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10 CFR 50.4

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Sequoyah Nuclear Plant, Units 1 and 2  
Facility Operating License Nos. DPR-77 and DPR-79  
NRC Docket Nos. 50-327 and 50-328

**Subject: 2010 Annual Radioactive Effluent Release Report**

Enclosed is the Sequoyah Nuclear Plant (SQN) Annual Radioactive Effluent Release Report (ARERR) for the period of January 1 to December 31, 2010. This report (Enclosure 1) is being submitted before May 1 in accordance with the respective SQN, Units 1 and 2, Technical Specification (TS) 6.9.1.8.

The SQN Offsite Dose Calculation Manual (ODCM), Section 5.2 requires that a Radiological Impact Assessment be submitted with the ARERR for the same reporting period. The assessment is included as Enclosure 2. In addition, in accordance with the respective SQN, Units 1 and 2, TS 6.14.1.3, a complete copy of the ODCM with marked revisions implemented during calendar year 2010 is required to be submitted as part of or current with the submittal of the ARERR. This document is included as Enclosure 3.

If you have any questions concerning this matter, please contact Geoff M. Cook at (423) 843-7170.

Respectfully,

R. M. Krich

Enclosures: 1. Effluent and Waste Disposal Annual Report, 2010  
2. Radiological Impact Assessment Report, 2010  
3. Offsite Dose Calculation Manual, Revision 56

cc (Enclosures): NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Sequoyah Nuclear Plant

IE48  
A-009  
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**Enclosure 1**

**Sequoyah Nuclear Plant  
Units 1 and 2**

**Effluent and Waste Disposal Annual Report  
Sequoyah Nuclear Plant  
2010**

2010  
SEQUOYAH NUCLEAR PLANT (SQN)  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

I. REGULATORY LIMITS

A. Gaseous Effluents

1. Dose rates due to radioactivity released in gaseous effluents from the site to areas at and beyond the unrestricted area boundary shall be limited to the following:
  - a. Noble gases:
    - Less than or equal to 500 mrem/year to the total body.
    - Less than or equal to 3000 mrem/year to the skin.
  - b. Iodine-131 (I-131), Iodine-133 (I-133), tritium, and all radionuclides in particulate form with half-lives greater than eight days:
    - Less than or equal to 1500 mrem/year to any organ.
2. Air dose due to noble gases released in gaseous effluents to areas at and beyond the unrestricted area boundary shall be limited to the following:
  - a. Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation during any calendar quarter.
  - b. Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation during any calendar year.
3. Dose to a member of the public from Iodine-131, Iodine-133, tritium, and radionuclides in particulate form with half-lives greater than eight days in gaseous effluents released to areas at and beyond the unrestricted area boundary shall be limited to the following:
  - a. Less than or equal to 7.5 mrem to any organ during any calendar quarter.
  - b. Less than or equal to 15 mrem to any organ during any calendar year.

B. Liquid Effluents

1. The annual average concentration of radioactivity released in liquid effluents to unrestricted areas shall be limited to the concentrations specified in Title 10 of the Code of Federal Regulations (CFR), 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 2.0E-04 microcuries/milliliter ( $\mu\text{Ci/ml}$ ) total activity.

2. The dose or dose commitment to a member of the public from radioactivity in liquid effluents released to unrestricted areas shall be limited to:
  - a. Less than or equal to 1.5 mrem to the total body and less than or equal to 5 mrem to any organ during any calendar quarter.
  - b. Less than or equal to 3 mrem to the total body and less than or equal to 10 mrem to any organ during any calendar year.

## II. EFFLUENT CONCENTRATION LIMITS

### A. Liquids

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

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

### B. Gaseous

- \*1. The maximum permissible dose rates for gaseous releases are defined in the plant Offsite Dose Calculation Manual (ODCM).
  - a. Noble gas dose rate at the unrestricted area boundary:
    - Less than or equal to 500 mrem/year to the total body.
    - Less than or equal to 3000 mrem/year to skin.
  - b. Iodine-131, Iodine-133, tritium, and particulates with half-lives greater than eight days dose rate at the unrestricted area boundary:
    - Less than or equal to 1500 mrem/year to any organ.

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

## III. AVERAGE ENERGY

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

#### IV. MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY

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

##### A. Fission and Activation Gases

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

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

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

##### B. Iodines and Particulates

Iodine and particulate activity is continuously sampled. Charcoal and particulate samples are taken from the shield and auxiliary building exhausts and analyzed at least weekly to determine the total activity released from the plant based on the average vent flow rates recorded for the 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. Carbon-14 in Gaseous Releases

The Carbon-14 production and effluent source term estimates were based on Electric Power Institute methodology provided in EPRI Report 1021106, "Estimation of Carbon-14 in Nuclear Power Plant Gaseous Effluents," December 2010. It was determined that 19.8 curies of Carbon-14 is generated annually at SQN. However, only 98 percent is considered released as gas and only the carbon dioxide form (20 percent) of that is used in the gaseous dose calculations.

### D. 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.

### Monitoring Wells

SQN started conducting an investigation of tritium releases to the groundwater in 2003 due to identification of tritium in one of the on-site monitoring wells. This study involved pressure testing of the radwaste discharge line, installation and sampling of groundwater wells, visual inspection under the refueling water storage tanks (RWSTs) and inspection of drain lines. In addition to the one on-site Radiological Environmental Monitoring Program (REMP) groundwater monitoring well, SQN also has 18 non-REMP monitoring wells to support monitoring the onsite groundwater plume and for the presence or increase of radioactivity. These wells are sampled periodically for tritium. The tritium concentrations obtained in 2010 from these non-REMP wells are listed below. Initial and follow up analyses for the semi-annual sampling procedure indicated no gamma activity or Hard to Detect nuclides.

Well ID	Date	Activity in pCi/L	Date	Activity in pCi/L
Well-21	4/22/2010	993	10/18/2010	431
Well-29	4/22/2010	360	N/A	N/A
Well-31	4/22/2010	9893	9/20/2010	5626
GP-13	4/22/2010	7919	11/01/2010	7240

Doses from I-131 Water Ingestion Pathway

The REMP requirements as specified in Table 3.12-1 from NUREG 1301, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors," dated April 1991, requires an I-131 specific analysis for drinking water pathway samples if the annual dose from I-131 is greater than 1 mrem. In order to evaluate the need for implementation of this additional analysis, the drinking water pathway dose from I-131 to the maximum organ and age group was calculated. The results reported here confirm that the drinking water pathway dose from I-131 was less than the 1 mrem limit and that the performance of the I-131 specific analysis is not required for SQN REMP drinking water samples.

Quarter	1	2	3	4	Totals
I-131 Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
Infant/Thyroid (mrem)	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
Population/Thyroid (mrem)	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01

There was no detectable I-131 released via this pathway during this reporting period.



V. BATCH RELEASES

	1st Half	Value		Units
		2nd Half		
1. <u>Liquid (Radwaste only)</u>				
a. Number of releases	46	89		Each
b. Total time period of releases	6739.00	15315.00		Minutes
c. Maximum time period of release	250.00	330.00		Minutes
d. Average time period of releases	146.50	172.08		Minutes
e. Minimum time period of release	15.00	70.00		Minutes
f. Average dilution stream flow during release periods	36,065.0	25,248.0		CFS
2. <u>Gaseous (Batches only - containment purges, and waste gas decay tanks)</u>				
a. Number of releases	64	51		Each
b. Total time period of releases	38038.00	28248.00		Minutes
c. Maximum time period of release	8579.00	1776.00		Minutes
d. Average time period of releases	594.34	553.88		Minutes
e. Minimum time period of release	8.00	119.00		Minutes

VI. ABNORMAL RELEASES

	1st Half	Value		Units
		2nd Half		
1. <u>Liquid</u>				
a. Number of releases	0	0		
b. Total activity released	0.00E-01	0.00E-01		Ci
2. <u>Gaseous</u>				
a. Number of releases	0	0		
b. Total activity released	0.00E-01	0.00E-01		Ci

**Liquid Abnormal Release**

**None**

Liquid Effluents-Summation of All Releases  
 During the Period  
 Starting: 1-Jan-2010 Ending: 30-Jun-2010

Type Of Effluent	Units	Quarter 1	Quarter 2	Est. Total Error %
<b>A. Fission &amp; Activation Products</b>				
1. Total Release (Not Including Tritium, Gases, Alpha)	Ci	3.40E-03	3.52E-03	18%
2. Average Diluted Concentration During Period	µCi/ml	2.01E-09	2.04E-09	
3. Percent Of Applicable Limit	%	*	*	
<b>B. Tritium</b>				
1. Total Release	Ci	2.30E+02	3.48E+02	18%
2. Average Diluted Concentration During Period	µCi/ml	1.36E-04	2.02E-04	
3. Percent Of Applicable Limit	%	*	*	
<b>C. Dissolved And Entrained Gases</b>				
1. Total Release	Ci	4.29E-04	1.62E-04	39%
2. Average Diluted Concentration During Period	µCi/ml	2.54E-10	9.39E-11	
3. Percent Of Applicable Limit	%	1.27E-04	4.69E-05	
<b>D. Gross Alpha Radioactivity</b>				
1. Total Release	Curies	0.00E+01**	0.00E+01	N/A***
<b>E. Total Waste Volume Released (Pre-Dilution)</b>				
	Liters	5.79E+07	6.61E+07	4%
<b>F. Volume Of Dilution Water Used</b>				
	Liters	1.63E+09	1.66E+09	4%
<b>G. Radwaste Volume Released</b>				
	Liters	1.01E+06	1.06E+06	N/A

\* Applicable Limits are expressed in terms of dose. See Tables 5-8 of the 2010 Radiological Impact Assessment Report.

\*\* Zeroes indicate that no radioactivity was present at detectable levels.

\*\*\* N/A - Errors in measurement are not reported for these values since none were identified during the reporting period.

