
Total Body	1.44E-03 mrad	10 mrad	0.0144	5/1	786
Skin	3.35E-03 mrad	10 mrad	0.0335	5/1	786
Organ Doses					
Child/Thyroid	6.26E-03 mrem	7~5 mrem	0.0835	SSW/2707	
Child/Total Body	6.26E-03 mrem	7.5 mrem	0.0835	SSW/2707	

Population Doses

Total Body Dose 4.90E-02 man-rem

Maximum Organ Dose (organ) 4.90E-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 4
Doses from Airborne Effluents
Fourth Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Sectori	Location Distance
External					
Gamma Air	9.38E-03 mrad	5 mrad	0.187		SSW/1840
Beta Air	2.82E-02 mrad	10 mrad	0.282		85W/I 840
Submersion					
Total Body	6.32E-03 mrad	10 mrad	0.0623		SSW/2134
Skin	1.57E-02 mrad	10 mrad	0.157	½	SSW/2134
Organ_Doses					
Child/Thyroid	2.42E-02 mrem	7.5 mrem	0.322		NNWI84I
Child/Total Body		2.35E-02 mrem			7.5 mrem 0.313 NNWI841

PoDulation Doses

Total Body Dose	1 .59E-01 man-rem	
Maximum Organ Dose (organ)	1 .65E-01 man-rem	(thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile

population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

Table 5
Doses from Liquid Effluents
First Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	7.40E-03	1.5 mrem	<1 %
Child	Liver	9.30E-03	5 mrem	<1 %
Child	Thyroid	6.BOE-03	5 mrem	<1 %

Average Riverflow past SQN (cubic feet per second): 17,682

Population Doses

Total Body Dose 5.30E-O1 man-rem

Maximum Organ Dose (organ) 5.3E-O1 man-rem (Bone, GIT, Liver,Thyroid, Kidney)

Population doses can be compared to the natural background dose for the entfre 50-mile

population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

E2-1o

Table 6
Doses from Liquid Effluents
Second Quarter
Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	1.1OE-03	1.5 mrem	<1 %
Teen	GIT	1.50E-03	5 mrem	<1 %
Child	Thyroid	7.50E-04	5 mrem	< 1 %

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

PoDulation Doses

Total Body Dose 6.1OE-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 7
Doses from Liquid Effluents
Third Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	4.40E-03	1.5 mrem	< 1 %
Child	Liver	5.40E-03	5 mrem	<1 %
Child	Thyroid	4.1OE-03	5 mrem	<1 %

Average Riverflow past SQN (cubic feet per second): 23,394

PoDulation Doses

Total Body Dose 3.70E-O1 man-rem

Maximum Organ Dose (organ) 3.70E-O1 man-rem (Liver, Kidney, Lung, Bone, GIT,Thyroid)

Population doses can be compared to the natural background dose for the entire 50-mile

population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

E2-12

Table8
Doses from Liquid Effluents
Fourth Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
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-O1 man-rem

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

Population doses can be compared to the natural background dose for the entire 50-mile

population of about 95,400 man-rem/year (based on 90 mrem/yr for natural background).

Table 9

Total Dose from Fuel Cycle

Dose	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Total Body or any Organ (except thyroid)				
Total body air submersion	5.02E03	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.IOE-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	O.OOE-OO	O~OOE-OO	O.OOE-OO	O.OOE-OO
Total	4.82E-02	1~57E-02	1.75E-02	6.IBE-02

Cumulative Total Dose ~al body or any other organ) mrem 1.43E-01

Annual Dose Limit (mrem) 25

Percent of Limit 0.6 %

Thyr~~~ Dose (mren~~				
Total body air submersion	5.02E-031	.78E-031	.44E-03	6.32E-03
Thyroid dose (airborne)	2.72E-021	.1 3E-02	6.26E-03	2.42E-02
Total body dose (liquid)	7.40E-031	.1OE-03	4.40E-03	1.40E-02
Thyroid dose (liquid)	6.80E-03	7.50E-044	.IOE-03	4.20E-03
Direct Radiation Dose	O.OOE-OO	O.OOE-OOO	.OOE-OO	O.OOE-OO
Total	4.64E-02	1.49E-021	.62E-02	4.87E-02

