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10 CFR 50.4

U.S. Nuclear Regulatory Commission
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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: **2009 Annual Radioactive Effluent Release Report**

Enclosed is the Annual Radioactive Effluent Release Report (ARERR) for the period of January 1 to December 31, 2009. This report (Enclosure 1) is being submitted in accordance with the respective Sequoyah Nuclear Plant (SQN), Units 1 and 2, Technical Specification (TS) 6.9.1.8

The 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 (Enclosure 3) is submitted with marked revisions implemented during calendar year 2009.

If you have any questions concerning this matter, please contact Beth A. Wetzel at (423) 843-7170.

Respectfully,

R. M. Krich

Enclosures:

1. Annual Radioactive Effluent Release Report, Sequoyah Nuclear Plant, 2009
2. Radiological Impact Assessment Report, Sequoyah Nuclear Plant, 2009
3. Offsite Dose Calculation Manual, Sequoyah Nuclear Plant, Revision 55

cc: (See Page 2)

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cc (Enclosures):

NRC Regional Administrator – Region II
NRC Senior Resident Inspector – Sequoyah Nuclear Plant

ENCLOSURE 1

**ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
SEQUOYAH NUCLEAR PLANT
2009**

2009
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 $2.0\text{E-}04$ $\mu\text{Ci/ml}$ 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

SQN'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. 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 2009 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-31	4/17/2009	8080	10/16/2009	5338
Well-29	4/17/2009	848		
GP-7A	4/22/2009	395	10/16/2009	345
GP-7B	4/22/2009	361		
GP-13	4/21/2009	7680	10/16/2009	7730

Onsite Radioactive Spills and Leaks

One spill (see Section VI ABNORMAL RELEASES Page E1-7).

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 only a small fraction of 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	3.03E-06	1.06E-04	8.26E-06	0.00E-01	1.17E-04
Infant/Thyroid (mrem)	6.50E-07	2.60E-05	2.10E-06	0.00E-01	2.88E-05
Population/Thyroid (mrem)	2.00E-05	7.50E-04	6.20E-05	0.00E-01	8.32E-04

V. Batch Releases

	1st Half	Value 2nd Half	Units
1. <u>Liquid (Radwaste only)</u>			
a. Number of releases	69	68	Each
b. Total time period of releases	13386	9914	Minutes
c. Maximum time period of release	907.50	330.00	Minutes
d. Average time period of releases	194.00	145.79	Minutes
e. Minimum time period of release	52.00	30.00	Minutes
f. Average dilution stream flow during release periods	30404.0	46837.5	CFS
2. <u>Gaseous (Batches only - containment purges, and waste gas decay tanks)</u>			
a. Number of releases	55	62	Each
b. Total time period of releases	26599.00	33497.00	Minutes
c. Maximum time period of release	3193.00	3823.00	Minutes
d. Average time period of releases	483.62	540.27	Minutes
e. Minimum time period of release	22.00	30.00	Minutes

VI. Abnormal Releases

	1st Half	Value 2nd Half	Units
1. <u>Liquid</u>			
a. Number of releases	0	1	
b. Total activity released	0.00E-01	2.52E-05	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

RWST moat spill July 30, 2009

This evaluation is for the spill to the environment from the Unit 1 (U1) RWST moat (Problem Evaluation Report 177727). On July 30, 2009 at 0755 the overflow catch basin at U1 RWST moat was discovered to be overflowing to the ground. Cleaning and decontamination activities had been ongoing in the moat during the week in preparation for coating the moat and installing the rain skirt. Approximately ten gallons of water flowed out of the catch containment onto the ground before the event stopped. Chemistry and Radiation Protection sampled the water from the catch containment. The results of the samples from the catch container are Tritium at $6.64\text{E-}04$ $\mu\text{Ci/ml}$ and Total Gamma emitter's at $1.13\text{E-}06$ $\mu\text{Ci/ml}$.

Tritium concentration was $6.64\text{E-}04$ $\mu\text{Ci/ml}$
Tritium released $2.51\text{E-}05$ Curies
Cobalt-58 concentration was $5.18\text{E-}07$ $\mu\text{Ci/ml}$
Cobalt-58 released $1.96\text{E-}08$ Curies
Cobalt-60 concentration was $5.32\text{E-}07$ $\mu\text{Ci/ml}$
Cobalt-60 released $2.01\text{E-}08$ Curies
Cesium-137 concentration was $6.75\text{E-}08$ $\mu\text{Ci/ml}$
Cesium-137 released $2.56\text{E-}09$ Curies

The impact to 10 CFR 20 Dose rates were as follows:

Total body dose rate $3.25\text{E-}09$ mrem
Organ dose rate $5.47\text{E-}09$ mrem/year

Limit is 3 mrem/year
Limit is 10 mrem/year

Liquid Effluents-Summation of All Releases
During the Period
Starting: 1-Jan-2009 Ending: 30-Jun-2009

Type of Effluent	Units	Quarter 1	Quarter 2	Estimated Total Error %
A. Fission and & Activation Products				
1. Total Release (Not including Tritium, Gases, and Alpha)	Ci	4.27E-03	8.45E-03	18%
2. Average Diluted Concentration During Period	μCi/ml	2.40E-09	4.55E-09	
3. Percent of Applicable Limit	%	*	*	
B. Tritium				
1. Total Release	Ci	8.79E+02	2.49E+02	18%
2. Average Diluted Concentration During Period	μCi/ml	4.94E-04	1.34E-04	
3. Percent of Applicable Limit	%	*	*	
C. Dissolved and Entrained Gases				
1. Total Release	Ci	2.44E-02	2.51E-02	39%
2. Average Diluted Concentration During Period	μCi/ml	1.37E-08	1.35E-08	
3. Percent of Applicable Limit	%	6.85E-03	6.76E-03	
D. Gross Alpha Radioactivity				
1. Total Release	Ci	0.00E-01	0.00E-01	N/A ***
E. Total Waste Volume Released (Pre-Dilution)				
	Liters	4.98E+07	7.75E+07	4%
F. Volume of Dilution Water Used				
	Liters	1.73E+09	1.78E+09	4%
G. Radwaste Volume Released				
	Liters	1.53E+06	1.59E+06	

* Applicable Limits are expressed in terms of dose. See Tables 5-8 of the 2009 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-2009 Ending: 31-Dec-2009

Type of Effluent	Units	Quarter 3	Quarter 4	Estimated Total Error %
A. Fission and & Activation Products				
1. Total Release (Not including Tritium, Gases, and Alpha)	Ci	3.96E-03	3.69E-03	18%
2. Average Diluted Concentration During Period	μCi/ml	2.15E-09	1.49E-09	
3. Percent of Applicable Limit	%	*	*	
B. Tritium				
1. Total Release	Ci	3.85E+02	3.01E+02	18%
2. Average Diluted Concentration During Period	μCi/ml	2.09E-04	1.22E-04	
3. Percent of Applicable Limit	%	*	*	
C. Dissolved and Entrained Gases				
1. Total Release	Ci	7.21E-04	1.33E-03	39%
2. Average Diluted Concentration During Period	μCi/ml	3.91E-10	5.38E-10	
3. Percent of Applicable Limit	%	1.95E-04	2.69E-04	
D. Gross Alpha Radioactivity				
1. Total Release	Ci	0.00E-01	0.00E-01	N/A ***
E. Total Waste Volume Released (Pre-Dilution)				
	Liters	7.40E+07	1.77E+09	4%
F. Volume of Dilution Water Used				
	Liters	2.24E+08	2.25E+09	4%
G. Radwaste Volume Released				
	Liters	1.24E+06	1.34E+06	

* Applicable Limits are expressed in terms of dose. See Tables 5-8 of the 2009 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-2009 Ending 31-Mar-2009