Liquid Effluents-Summation of All Releases  
 During the Period  
 Starting: 1-Jul-2010 Ending: 31-Dec-2010

Type Of Effluent	Units	Quarter 1	Quarter 2	Est. Total Error %
<b>A. Fission &amp; Activation Products</b>				
1. Total Release (Not Including Tritium, Gases, Alpha)	Ci	1.94E-03	1.67E-02	18%
2. Average Diluted Concentration During Period	μCi/ml	7.87E-10	8.41E-09	
3. Percent Of Applicable Limit	%	*	*	
<b>B. Tritium</b>				
1. Total Release	Ci	7.31E+02	2.37E+02	18%
2. Average Diluted Concentration During Period	μCi/ml	2.97E-04	1.19E-04	
3. Percent Of Applicable Limit	%	*	*	
<b>C. Dissolved And Entrained Gases</b>				
1. Total Release	Ci	1.96E-03	2.31E-04	39%
2. Average Diluted Concentration During Period	μCi/ml	7.95E-10	1.16E-10	
3. Percent Of Applicable Limit	%	3.98E-04	5.82E-05	
<b>D. Gross Alpha Radioactivity</b>				
1. Total Release	Curies	0.00E+01**	0.00E+01	N/A***
<b>E. Total Waste Volume Released (Pre-Dilution)</b>				
	Liters	8.42E+07	6.60E+07	4%
<b>F. Volume Of Dilution Water Used</b>				
	Liters	2.38E+09	1.92E+09	4%
<b>G. Radwaste Volume Released</b>				
	Liters	1.93E+06	2.49E+06	N/A

\* Applicable Limits are expressed in terms of dose. See Tables 5-8 of the 2010 Radiological Impact Assessment Report.

\*\* Zeroes indicate that no radioactivity was present at detectable levels.

\*\*\* N/A - Errors in measurement are not reported for these values since none were identified during the reporting period.

Curies Released in Liquid Effluents  
 During the period  
 Starting: 1-Jan-2010 Ending 31-Mar-2010

	Continuous	Batch	Total
Tritium	2.33E-01	2.30E+02	2.30E+02
<b>FISSION &amp; ACTIVATION PRODUCTS</b>			
Cobalt-57	0.00E+01	3.94E-06	3.94E-06
Cobalt-58	0.00E+01	2.76E-03	2.76E-03
Cobalt-60	0.00E+01	3.00E-04	3.00E-04
Chromium-51	0.00E+01	4.06E-05	4.06E-05
Cesium-134	0.00E+01	8.79E-08	8.79E-08
Cesium-137	0.00E+01	1.13E-07	1.13E-07
Iron-55	0.00E+01	1.95E-04	1.95E-04
Iron-59	0.00E-01	2.57E-06	2.57E-06
Manganese-54	0.00E+01	2.73E-06	2.73E-06
Niobium-95	0.00E+01	4.34E-06	4.34E-06
Antimony-125	0.00E+01	8.96E-05	8.96E-05
TOTALS	0.00E+01	3.40E-03	3.40E-03
<b>DISSOLVED AND ENTRAINED GASES</b>			
Xenon-133	0.00E+01	4.27E-04	4.27E-04
Xenon-135	0.00E+01	2.65E-06	2.65E-06
TOTALS	0.00E+01	4.29E-04	4.29E-04

\*Zeroes indicate that no activity was present at detectable levels.

Curies Released in Liquid Effluents  
 During the period  
 Starting: 1-Apr-2010 Ending 30-Jun-2010

	Continuous	Batch	Total
Tritium	1.76E-01	3.48E+02	3.48E+02
<b>FISSION &amp; ACTIVATION PRODUCTS</b>			
Cobalt-57	0.00E+01	1.52E-05	1.52E-05
Cobalt-58	0.00E+01	2.71E-03	2.71E-03
Cobalt-60	0.00E+01	5.70E-04	5.70E-04
Cesium-137	0.00E+01	4.20E-06	4.20E-06
Iron-55	0.00E+01	1.06E-04	1.06E-04
Antimony-124	0.00E+01	5.24E-06	5.24E-06
Antimony-125	0.00E+01	1.07E-04	1.07E-04
TOTALS	0.00E+01	3.52E-03	3.52E-03
<b>DISSOLVED AND ENTRAINED GASES</b>			
Xenon-133	0.00E+01	1.52E-04	1.52E-04
Xenon-133M	0.00E+01	9.45E-06	9.45E-06
TOTALS	0.00E+01	1.62E-04	1.62E-04

\*Zeroes indicate that no activity was present at detectable levels.

Curies Released in Liquid Effluents  
 During the period  
 Starting: 1-Jul-2010 Ending 30-Sep-2010

	Continuous	Batch	Total
Tritium	1.55E-01	7.31E+02	7.31E+02
<b>FISSION &amp; ACTIVATION PRODUCTS</b>			
Cobalt-57	0.00E+01	1.88E-06	1.88E-06
Cobalt-58	0.00E+01	9.57E-04	9.57E-04
Cobalt-60	0.00E+01	3.15E-04	3.15E-04
Chromium-51	0.00E+01	2.49E-05	2.49E-05
Cesium-137	0.00E+01	1.64E-06	1.64E-06
Iron-55	0.00E+01	2.23E-04	2.23E-04
Niobium-95	0.00E+01	2.13E-06	2.13E-06
Antimony-124	0.00E+01	2.42E-05	2.42E-05
Antimony-125	0.00E+01	3.86E-04	3.86E-04
TOTALS	0.00E+01	1.94E-03	1.94E-03
<b>DISSOLVED AND ENTRAINED GASES</b>			
Xenon-133	0.00E+01	1.95E-03	1.95E-03
Xenon-135	0.00E+01	2.95E-06	2.95E-06
TOTALS	0.00E+01	1.96E-03	1.96E-03

\*Zeroes indicate that no activity was present at detectable levels.

Curies Released in Liquid Effluents  
 During the period  
 Starting: 1-Oct-2010 Ending 31-Dec-2010

	Continuous	Batch	Total
Tritium	1.25E-01	2.37E+02	2.37E+02
<b>FISSION &amp; ACTIVATION PRODUCTS</b>			
Cobalt-57	0.00E+01	3.25E-05	3.25E-05
Cobalt-58	0.00E+01	1.11E-02	1.11E-02
Cobalt-60	0.00E+01	2.32E-03	2.32E-03
Chromium-51	0.00E+01	1.04E-03	1.04E-03
Cesium-138	0.00E+01	8.02E-06	8.02E-06
Iron-55	0.00E+01	4.22E-04	4.22E-04
Iodine-132	0.00E+01	1.72E-05	1.72E-05
Manganese-54	0.00E+01	3.59E-06	3.59E-06
Niobium-95	0.00E+01	4.91E-05	4.91E-05
Antimony-124	0.00E+01	8.63E-04	8.63E-04
Antimony-125	0.00E+01	6.47E-04	6.47E-04
Tellurium-132	0.00E+01	2.38E-06	2.38E-06
Zinc-65	0.00E+01	2.01E-04	2.01E-04
Zirconium-95	0.00E+01	2.84E-05	2.84E-05
TOTALS	0.00E+01	1.67E-02	1.67E-02
<b>DISSOLVED AND ENTRAINED GASES</b>			
Xenon-133	0.00E+01	2.31E-04	2.31E-04
TOTALS	0.00E+01	2.31E-04	2.31E-04

\*Zeroes indicate that no activity was present at detectable levels.



TABLE A  
LIQUID "TYPICAL LLD" EVALUATION<sup>(1)</sup>

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

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

**NOTES:** (1) LLD values are in  $\mu\text{Ci/ml}$ .  
 (2)  $\Delta t$  is the time between sample collection and counting time.  
 (3) T  $\frac{1}{2}$  too short.

Gaseous Effluents - Summation of All Releases  
 During the Period  
 Starting: 1-Jan-2010 Ending: 30-Jun-2010

Type of Effluent	Units	Quarter 1	Quarter 2	Estimated Total Error %
<b>A. Fission and Activation Products</b>				
1. Total Release	Ci	5.31E-01	3.18E+00	11%
2. Average Release Rate For Period	μCi/sec	6.83E-02	4.05E-01	
3. Percent of Applicable Limit	%	*	*	
<b>B. Radioiodines</b>				
1. Total Iodine-131	Ci	0.00E+01	0.00+00	N/A***
2. Average Release Rate For Period	μCi/sec	0.00E+01	0.00+00	
3. Percent of Applicable Limit	%	*	*	
<b>C. Particulates</b>				
1. Particulates (Half-Lives > 8 Days)	Ci	0.00E+01	0.00E+01	N/A***
2. Average Release Rate For Period	μCi/sec	0.00E+01	0.00E+01	
3. Percent of Applicable Limit	%	*	*	
4. Gross Alpha Radioactiviy	Ci	0.00E+01	0.00E+01	
<b>D. Tritium</b>				
1. Total Release	Ci	3.78E+01	1.94E+01	15%
2. Average Release Rate For Period	μCi/sec	4.86E+01	2.46E+00	
3. Percent of Applicable Limit	%	*	*	
<b>E. Carbon-14</b>				
1. Total Release	Ci	5.64E+00	5.51E+00	N/A
2. Average Release Rate For Period	μCi/sec	7.25E-01	7.02E-01	
3. Percent of Applicable Limit	%	*	*	

\* Applicable Limits are expressed in terms of dose. See Tables 1-4 of the 2010 Radiological Impact Assessment Report.

\*\* Zeroes indicate that no radioactivity was present at detectable levels.

\*\*\* N/A - Errors in measurement are not reported for these values since none were identified during the reporting period.

Gaseous Effluents - Summation of All Releases  
 During the Period  
 Starting: 1-Jul-2010 Ending: 31-Dec-2010

Type of Effluent	Units	Quarter 3	Quarter 4	Estimated Total Error %
<b>A. Fission and Activation Products</b>				
1. Total Release	Ci	4.12E-01	9.72E-01	11%
2. Average Release Rate For Period	μCi/sec	5.19E-02	1.22E-01	
3. Percent of Applicable Limit	%	*	*	
<b>B. Radioiodines</b>				
1. Total Iodine-131	Ci	0.00E+01	0.00E+01	N/A ***
2. Average Release Rate For Period	μCi/sec	0.00E+01	0.00E+01	
3. Percent of Applicable Limit	%	*	*	
<b>C. Particulates</b>				
1. Particulates (Half-Lives > 8 Days)	Ci	0.00E+01	0.00E+00	N/A ***
2. Average Release Rate For Period	μCi/sec	0.00E+01	0.00E+00	
3. Percent of Applicable Limit	%	*	*	
4. Gross Alpha Radioactiviy	Ci	0.00E+01	0.00E+01	
<b>D. Tritium</b>				
1. Total Release	Ci	2.32E+00	2.93E+01	15%
2. Average Release Rate For Period	μCi/sec	2.91E-01	3.69E+00	
3. Percent of Applicable Limit	%	*	*	
<b>E. Carbon-14</b>				
1. Total Release	Ci	5.73E+00	4.82E+00	N/A
2. Average Release Rate For Period	μCi/sec	7.22E-01	6.05E-01	
3. Percent of Applicable Limit	%	*	*	

- \* Applicable Limits are expressed in terms of dose. See Tables 1-4 of the 2010 Radiological Impact Assessment Report.
- \*\* Zeroes indicate that no radioactivity was present at detectable levels.
- \*\*\* N/A - Errors in measurement are not reported for these values since none were identified during the reporting period.