Cumulative Total Dose (Thyroid) mrem 1.26E-01

Annual Dose Limit (mrem) 75

Percent of Limit <.1 %

Attachment 1.0

Joint Frequency Distribution Tables

Al

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 CIbO M)

Sequoyah Nuclear Plant

JAN 11 2000 - MAR 31, 2000

WI ND DIRECTION	CALN	0.6-1.4	1.5-3.4	3~S-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.S	TOTAL
N	0.000	0.000	0.000	0.000	0.104	0.363	0.000	0.000	0.000	0.466
NNF	0.000	0.000	0.000	0.000	1.101	1.088	0.000	0.000	0.000	2.270
NE	0.000	0.000	0.052	0.414	0.516	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	0.0000~0O0			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
	0.000	0.000	0.000	0.000	0.104	0.259	0.000	0.000	0.000	0.363
55W	0.000	0.000	0.000	0.000	0.414	0.259	0.000	0.000	0.000	0.673
SN	0.000	0.000	0.000	0.104	0.673	0.104	0.000	0.000	0.000	0.680
WSN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNN	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
NNN	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 NOURS OF VALID STABILITY OBSERVATIONS 2168

TOTAL NOURS 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 CALN 0

NETFOROLDOICAL FACILITY: S~q:~o~ah N:~c1ear Plani:
STASILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 NETERS
WINO SPEED AND DIRECTION NEASURED AT 9.73 NETER LEVEL

DATE PRINTED: 20000526

WEAN WIND SPEED = 7.31

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FRaN UNROUNDED NUMBERS

Al

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<=-l.7 CIbO M)

Sequoyah Nuclear Plant

JAN 1, 2000 - MAR 31 2000

MIND DIRECTION	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0~OOO	0.000	0.000	0.052	0.363	0.207	0.0000.000	0.000	0.621	
NNE	0.000	0.000	0.000	0.250	0.621	0.311	0.0000.000	0.000	1.191	
NE	0~00O	0.000	0.052	0.155	0.259	0.052	0.0000.000	0.000	0.516	
		0.000	0.000	0.000	0.052	0.000	0.000	0.0000~0O0	0.000	0.052
E		0.000	0.000	0.052	0.000	0.000	0.000	0.0000~000	0.000	0.052
656		0.000	0.000	0.052	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	0.0000~000	0.000	0.052
590		0.000	0.000	0.000	0.000	0.000	0.052	0.000	0.000	0.052
		0.000	0.000	0.000	0.000	0.207	0.104	0.000	0.000	0.311
39W		0.000	0.000	0.000	0.311	0.311	0.104	0.000	0.000	0.725
SW		0.000	0.000	0.000	0.259	0.207	0.000	0.000	0.000	0.460
WSW		0.000	0.000	0.000	0.000	0.155	0.104	0.000	0.000	0.259
N		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNN		0.000	0.000	0.000	0.104	0.000	0.104	0.000	0.000	0.207
NW		0.000	0.000	0.000	0.000	0.104	0.155	0.000	0.000	0.259

WNN 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 CE VALID WIND DIRECTIoN-WIND SPEED-STABILITY
OBSERVATIONS 1931
TOTAL HOURS CALM 0

METOOROLOOICAL FACILITY: SequoVaN NiAclear Pla~t
STASILIY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
WINO SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 20000526
MEAN HIND SPEED 6.38

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

A2

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS C (-1.7< DELTA T<--1.5 C/bc N)