	Continuous	Batch	Total
Tritium	1.19E-01	8.79E+02	8.79E+02
FISSION & ACTIVATION PRODUCTS			
Cobalt-57	0.00E+01	1.76E-05	1.76E-05
Cobalt-58	0.00E+01	1.70E-03	1.70E-03
Cobalt-60	0.00E+01	1.12E-03	1.12E-03
Chromium-51	0.00E+01	3.07E-05	3.07E-05
Cesium-137	0.00E+01	1.73E-04	1.73E-04
Iron-55	0.00E+01	3.56E-04	3.56E-04
Iron-59	0.00E-01	2.82E-07	2.82E-07
Iodine-131	0.00E+01	3.03E-06	3.03E-06
Niobium-95	0.00E+01	6.63E-06	6.63E-06
Antimony-124	0.00E+01	7.70E-05	7.70E-05
Antimony-125	0.00E+01	7.88E-04	7.88E-04
TOTALS	0.00E+01	4.27E-03	4.27E-03
DISSOLVED AND ENTRAINED GASES			
Krypton-85	0.00E+01	1.04E-03	1.04E-03
Xenon-131M	0.00E+01	6.63E-04	6.63E-04
Xenon-133	0.00E+01	2.25E-02	2.25E-02
Xenon-133M	0.00E+01	8.48E-05	8.48E-05
Xenon-135	0.00E+01	1.08E-04	1.08E-04
TOTALS	0.00E+01	2.44E-02	2.44E-02

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

Curies Released in Liquid Effluents
During the period
Starting: 1-Apr-2009 Ending 30-Jun-2009

	Continuous	Batch	Total
Tritium	1.17E-01	2.49E+02	2.49E+02
FISSION & ACTIVATION PRODUCTS			
Cobalt-57	0.00E+01	1.72E-05	1.72E-05
Cobalt-58	0.00E+01	2.90E-03	2.90E-03
Cobalt-60	0.00E+01	1.40E-03	1.40E-03
Chromium-51	0.00E+01	4.83E-04	4.83E-04
Cesium-137	0.00E+01	4.54E-07	4.54E-07
Iron-55	0.00E+01	1.87E-03	1.87E-03
Iodine-131	0.00E+01	1.06E-04	1.06E-04
Iodine-132	0.00E+01	7.04E-05	7.04E-05
Manganese-54	0.00E+01	1.22E-05	1.22E-05
Niobium-95	0.00E+01	5.77E-05	5.77E-05
Antimony-124	0.00E+01	4.43E-04	4.43E-04
Antimony-125	0.00E+01	1.03E-03	1.03E-03
Technetium-99M	0.00E+01	3.60E-06	3.60E-06
Tellurium-132	0.00E+01	3.58E-05	3.58E-05
Zirconium-95	0.00E+01	1.57E-05	1.57E-05
TOTALS	0.00E+01	8.45E-03	8.45E-03
DISSOLVED AND ENTRAINED GASES			
Krypton-85	0.00E+01	1.02E-03	1.02E-03
Xenon-131M	0.00E+01	5.08E-04	5.08E-04
Xenon-133	0.00E+01	2.34E-02	2.34E-02
Xenon-133M	0.00E+01	1.57E-04	1.57E-04
Xenon-135	0.00E+01	1.17E-05	1.17E-05
TOTALS	0.00E+01	2.51E-02	2.51E-02

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

Curies Released in Liquid Effluents
During the period
Starting: 1-Jul-2009 Ending 30-Sep-2009

	Continuous	Batch	Total
Tritium	1.36E-01	3.85E+02	3.85E+02
FISSION & ACTIVATION PRODUCTS			
Silver-110M	0.00E+01	3.38E-07	3.38E-07
Cobalt-57	0.00E+01	5.25E-06	5.25E-06
Cobalt-58	0.00E+01	1.52E-03	1.52E-03
Cobalt-60	0.00E+01	1.41E-03	1.41E-03
Chromium-51	0.00E+01	5.37E-05	5.37E-05
Cesium-134	0.00E+01	7.41E-07	7.41E-07
Cesium-137	0.00E+01	1.99E-06	1.99E-06
Iron-55	0.00E+01	4.40E-04	4.40E-04
Iron-59	0.00E+01	5.19E-06	5.19E-06
Iodine-131	0.00E+01	8.26E-06	8.26E-06
Manganese-54	0.00E+01	1.53E-05	1.53E-05
Niobium-95	0.00E+01	2.95E-05	2.95E-05
Antimony-124	0.00E+01	2.53E-05	2.53E-05
Antimony-125	0.00E+01	4.32E-04	4.32E-04
Zirconium-95	0.00E+01	1.58E-05	1.58E-05
TOTALS	0.00E+01	3.96E-03	3.96E-03
DISSOLVED AND ENTRAINED GASES			
Xenon-133	0.00E+01	7.20E-04	7.20E-04
Xenon-135	0.00E+01	1.31E-06	1.31E-06
TOTALS	0.00E+01	7.21E-04	7.21E-04

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

Curies Released in Liquid Effluents
During the period
Starting: 1-Oct-2009 Ending 31-Dec-2009

	Continuous	Batch	Total
Tritium	2.03E+01	2.80E+02	3.01E+02
FISSION & ACTIVATION PRODUCTS			
Silver-110M	0.00E+01	5.46E-06	5.46E-06
Cobalt-58	0.00E+01	2.84E-03	2.84E-03
Cobalt-60	0.00E+01	2.28E-04	2.28E-04
Cesium-137	0.00E+01	1.40E-07	1.40E-07
Iron-55	0.00E+01	1.92E-04	1.92E-04
Manganese-54	0.00E+01	2.67E-06	2.67E-06
Niobium-95	0.00E+01	5.42E-06	5.42E-06
Antimony-124	0.00E+01	2.05E-05	2.05E-05
Antimony-125	0.00E+01	3.99E-04	3.99E-04
TOTALS	0.00E+01	3.69E-03	3.69E-03
DISSOLVED AND ENTRAINED GASES			
Xenon-133	0.00E+01	1.29E-03	1.29E-03
Xenon-135	0.00E+01	4.41E-05	4.41E-05
TOTALS	0.00E+01	1.33E-03	1.33E-03

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

TABLE A
LIQUID "TYPICAL LLD" EVALUATION⁽¹⁾

<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) Δt 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-2009 Ending: 30-Jun-2009

Type of Effluent	Units	Quarter 1	Quarter 2	Estimated Total Error %
A. Fission and & Activation Products				
1. Total Release	Ci	1.20E+00	4.84E-01	11%
2. Average Release Rate For Period	μCi/sec	1.54E-01	6.15E-02	
3. Percent of Applicable Limit	%	*	*	
B. Radioiodines				
1. Total Iodine-131	Ci	2.17E-06	1.16E-05	13%
2. Average Release Rate For Period	μCi/sec	2.78E-07	1.48E-06	
3. Percent of Applicable Limit	%	*	*	
C. Particulates				
1. Particulates (Half-Lives > 8 Days)	Ci	7.14E-06	0.00E+01	16%
2. Average Release Rate For Period	μCi/sec	9.18E-07	0.00E+01	
3. Percent of Applicable Limit	%	*	*	
4. Gross Alpha Radioactivity	Ci	0.00E+01	0.00E+01	
D. Tritium				
1. Total Release	Ci	7.44E+00	1.15E+01	15%
2. Average Release Rate For Period	μCi/sec	9.56E-01	1.46E+00	
3. Percent of Applicable Limit	%	*	*	

* Applicable Limits are expressed in terms of dose. See Tables 1-4 of the 2009 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-2009 Ending: 31-Dec-2009