Curies released Gaseous Ground Level Releases  
 During the period  
 Starting: 1-Jan-2010 Ending: 31-Mar-2010

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Krypton-85M	0.00E+01	6.28E-05	6.28E-05
Xenon-133	0.00E+01	8.06E-02	8.06E-02
Xenon-135	0.00E+01	7.00E-03	7.00E-03
Argon-41	0.00E+01	4.44E-01	4.44E-01
TOTALS	0.00E+01	5.31E-01	5.31E-01
 <u>IODINES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>PARTICULATES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>TRITIUM</u>			
Tritium	3.75E+01	2.79E-01	3.78E+01
 <u>CARBON-14</u>			
Carbon-14 (CO <sub>2</sub> form)	1.10E+00	0.00E+00	1.10E+00
Carbon-14 (Total)	5.64E+00	0.00E+00	5.64E+00

\*Zereos indicate that no radioactivity was present at detectable levels.

Curies released Gaseous Ground Level Releases  
 During the period  
 Starting: 1-Apr-2010 Ending: 30-Jun-2010

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Xenon-133	0.00E+01	7.79E-01	7.79E-01
Xenon-135	0.00E+01	9.27E-02	9.27E-02
Argon-41	0.00E+01	2.31E+00	2.31E+00
TOTALS	0.00E+01	3.18E+00	3.18E+00
 <u>IODINES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>PARTICULATES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>TRITIUM</u>			
Tritium	1.54E+01	3.93E+00	1.93E+01
 <u>CARBON-14</u>			
Carbon-14 (CO <sub>2</sub> form)	1.08E+00	0.00E+00	1.08E+00
Carbon-14 (Total)	5.51E+00	0.00E+00	5.51E+00

\*Zereos indicate that no radioactivity was present at detectable levels.

Curies released Gaseous Ground Level Releases  
 During the period  
 Starting: 1-July-2010 Ending: 30-Sep-2010

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Xenon-133	0.00E+01	5.61E-02	5.61E-02
Xenon-135	0.00E+01	3.26E-03	3.26E-03
Argon-41	0.00E+01	3.53E-01	3.53E-01
TOTALS	0.00E+01	4.12E-01	4.12E-01
 <u>IODINES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>PARTICULATES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>TRITIUM</u>			
Tritium	2.12E+00	1.95E-01	2.32E+00
 <u>CARBON-14</u>			
Carbon-14 (CO <sub>2</sub> form)	1.12E+00	0.00E+00	1.12E+00
Carbon-14 (Total)	5.73E+00	0.00E+00	5.73E+00

\*Zereos indicate that no radioactivity was present at detectable levels.

Curies released Gaseous Ground Level Releases  
 During the period  
 Starting: 1-Oct-2010 Ending: 31-Dec-2010

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Krypton-87	0.00E+01	9.73E-04	9.73E-04
Krypton-85	0.00E+01	1.76E-02	1.76E-02
Xenon-133	0.00E+01	7.15E-02	7.15E-02
Xenon-135	0.00E+01	4.16E-03	4.16E-03
Argon-41	0.00E+01	8.77E-01	8.77E-01
TOTALS	0.00E+01	9.72E-01	9.72E-01
 <u>IODINES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>PARTICULATES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>TRITIUM</u>			
Tritium	2.89E+01	3.90E-01	2.93E+01
 <u>CARBON-14</u>			
Carbon-14 (CO <sub>2</sub> form)	9.44E-01	0.00E+00	9.44E-01
Carbon-14 (Total)	4.82E+00	0.00E+00	4.82E+00

\*Zereos indicate that no radioactivity was present at detectable levels.

TABLE B  
GASEOUS "TYPICAL" LLD EVALUATION<sup>(1)</sup>

Noble Gas

<u>Nuclide</u>	<u>ODCM LLD</u>	$\Delta t^{(2)}$	
		<u>1 hr</u>	<u>1.5 hr</u>
Krypton-87	1.0E-04	2.08E-06	2.73E-06
Krypton-88	1.0E-04	1.61E-06	1.81E-06
Xenon-133	1.0E-04	6.61E-07	6.63E-07
Xenon-133m	1.0E-04	2.34E-06	2.35E-06
Xenon-135	1.0E-04	3.43E-07	3.56E-07
Xenon-138	1.0E-04	1.40E-04	6.10E-04

Particulate Sample<sup>(3)</sup>

<u>Nuclide</u>	<u>ODCM LLD</u>	<u>1 hr</u>	<u>24 hr</u>	<u>7.0 day</u>
		Manganese-54	1.0E-10	7.47E-12
Cobalt-58	1.0E-10	5.62E-12	2.35E-13	3.46E-14
Iron-59	1.0E-10	1.20E-11	5.02E-13	7.49E-14
Cobalt-60	1.0E-10	1.07E-11	4.46E-13	6.38E-14
Zinc-65	1.0E-10	6.71E-12	2.80E-13	4.03E-14
Molybdenum-99	1.0E-10	3.43E-11	1.61E-12	4.70E-13
Cesium-134	1.0E-10	4.25E-12	1.77E-13	2.54E-14
Cesium-137	1.0E-10	8.48E-12	3.54E-13	5.05E-14
Cerium-141	1.0E-10	5.10E-12	2.15E-13	3.26E-14
Cerium-144	1.0E-10	2.01E-11	8.33E-13	1.20E-13
Iodine-131	1.0E-10	4.76E-12	2.07E-13	3.77E-14

Charcoal Sample

Iodine-131	1.0E-11	7.25E-12	3.15E-13	5.74E-14
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Note:

(1) LLD values are in  $\mu\text{Ci/ml}$ .

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

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



TABLE B  
GASEOUS "TYPICAL" LLD EVALUATION<sup>(1)</sup> (continued)

<u>Nuclide</u>	<u>ODCM LLD</u>	<u>Typical LLD</u>
Tritium	1.0E-06	1.0E-11
Gross Alpha	1.0E-11	1.5E-14
Strontium-89	1.0E-11	1.0E-14
Strontium-90	1.0E-11	1.0E-15

NOTE:

(1) LLD values are in  $\mu\text{Ci/cc}$ .

## SOLID WASTE (RADIOACTIVE SHIPMENTS)

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

1. <u>Type of Waste</u>	<u>Unit</u>	<u>12 Month Period</u>	<u>Est. Tot. Error %</u>
a. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.	m <sup>3</sup>	None	N/A
	Ci	None	N/A
b. Dry Active Waste, Compressible Waste Contaminated Equipment, etc.	m <sup>3</sup>	9.99E+01	±1.00E+01
	Ci	2.47E-01	±2.29E+01
c. Irradiated Components, Control Rods, etc.	m <sup>3</sup>	None	N/A
	Ci	None	N/A
d. Other: Mechanical Filters	m <sup>3</sup>	None	N/A
	Ci	None	N/A

The reported volume is based on the defined volume of the packaging. During transit, the waste may settle resulting in an overall reduced volume. The reduction in disposal volume is estimated to be 10 percent less than the package volume.

The estimated total error (percent) for the total Curies shipped is based on calculating the square root of the sum of the squares method. Three parameters were considered as important for estimating the error. The parameters were variances with sample preparation and counting geometry, survey instrument accuracy for dose to Currie evaluations, and "in-field" sampling techniques. The assigned values for these parameters were 20, 10, and 5 percent, respectively.

$$\text{Total error (\%)} = (0.20^2 + 0.10^2 + 0.05^2)^{1/2} \times 100 = 22.9\%$$

## SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

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

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

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

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

	<u>Curies</u>	<u>Percent</u>
1. Hydrogen-3	1.00E-05	0.00
2. Chromium-51	3.30E-02	13.32
3. Manganese-54	3.98E-03	1.61
4. Iron-55	6.76E-02	27.30
5. Iron-59	3.78E-03	1.53
6. Cobalt-57	2.43E-04	0.10
7. Cobalt-58	5.14E-02	20.77
8. Cobalt-60	5.30E-02	21.43
9. Nickel-63	9.90E-03	4.00
10. Zinc-65	7.39E-06	0.00
11. Zirconium-95	4.91E-03	1.99
12. Niobium-95	1.74E-02	7.05
13. Antimony-125	1.98E-05	0.01
14. Cesium-134	5.67E-04	0.23
15. Cesium-137	1.10E-03	0.45
16. Cerium-144	5.51E-04	0.22

	<u>Curies</u>	<u>Percent</u>
c. Irradiated Components		
None	N/A	N/A

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

**SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)**

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	Type Quantity	Mode of Transportation	Destination
9	A-LSA II	Motor Freight	Duratek Processing Facility Oak Ridge, TN
1	Limited Quantity	Motor Freight	Duratek Processing Facility Kingston, TN

c. Irradiated components, control rods, etc.

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

d. Other: Mechanical Filters

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

4. Irradiated Fuel Shipments (Disposition)

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

5. Solidification of Waste

Was solidification performed? No  
If yes, solidification media: N/A

## Independent Spent Fuel Storage Installation

SNP implemented use of an independent spent fuel storage installation (ISFSI) on July 13, 2004, utilizing 10 CFR 72.214 Certificate of Compliance (CoC number 1014). The ISFSI is located on site, within the protected area and is designed to hold 90 spent fuel canisters. CoC 1014 Appendix A Section 5.4 requires an annual report in accordance with 10 CFR 72.44(d)(3). A report has been submitted providing the results of any releases during this monitoring period. CoC 1014 Section 5.4 also provides that the ISFSI operations may be considered part of plant operations for the purposes of the radiological environmental monitoring program.

CoC 1014 Section 5.4a states “The HI-STORM 100 Cask System does not create any radioactive material or have any radioactive waste treatment systems. Therefore, specific operating procedures for the control of radioactive effluents are not required. Specification 3.1.1, Multi-Purpose Canister (MPC), provides assurance that there are not radioactive effluents from spent fuel storage canister.”

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

Total Body	$\leq 25$ mrem/year
Thyroid	$\leq 75$ mrem/year
Any other organ	$\leq 25$ mrem/year

Although CoC 1014 provides that the HI-STORM 100 Cask System does not create any radioactive material or have any radioactive waste treatment systems, for this report, total site releases include the the SNP ISFSI as part of the SNP site and part of plant operations. These releases are within 40 CFR 190 limits and 10 CFR 72.104 limits.