S~q~oyah N]Clear Plant

JAN 1, 2DOD - WAR 31, 2DDD

WIND DIRECTION	CALN	WIND SPEED(MPH) D.S-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.DDO	D.ODO	D.D52	D.DOO	D.570	D.259	D.ODO	D.000	O.ODD	0.88D
NNE	D.000	0.000	0.052	0.311	0.460	0.D52	D.000	D.000	0.ODO	0.880
NE	D.DDD	D.DOO	D.207	D.1D4	D.2D7	D.ODO	D.0O0	D.DOD	D.ODD	0.518
EWE	D.DDO	D.DOO	D.1D4	D.DDO	0.ODD	0.ODO	0.DDO	0.000	D.00D	0.104
E	0.ODD	D.DDO	D.DDO	O.D52	D.ODD	O.ODD	D.ODO	0.DOO	0.OOD	0.D52
ESE	0.ODD	0.DDO	D.DDD	D.DDO	0.ODD	O.ODD	0.DDO	0.DDO	0.OOD	0.000
SE	0.ODD	0.DDO	0.DDD	0.052	0.OOD	D.052	O.ODO	0.DDD	0.000	0.104
SSE	0.OOD	O.ODD	0.000	0.052	D.000	0.000	0.000	0.000	0.000	0.052
5	0.000	0.000	0.052	0.155	0.259	0.052	0.000	0.000	0.000	0.518
55W	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  1.105  2.175  0.777  0.000  0.000
0.000  S.075
            TOTAL HOURS OF VALID STABILITY OBSERVATIONS    2118
            TOTAL NOURS 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 CALN                                 0

         NETEOROLDOICAL FACILITY:                Sequo~ah Ni~c1ear Plant
            STABILITY BASED ON DELTA-T BETWEEN   9.25 AND  45.99 WETERS
            WIND SPEED AND DIRECTION WEASURED AT 9.73 NETER LEVEL


         DATE PRINTED: 20000521

            WEAN WIND SPEED =  5.79



      NOTE: TOTALS AWO SUBTOTALS ARE OBTAINED FROW UNROUNDED NUNBERS
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A3

JDINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTIDN EDR

STABILTTY CLASS D (-1.5< DELTA T<=-0.5 CITDON)

S~quoyah N~clea~ Plan~

JAN 1, 2DDO - WAR 31, 2DOD

WI ND DIRECTION	CALN	WIND SPEED(NPN) 0.8-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.052	0.621	1.761	2.330	0.880	0.000	0.000	0.000	5.645
WHE	D.OOD	D.ODD	D.829	l.~D9	1.101	1.864	0.ODO	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	1.805
EHE	0.000O~000		0.207	0.052	0.000	0.0000~0O0		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
855	0.000	0.052	D.207	0.000	D.000	0.000	0.000	0.000	0.ODO	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
	0.000	0.104	0.880	0.880	0.311	0.363	0.000	0.000	0.000	2.538
55W	0.000	0.052	1.295	2.841	1.918	0.821	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
N	0.000	0.000	0.155	0.207	0.155	0.155	0.000	0.000	0.000	0.873
WNW	0.000	0.000	0.104	0.383	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  1.988  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 0                806
            TOTAL HOURS OF VALID WIND DIRECTION-WINO SPEED-STABILITY CLASS 0
705
            TOTAL HOURS OP VALID WIND DIRECTION-WIND SPEED-STABILITY
OBSERVATIONS   1931
            TOTAL HOURS CALN                                  0
            WETSOROLOOICAL FACILITY.   Sequcy~h Nuclear Pla~t
            STASILITY BASED ON DELTA-T BETWEEN   9.25 AND  45.99 WETERS
            WIND SPEED AND DIRECTION WEASURED AT 9.73 NETER LEVEL


         DATE PRINTED: 20000526
            WEAN HIND SPEED  5.23


      NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FRON UNROUNDED WUWBERS
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A4

~O1NT PERCENTAGE FREQUENCIES OF WINO SPEED BY WINO DIRECTION FOR STABILITY CLASS S ~0~5< DELTA T<= 1.5 CIODO M)