Type of Effluent	Units	Quarter 3	Quarter 4	Estimated Total Error %
A. Fission and & Activation Products				
1. Total Release	Ci	9.04E-01	2.16E+00	11%
2. Average Release Rate For Period	μCi/sec	1.14E-01	2.72E-01	
3. Percent of Applicable Limit	%	*	*	
B. Radioiodines				
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	%	*	*	
C. Particulates				
1. Particulates (Half-Lives > 8 Days)	Ci	0.00E+01	1.98E-04	16%
2. Average Release Rate For Period	μCi/sec	0.00E+01	2.48E-05	
3. Percent of Applicable Limit	%	*	*	
4. Gross Alpha Radioactiviy	Ci	0.00E+01	0.00E+01	
D. Tritium				
1. Total Release	Ci	1.34E+01	1.30E+01	15%
2. Average Release Rate For Period	μCi/sec	1.69E+01	1.64E+00	
3. Percent of Applicable Limit	%	*	*	

* Applicable Limits are expressed in terms of dose. See Tables 1-4 of the 2009 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-2009 Ending: 31-Mar-2009

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Xenon-131m	0.00E+01	1.81E-03	1.81E-03
Xenon-133	0.00E+01	9.09E-01	9.09E-01
Xenon-135	0.00E+01	1.94E-02	1.94E-02
Argon-41	0.00E+01	2.66E-01	2.66E-01
TOTALS	0.00E+01	1.20E+00	1.20E+00
 <u>IODINES</u>			
Iodine-131	2.16E-06	0.00E+01	2.16E-06
TOTALS	2.16E-06	0.00E+01	2.16E-06
 <u>PARTICULATES</u>			
Cobalt-60	7.14E-06	0.00E+01	7.14E-06
TOTALS	7.14E-06	0.00E+01	7.14E-06
 <u>TRITIUM</u>			
Tritium	7.07E+00	3.60E-01	7.43E+00

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

Curies released Gaseous Ground Level Releases
During the period
Starting: 1-Apr-2009 Ending: 30-Jun-2009

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Krypton-85	0.00E+01	4.45E-02	4.45E-02
Xenon-133	0.00E+01	1.31E-01	1.31E-01
Xenon-135	0.00E+01	9.03E-03	9.03E-03
Argon-41	0.00E+01	2.99E-01	2.99E-01
TOTALS	0.00E+01	4.84E-01	4.84E-01
 <u>IODINES</u>			
Iodine-131	1.16E-05	0.00E+01	1.16E-05
TOTALS	1.16E-05	0.00E+01	1.16E-05
 <u>PARTICULATES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>TRITIUM</u>			
Tritium	1.14E+01	1.50E-01	1.16E+01

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

Curies released Gaseous Ground Level Releases
During the period
Starting: 1-July-2009 Ending: 30-Sep-2009

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Xenon-133M	0.00E+01	9.06E-04	9.06E-04
Xenon-133	0.00E+01	3.12E-01	3.12E-01
Xenon-135	0.00E+01	2.08E-02	2.08E-02
Argon-41	1.82E-03	5.68E-01	5.70E-01
TOTALS	1.82E-03	9.02E-01	9.04E-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	1.31E+01	2.55E-01	1.34E+01

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

Curies released Gaseous Ground Level Releases
During the period
Starting: 1-Oct-2009 Ending: 31-Dec-2009

	CONTINUOUS	BATCH	TOTAL
<u>FISSION GASES</u>			
Xenon-131M	0.00E+01	9.18E-01	9.18E-01
Krypton-85M	0.00E+01	7.90E-04	7.90E-04
Xenon-133	0.00E+01	2.25E-01	2.25E-01
Xenon-135	0.00E+01	3.30E-02	3.30E-02
Argon-41	6.77E-05	9.84E-01	9.84E-01
TOTALS	6.77E-05	2.16E+00	2.16E+00
 <u>IODINES</u>			
TOTALS	0.00E+01	0.00E+01	0.00E+01
 <u>PARTICULATES</u>			
Cobalt-58	1.97E-04	0.00E+01	1.97E-04
TOTALS	1.97E-04	0.00E+01	1.97E-04
 <u>TRITIUM</u>			
Tritium	1.27E+01	3.00E-01	1.30E+01

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

TABLE B
GASEOUS "TYPICAL" LLD EVALUATION⁽¹⁾

Noble Gas

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

Particulate Sample⁽³⁾

		<u>1 hr</u>	<u>24 hr</u>	<u>7.0 day</u>
Manganese-54	1.0E-10	7.47E-12	3.12E-13	4.48E-14
Cobalt-58	1.0E-10	5.62E-12	2.35E-13	3.46E-14
Iron-59	1.0E-10	1.20E-11	5.02E-13	7.49E-14
Cobalt-60	1.0E-10	1.07E-11	4.46E-13	6.38E-14
Zinc-65	1.0E-10	6.71E-12	2.80E-13	4.03E-14
Molybdenum-99	1.0E-10	3.43E-11	1.61E-12	4.70E-13
Cesium-134	1.0E-10	4.25E-12	1.77E-13	2.54E-14
Cesium-137	1.0E-10	8.48E-12	3.54E-13	5.05E-14
Cerium-141	1.0E-10	5.10E-12	2.15E-13	3.26E-14
Cerium-144	1.0E-10	2.01E-11	8.33E-13	1.20E-13
Iodine-131	1.0E-10	4.76E-12	2.07E-13	3.77E-14

Charcoal Sample

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

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

(2) Δt is the time between sample collection and counting time.

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

TABLE B
GASEOUS "TYPICAL" LLD EVALUATION⁽¹⁾ (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)

<u>1. Type of Waste</u>	<u>Unit</u>	<u>12 Month Period</u>	<u>Est. Tot. Error %</u>
a. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.	m ³ Ci	3.77E+00 9.31E+00	±7.51E-01 ±1.10E-01
b. Dry Active Waste, Compressible Waste Contaminated Equipment, etc.	m ³ Ci	7.24E+01 1.96E-01	±1.96E-01 ±5.10E-01
c. Irradiated Components, Control Rods, etc.	m ³ Ci	None None	N/A N/A
d. Other: Mechanical Filters	m ³ Ci	None None	N/A N/A

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

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

	<u>Curies</u>	<u>Percent</u>
1. Hydrogen-3	7.17E-02	0.77
2. Carbon-14	2.89E-03	0.03
3. Beryllium-7	1.55E-03	0.02
4. Manganese-54	1.41E-01	1.52
5. Iron-55	9.42E-01	10.13
6. Cobalt-57	1.81E-02	0.19
7. Cobalt-58	6.45E-02	0.69
8. Nickel-59	1.48E-02	0.16
9. Cobalt-60	2.24E+00	24.08
10. Nickel-63	5.37E+00	57.72
11. Zinc-65	2.26E-02	0.24
12. Strontium-90	2.67E-03	0.03
13. Niobium-95	1.87E-05	0.00
14. Antimony-125	1.18E-02	0.13
15. Cesium-134	6.69E-02	0.72
16. Cesium-137	2.86E-01	3.07
17. Cerium-144	4.02E-02	0.43
18. Plutonium-238	2.48E-05	0.00
19. Plutonium-239/240	7.46E-06	0.00
20. Plutonium-241	6.28E-03	0.07
21. Americium-241	1.80E-04	0.00
22. Curium-242	9.90E-07	0.00
23. Curium-243/244	2.09E-05	0.00

SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

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

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

		<u>Curies</u>	<u>Percent</u>
1.	Hydrogen-3	6.42E-04	0.33
2.	Chromium-51	1.27E-02	6.45
3.	Manganese-54	2.55E-03	1.30
4.	Iron-55	1.48E-02	7.58
5.	Cobalt-57	2.10E-04	0.11
6.	Cobalt-58	5.48E-02	27.93
7.	Iron-59	9.65E-04	0.49
8.	Cobalt-60	1.90E-02	9.67
9.	Nickel-63	4.27E-03	2.18
10.	Zinc-65	3.73E-04	0.19
11.	Strontium-89	3.67E-05	0.02
12.	Zirconium-95	2.29E-02	11.67
13.	Niobium-95	6.13E-02	31.26
14.	Antimony-125	9.97E-04	0.51
15.	Cesium-134	1.75E-05	0.01
16..	Cesium-137	1.56E-04	0.08
17.	Cerium-144	4.49E-04	0.23

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

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

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
1	A-LSA II	Motor Freight	Duratek Processing Facility Kingston, Tn

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

Number of Shipments	Type Quantity	Mode of Transportation	Destination
8	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

SNQ 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 TS 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 TS 5.4a states "The HI-STORM 100 Cask System does not create any radioactive material or have any radioactive waste treatment systems. Therefore, specific operating procedures for the control of radioactive effluents are not required. Specification 3.1.1, Multi-Purpose Canister (MPC), provides 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	=25 mrem/year
Thyroid	=75 mrem/year
Any other organ	=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 SNQ ISFSI as part of the SNQ site and part of plant operations. These releases are within 40 CFR 190 limits and 10 CFR 72.104 limits.