**Enclosure 2**

**Sequoyah Nuclear Plant  
Units 1 and 2**

**Radiological Impact Assessment Report  
Sequoyah Nuclear Plant  
2010**

2010  
SEQUOYAH NUCLEAR PLANT  
RADIOLOGICAL IMPACT ASSESSMENT REPORT

## INTRODUCTION

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

## DOSE LIMITS

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

The limits for doses in unrestricted areas from airborne noble gases released 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 limits for doses to a member of the general public from radioactive material in liquid effluents released to unrestricted areas are:

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

Less than or equal to 25 mrem per year to the total body,  
Less than or equal to 75 mrem per year to the thyroid,  
- and -  
Less than or equal to 25 mrem per year to any other organ.

## DOSE CALCULATIONS

Estimated doses to the public are determined using computer models: Gaseous Effluent Licensing Code (GELC), and the Quarterly Water Dose Assessment Code (QWATA). These models are based on guidance provided by the NRC (in Regulatory Guides 1.109, 1.111 and 1.113) for determining the potential dose to individuals and populations living in the vicinity of the plant. The area around the plant is analyzed to determine the pathways through which the public may receive a dose. The doses calculated are a representation of the dose to a "maximum exposed individual." Some of the factors used in these calculations (such as ingestion rates) are maximum values. Many of these factors are obtained from NUREG/CR-1004. The values chosen will tend to overestimate the dose to this "maximum" person. The expected dose to actual individuals is lower. The calculated doses are presented in Tables 1 through 9.

## DOSES FROM AIRBORNE EFFLUENTS

For airborne effluents, the public can be exposed to radiation from several sources: direct radiation from the radioactivity in the air, direct radiation from radioactivity deposited on the ground, inhalation of airborne radioactivity, ingestion of vegetation which contains radioactivity deposited from the atmosphere, and ingestion of milk and beef which contains radioactivity deposited from the atmosphere onto vegetation and subsequently eaten by milk and beef animals.

### Airborne Discharge Points

Releases from SQN are considered ground-level releases. The ground-level Joint Frequency Distribution (JFD) is derived from windspeeds and directions measured 10 meters above ground and from the vertical temperature difference between 10 and 46 meters, and are presented for each quarter in Attachment 1.0.

### Meteorological Data

Meteorological variables at SQN are measured continuously. Measurements collected include wind speed, wind direction, and temperature at heights of 10, 46, and 91 meters above the ground. Quarterly joint frequency distributions (JFDs) are calculated for each release point using the appropriate levels of meteorological data. A JFD gives the percentage of the time in a quarter that the wind is blowing out of a particular upwind compass sector in a particular range of wind speeds for a given stability Class A through G. The wind speeds are divided into nine wind speed ranges. Calms are distributed by direction in proportion to the distribution of noncalm wind directions less than 0.7 m/s (1.5 mph). Stability classes are determined from the vertical temperature difference between two measurement levels.

### External Exposure Dose

Dose estimates for maximum external air dose (gamma-air and beta-air doses) are made for points at and beyond the unrestricted area boundary as described in the SQN ODCM. The highest of these doses is then selected.



### Submersion Dose

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

### Organ Dose

Doses to organs due to releases of airborne effluents are estimated for the inhalation, ground contamination, and ingestion pathways. The ingestion pathway is further divided into four possible contributing pathways: ingestion of cow/goat milk, ingestion of beef, and ingestion of vegetables. Doses from applicable pathways are calculated for each real receptor location identified in the most recent land use survey. To determine the maximum organ dose, the doses from the pathways are summed for each receptor. For the ingestion dose, however, only those pathways that exist for each receptor are considered in the sum, i.e., milk ingestion doses are included only for locations where milk is consumed without commercial preparation and vegetable ingestion is included only for those locations where a garden is identified. To conservatively account for beef ingestion, a beef ingestion dose equal to that for the highest unrestricted area boundary location is added to each identified receptor. For ground contamination, the dose added to the organ dose being calculated is the total body dose calculated for that location, i.e., it is assumed that the dose to an individual organ is equal to the total body dose.

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

### DOSES FROM LIQUID EFFLUENTS

For liquid effluents, the public can be exposed to radiation from three sources: the ingestion of water from the Tennessee River, the ingestion of fish caught in the Tennessee River, and direct exposure from radioactive material deposited on the river shoreline sediment (recreation).

The concentrations of radioactivity in the Tennessee River are estimated by a computer model which uses measured hydraulic data downstream of SQN. Parameters used to determine the doses are based on guidance given by the NRC (in Regulatory Guides 1.109) for maximum ingestion rates, exposure times, etc. Wherever possible, parameters used in the dose calculation are site specific use factors determined by TVA. The models that are used to estimate doses, as well as the parameters input to the models, are described in detail in the SQN ODCM.

### Liquid Release Points and River Data

Radioactivity concentrations in the Tennessee River are calculated assuming that releases in liquid effluents are continuous. Routine liquid releases from SQN, located at Tennessee River Mile 484, are made through diffusers which extend into the Tennessee River. It is assumed that releases to the river through these diffusers will initially be entrained in one-fifth of the water which flows past the plant. The QWATA code makes the assumption that this mixing condition holds true until the water is completely mixed at the first downstream dam, at Tennessee River Mile 471.

Doses are calculated for locations within a 50-mile radius downstream of the plant site. The maximum potential recreation dose is calculated for a location immediately downstream from the plant outfall. The maximum individual dose from ingestion of fish is assumed to be that calculated for the consumption of fish caught anywhere between the plant and the first downstream dam (Chickamauga Dam). The maximum individual dose from drinking water is assumed to be that calculated at the nearest downstream public water supply (East Side Utilities). This could be interpreted as indicating that the maximum individual, as assumed for liquid releases from Sequoyah, is an individual who obtains all of his drinking water at East Side Utilities, consumes fish caught from the Tennessee River between SQN and Chickamauga Dam, and spends 500 hours per year on the shoreline just below the outfall from Sequoyah. Dose estimates for the maximum individual due to liquid effluents for each quarter in the period are presented in Tables 5-8, 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 the 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 1-4 and Tables 5-8.

#### DIRECT RADIATION

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around SQN as part of the offsite REMP. The quarterly gamma radiation levels determined from these TLDs during this reporting period averaged approximately 10.5 mrem/quarter at onsite (at or near the site boundary) stations and approximately 9.5 mrem/quarter at offsite stations, or approximately 1.0 mrem/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 mrem/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 ODCM, an evaluation of the dose to a member of the public inside the unrestricted area boundary is performed for a hypothetical TVA employee who works just outside the restricted area fence for an entire work year (2000/8760 hours). Results from onsite TLD measurements for the calendar year in question indicate that the highest onsite TLD reading was 68 mrem. Using this value, and subtracting an annual background value of 42 mrem/year (see previous section), and multiplying by the ratio of the occupancy times (2000/8760), the external dose was 5.94 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.

Tables 1 and 2  
Doses from Airborne Effluents

**First Quarter**

**Individual Doses**

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
<b>External</b>				
Gamma Air	5.10E-04 mrad	5 mrad	<1%	NNW/730/meters
Beta Air	1.92E-04mrad	10 mrad	<1%	NNW/730/meters
<b>Submersion</b>				
Total Body	3.78E-04 mrad	10 mrad	<1%	NNW/841/meters
Skin	5.60E-04 mrad	10 mrad	<1%	NNW/841/meters
<b>Organ Doses<sup>1</sup></b>				
(Max) Child/Bone	3.98E-01 mrem	7.5 mrem	5.31%	SSW3220/meters
Child/Thyroid	9.11E-02 mrem	7.5 mrem	1.21%	SSW3220/meters
Child/Total Body	9.11E-02 mrem	7.5 mrem	1.21%	SSW3220/meters

**Population Doses**

Total Body Dose                      6.27E-01 man-rem  
 Maximum Organ Dose (organ)    2.46E+00 man-rem (Bone)

**Second Quarter**

**Individual Doses**

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
<b>External</b>				
Gamma Air	3.76E-03 mrad	5 mrad	<1	N/950/meters
Beta Air	1.50E-03mrad	10 mrad	<1	N/950/meters
<b>Submersion</b>				
Total Body	2.36E-03 mrad	10 mrad	<1	NNW/841/meters
Skin	3.52E-03 mrad	10 mrad	<1	NNW/841/meters
<b>Organ Doses<sup>1</sup></b>				
(Max) Child/Bone	5.13E-01 mrem	7.5 mrem	6.84%	N/1829/meters
Child/Thyroid	1.11E-01 mrem	7.5 mrem	1.48%	N/1829/meters
Child/Total Body	1.11E-01 mrem	7.5 mrem	1.48%	N/1829/meters

**Population Doses**

Total Body Dose                      5.48E-01 man-rem  
 Maximum Organ Dose (organ)    2.38E+00 man-rem (Bone)

*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/year for natural background).*

<sup>1</sup>Organ Doses include contributions from Carbon-14 in the form of Carbon Dioxide.

Tables 3 and 4  
Doses from Airborne Effluents

**Third Quarter**

**Individual Doses**

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
<b>External</b>				
Gamma Air	4.36E-04 mrad	5 mrad	<1	SSW/1840/meters
Beta Air	1.63E-04 mrad	10 mrad	<1	SSW/1840/meters
<b>Submersion</b>				
Total Body	3.23E-04 mrad	10 mrad	<1	SSW/2134/meters
Skin	4.78E-04 mrad	10 mrad	<1	SSW/2134/meters
<b>Organ Doses<sup>1</sup></b>				
(Max) Child/Bone	4.92E-01 mrem	7.5 mrem	6.56%	SSW/3220/meters
Child/Thyroid	9.93E-02 mrem	7.5 mrem	1.32%	SSW/3220/meters
Child/Total Body	9.93E-02 mrem	7.5 mrem	1.32%	SSW/3220/meters

**Population Doses**

Total Body Dose 4.93E-01 man-rem  
Maximum Organ Dose (organ) 2.42E+00 man-rem (Bone)

**Fourth Quarter**

**Individual Doses**

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Units
<b>External</b>				
Gamma Air	1.34E-03mrad	5 mrad	<1	SSW/1840/meters
Beta Air	4.96E-04 mrad	10 mrad	<1	SSW/1840/meters
<b>Submersion</b>				
Total Body	9.98E-04 mrad	10 mrad	<1	SSW/2134/meters
Skin	1.48E-03 mrad	10 mrad	<1	SSW/2134/meters
<b>Organ Doses<sup>1</sup></b>				
(Max) Child/Bone	5.37E-01mrem	7.5 mrem	7.16%	SSW/3220/meters
Child/Thyroid	1.08E-01 mrem	7.5 mrem	1.44%	SSW/3220/meters
Child/Total Body	1.08E-01 mrem	7.5 mrem	1.44%	SSW/3220/meters

**Population Doses**

Total Body Dose 1.24E-01 man-rem  
Maximum Organ Dose (organ) 6.19E-01 man-rem (Bone)

*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/year for natural background).*

<sup>1</sup>Organ Doses include contributions from Carbon-14 in the form of Carbon Dioxide.