Seq’~nYah Nuclaar Plant

JAN 1, 2000 - MAR 31, 2000

WINO DIRECTIJN	CALM	WINO SPEEO(MPN) 0.1-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.414	1.502	1.105	0.518	0.000	0.000	0.000	0.000	4.039
NNE	0.000	0.259	2.279	0.984	0.510	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
EWE	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	0.250
551	0.000	0.104	0.104	0.155	0.207	0.207	0.000	0.000	0.000	0.777
	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	0.121	0.207	0.000	0.000	0.000	4.972
SM	0.000	0.104	1.348	1.709	0.104	0.104	0.000	0.000	0.000	3.388
MSW	0.000	0.052	0.414	0.104	0.000	0.000	0.000	0.000	0.000	0.570
N	0.000	0.000	0.311	0.052	0.052	0.000	0.000	0.000	0.000	0.414
MNW	0.000	0.000	0.207	0.259	0.052	0.000	0.000	0.000	0.000	0.518
NM	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.B29	0.259	0.000	0.052	0.000	0.000	0.000	1.295

SUBTOTAL 0.000 2.481 10.875 8.804 2.434 1.398 0.000 0.000 0.000 25.997

TOTAL NOURS OF VALID STABILITY OBSERVATIONS 2168

TOTAL NOURS OF STABILITY CLASS E 559

TOTAL NOURS OF VALID WINO DIRECTION-WIND SPEED-STABILITY CLASS E 502

TOTAL NOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 1931

TOTAL NOURS CALM 0

NETIOROLOGICAL FACILITY: Sequnyat N'~claa~ Plant

STASILITY BASSO ON DELTA-T BETWEEN 9.25 AND 45.99 METERS

WINJ SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 20000521

MEAN MIND SPEED = 3.18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

A5

JOiNT PERCENTADE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS F 1.5~ DELTA T<= 4~D C/1DOM)

S~q~oyah Nuclear Plarf:

JAN 1, 2000 - NAR 31~ 2000

WI ND DIRECTION	CALN	WIND SPEED(NPN) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>--24.5	TOTAL
N	0.ODD	D.259	1.139	0.258	0.ODO	D.DD0	D.ODO	D.DDO	0.DDD	1.657
NNE	0.000	0.021	3.418	0.259	0.000	0.000	D.ODO	0.DDD	0.DOO	4.298
NE	D.0D0	D.466	D.725	0.ODD	0.000	D.DOD	D.ODD	D.DDD	0.DDD	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	0.1040~000		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
558	0.000	0.259	0.311	0.052	0.000	0.000	0.000	0.000	0.000	0.621
5	0.000	0.000	0.829	0.000	0.000	0.000	0.000	0.000	0.000	0.829
55W	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
N	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
	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
         SUBTOAL    0.000  2.330  8.752  1.191  0.000  0.000  0.000  0.000
0.000 12.273
            TOTAL NOURS OF VALID STABILITY OBSERVATIONS    2168
            TOTAL NOURS OF STABILITY CLASS F                258
            TOTAL NOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F
237
            TOTAL NOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY
OBSERVATIONS   1931
            TOTAL NOURS CALN                                  0

         NETEOROLOCICAL FACILITY:                Sequcych Nuclear Plant:
            STABILITY BASED ON DELTA-T BETWEEN   9.25 AND  45.89 NETERS
            WINO SPEED AND DIRECTION NEASURED AT 9.73 NETER LEVEL

         DATE PRINTED: 20000526
            WEAN WIND SPEED  2.22



      NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FRON UNROUNDED NUMBERS
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A6

JOINT PERCENTADE FREQUENCIES OF WIND SPEED DY NIND DIRECTION FOR

STABILITY CLASS 0 (DELTA T > 4.0 0/100 N)