ENCLOSURE 2

**RADIOLOGICAL IMPACT ASSESSMENT REPORT
SEQUOYAH NUCLEAR PLANT
2009**

2009
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 11.25 mR/quarter at onsite (at or near the site boundary) stations and approximately 9.5 mR/quarter at offsite stations, or approximately 1.75mR/quarter higher onsite than at offsite stations. This difference is consistent with levels measured for preoperation and construction phases of the TVA nuclear plant site where the average radiation levels onsite were generally 2-6 mR/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other undetermined influences. Fluctuations in natural background dose rates and in TLD readings tend to mask any small increments which may be due to plant

operations. Thus, there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents.

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

As stated in the SQN 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 81 mrem. Using this value, and subtracting an annual background value of 45 mrem/year (see previous section), and multiplying by the ratio of the occupancy times (2000/8760), the external dose was 10.27 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
External				
Gamma Air	4.30E-04 mrad	5 mrad	<1	N/950/M
Beta Air	3.00E-04 mrad	10 mrad	<1	N/950/M
Submersion				
Total Body	3.14E-03 mrad	10 mrad	<1	NNW/841/M
Skin	4.83E-03 mrad	10 mrad	<1	NNW/841/M
Organ Doses				
Child/Thyroid	3.42E-03 mrem	7.5 mrem	<1	N/1829/M
Child/Total Body	3.42E-03 mrem	7.5 mrem	<1	N/1829/M

Population Doses

Total Body Dose 9.70E-03 man-rem
Maximum Organ Dose (organ) 9.73E-03 man-rem (Thyroid, GIT)

Second Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
External				
Gamma Air	5.53E-04 mrad	5 mrad	<1	N/950/M
Beta Air	2.44E-04 mrad	10 mrad	<1	N/950/M
Submersion				
Total Body	4.13E-04 mrad	10 mrad	<1	NNW/841/M
Skin	6.27E-04 mrad	10 mrad	<1	NNW/841/M
Organ Doses				
Child/Thyroid	6.83E-03 mrem	7.5 mrem	<1	N/1829/M
Child/Total Body	6.74E-03 mrem	7.5 mrem	<1	N/1829/M

Population Doses

Total Body Dose 5.02E-02 man-rem
Maximum Organ Dose (organ) 5.08E-02 man-rem (Thyroid)

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

Tables 3 and 4
Doses from Airborne Effluents

Third Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
External				
Gamma Air	7.92E-04 mrad	5 mrad	<1	S/1570/M
Beta Air	3.36E-04mrad	10 mrad	<1	S/1570/M
Submersion				
Total Body	6.05E-04 mrad	10 mrad	<1	S/1786/M
Skin	9.06E-04 mrad	10 mrad	<1	S/1786/M
Organ Doses				
Child/Thyroid	1.05E-02 mrem	7.5 mrem	<1	S/2093/M
Child/Total Body	1.05E-02 mrem	7.5 mrem	<1	S/2093/M

Population Doses

Total Body Dose 5.26E-02 man-rem
Maximum Organ Dose (organ) 5.26E-02 man-rem (Thyroid, Liver, Bone, GIT, Lung, Kidney)

Fourth Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Units
External				
Gamma Air	1.37E-03 mrad	5 mrad	<1	S/1570/M
Beta Air	6.97E-04 mrad	10 mrad	<1	S/1570/M
Submersion				
Total Body	1.07E-03 mrad	10 mrad	<1	S/1786/M
Skin	1.65E-03 mrad	10 mrad	<1	S/1786/M
Organ Doses				
Child/Thyroid	5.27E-03mrem	7.5 mrem	<1	N/1829/M
Child/Total Body	5.31E-03mrem	7.5 mrem	<1	N/1829/M

Population Doses

Total Body Dose 5.16E-02 man-rem
Maximum Organ Dose (organ) 5.19E-02 man-rem (GIT)

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

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	5.20E-03	1.5 mrem	< 1 %
Child	Liver	5.20E-03	5 mrem	< 1 %
Child	Thyroid	5.20E-03	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 32,978

Population Doses

Total Body Dose 3.40E-01 man-rem
Maximum Organ Dose (organ) 3.40E-01 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	1.80E-03	1.5 mrem	< 1 %
Child	Liver	1.80E-03	5 mrem	< 1 %
Child	Thyroid	1.80E-03	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 27,830

Population Doses

Total Body Dose 1.20E-01 man-rem
Maximum Organ Dose (organ) 1.20E-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	2.80E-03	1.5 mrem	< 1 %
Child	Liver	2.80E-03	5 mrem	< 1 %
Child	Thyroid	2.80E-03	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 27,108

Population Doses

Total Body Dose 1.90E-01 man-rem
Maximum Organ Dose (organ) 1.90E-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	8.90E-04	1.5 mrem	< 1 %
Child	Liver	8.90E-04	5 mrem	< 1 %
Child	Thyroid	8.90E-04	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 66,567

Population Doses

Total Body Dose 5.90E-02 man-rem
Maximum Organ Dose (organ) 5.90E-02 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	
Total Body or any Organ (except thyroid)					
Total body air submersion	3.14E-03	4.13E-04	6.05E-04	1.07E-03	
Critical organ dose (air)	3.43E-03	6.74E-03	1.05E-02	5.35E-03	
Total body dose (liquid)	5.20E-03	1.80E-03	2.80E-03	8.90E-04	
Maximum organ dose (liquid)	5.20E-03	1.80E-03	2.80E-03	8.90E-04	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
Total	1.70E-02	1.08E-02	1.67E-02	8.20E-03	
Cumulative Total Dose (Total body or any other organ) mrem					5.27E-02
<i>Annual Dose Limit (mrem)</i>					25
Percent of Limit					0.21
Thyroid Dose (mrem)					
Total body air submersion	3.14E-03	4.13E-04	6.05E-04	1.07E-03	
Thyroid dose (airborne)	3.42E-03	6.83E-03	1.05E-02	5.27E-03	
Total body dose (liquid)	5.20E-03	1.80E-03	2.80E-03	8.90E-04	
Thyroid dose (liquid)	5.20E-03	1.80E-03	2.80E-03	8.90E-04	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
Total	1.70E-02	1.08E-02	1.67E-02	8.12E-03	
Cumulative Total Dose (Thyroid) mrem					5.26E-02
<i>Annual Dose Limit (mrem)</i>					75
Percent of Limit					0.07

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, 2009 - MAR 31, 2009

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	0.187	0.000	0.000	0.000	0.234
NNE	0.000	0.000	0.000	0.000	0.328	0.468	0.000	0.000	0.000	0.796
NE	0.000	0.000	0.000	0.140	0.328	0.375	0.000	0.000	0.000	0.843
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	0.047	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
S	0.000	0.000	0.000	0.094	0.094	0.000	0.000	0.000	0.000	0.187
SSW	0.000	0.000	0.000	0.047	0.983	0.328	0.000	0.000	0.000	1.358
SW	0.000	0.000	0.000	0.000	0.468	0.328	0.000	0.000	0.000	0.796
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.281	0.000	0.000	0.000	0.281
NNW	0.000	0.000	0.000	0.000	0.094	0.187	0.000	0.000	0.000	0.281
SUBTOTAL	0.000	0.000	0.000	0.421	2.341	2.200	0.000	0.000	0.000	4.963