Tables 5 and 6  
Doses from Liquid Effluents

**First Quarter**

**Individual Doses (mrem)**

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	8.00E-04	1.5 mrem	< 1 %
Child	Liver	8.00E-04	5 mrem	< 1 %
Child	Thyroid	8.00E-04	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 56,048

**Population Doses**

Total Body Dose 5.30E-02 man-rem  
 Maximum Organ Dose (organ) 5.30E-02 man-rem (GIT, Bone, Thyroid, Liver, Kidney, Lung)

**Second Quarter**

**Individual Doses (mrem)**

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	4.20E-03	1.5 mrem	< 1 %
Child	Liver	4.20E-03	5 mrem	< 1 %
Child	Thyroid	4.20E-03	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 16,082

**Population Doses**

Total Body Dose 2.70E-01 man-rem  
 Maximum Organ Dose (organ) 2.70E-01 man-rem (Bone, Liver, GIT, Thyroid, Kidney, Lung)

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

Tables 7 and 8  
Doses from Liquid Effluents

**Third Quarter**

**Individual Doses (mrem)**

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	6.90E-03	1.5 mrem	< 1 %
Child	GIT	7.00E-03	5 mrem	< 1 %
Child	Thyroid	6.90E-03	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 20,514

**Population Doses**

Total Body Dose 4.70E-01 man-rem  
Maximum Organ Dose (organ) 4.70E-01 man-rem (Bone, Liver, GIT, Thyroid, Kidney, Lung)

**Fourth Quarter**

**Individual Doses (mrem)**

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

Average Riverflow past SQN (cubic feet per second): 29,982

**Population Doses**

Total Body Dose 1.10E-01 man-rem  
Maximum Organ Dose (organ) 1.10E-01 man-rem (Bone, Liver, GIT, Thyroid, Kidney, Lung)

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

Table 9

## Total Dose from Fuel Cycle

Dose	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
<b>Total Body or any Organ (except thyroid)</b>					
Total body air submersion	3.78E-04	2.36E-03	3.23E-04	9.98E-04	
Critical organ dose (air)	3.98E-01	5.13E-01	4.92E-01	5.37E-01	
Total body dose (liquid)	8.00E-04	4.20E-03	6.90E-03	1.60E-03	
Maximum organ dose (liquid)	8.00E-04	4.20E-03	7.00E-03	1.60E-03	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
Total	4.00E-01	5.64E-01	5.06E-01	5.41E-01	
Cumulative Total Dose (Total body or any other organ) mrem					2.01E+00
<i>Annual Dose Limit (mrem)</i>					25
Percent of Limit					8.04
<b>Thyroid Dose (mrem)</b>					
Total body air submersion	3.78E-04	2.36E-03	3.23E-04	9.98E-04	
Thyroid dose (airborne)	9.11E-02	1.11E-01	9.93E-02	1.08E-01	
Total body dose (liquid)	8.00E-04	4.20E-03	6.90E-03	1.60E-03	
Thyroid dose (liquid)	8.00E-04	4.20E-03	6.90E-03	1.60E-03	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
Total	9.31E-02	1.22E-01	1.13E-01	1.22E-01	
Cumulative Total Dose (Thyroid) mrem					4.50E-01
<i>Annual Dose Limit (mrem)</i>					75
Percent of Limit					0.60



Attachment 1.0

Joint Frequency Distribution Tables

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.139	0.186	0.000	0.000	0.000	0.325
NNE	0.000	0.000	0.000	0.000	0.279	0.093	0.000	0.000	0.000	0.372
NE	0.000	0.000	0.000	0.186	0.139	0.046	0.000	0.000	0.000	0.372
ENE	0.000	0.000	0.000	0.232	0.046	0.000	0.000	0.000	0.000	0.279
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	0.093	0.000	0.000	0.000	0.000	0.000	0.093
SE	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
SSE	0.000	0.000	0.000	0.000	0.046	0.093	0.000	0.000	0.000	0.139
S	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
SSW	0.000	0.000	0.000	0.046	0.279	0.000	0.000	0.000	0.000	0.325
SW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
WSW	0.000	0.000	0.000	0.000	0.046	0.139	0.000	0.000	0.000	0.186
W	0.000	0.000	0.000	0.046	0.093	0.000	0.000	0.000	0.000	0.139
WNW	0.000	0.000	0.000	0.000	0.093	0.046	0.000	0.000	0.000	0.139
NW	0.000	0.000	0.000	0.000	0.186	0.558	0.000	0.000	0.000	0.743
NNW	0.000	0.000	0.000	0.000	0.093	0.279	0.000	0.000	0.000	0.372
SUBTOTAL	0.000	0.000	0.000	0.697	1.487	1.487	0.000	0.000	0.000	3.671

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2152  
 TOTAL HOURS OF STABILITY CLASS A 79  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 79  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2152  
 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: 2010/05/11

MEAN WIND SPEED = 6.98

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.186	0.418	0.000	0.000	0.000	0.604
NNE	0.000	0.000	0.000	0.046	0.372	0.279	0.000	0.000	0.000	0.697
NE	0.000	0.000	0.000	0.139	0.372	0.093	0.000	0.000	0.000	0.604
ENE	0.000	0.000	0.046	0.232	0.000	0.000	0.000	0.000	0.000	0.279
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.000	0.139	0.000	0.000	0.000	0.000	0.000	0.139
SSE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.046	0.186	0.093	0.046	0.000	0.000	0.000	0.372
SW	0.000	0.000	0.000	0.000	0.232	0.093	0.000	0.000	0.000	0.325
WSW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.093
WNW	0.000	0.000	0.000	0.000	0.186	0.000	0.000	0.000	0.000	0.186
NW	0.000	0.000	0.000	0.046	0.279	0.186	0.000	0.000	0.000	0.511
NNW	0.000	0.000	0.000	0.000	0.232	0.139	0.000	0.000	0.000	0.372
SUBTOTAL	0.000	0.000	0.139	0.883	1.998	1.348	0.000	0.000	0.000	4.368

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2152
TOTAL HOURS OF STABILITY CLASS B	94
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	94
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2152
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: 2010/05/11

MEAN WIND SPEED = 6.71

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR  
 STABILITY CLASS C (-1.7< DELTA T<=-1.5 C/100 M)

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.046	0.232	0.279	0.000	0.000	0.000	0.558
NNE	0.000	0.000	0.000	0.093	0.372	0.046	0.000	0.000	0.000	0.511
NE	0.000	0.000	0.139	0.186	0.186	0.046	0.000	0.000	0.000	0.558
ENE	0.000	0.000	0.093	0.093	0.046	0.000	0.000	0.000	0.000	0.232
E	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.232	0.000	0.046	0.000	0.000	0.000	0.279
SSW	0.000	0.000	0.000	0.558	0.139	0.046	0.000	0.000	0.000	0.743
SW	0.000	0.000	0.046	0.418	0.139	0.093	0.000	0.000	0.000	0.697
WSW	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.093
W	0.000	0.000	0.000	0.000	0.186	0.046	0.000	0.000	0.000	0.232
WNW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.000	0.000	0.093	0.325	0.046	0.000	0.000	0.465
NNW	0.000	0.000	0.000	0.000	0.325	0.279	0.000	0.000	0.000	0.604
SUBTOTAL	0.000	0.000	0.325	1.719	1.766	1.255	0.046	0.000	0.000	5.112

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2152  
 TOTAL HOURS OF STABILITY CLASS C 110  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 110  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2152  
 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: 2010/05/11

MEAN WIND SPEED = 6.15

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR  
 STABILITY CLASS D (-1.5< DELTA T<=-0.5 C/100 M)

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.139	0.790	2.835	3.439	0.929	0.000	0.000	0.000	8.132
NNE	0.000	0.139	1.162	3.485	3.857	2.649	0.000	0.000	0.000	11.292
NE	0.000	0.046	0.976	1.348	0.325	0.139	0.000	0.000	0.000	2.835
ENE	0.000	0.000	0.465	0.046	0.000	0.000	0.000	0.000	0.000	0.511
E	0.000	0.000	0.418	0.000	0.000	0.000	0.000	0.000	0.000	0.418
ESE	0.000	0.000	0.279	0.000	0.046	0.000	0.000	0.000	0.000	0.325
SE	0.000	0.000	0.186	0.000	0.046	0.000	0.000	0.000	0.000	0.232
SSE	0.000	0.000	0.279	0.186	0.000	0.093	0.000	0.000	0.000	0.558
S	0.000	0.046	0.372	0.651	0.279	0.511	0.046	0.000	0.000	1.905
SSW	0.000	0.046	0.883	1.626	0.836	0.186	0.000	0.000	0.000	3.578
SW	0.000	0.000	1.115	1.719	0.743	0.186	0.000	0.000	0.000	3.764
WSW	0.000	0.139	0.325	0.697	0.232	0.232	0.000	0.000	0.000	1.626
W	0.000	0.000	0.139	0.558	0.604	0.558	0.000	0.000	0.000	1.859
WNW	0.000	0.000	0.139	0.325	0.558	0.651	0.000	0.000	0.000	1.673
NW	0.000	0.000	0.604	0.976	1.348	0.558	0.000	0.000	0.000	3.485
NNW	0.000	0.046	1.208	1.812	2.184	0.511	0.000	0.000	0.000	5.762
SUBTOTAL	0.000	0.604	9.340	16.264	14.498	7.203	0.046	0.000	0.000	47.955

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2152  
 TOTAL HOURS OF STABILITY CLASS D 1032  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 1032  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2152  
 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: 2010/05/11

MEAN WIND SPEED = 5.29

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR  
 STABILITY CLASS E (-0.5< DELTA T<= 1.5 C/100 M)