Se~JoYah Nuclear Plant

JAN 1, 2000 - NAR 31, 2000

WIND DIRECTION	CALN	WIND SPEED(MPH) 0.8-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.OOD	0.000	D.ODO	0.ODO	0.000	0.0000.000	0.000	
NNE	0.016	0.311	2.330	0.000	0.000	0.000	0.DOO	0.000O~000	2.657	
NE	0.006	0.259	0.673	0.000	0.000	0.000	0.DOD	0.0000.000	0.938	
ONE	0.003	0.363	0.207	0.000	0.000	0.000	0.000	0.0000.000	0.573	
	0.002	0.207	0.052	0.000	0.000	0.000	0.000	0.0000.000	0.261	
0SF	0.003	0.363	0.104	0.000	0.000	0.000	0.000	0.000O~000	0.469	
SE	0.002	0.363	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.365
OSE	0.004	0.518	0.207	0.000	0.000	0.000	0.000	0.000	0.000	0.729
5	0.008	0.311	0.932	0.000	0.000	0.000	0.000	0.000	0.000	1.250
55W	0.006	0.000	0.932	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	0.364
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
WNN	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
NNN	0.001	0.000	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.104

SUBTOTAL 0.052 2.745 5.749 0.104 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 0
187
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY
OBSERVATIONS 1931
TOTAL HOURS CALM 1

NETEOROLOOICAL FACILITY: Saqunych Nuclear Plant
STA8ILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
WINO SPEED AND DIRECTION NEASURED AT 9.73 NETER LEVEL

DATE PRINTED: 20000526

MEAN WIND SPEED = 1.79

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FRON UNROUNDED NUNBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 CIbO N)

Sequoyah Nuclear Plant

APR 1, 2000 - JUN 30, 2000

WIND DIRECTION	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7~4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.0000~000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HNE	0.000	0.000O~OOO	0.046	0.184	0.230	0.000	0.000	0.000	0.460	
HE	0.000	0.000	0.000	0.000	0.138	0.0920~0OO	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	0.184
5	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
WHW	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 MAASURED AT   9.73 METER LEVEL

         DATE PRINTED: 20000814

            MEAW WIND SPEED =  6.38


       NOTE:    TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NDNBERS
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A8

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WINO DIRECTION FOR STABILITY CLASS B (-1.9< DELTA T<=-1.7 CIlDOM)

Sequoyah Nuclear Plant

APR 1, 2000 - JUN 30~ 2000

WIND DIRECTION	CAlM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	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
5	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 WINO DIRECTION-WIND SPEED-STABILITY CLASS 5
119
            TOTAL HOURS OF VALID WINO DIRECTION-WIND SPEED-STABILITY
OBSERVATIONS   2174
            TOTAL HOURS CAlM                                  0

         METEOROLOGICAL FACILITY:                 Sequoyah Nuclear Plant
            STABILITY BASED ON DELTA-T BETWEEN   9.2S 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
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A9

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS C (-1.7< DELTA T<=-1.5 CIbOM)

Sequo~ah Nuclear Plant

APR 1, 2000 - JUN 30 2000

WIND DIRECTION	CALM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5~4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.230	0.184	0.092	0.000	0.000	0.000	0.506
NHE	0.000	0.000	0.138	0.138	0.368	0.092	0.000	0.000	0.ODO	0.736
NE	0.000	0.000	0.000	0.414	0.046	0.000	0.000	0.OOD	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
5	0.000	0.000	0.138	0.276	0.276	0.046	0.000	0.000	0.000	0.736
55W	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
           HNW      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
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AlO

JOINT PERCENTAGE FREQOENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS 0 (-1.5< DELTA T<=-0.5 CIbo M)

Sequoyah Nuclear Plant

APR 1, 2000 - JUN 30, 2000

WIND DIRECTION	CALM	0.6-1.4	WIND SPEED (MPH) 1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	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	0.0920~000		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
5	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:                Sequcyah Nuclear Plant
            STABILITY BASED ON DELTA-T BETWEEN   9.25 AND  45.89 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 DNROONDED NIMPERS
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All
JOINT PERCENTAGE FREQOENCIES OF WIND SPEED BY WIND DIRECTION FOR
STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