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS A	106
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	106
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2136
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: 2009/05/19

MEAN WIND SPEED = 7.23

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, 2009 - MAR 31, 2009

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	0.047	0.094	0.234	0.000	0.000	0.000	0.375
NNE	0.000	0.000	0.000	0.000	0.468	0.234	0.000	0.000	0.000	0.702
NE	0.000	0.000	0.000	0.094	0.187	0.094	0.000	0.000	0.000	0.375
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
S	0.000	0.000	0.000	0.094	0.000	0.000	0.000	0.000	0.000	0.094
SSW	0.000	0.000	0.000	0.234	0.562	0.094	0.000	0.000	0.000	0.890
SW	0.000	0.000	0.000	0.094	0.421	0.094	0.000	0.000	0.000	0.609
WSW	0.000	0.000	0.000	0.094	0.000	0.000	0.094	0.000	0.000	0.187
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	0.140	0.047	0.000	0.000	0.187
NW	0.000	0.000	0.000	0.000	0.047	0.234	0.000	0.000	0.000	0.281
NNW	0.000	0.000	0.000	0.000	0.000	0.234	0.000	0.000	0.000	0.234
SUBTOTAL	0.000	0.000	0.000	0.749	1.826	1.358	0.140	0.000	0.000	4.073

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2136
TOTAL HOURS OF STABILITY CLASS B 87
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 87
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2136
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: 2009/05/19

MEAN WIND SPEED = 7.02

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, 2009 - MAR 31, 2009

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	0.140	0.187	0.234	0.000	0.000	0.000	0.562
NNE	0.000	0.000	0.000	0.375	0.234	0.328	0.047	0.000	0.000	0.983
NE	0.000	0.000	0.187	0.047	0.094	0.047	0.000	0.000	0.000	0.375
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	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.094	0.047	0.000	0.000	0.000	0.000	0.000	0.140
S	0.000	0.000	0.000	0.281	0.094	0.094	0.000	0.000	0.000	0.468
SSW	0.000	0.000	0.094	0.609	0.234	0.094	0.000	0.000	0.000	1.030
SW	0.000	0.000	0.000	0.421	0.468	0.047	0.000	0.000	0.000	0.936
WSW	0.000	0.000	0.000	0.047	0.094	0.047	0.000	0.000	0.000	0.187
W	0.000	0.000	0.047	0.000	0.047	0.000	0.000	0.000	0.000	0.094
WNW	0.000	0.000	0.047	0.000	0.047	0.140	0.000	0.000	0.000	0.234
NW	0.000	0.000	0.000	0.000	0.000	0.140	0.000	0.000	0.000	0.140
NNW	0.000	0.000	0.000	0.000	0.047	0.187	0.000	0.000	0.000	0.234
SUBTOTAL	0.000	0.000	0.562	1.966	1.545	1.358	0.047	0.000	0.000	5.478

TOTAL HOURS OF VALID STABILITY OBSERVATIONS

2136

TOTAL HOURS OF STABILITY CLASS C

117

TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C

117

TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS

2136

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: 2009/05/19

MEAN WIND SPEED = 6.22

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, 2009 - MAR 31, 2009

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	0.140	0.796	1.732	1.826	1.217	0.234	0.000	0.000	5.946
NNE	0.000	0.000	1.639	3.090	2.388	2.107	0.281	0.000	0.000	9.504
NE	0.000	0.047	0.843	0.328	0.234	0.000	0.000	0.000	0.000	1.451
ENE	0.000	0.000	0.187	0.047	0.000	0.000	0.000	0.000	0.000	0.234
E	0.000	0.047	0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.234
ESE	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SE	0.000	0.047	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.328
SSE	0.000	0.047	0.421	0.140	0.140	0.281	0.094	0.000	0.000	1.124
S	0.000	0.140	0.749	0.234	0.609	0.890	0.094	0.000	0.000	2.715
SSW	0.000	0.094	1.264	1.919	2.060	0.468	0.000	0.000	0.000	5.805
SW	0.000	0.140	1.639	1.826	0.609	0.234	0.047	0.000	0.000	4.494
WSW	0.000	0.094	0.328	0.094	0.140	0.562	0.000	0.000	0.000	1.217
W	0.000	0.047	0.140	0.140	0.234	0.187	0.140	0.000	0.000	0.890
WNW	0.000	0.000	0.047	0.140	0.094	0.281	0.000	0.000	0.000	0.562
NW	0.000	0.047	0.140	0.281	0.562	0.843	0.000	0.000	0.000	1.873
NNW	0.000	0.000	0.468	0.936	1.685	0.796	0.000	0.000	0.000	3.886
SUBTOTAL	0.000	0.890	9.176	10.908	10.581	7.865	0.890	0.000	0.000	40.309

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS D	861
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	861
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2136
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: 2009/05/19

MEAN WIND SPEED = 5.56

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, 2009 - MAR 31, 2009

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	0.187	1.685	1.124	0.140	0.000	0.000	0.000	0.000	3.137
NNE	0.000	0.234	2.575	0.749	0.187	0.000	0.000	0.000	0.000	3.745
NE	0.000	0.234	0.562	0.047	0.000	0.000	0.000	0.000	0.000	0.843
ENE	0.000	0.000	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.140
E	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.094
ESE	0.000	0.094	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.234
SE	0.000	0.047	0.187	0.000	0.000	0.047	0.000	0.000	0.000	0.281
SSE	0.000	0.234	0.328	0.140	0.000	0.000	0.000	0.000	0.000	0.702
S	0.000	0.375	1.311	0.702	1.077	0.655	0.047	0.000	0.000	4.167
SSW	0.000	0.375	2.669	1.311	0.655	0.328	0.000	0.000	0.000	5.337
SW	0.000	0.140	2.622	1.077	0.140	0.234	0.000	0.000	0.000	4.213
WSW	0.000	0.187	0.796	0.375	0.094	0.328	0.000	0.000	0.000	1.779
W	0.000	0.047	0.281	0.140	0.047	0.000	0.000	0.000	0.000	0.515
WNW	0.000	0.140	0.187	0.140	0.140	0.000	0.000	0.000	0.000	0.609
NW	0.000	0.140	0.234	0.281	0.094	0.094	0.000	0.000	0.000	0.843
NNW	0.000	0.047	1.404	0.749	0.094	0.000	0.000	0.000	0.000	2.294
SUBTOTAL	0.000	2.528	15.169	6.835	2.669	1.685	0.047	0.000	0.000	28.933

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS E	618
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	618
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2136
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: 2009/05/19

MEAN WIND SPEED = 3.44

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, 2009 - MAR 31, 2009

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	0.094	0.468	0.047	0.000	0.000	0.000	0.000	0.000	0.609
NNE	0.000	0.047	1.264	0.281	0.000	0.000	0.000	0.000	0.000	1.592
NE	0.000	0.187	0.421	0.000	0.000	0.000	0.000	0.000	0.000	0.609
ENE	0.000	0.000	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.094
E	0.000	0.094	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.140
ESE	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SE	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.140	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.281
S	0.000	0.140	0.468	0.281	0.000	0.000	0.000	0.000	0.000	0.890
SSW	0.000	0.187	1.358	0.281	0.000	0.000	0.000	0.000	0.000	1.826
SW	0.000	0.187	2.013	0.094	0.047	0.000	0.000	0.000	0.000	2.341
WSW	0.000	0.094	0.328	0.047	0.000	0.000	0.000	0.000	0.000	0.468
W	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
NNW	0.000	0.047	0.094	0.047	0.000	0.000	0.000	0.000	0.000	0.187
SUBTOTAL	0.000	1.311	6.835	1.077	0.047	0.000	0.000	0.000	0.000	9.270