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.232	1.533	1.208	0.279	0.000	0.000	0.000	0.000	3.253
NNE	0.000	0.418	2.928	1.533	0.325	0.093	0.000	0.000	0.000	5.297
NE	0.000	0.418	1.022	0.325	0.000	0.000	0.000	0.000	0.000	1.766
ENE	0.000	0.139	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.186
E	0.000	0.279	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.372
ESE	0.000	0.000	0.046	0.000	0.046	0.000	0.000	0.000	0.000	0.093
SE	0.000	0.046	0.232	0.093	0.000	0.000	0.000	0.000	0.000	0.372
SSE	0.000	0.186	0.232	0.046	0.093	0.139	0.000	0.000	0.000	0.697
S	0.000	0.093	0.325	0.232	0.232	0.325	0.000	0.000	0.000	1.208
SSW	0.000	0.232	1.626	0.418	0.372	0.093	0.000	0.000	0.000	2.742
SW	0.000	0.139	1.394	0.883	0.279	0.093	0.000	0.000	0.000	2.788
WSW	0.000	0.139	0.418	0.093	0.511	0.046	0.000	0.000	0.000	1.208
W	0.000	0.186	0.372	0.186	0.186	0.046	0.000	0.000	0.000	0.976
WNW	0.000	0.046	0.558	0.046	0.000	0.046	0.000	0.000	0.000	0.697
NW	0.000	0.000	1.162	0.418	0.000	0.000	0.000	0.000	0.000	1.580
NNW	0.000	0.186	1.069	0.604	0.093	0.046	0.000	0.000	0.000	1.998
SUBTOTAL	0.000	2.742	13.058	6.087	2.416	0.929	0.000	0.000	0.000	25.232

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2152  
 TOTAL HOURS OF STABILITY CLASS E 543  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 543  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2152  
 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: 2010/05/11

MEAN WIND SPEED = 3.33

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.093	0.325	0.000	0.000	0.000	0.000	0.000	0.000	0.418
NNE	0.000	0.232	1.208	0.093	0.000	0.000	0.000	0.000	0.000	1.533
NE	0.000	0.139	1.115	0.000	0.000	0.000	0.000	0.000	0.000	1.255
ENE	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.093
E	0.000	0.186	0.186	0.046	0.000	0.000	0.000	0.000	0.000	0.418
ESE	0.000	0.093	0.139	0.000	0.000	0.000	0.000	0.000	0.000	0.232
SE	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.093
SSE	0.000	0.139	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.325
S	0.000	0.279	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.465
SSW	0.000	0.186	0.418	0.046	0.000	0.000	0.000	0.000	0.000	0.651
SW	0.000	0.093	0.790	0.046	0.000	0.000	0.000	0.000	0.000	0.929
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.093
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	1.487	4.879	0.279	0.000	0.000	0.000	0.000	0.000	6.645

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2152  
 TOTAL HOURS OF STABILITY CLASS F 143  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 143  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2152  
 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: 2010/05/11

MEAN WIND SPEED = 2.05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JAN 1, 2010 - MAR 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNE	0.000	0.279	1.115	0.000	0.000	0.000	0.000	0.000	0.000	1.394
NE	0.000	0.511	1.394	0.046	0.000	0.000	0.000	0.000	0.000	1.952
ENE	0.000	0.325	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.511
E	0.000	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.186
ESE	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.093
SE	0.000	0.325	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.372
SSE	0.000	0.465	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.558
S	0.000	0.325	0.139	0.000	0.000	0.000	0.000	0.000	0.000	0.465
SSW	0.000	0.558	0.418	0.000	0.000	0.000	0.000	0.000	0.000	0.976
SW	0.000	0.000	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.279
WSW	0.000	0.046	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.139
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	3.067	3.903	0.046	0.000	0.000	0.000	0.000	0.000	7.017

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2152
TOTAL HOURS OF STABILITY CLASS G	151
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	151
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2152
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: 2010/05/11

MEAN WIND SPEED = 1.69

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS



JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.093
NNE	0.000	0.000	0.000	0.093	0.186	0.000	0.000	0.000	0.000	0.279
NE	0.000	0.000	0.000	0.466	0.186	0.000	0.000	0.000	0.000	0.652
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.047	0.093	0.140	0.140	0.000	0.000	0.000	0.419
SSW	0.000	0.000	0.047	1.211	0.745	0.186	0.000	0.000	0.000	2.189
SW	0.000	0.000	0.047	0.466	0.652	0.000	0.000	0.000	0.000	1.164
WSW	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
W	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.093
NNW	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.093
SUBTOTAL	0.000	0.000	0.140	2.375	2.096	0.559	0.000	0.000	0.000	5.170

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS A 111  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 111  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2147  
 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: 2010/08/13

MEAN WIND SPEED = 5.75

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
NNE	0.000	0.000	0.047	0.419	0.326	0.047	0.000	0.000	0.000	0.838
NE	0.000	0.000	0.093	0.186	0.047	0.000	0.000	0.000	0.000	0.326
ENE	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
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	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.093
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.186	0.000	0.047	0.000	0.000	0.000	0.233
SSW	0.000	0.000	0.000	1.071	0.373	0.093	0.000	0.000	0.000	1.537
SW	0.000	0.000	0.047	0.699	0.140	0.000	0.000	0.000	0.000	0.885
WSW	0.000	0.000	0.000	0.000	0.140	0.000	0.000	0.000	0.000	0.140
W	0.000	0.000	0.000	0.000	0.047	0.186	0.000	0.000	0.000	0.233
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	0.047	0.093	0.000	0.000	0.000	0.140
NNW	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.093
SUBTOTAL	0.000	0.000	0.233	2.795	1.211	0.466	0.000	0.000	0.000	4.704

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS B 102  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 101  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2147  
 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: 2010/08/13

MEAN WIND SPEED = 5.38

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.093
NNE	0.000	0.000	0.093	0.605	0.093	0.047	0.000	0.000	0.000	0.838
NE	0.000	0.000	0.047	0.326	0.093	0.000	0.000	0.000	0.000	0.466
ENE	0.000	0.000	0.093	0.047	0.047	0.000	0.000	0.000	0.000	0.186
E	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.047	0.093	0.000	0.000	0.000	0.000	0.000	0.140
SE	0.000	0.000	0.047	0.140	0.000	0.000	0.000	0.000	0.000	0.186
SSE	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
S	0.000	0.000	0.047	0.512	0.093	0.047	0.000	0.000	0.000	0.699
SSW	0.000	0.000	0.140	1.164	0.233	0.047	0.000	0.000	0.000	1.584
SW	0.000	0.000	0.559	0.745	0.186	0.186	0.000	0.000	0.000	1.677
WSW	0.000	0.000	0.047	0.279	0.093	0.000	0.000	0.000	0.000	0.419
W	0.000	0.000	0.000	0.047	0.047	0.140	0.000	0.000	0.000	0.233
WNW	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.093
NNW	0.000	0.000	0.000	0.093	0.047	0.047	0.000	0.000	0.000	0.186
SUBTOTAL	0.000	0.000	1.164	4.192	1.025	0.559	0.000	0.000	0.000	6.940

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS C 150  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 149  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2147  
 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: 2010/08/13

MEAN WIND SPEED = 4.75

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.699	1.071	0.186	0.000	0.000	0.000	0.000	1.956
NNE	0.000	0.000	1.770	1.956	0.652	0.047	0.000	0.000	0.000	4.425
NE	0.000	0.093	1.770	0.466	0.047	0.000	0.000	0.000	0.000	2.375
ENE	0.000	0.000	0.838	0.047	0.000	0.000	0.000	0.000	0.000	0.885
E	0.000	0.000	0.512	0.140	0.000	0.000	0.000	0.000	0.000	0.652
ESE	0.000	0.000	0.373	0.000	0.000	0.000	0.000	0.000	0.000	0.373
SE	0.000	0.000	0.559	0.093	0.000	0.000	0.000	0.000	0.000	0.652
SSE	0.000	0.000	0.512	0.233	0.047	0.047	0.000	0.000	0.000	0.838
S	0.000	0.093	1.816	1.537	0.419	0.233	0.000	0.000	0.000	4.099
SSW	0.000	0.047	3.307	3.214	0.559	0.093	0.000	0.000	0.000	7.219
SW	0.000	0.140	1.956	1.863	0.093	0.140	0.000	0.000	0.000	4.192
WSW	0.000	0.000	0.419	0.373	0.186	0.093	0.000	0.000	0.000	1.071
W	0.000	0.000	0.279	0.373	0.326	0.186	0.000	0.000	0.000	1.164
WNW	0.000	0.047	0.186	0.093	0.093	0.186	0.000	0.000	0.000	0.605
NW	0.000	0.093	0.466	0.140	0.140	0.279	0.000	0.000	0.000	1.118
NNW	0.000	0.000	0.466	0.233	0.140	0.140	0.000	0.000	0.000	0.978
SUBTOTAL	0.000	0.512	15.929	11.830	2.888	1.444	0.000	0.000	0.000	32.604

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS D 705  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 700  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2147  
 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: 2010/08/13

MEAN WIND SPEED = 3.81

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.373	2.981	0.885	0.233	0.000	0.000	0.000	0.000	4.471
NNE	0.000	0.605	2.888	0.745	0.279	0.000	0.000	0.000	0.000	4.518
NE	0.000	0.466	0.745	0.047	0.000	0.000	0.000	0.000	0.000	1.258
ENE	0.000	0.140	0.047	0.093	0.000	0.000	0.000	0.000	0.000	0.279
E	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.233	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.419
SE	0.000	0.140	0.093	0.047	0.000	0.000	0.000	0.000	0.000	0.279
SSE	0.000	0.326	0.652	0.047	0.047	0.047	0.000	0.000	0.000	1.118
S	0.000	0.186	1.630	0.652	0.419	0.093	0.000	0.000	0.000	2.981
SSW	0.000	0.419	3.307	1.584	0.326	0.000	0.000	0.000	0.000	5.636
SW	0.000	0.186	2.282	1.025	0.140	0.000	0.000	0.000	0.000	3.633
WSW	0.000	0.233	1.584	0.932	0.233	0.000	0.000	0.000	0.000	2.981
W	0.000	0.140	0.699	0.186	0.047	0.000	0.000	0.000	0.000	1.071
WNW	0.000	0.186	0.373	0.093	0.000	0.047	0.000	0.000	0.000	0.699
NW	0.000	0.373	0.466	0.233	0.000	0.000	0.000	0.000	0.000	1.071
NNW	0.000	0.326	1.584	0.512	0.186	0.000	0.000	0.000	0.000	2.608
SUBTOTAL	0.000	4.332	19.562	7.080	1.910	0.186	0.000	0.000	0.000	33.069

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS E 722  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 710  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2147  
 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: 2010/08/13