Seqtioyah Nuclear Plant

APR 1, 2000 - JON 30, 2000

WIND DIRECTION	CALH	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.016	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	~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	~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	~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	0.534
SSR	0.003	0.230	0.460	0.000	0.046	0.184	0.000	0.000	0.000	0.923
5	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

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            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
            WW      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 NUb~~ERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS F C 1.5< DELTA T<-- 4.0 CIbOM)

Sequoyah Nuclear Plant

APR 1, 2000 - JUN 30 2000

WIND DIRECTION	CALM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-3.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.011	0.460	2.622	0.046	0.000O~000	0.000	0.000	0.000	3.139	
NHE	0.011	0.966	1.978	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	0.923	
ENE	0.001	0.276	0.046	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	0.046	
ESE	0.001	0.184	0.046	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	0.231	
SSE	0.003	0.506	0.322	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	0.692	
SSW	0.004	0.230	0.782	0.046	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	0.969	

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            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
          SUETOTAL   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:                 Sequo~ah 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 SURTOTALS ARE OBTAINED FROM UNROUNDED NMMBERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS G (DELTA T > 4.0 C/1oO M)

Sequoyah Nuc1~ar Plant

APR 1, 2000 - JUN 30, 2000

WIND DIRECTION	CALH	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3~5-5.4	5.B-7~4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
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	0.800	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	0.082
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	0.276
5	0.000	0.138	0.322	0.000	0.000	0.000	0.000	0.000	0.000	0.460
SSW	0.000	0.000	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.230
SW	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.184

```
           WSW      0.000  0.000  0.046  0.000  0.000  0.000  0.000  0.000
0.000  0.046
            W       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000
           WWW      0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000
           NW       0.000  0.000  0.046  0.000  0.000  0.000  0.000  0.000
0.000  0.046
           NNW      0.000  0.046  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 EASED 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 CIbo M)

Sequoyah Nuclear Plant

JUL 1, 2000 - SEP 12 2000

WIND DIRECTION	~ 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>24.5	TOTAL
N	0~0O0	0.000	0.000	0.058	0.292	0.000	0.0000.000	0.000	0.350
NNE	0.000	0.000	0.000	0.467	0.759	0.000	0.000O~O0O	0.000	1.226
NE	0.000	0.000	0.117	0.934	0.525	0.000	0.0000.000	0.000	1.576
ENE	0.000	0.000	0.000	0.467	0.058	0.000	0.0000~00O	0.000	0.525
E	0.000	0.000	0.058	0.117	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
SE	0.000	0.000	0.000	0.117	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
5	0.000	0.000	0.000	0.409	0.350	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	2.335
SW	0.000	0.000	0.175	1.226	0.292	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	0.117

```
            W       0.000  0.000  0.000  0.117  0.117  0.117  0.000  0.000
0.000  0.350
            WsW     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 CAlSS                                 0
          METEOROLOGICAL FACILITY:                Sequoyah Nuclear Plant
            STABILITY BASED ON DELTA-T BETWEEN   9.25 AND  45.99 NETERS
            WIND SPEED AND DIRECTION HEASURED AT   9.73 NOETER LEVEL


          DATE PRINTED: 20001121

            NEAN WIND SPEED =  5.20



            NOTE  TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS
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A15

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WINO DIRECTION FOR

STABILITY CLASS B (-1.9< DELTA T<--1.7 CIlDOM)

Sequoyah Nuclear Plant

JUL 1, 2000 - SEP 12, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3~S-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.175	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
5	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
         SURTOTAL   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  8.25 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 SURTOTALS ARE OBTAINED FROM URROUNDED NUMBERS
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A16

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

Sequoyah Nuclear Plant

JUL 1, 2000 - SEP 12, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	16.5-24.4	>=24.S	TOTAL
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
5	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

            MEAH WIND SPEED =  4.59


            NOTE  TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS D (-1.5< DELTA T<=-O.5 CIbOM)