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS F	198
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	198
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2136
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: 2009/05/19

MEAN WIND SPEED = 2.33

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, 2009 - MAR 31, 2009

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	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.094
NNE	0.000	0.094	1.077	0.047	0.000	0.000	0.000	0.000	0.000	1.217
NE	0.000	0.421	0.890	0.047	0.000	0.000	0.000	0.000	0.000	1.358
ENE	0.000	0.187	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.281
E	0.000	0.187	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.234
ESE	0.000	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.140
SE	0.000	0.140	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.187
SSE	0.000	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.468
S	0.000	0.281	0.234	0.047	0.000	0.000	0.000	0.000	0.000	0.562
SSW	0.000	0.281	0.843	0.094	0.000	0.000	0.000	0.000	0.000	1.217
SW	0.000	0.000	0.843	0.047	0.000	0.000	0.000	0.000	0.000	0.890
WSW	0.000	0.094	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.187
W	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
NW	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	2.434	4.260	0.281	0.000	0.000	0.000	0.000	0.000	6.976

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2136
TOTAL HOURS OF STABILITY CLASS G	149
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	149
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2136
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: 2009/05/19

MEAN WIND SPEED = 1.85

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 STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

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	0.145	0.193	0.000	0.000	0.000	0.000	0.337
NNE	0.000	0.000	0.000	0.337	0.386	0.241	0.000	0.000	0.000	0.964
NE	0.000	0.000	0.000	0.193	0.096	0.096	0.000	0.000	0.000	0.386
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.048	0.000	0.048	0.000	0.000	0.000	0.096
S	0.000	0.000	0.000	0.145	0.193	0.096	0.000	0.000	0.000	0.434
SSW	0.000	0.000	0.048	0.578	0.771	0.241	0.000	0.000	0.000	1.639
SW	0.000	0.000	0.000	0.867	0.675	0.145	0.000	0.000	0.000	1.687
WSW	0.000	0.000	0.000	0.193	0.145	0.096	0.000	0.000	0.000	0.434
W	0.000	0.000	0.048	0.000	0.193	0.096	0.145	0.000	0.000	0.482
WNW	0.000	0.000	0.000	0.000	0.048	0.241	0.000	0.000	0.000	0.289
NW	0.000	0.000	0.000	0.048	0.145	0.145	0.000	0.000	0.000	0.337
NNW	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
SUBTOTAL	0.000	0.000	0.096	2.602	2.843	1.446	0.145	0.000	0.000	7.133

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS A	148
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	148
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

MEAN WIND SPEED = 6.32

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 STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

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	0.048	0.193	0.000	0.000	0.000	0.000	0.241
NNE	0.000	0.000	0.000	0.241	0.289	0.000	0.000	0.000	0.000	0.530
NE	0.000	0.000	0.048	0.241	0.096	0.048	0.000	0.000	0.000	0.434
ENE	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.048
E	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.048
ESE	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.048
SE	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.048
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	0.241	0.096	0.048	0.000	0.000	0.000	0.386
SSW	0.000	0.000	0.193	1.253	0.145	0.000	0.000	0.000	0.000	1.590
SW	0.000	0.000	0.193	0.530	0.337	0.048	0.000	0.000	0.000	1.108
WSW	0.000	0.000	0.000	0.193	0.000	0.096	0.000	0.000	0.000	0.289
W	0.000	0.000	0.000	0.048	0.048	0.096	0.000	0.000	0.000	0.193
WNW	0.000	0.000	0.000	0.096	0.096	0.096	0.000	0.000	0.000	0.289
NW	0.000	0.000	0.000	0.000	0.145	0.000	0.000	0.000	0.000	0.145
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.578	2.940	1.446	0.434	0.000	0.000	0.000	5.398

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS B	112
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	112
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

MEAN WIND SPEED = 5.11

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 STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

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	0.048	0.193	0.096	0.000	0.000	0.000	0.000	0.337
NNE	0.000	0.000	0.048	0.337	0.337	0.048	0.000	0.000	0.000	0.771
NE	0.000	0.000	0.048	0.289	0.096	0.000	0.000	0.000	0.000	0.434
ENE	0.000	0.000	0.048	0.096	0.000	0.000	0.000	0.000	0.000	0.145
E	0.000	0.000	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.096
ESE	0.000	0.000	0.193	0.096	0.000	0.000	0.000	0.000	0.000	0.289
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	0.096	0.096	0.000	0.048	0.000	0.000	0.000	0.241
S	0.000	0.000	0.193	0.482	0.048	0.000	0.000	0.000	0.000	0.723
SSW	0.000	0.000	0.482	1.012	0.096	0.000	0.000	0.000	0.000	1.590
SW	0.000	0.000	0.434	0.675	0.048	0.000	0.000	0.000	0.000	1.157
WSW	0.000	0.000	0.096	0.241	0.048	0.000	0.000	0.000	0.000	0.386
W	0.000	0.000	0.000	0.048	0.193	0.048	0.000	0.000	0.000	0.289
WNW	0.000	0.000	0.000	0.048	0.193	0.337	0.000	0.000	0.000	0.578
NW	0.000	0.000	0.000	0.000	0.434	0.096	0.000	0.000	0.000	0.530
NNW	0.000	0.000	0.048	0.193	0.145	0.000	0.000	0.000	0.000	0.386
SUBTOTAL	0.000	0.000	1.783	3.855	1.735	0.578	0.000	0.000	0.000	7.952

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS C	165
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	165
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

MEAN WIND SPEED = 4.78

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 STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

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	0.096	0.819	0.916	0.386	0.000	0.000	0.000	0.000	2.217
NNE	0.000	0.048	1.253	1.639	1.928	0.434	0.000	0.000	0.000	5.301
NE	0.000	0.096	0.771	0.434	0.096	0.048	0.000	0.000	0.000	1.446
ENE	0.000	0.048	0.337	0.145	0.000	0.000	0.000	0.000	0.000	0.530
E	0.000	0.000	0.337	0.241	0.048	0.000	0.000	0.000	0.000	0.627
ESE	0.000	0.000	0.193	0.048	0.000	0.000	0.000	0.000	0.000	0.241
SE	0.000	0.000	0.386	0.048	0.048	0.000	0.000	0.000	0.000	0.482
SSE	0.000	0.000	0.916	0.096	0.096	0.193	0.000	0.000	0.000	1.301
S	0.000	0.096	1.542	0.675	0.434	0.145	0.000	0.000	0.000	2.892
SSW	0.000	0.048	3.181	2.024	0.627	0.096	0.000	0.000	0.000	5.976
SW	0.000	0.048	1.880	1.253	0.241	0.145	0.000	0.000	0.000	3.566
WSW	0.000	0.048	0.241	0.145	0.193	0.096	0.000	0.000	0.000	0.723
W	0.000	0.000	0.096	0.337	0.289	0.337	0.000	0.000	0.000	1.060
WNW	0.000	0.000	0.096	0.241	0.530	0.530	0.000	0.000	0.000	1.398
NW	0.000	0.000	0.386	0.386	0.627	0.145	0.000	0.000	0.000	1.542
NNW	0.000	0.000	0.337	0.916	0.241	0.048	0.000	0.000	0.000	1.542
SUBTOTAL	0.000	0.530	12.771	9.542	5.783	2.217	0.000	0.000	0.000	30.843

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS D	644
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	640
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