MEAN WIND SPEED = 2.81

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.373	1.025	0.186	0.000	0.000	0.000	0.000	0.000	1.584
NNE	0.000	0.512	2.096	0.093	0.047	0.000	0.000	0.000	0.000	2.748
NE	0.000	0.932	1.025	0.047	0.000	0.000	0.000	0.000	0.000	2.003
ENE	0.000	0.326	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.373
E	0.000	0.279	0.093	0.047	0.000	0.000	0.000	0.000	0.000	0.419
ESE	0.000	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.279
SE	0.000	0.559	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.652
SSE	0.000	0.326	0.140	0.093	0.000	0.000	0.000	0.000	0.000	0.559
S	0.000	0.373	0.373	0.000	0.000	0.000	0.000	0.000	0.000	0.745
SSW	0.000	0.140	0.605	0.047	0.000	0.000	0.000	0.000	0.000	0.792
SW	0.000	0.140	0.885	0.047	0.000	0.000	0.000	0.000	0.000	1.071
WSW	0.000	0.093	0.326	0.047	0.000	0.000	0.000	0.000	0.000	0.466
W	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.093
WNW	0.000	0.047	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.326
NW	0.000	0.000	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.186
NNW	0.000	0.186	0.373	0.000	0.000	0.000	0.000	0.000	0.000	0.559
SUBTOTAL	0.000	4.565	7.639	0.605	0.047	0.000	0.000	0.000	0.000	12.855

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2168  
 TOTAL HOURS OF STABILITY CLASS F 277  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 276  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2147  
 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: 2010/08/13

MEAN WIND SPEED = 1.90

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2010 - JUN 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.001	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.094
NNE	0.006	0.047	0.512	0.000	0.000	0.000	0.000	0.000	0.000	0.565
NE	0.005	0.233	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.518
ENE	0.001	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.141
E	0.001	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.141
ESE	0.002	0.093	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.188
SE	0.001	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.141
SSE	0.004	0.326	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.376
S	0.006	0.279	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.565
SSW	0.013	0.326	0.932	0.000	0.000	0.000	0.000	0.000	0.000	1.270
SW	0.006	0.047	0.512	0.000	0.000	0.000	0.000	0.000	0.000	0.565
WSW	0.001	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.094
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	0.047	1.816	2.795	0.000	0.000	0.000	0.000	0.000	0.000	4.658

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2168
TOTAL HOURS OF STABILITY CLASS G	101
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	100
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	1

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

DATE PRINTED: 2010/08/13

MEAN WIND SPEED = 1.75

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.045	0.317	0.272	0.045	0.000	0.000	0.000	0.680
NNE	0.000	0.000	0.000	1.497	1.179	0.181	0.000	0.000	0.000	2.857
NE	0.000	0.000	0.091	0.816	0.227	0.045	0.000	0.000	0.000	1.179
ENE	0.000	0.000	0.045	0.408	0.000	0.000	0.000	0.000	0.000	0.454
E	0.000	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.227
ESE	0.000	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.227
SE	0.000	0.000	0.045	0.136	0.045	0.000	0.000	0.000	0.000	0.227
SSE	0.000	0.000	0.000	0.091	0.272	0.045	0.000	0.000	0.000	0.408
S	0.000	0.000	0.000	0.454	0.136	0.000	0.000	0.000	0.000	0.590
SSW	0.000	0.000	0.091	2.404	0.590	0.000	0.000	0.000	0.000	3.084
SW	0.000	0.000	0.136	3.129	0.680	0.000	0.000	0.000	0.000	3.946
WSW	0.000	0.000	0.000	0.317	0.045	0.000	0.000	0.000	0.000	0.363
W	0.000	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.000	0.091
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	0.045	0.045	0.000	0.000	0.000	0.000	0.091
NNW	0.000	0.000	0.000	0.000	0.227	0.000	0.000	0.000	0.000	0.227
SUBTOTAL	0.000	0.000	0.635	9.887	3.764	0.363	0.000	0.000	0.000	14.649

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS A 323  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 323  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 5.01

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS



JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR  
 STABILITY CLASS B (-1.9< DELTA T<=-1.7 C/100 M)

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.045	0.091	0.045	0.045	0.000	0.000	0.000	0.227
NNE	0.000	0.000	0.045	0.680	0.227	0.000	0.000	0.000	0.000	0.952
NE	0.000	0.000	0.181	0.181	0.000	0.000	0.000	0.000	0.000	0.363
ENE	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SE	0.000	0.000	0.045	0.136	0.000	0.000	0.000	0.000	0.000	0.181
SSE	0.000	0.000	0.045	0.181	0.000	0.045	0.000	0.000	0.000	0.272
S	0.000	0.000	0.045	0.363	0.000	0.000	0.000	0.000	0.000	0.408
SSW	0.000	0.000	0.227	0.862	0.000	0.000	0.000	0.000	0.000	1.088
SW	0.000	0.000	0.272	0.771	0.136	0.000	0.000	0.000	0.000	1.179
WSW	0.000	0.000	0.000	0.045	0.091	0.045	0.000	0.000	0.000	0.181
W	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SUBTOTAL	0.000	0.000	1.179	3.401	0.499	0.136	0.000	0.000	0.000	5.215

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS B 115  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 115  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 4.37

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.136	0.091	0.045	0.091	0.000	0.000	0.000	0.363
NNE	0.000	0.000	0.272	0.408	0.317	0.000	0.000	0.000	0.000	0.998
NE	0.000	0.000	0.590	0.227	0.091	0.000	0.000	0.000	0.000	0.907
ENE	0.000	0.000	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.136
E	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.000	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.136
SE	0.000	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.136
SSE	0.000	0.000	0.181	0.136	0.000	0.000	0.000	0.000	0.000	0.317
S	0.000	0.000	0.091	0.272	0.045	0.000	0.000	0.000	0.000	0.408
SSW	0.000	0.000	0.272	1.224	0.045	0.000	0.000	0.000	0.000	1.542
SW	0.000	0.045	0.272	0.363	0.000	0.000	0.000	0.000	0.000	0.680
WSW	0.000	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.091
W	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
WNW	0.000	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.136
NW	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.045	2.177	3.129	0.590	0.091	0.000	0.000	0.000	6.032

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS C 133  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 133  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 3.99

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.136	0.998	0.726	0.227	0.045	0.000	0.000	0.000	2.132
NNE	0.000	0.091	1.950	2.540	0.952	0.045	0.000	0.000	0.000	5.578
NE	0.000	0.000	1.224	0.363	0.136	0.000	0.000	0.000	0.000	1.723
ENE	0.000	0.000	0.454	0.091	0.045	0.000	0.000	0.000	0.000	0.590
E	0.000	0.000	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.317
ESE	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SE	0.000	0.000	0.363	0.136	0.000	0.000	0.000	0.000	0.000	0.499
SSE	0.000	0.000	0.499	0.181	0.045	0.000	0.000	0.000	0.000	0.726
S	0.000	0.136	1.587	1.406	0.181	0.000	0.000	0.000	0.000	3.311
SSW	0.000	0.091	2.676	1.587	0.045	0.000	0.000	0.000	0.000	4.399
SW	0.000	0.000	1.542	0.952	0.091	0.000	0.000	0.000	0.000	2.585
WSW	0.000	0.045	0.499	0.408	0.091	0.045	0.000	0.000	0.000	1.088
W	0.000	0.045	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.272
WNW	0.000	0.045	0.136	0.091	0.000	0.091	0.000	0.000	0.000	0.363
NW	0.000	0.045	0.136	0.317	0.136	0.000	0.000	0.000	0.000	0.635
NNW	0.000	0.091	0.408	0.181	0.136	0.045	0.000	0.000	0.000	0.862
SUBTOTAL	0.000	0.726	12.971	9.116	2.086	0.272	0.000	0.000	0.000	25.170

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS D 555  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 555  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 3.52

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.726	5.261	0.907	0.045	0.000	0.000	0.000	0.000	6.939
NNE	0.000	0.680	5.215	1.859	0.091	0.000	0.000	0.000	0.000	7.846
NE	0.000	0.227	0.590	0.136	0.045	0.000	0.000	0.000	0.000	0.998
ENE	0.000	0.091	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.181
E	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.045	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.272
SE	0.000	0.227	0.408	0.000	0.000	0.000	0.000	0.000	0.000	0.635
SSE	0.000	0.272	0.590	0.227	0.045	0.000	0.000	0.000	0.000	1.134
S	0.000	0.544	1.678	0.091	0.000	0.000	0.000	0.000	0.000	2.313
SSW	0.000	0.317	3.356	0.091	0.000	0.000	0.000	0.000	0.000	3.764
SW	0.000	0.317	2.177	0.181	0.045	0.000	0.000	0.000	0.000	2.721
WSW	0.000	0.227	1.678	0.181	0.045	0.000	0.000	0.000	0.000	2.132
W	0.000	0.317	0.590	0.091	0.045	0.000	0.000	0.000	0.000	1.043
WNW	0.000	0.091	0.363	0.045	0.000	0.000	0.000	0.000	0.000	0.499
NW	0.000	0.227	0.680	0.091	0.000	0.045	0.000	0.000	0.000	1.043
NNW	0.000	0.408	1.859	0.408	0.000	0.000	0.000	0.000	0.000	2.676
SUBTOTAL	0.000	4.807	24.762	4.308	0.363	0.045	0.000	0.000	0.000	34.286

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS E 756  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 756  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 2.43

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.317	2.494	0.227	0.000	0.000	0.000	0.000	0.000	3.039
NNE	0.000	0.408	4.490	0.045	0.000	0.000	0.000	0.000	0.000	4.943
NE	0.000	0.544	0.635	0.000	0.000	0.000	0.000	0.000	0.000	1.179
ENE	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.136
E	0.000	0.181	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.227
ESE	0.000	0.136	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.363
SE	0.000	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.227
SSE	0.000	0.227	0.136	0.045	0.000	0.000	0.000	0.000	0.000	0.408
S	0.000	0.091	0.363	0.000	0.000	0.000	0.000	0.000	0.000	0.454
SSW	0.000	0.045	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.544
SW	0.000	0.045	0.363	0.000	0.000	0.000	0.000	0.000	0.000	0.408
WSW	0.000	0.045	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.317
W	0.000	0.136	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.181
WNW	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.136
NW	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.136
NNW	0.000	0.181	0.363	0.045	0.000	0.000	0.000	0.000	0.000	0.590
SUBTOTAL	0.000	2.630	10.295	0.363	0.000	0.000	0.000	0.000	0.000	13.288

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS F 293  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 293  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 1.95

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR  
 STABILITY CLASS G (DELTA T > 4.0 C/100 M)