Sequcyah Nuclear Plant

JUL 1, 2000 - SEP 12, 2000

WIND DIRECTION	CALM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.058	0.992	1.576	1.051	0.0000~0O0	0.000	0.000	3.678	
NNE	0.000	0.000	1.343	3.094	1.343	0.175	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	1.968
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
SEE	0.000	0.058	0.292	0.409	0.234	0.000	0.000	0.000	0.000	0.992
5	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  0.0S8  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 CALH                                  0
          METEOROLOGICAL FACILITY:                 SequoyaI~ 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 ~JMBERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS E (-0.5< DELTA T<= 1.5 CIbOM)

Sequoyah Nuclear Plant

JUL 1, 2000 - SEP 12 2000

WIND DIRECTION	CAlM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.033	0.8764~437	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	4.573	
NE	0.002	0.000	0.350	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	0.117	
E	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	0.293	
SE	0.001	0.234	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	0.764	
5	0.016	0.759	1.751	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	5.519	
SW	0.020	0.701	2.510	0.876	0.000	0.058	0.000	0.000	4.165	
WSW	0.012	0.292	1.576	0.175	0.058	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:                Seqtio~an 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 NDMBERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS F C 1.5< DELTA T<= 4.0 C/100 M)

Sequoyah Nuclear Plant

JUL 1, 2000 - SEP 12, 2000

WIND DIRECTION	WIND SPEED (NPH) CAI~1	0.6-1.4	1.5-3.4	3.3-5.4	5~5-7.4	7.5-12.4	12.5-18.4	16.5-24.4	>=24.5	TOTAL
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	0.296
ENE	0.006	0.234	0.0560~000		0.000	0.000	0.000	0.000	0.000	0.296
E	0.001	0.056	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
SEE	0.001	0.000	0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.060
5	0.008	0.175	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.417
SEW	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	0.523	0.000	0.000	0.000	0.000	0.000	0.000	0.536
WEW	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

```
           WNN      0.001  0.058  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.060
            NW      0.006  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  2.602  8.615  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 CAUH                                  4
         METEOROLOGICAL FACILITY:                 Sequoyan 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 NDMEERE
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A20

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS B (DELTA T > 4.0 C/1OO M)

Sequoyali NuClear Plant

JUL 1’ 2000 - SEP 12, 2000

WIND DIRECTION	CALM	0.6-1.4	1.5-3.4	3.5-5.4				5.5-7~4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.S	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.058	0.058	0.000	0.000	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	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	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	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	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	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	0.000	0.000
5	0.000	0.000	0.058	0.000	0.000	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	0.000	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	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	0.000	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  0.000  0.000  0.000  0.000
0.000  0.000
           NW       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000
          NNW       0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000
        SUBTOTAL    0.000  0.058  0.175  0.058  0.000  0.000  0.000  0.000
0.000  0.282
            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
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

STABILITY CLASS A (DELTA T<=-1.9 CIbO N)

Seqiloyan Nuclear Plant

OCT 1, 2000 - DEC 31, 2000

WIND DIRECTION	CAlM	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	19.5-24.4	>=24.5	TOTAL
H	0.000	0.000	0.000	0.000	0.000	0.144	0.000	0.000	0.000	0.144
HNE	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
B	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
5	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
           'NNN     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
            HNW     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 ONROUNDED NUMBERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS 8 (-1.9< DELTA T<=-1.7 CIbOM)

SequoYah Nuclear Plant

OCT 1, 2000 - DEC 31, 2000

WIND DIRECTION	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	16.5-24.4	>=24.5	TOTAL