MEAN WIND SPEED = 4.23

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

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	0.241	2.072	0.867	0.096	0.000	0.000	0.000	0.000	3.277
NNE	0.000	0.337	2.940	0.771	0.096	0.000	0.000	0.000	0.000	4.145
NE	0.000	0.386	0.819	0.241	0.000	0.000	0.000	0.000	0.000	1.446
ENE	0.000	0.289	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.530
E	0.000	0.434	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.675
ESE	0.000	0.241	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.386
SE	0.000	0.386	0.241	0.048	0.000	0.000	0.000	0.000	0.000	0.675
SSE	0.000	0.289	0.627	0.337	0.193	0.145	0.000	0.000	0.000	1.590
S	0.000	0.530	1.976	0.819	0.241	0.145	0.000	0.000	0.000	3.711
SSW	0.000	0.578	3.807	0.916	0.386	0.000	0.000	0.000	0.000	5.687
SW	0.000	0.193	2.651	1.060	0.241	0.096	0.000	0.000	0.000	4.241
WSW	0.000	0.193	0.916	0.434	0.145	0.048	0.000	0.000	0.000	1.735
W	0.000	0.241	0.337	0.145	0.000	0.048	0.000	0.000	0.000	0.771
WNW	0.000	0.096	0.289	0.096	0.145	0.000	0.000	0.000	0.000	0.627
NW	0.000	0.241	0.096	0.096	0.048	0.000	0.000	0.000	0.000	0.482
NNW	0.000	0.145	0.675	0.048	0.000	0.000	0.000	0.000	0.000	0.867
SUBTOTAL	0.000	4.819	18.072	5.880	1.590	0.482	0.000	0.000	0.000	30.843

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS E	650
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	640
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

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 STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	1.060	0.048	0.000	0.000	0.000	0.000	0.000	1.108
NNE	0.000	0.434	3.422	0.000	0.000	0.000	0.000	0.000	0.000	3.855
NE	0.000	0.578	0.867	0.000	0.000	0.000	0.000	0.000	0.000	1.446
ENE	0.000	0.386	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.386
E	0.000	0.337	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.386
ESE	0.000	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.145
SE	0.000	0.337	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.386
SSE	0.000	0.675	0.289	0.048	0.000	0.000	0.000	0.000	0.000	1.012
S	0.000	0.241	0.771	0.000	0.048	0.000	0.000	0.000	0.000	1.060
SSW	0.000	0.337	1.349	0.048	0.000	0.000	0.000	0.000	0.000	1.735
SW	0.000	0.000	0.482	0.000	0.000	0.000	0.000	0.000	0.000	0.482
WSW	0.000	0.000	0.193	0.000	0.000	0.000	0.000	0.000	0.000	0.193
W	0.000	0.000	0.289	0.000	0.000	0.000	0.000	0.000	0.000	0.289
WNW	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.048
NW	0.000	0.048	0.193	0.000	0.000	0.000	0.000	0.000	0.000	0.241
NNW	0.000	0.096	0.193	0.000	0.000	0.000	0.000	0.000	0.000	0.289
SUBTOTAL	0.000	3.614	9.253	0.145	0.048	0.000	0.000	0.000	0.000	13.060

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS F	279
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	271
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

MEAN WIND SPEED = 1.87

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 STA 57 A - Validated Edited Data

APR 1, 2009 - JUN 30, 2009

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	0.048	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.096
NNE	0.000	0.193	0.578	0.096	0.000	0.000	0.000	0.000	0.000	0.867
NE	0.000	0.000	0.386	0.000	0.000	0.000	0.000	0.000	0.000	0.386
ENE	0.000	0.145	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.241
E	0.000	0.289	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.289
ESE	0.000	0.434	0.096	0.000	0.000	0.000	0.000	0.000	0.000	0.530
SE	0.000	0.337	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.337
SSE	0.000	0.337	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.386
S	0.000	0.289	0.482	0.000	0.000	0.000	0.000	0.000	0.000	0.771
SSW	0.000	0.000	0.482	0.000	0.000	0.000	0.000	0.000	0.000	0.482
SW	0.000	0.000	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.241
WSW	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
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	0.048	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.096
SUBTOTAL	0.000	2.169	2.458	0.145	0.000	0.000	0.000	0.000	0.000	4.771

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2097
TOTAL HOURS OF STABILITY CLASS G	99
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	99
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2075
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data
 STABILITY BASED ON DELTA-T BETWEEN 9.25 AND 45.99 METERS
 WIND SPEED AND DIRECTION MEASURED AT 9.73 METER LEVEL

DATE PRINTED: 2009/08/06

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

JUL 1, 2009 - SEP 30, 2009

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	0.092	0.092	0.000	0.000	0.000	0.000	0.183
NNE	0.000	0.000	0.000	0.733	0.824	0.000	0.000	0.000	0.000	1.557
NE	0.000	0.000	0.046	0.458	0.137	0.000	0.000	0.000	0.000	0.641
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	0.046	0.000	0.000	0.000	0.000	0.046
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	0.092	0.000	0.000	0.000	0.000	0.092
S	0.000	0.000	0.000	0.092	0.000	0.046	0.000	0.000	0.000	0.137
SSW	0.000	0.000	0.000	1.603	0.641	0.000	0.000	0.000	0.000	2.244
SW	0.000	0.000	0.092	1.236	0.275	0.000	0.000	0.000	0.000	1.603
WSW	0.000	0.000	0.000	0.183	0.137	0.000	0.000	0.000	0.000	0.321
W	0.000	0.000	0.000	0.000	0.046	0.137	0.000	0.000	0.000	0.183
WNW	0.000	0.000	0.000	0.046	0.321	0.137	0.000	0.000	0.000	0.504
NW	0.000	0.000	0.000	0.092	0.000	0.046	0.000	0.000	0.000	0.137
NNW	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	0.000	0.183	4.579	2.656	0.366	0.000	0.000	0.000	7.784

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS A	170
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	170
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 5.25

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, 2009 - SEP 30, 2009

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	0.092	0.000	0.000	0.000	0.000	0.137
NNE	0.000	0.000	0.046	0.366	0.321	0.000	0.000	0.000	0.000	0.733
NE	0.000	0.000	0.046	0.183	0.000	0.000	0.000	0.000	0.000	0.229
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.000	0.229	0.000	0.000	0.000	0.000	0.000	0.229
SSW	0.000	0.000	0.137	1.145	0.183	0.000	0.000	0.000	0.000	1.465
SW	0.000	0.000	0.092	0.229	0.183	0.000	0.000	0.000	0.000	0.504
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.137
NNW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	0.000	0.366	2.335	1.007	0.046	0.000	0.000	0.000	3.755

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS B	82
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	82
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 4.79

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, 2009 - SEP 30, 2009

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	0.000	0.000	0.000	0.000	0.321
NNE	0.000	0.000	0.092	0.595	0.183	0.000	0.000	0.000	0.000	0.870
NE	0.000	0.000	0.092	0.366	0.046	0.000	0.000	0.000	0.000	0.504
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	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.092
ESE	0.000	0.000	0.137	0.092	0.000	0.000	0.000	0.000	0.000	0.229
SE	0.000	0.000	0.046	0.137	0.000	0.000	0.000	0.000	0.000	0.183
SSE	0.000	0.000	0.046	0.229	0.000	0.000	0.000	0.000	0.000	0.275
S	0.000	0.000	0.183	0.458	0.092	0.000	0.000	0.000	0.000	0.733
SSW	0.000	0.000	0.504	0.962	0.000	0.046	0.000	0.000	0.000	1.511
SW	0.000	0.000	0.321	0.687	0.183	0.000	0.000	0.000	0.000	1.190
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	0.046	0.046	0.137	0.000	0.000	0.000	0.000	0.229
NW	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.092
NNW	0.000	0.000	0.000	0.046	0.046	0.092	0.000	0.000	0.000	0.183
SUBTOTAL	0.000	0.000	1.648	3.846	0.916	0.183	0.000	0.000	0.000	6.593

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS C	144
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	144
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 4.29