SEQUOYAH NUCLEAR PLANT

JUL 1, 2010 - SEP 30, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.227
NNE	0.000	0.045	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.272
NE	0.000	0.091	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.363
ENE	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
ESE	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SSW	0.000	0.000	0.181	0.000	0.000	0.000	0.000	0.000	0.000	0.181
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SUBTOTAL	0.000	0.363	0.952	0.045	0.000	0.000	0.000	0.000	0.000	1.361

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2205  
 TOTAL HOURS OF STABILITY CLASS G 30  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 30  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2205  
 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: 2010/10/22

MEAN WIND SPEED = 1.81

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.091	0.502	0.548	0.000	0.000	0.000	1.141
NNE	0.000	0.000	0.000	0.456	0.548	0.365	0.000	0.000	0.000	1.369
NE	0.000	0.000	0.137	0.730	0.456	0.365	0.000	0.000	0.000	1.689
ENE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.000	0.228	0.137	0.000	0.000	0.000	0.000	0.365
SSW	0.000	0.000	0.046	0.274	0.274	0.046	0.000	0.000	0.000	0.639
SW	0.000	0.000	0.000	0.274	0.319	0.000	0.000	0.000	0.000	0.593
WSW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.183	0.000	0.000	0.000	0.183
WNW	0.000	0.000	0.000	0.046	0.046	0.046	0.000	0.000	0.000	0.137
NW	0.000	0.000	0.000	0.000	0.091	0.319	0.000	0.000	0.000	0.411
NNW	0.000	0.000	0.000	0.000	0.091	0.228	0.000	0.000	0.000	0.319
SUBTOTAL	0.000	0.000	0.274	2.236	2.465	2.099	0.000	0.000	0.000	7.074

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2191
TOTAL HOURS OF STABILITY CLASS A	155
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	155
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2191
TOTAL HOURS CALM	0

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 6.59

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.137	0.183	0.228	0.000	0.000	0.000	0.548
NNE	0.000	0.000	0.046	0.274	0.274	0.137	0.046	0.000	0.000	0.776
NE	0.000	0.000	0.091	0.319	0.091	0.046	0.000	0.000	0.000	0.548
ENE	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
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	0.091	0.000	0.000	0.000	0.000	0.000	0.091
SSE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.046	0.137	0.046	0.046	0.000	0.000	0.000	0.274
SSW	0.000	0.000	0.000	0.411	0.137	0.000	0.000	0.000	0.000	0.548
SW	0.000	0.000	0.137	0.456	0.046	0.000	0.000	0.000	0.000	0.639
WSW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.046	0.046	0.046	0.000	0.000	0.000	0.137
NW	0.000	0.000	0.000	0.046	0.091	0.046	0.000	0.000	0.000	0.183
NNW	0.000	0.000	0.000	0.000	0.091	0.183	0.000	0.000	0.000	0.274
SUBTOTAL	0.000	0.000	0.502	2.008	1.004	0.730	0.046	0.000	0.000	4.290

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2191
TOTAL HOURS OF STABILITY CLASS B	94
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	94
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2191
TOTAL HOURS CALM	0

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 5.59

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS



JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.137	0.274	0.183	0.000	0.000	0.000	0.593
NNE	0.000	0.000	0.183	0.228	0.137	0.183	0.000	0.000	0.000	0.730
NE	0.000	0.000	0.502	0.319	0.091	0.046	0.000	0.000	0.000	0.958
ENE	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.183	0.046	0.183	0.000	0.000	0.000	0.000	0.411
SSW	0.000	0.000	0.183	0.593	0.091	0.000	0.000	0.000	0.000	0.867
SW	0.000	0.000	0.319	0.456	0.137	0.000	0.000	0.000	0.000	0.913
WSW	0.000	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.137
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	0.046	0.000	0.091	0.000	0.000	0.000	0.137
NW	0.000	0.000	0.000	0.000	0.091	0.091	0.000	0.000	0.000	0.183
NNW	0.000	0.046	0.000	0.091	0.046	0.137	0.000	0.000	0.000	0.319
SUBTOTAL	0.000	0.046	1.643	1.963	1.050	0.776	0.000	0.000	0.000	5.477

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2191  
 TOTAL HOURS OF STABILITY CLASS C 120  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 120  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191  
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 4.86

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.137	1.871	1.278	1.506	1.461	0.000	0.000	0.000	6.253
NNE	0.000	0.046	2.373	2.328	1.050	1.141	0.000	0.000	0.000	6.937
NE	0.000	0.046	1.278	0.411	0.183	0.046	0.000	0.000	0.000	1.963
ENE	0.000	0.000	0.365	0.046	0.000	0.000	0.000	0.000	0.000	0.411
E	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.046	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.228
SE	0.000	0.046	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.137
SSE	0.000	0.000	0.091	0.046	0.137	0.046	0.000	0.000	0.000	0.319
S	0.000	0.091	1.004	0.502	0.319	0.183	0.000	0.000	0.000	2.099
SSW	0.000	0.046	1.095	0.822	0.593	0.228	0.000	0.000	0.000	2.784
SW	0.000	0.046	1.415	0.730	0.091	0.137	0.000	0.000	0.000	2.419
WSW	0.000	0.046	0.730	0.183	0.137	0.274	0.000	0.000	0.000	1.369
W	0.000	0.046	0.183	0.228	0.319	0.593	0.000	0.000	0.000	1.369
WNW	0.000	0.046	0.091	0.183	0.274	0.411	0.000	0.000	0.000	1.004
NW	0.000	0.091	0.183	0.365	0.548	0.639	0.000	0.000	0.000	1.826
NNW	0.000	0.046	0.365	0.822	1.141	1.095	0.000	0.000	0.000	3.469
SUBTOTAL	0.000	0.776	11.365	7.942	6.298	6.253	0.000	0.000	0.000	32.633

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2191  
 TOTAL HOURS OF STABILITY CLASS D 715  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 715  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191  
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 4.91

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.274	3.104	1.278	0.319	0.000	0.000	0.000	0.000	4.975
NNE	0.000	0.228	4.518	1.232	0.319	0.000	0.000	0.000	0.000	6.298
NE	0.000	0.319	0.548	0.183	0.000	0.000	0.000	0.000	0.000	1.050
ENE	0.000	0.137	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.274
E	0.000	0.046	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.183
ESE	0.000	0.091	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.137
SE	0.000	0.091	0.091	0.091	0.000	0.000	0.000	0.000	0.000	0.274
SSE	0.000	0.137	0.365	0.365	0.091	0.091	0.000	0.000	0.000	1.050
S	0.000	0.183	0.365	0.593	0.228	0.411	0.000	0.000	0.000	1.780
SSW	0.000	0.183	1.324	0.822	0.548	0.046	0.000	0.000	0.000	2.921
SW	0.000	0.137	1.917	0.822	0.274	0.046	0.000	0.000	0.000	3.195
WSW	0.000	0.183	0.639	0.183	0.000	0.137	0.000	0.000	0.000	1.141
W	0.000	0.046	0.730	0.137	0.046	0.000	0.000	0.000	0.000	0.958
WNW	0.000	0.183	0.456	0.183	0.091	0.000	0.000	0.000	0.000	0.913
NW	0.000	0.091	0.593	0.365	0.365	0.000	0.000	0.000	0.000	1.415
NNW	0.000	0.548	1.461	0.685	0.228	0.000	0.000	0.000	0.000	2.921
SUBTOTAL	0.000	2.875	16.431	6.937	2.510	0.730	0.000	0.000	0.000	29.484

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2191  
 TOTAL HOURS OF STABILITY CLASS E 646  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 646  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191  
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 3.19

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR  
 STABILITY CLASS F ( 1.5< DELTA T<= 4.0 C/100 M)

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.456	1.689	0.091	0.000	0.000	0.000	0.000	0.000	2.236
NNE	0.000	1.232	5.340	0.046	0.000	0.000	0.000	0.000	0.000	6.618
NE	0.000	0.822	1.415	0.046	0.000	0.000	0.000	0.000	0.000	2.282
ENE	0.000	0.319	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.411
E	0.000	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.228
ESE	0.000	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.228
SE	0.000	0.228	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.274
SSE	0.000	0.274	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.319
S	0.000	0.137	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.365
SSW	0.000	0.091	0.913	0.000	0.000	0.000	0.000	0.000	0.000	1.004
SW	0.000	0.274	0.548	0.046	0.000	0.000	0.000	0.000	0.000	0.867
WSW	0.000	0.000	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.228
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.091	0.046	0.000	0.000	0.000	0.000	0.000	0.137
NNW	0.000	0.091	0.411	0.091	0.000	0.000	0.000	0.000	0.000	0.593
SUBTOTAL	0.000	4.290	11.136	0.411	0.000	0.000	0.000	0.000	0.000	15.838

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2191  
 TOTAL HOURS OF STABILITY CLASS F 347  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 347  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191  
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 1.92

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2010 - DEC 31, 2010

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.001	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.092
NNE	0.014	0.228	1.324	0.000	0.000	0.000	0.000	0.000	0.000	1.566
NE	0.010	0.274	0.867	0.000	0.000	0.000	0.000	0.000	0.000	1.151
ENE	0.004	0.183	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.414
E	0.002	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.230
ESE	0.003	0.319	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.368
SE	0.002	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.230
SSE	0.002	0.228	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.276
S	0.004	0.183	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.414
SSW	0.002	0.091	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.230
SW	0.001	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.092
WSW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.092
SUBTOTAL	0.046	1.917	3.195	0.046	0.000	0.000	0.000	0.000	0.000	5.203

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2191  
 TOTAL HOURS OF STABILITY CLASS G 114  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 114  
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2191  
 TOTAL HOURS CALM 1

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

DATE PRINTED: 2011/02/22

MEAN WIND SPEED = 1.71

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Attachment 2.0

Deviations from ODCM Controls/Surveillance Requirements

Date	ODCM Requirement	Description of Deviation
July 23, 2010	1/2 1.2.2.1 Table 2.2-2 Item D.1	During the weekly performance of 0-SO-CEM-030-407.2. Chemistry personnel discovered that the installed charcoal filter on radiation monitor 0-RM-90-101 was outside its expiration date. The filter expired while it was installed on the monitor. PER 240854.
October 29, 2010	1/2 1.1.1 Table 1.1-1 Item 2a	ERCW radiation monitor (0-RM-90-134/141) was inoperable due to a pump replacement. Chemistry collected a required compensatory sample late. Sample was due at 10/28/10 2205 and the sample was not collected until 10/29/10 at 0350. Sample was collected 5 hours and 45 minutes late. Sample was analyzed and showed no activity present. PER 275439.

Attachment 3.0

Radiation Monitors Inoperable for Greater than 30 days

None