			WINO SPEED (MPH)							
N	0.000	0.000	0.000	0.000	0.000	0.144	0.000	0.0000~O00		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	0.0000,000		0.000	0.000	0.000	0.144
ENE	O~000	0.000	0.000	0.000	O~00O	0.000	0.000	0.000	0.000	0.000
E	0~0OO	0.000	0.000	0.0960~00O		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
5	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
            WNN     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-WINO SPEED-STABILITY CLASS B
56
            TOTAL HOURS OF VALID WIND DIRECTION-WINO SPEED-STABILITY
OBSERVATIONS   2079
            TOTAL HOURS CALM                                 0
          METEOROLOGICAL FACILITY:                Sequoyan Nuclear Plant
            STABILITY BASED ON DELTA-T BETWEEN   9.2S 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   C-1.7< DELTA T<=-1.S CIbO
N)

                               Sequoyah Nuc1~ar Plant

                                        OCT  1, 2000 - DEC 31  2000
            WIND                       WIND SPEED (MPH)
          DIRECTION  OLIN   0.6-1.4      1.5-3.4 3~S-S.4
5.5-7.4    7.5-12.4  12.5-18.4  18.5-24.4     >=24.5    TOTAL
            N       0.0000.00D    0.000  0.096  0.144  0.269  0.D00  0.000
0.000  0.529
           NNE      0.0000.000    0.048  0.385  0.337  0.433  0.000  0.000
0.000  1.203
            NE      0.0000~000    0.192  0.144  0.000  0.000  0.000  0.0000~000
0.337
           ENE      0.0000.000    0.046  0.048  0.000  0.000  0.000  0.000
0.000  0.096
            E       0.0000~O00    0.000  0.048  0.000  0.000  0.000  0.000
0.000  0.048
           ESE      0.0000~0000~000  0~000      0.000  0.000  0.000  0.000
0.000  0.000
           SE       0.0000~000    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
```

```
           5        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
            WNH     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 CALN                                  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 FRON UNROUNDED NUEBERS
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR STABILITY CLASS D (-1.5< DELTA T<=-O.5 CIlDOM)

Sequoyah Nuclear Plant

OCT 1, 2000 - DEC 31, 2000

WIND DIRECTION	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0~00O	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	1.3950~722		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
5	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 OAAM                                  0
         METEOROLOGICAL FACILITY:                Sequoyah Nuclear Plant
            STABILITY EASED ON DELTA-T BETWEEN   9.2S 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 FRON UNROUNDED NUMBERS
                                       JOINT PERCENTAGE FREQUENCIES OF WIND
SPEED BY WIND DIRECTION FOR
                                    STABILITY CLASS E   (-0.5< DELTA T<= 1.5 CIbO
M)

                                       Secuoyab Nuclear Plant

                                       OCT  1, 2000 - DEC 31, 2000
           WIND                       WIND SPEED (MPH)
          DIRECTION  CALM   0.6-1.4      1.5-3.4 3.5-5.4
5.5-7.4    7.5-12.4  12.5-18.4  18.5-24.4     >=24.5    TOTAL
            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
            ESE     0.007  0.577  0.144  0.000  0.000  0.000  0.000  0.000
0.000  0.728
            5       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
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```
            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.S29  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 CIbO
M)


                                       Sequoyah Nuclear Plant


                                       OCT  1, 2000 - DEC 31, 2000
            WIND                      WIND SPEED(NPH)
          DIRECTION         0.6-1.4      1.5-3.4 3.5-5.4
5.5-7.4    7.5-12.4  12.5-18.4  18.5-24.4     >=24.5    TOTAL
            N       0.060  0.385  1.780  0.096  0.000  0.000  0.0000~000
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
5	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	0.146
NEW	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 ~ 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 FROX UNROUNDED N’U88ERS

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	CALH	WIND SPEED (MPH) 0.6-1.4	1.5-3.4	3.5-5.4	5~5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.001	0.000	0.096	0.0000~000	0.000	0.000	0.000	0.000	0.000	0.097
NHE	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	0.288	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.341
5	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
NHW	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 CAI~4 1
METEOROLOGICAL FACILITY: Sequcyah 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

A2

Attachment 3.0

Radiation Monitors Inoperable for Greater than 30 days

None

A3