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, 2009 - SEP 30, 2009

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.046	2.335	0.870	0.137	0.046	0.000	0.000	0.000	3.434
NNE	0.000	0.000	2.106	2.701	0.641	0.046	0.000	0.000	0.000	5.495
NE	0.000	0.137	2.015	1.099	0.092	0.000	0.000	0.000	0.000	3.342
ENE	0.000	0.000	0.641	0.137	0.000	0.000	0.000	0.000	0.000	0.778
E	0.000	0.046	0.595	0.046	0.000	0.000	0.000	0.000	0.000	0.687
ESE	0.000	0.000	0.366	0.000	0.000	0.000	0.000	0.000	0.000	0.366
SE	0.000	0.000	0.504	0.321	0.000	0.000	0.000	0.000	0.000	0.824
SSE	0.000	0.092	1.328	0.504	0.183	0.000	0.000	0.000	0.000	2.106
S	0.000	0.000	2.930	2.473	0.137	0.000	0.000	0.000	0.000	5.540
SSW	0.000	0.000	2.976	1.923	0.137	0.046	0.000	0.000	0.000	5.082
SW	0.000	0.046	1.374	0.962	0.275	0.046	0.000	0.000	0.000	2.701
WSW	0.000	0.000	0.687	0.321	0.137	0.000	0.000	0.000	0.000	1.145
W	0.000	0.046	0.137	0.504	0.000	0.046	0.000	0.000	0.000	0.733
WNW	0.000	0.137	0.229	0.046	0.092	0.229	0.000	0.000	0.000	0.733
NW	0.000	0.000	0.321	0.366	0.229	0.046	0.000	0.000	0.000	0.962
NNW	0.000	0.092	0.549	0.275	0.458	0.092	0.000	0.000	0.000	1.465
SUBTOTAL	0.000	0.641	19.093	12.546	2.518	0.595	0.000	0.000	0.000	35.394

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS D	773
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	773
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 3.48

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, 2009 - SEP 30, 2009

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	0.870	7.326	0.962	0.046	0.000	0.000	0.000	0.000	9.203
NNE	0.000	0.595	5.403	1.099	0.046	0.000	0.000	0.000	0.000	7.143
NE	0.000	0.321	1.007	0.092	0.000	0.000	0.000	0.000	0.000	1.419
ENE	0.000	0.275	0.412	0.000	0.000	0.000	0.000	0.000	0.000	0.687
E	0.000	0.137	0.321	0.046	0.000	0.000	0.000	0.000	0.000	0.504
ESE	0.000	0.092	0.458	0.046	0.000	0.000	0.000	0.000	0.000	0.595
SE	0.000	0.183	0.321	0.046	0.000	0.000	0.000	0.000	0.000	0.549
SSE	0.000	0.321	0.549	0.137	0.000	0.000	0.000	0.000	0.000	1.007
S	0.000	0.229	1.694	0.275	0.000	0.000	0.000	0.000	0.000	2.198
SSW	0.000	0.366	2.198	0.321	0.092	0.000	0.000	0.000	0.000	2.976
SW	0.000	0.321	2.518	0.412	0.000	0.000	0.000	0.000	0.000	3.251
WSW	0.000	0.321	1.419	0.229	0.000	0.000	0.000	0.000	0.000	1.969
W	0.000	0.321	0.687	0.137	0.000	0.000	0.000	0.000	0.000	1.145
WNW	0.000	0.504	0.504	0.046	0.183	0.000	0.000	0.000	0.000	1.236
NW	0.000	0.229	0.275	0.046	0.000	0.000	0.000	0.000	0.000	0.549
NNW	0.000	0.458	2.152	0.504	0.000	0.000	0.000	0.000	0.000	3.114
SUBTOTAL	0.000	5.540	27.244	4.396	0.366	0.000	0.000	0.000	0.000	37.546

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS E	820
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	820
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 2.33

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

JUL 1, 2009 - SEP 30, 2009

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	2.656	0.183	0.000	0.000	0.000	0.000	0.000	2.976
NNE	0.000	0.321	2.335	0.000	0.000	0.000	0.000	0.000	0.000	2.656
NE	0.000	0.183	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.366
ENE	0.000	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
E	0.000	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
ESE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.137	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.275
SSW	0.000	0.046	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.275
SW	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.137
WSW	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.137
W	0.000	0.046	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.229
WNW	0.000	0.046	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.183
NW	0.000	0.092	0.275	0.092	0.000	0.000	0.000	0.000	0.000	0.458
NNW	0.000	0.092	0.549	0.000	0.000	0.000	0.000	0.000	0.000	0.641
SUBTOTAL	0.000	1.648	6.822	0.366	0.000	0.000	0.000	0.000	0.000	8.837

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS F	193
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	193
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 2.07

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, 2009 - SEP 30, 2009

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.046	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2184
TOTAL HOURS OF STABILITY CLASS G	2
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	2
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2184
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: 2009/11/10

MEAN WIND SPEED = 1.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2009 - DEC 31, 2009

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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NNE	0.000	0.000	0.000	0.091	0.045	0.227	0.000	0.000	0.000	0.364
NE	0.000	0.000	0.000	0.091	0.136	0.045	0.000	0.000	0.000	0.273
ENE	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SSW	0.000	0.000	0.000	0.136	0.318	0.000	0.000	0.000	0.000	0.455
SW	0.000	0.000	0.000	0.273	0.182	0.045	0.000	0.000	0.000	0.500
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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.000	0.000	0.091	0.045	0.000	0.000	0.000	0.136
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.045	0.727	0.773	0.364	0.000	0.000	0.000	1.909

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS A	42
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	42
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
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: 2010/02/10

MEAN WIND SPEED = 6.00

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, 2009 - DEC 31, 2009

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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NNE	0.000	0.000	0.000	0.045	0.318	0.182	0.000	0.000	0.000	0.545
NE	0.000	0.000	0.000	0.273	0.182	0.091	0.000	0.000	0.000	0.545
ENE	0.000	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.136
E	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.045	0.091	0.045	0.000	0.000	0.000	0.000	0.182
SSW	0.000	0.000	0.000	0.182	0.091	0.045	0.000	0.000	0.000	0.318
SW	0.000	0.000	0.045	0.091	0.182	0.045	0.000	0.000	0.000	0.364
WSW	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
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	0.045	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.000	0.045	0.091	0.091	0.000	0.000	0.000	0.227
NNW	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
SUBTOTAL	0.000	0.000	0.136	1.000	0.955	0.500	0.000	0.000	0.000	2.591

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS B	57
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	57
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
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: 2010/02/10

MEAN WIND SPEED = 6.03

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, 2009 - DEC 31, 2009

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	0.182	0.045	0.000	0.000	0.000	0.227
NNE	0.000	0.000	0.000	0.091	0.409	0.045	0.000	0.000	0.000	0.545
NE	0.000	0.000	0.091	0.227	0.091	0.091	0.000	0.000	0.000	0.500
ENE	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
E	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.091
SSW	0.000	0.000	0.136	0.409	0.000	0.045	0.000	0.000	0.000	0.591
SW	0.000	0.000	0.091	0.364	0.182	0.000	0.000	0.000	0.000	0.636
WSW	0.000	0.000	0.000	0.045	0.000	0.091	0.000	0.000	0.000	0.136
W	0.000	0.000	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.136
WNW	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.000	0.091	0.182	0.045	0.000	0.000	0.000	0.318
NNW	0.000	0.000	0.000	0.045	0.045	0.045	0.000	0.000	0.000	0.136
SUBTOTAL	0.000	0.000	0.409	1.409	1.227	0.455	0.000	0.000	0.000	3.500

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2200
 TOTAL HOURS OF STABILITY CLASS C 77
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 77
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2200
 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: 2010/02/10

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

SEQUOYAH NUCLEAR PLANT

OCT 1, 2009 - DEC 31, 2009

WIND DIRECTION	WIND SPEED(MPH)									TOTAL
	CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	
N	0.000	0.000	1.273	1.818	0.909	0.500	0.000	0.000	0.000	4.500
NNE	0.000	0.000	2.455	3.455	2.136	2.045	0.045	0.000	0.000	10.136
NE	0.000	0.000	1.455	0.818	0.455	0.136	0.000	0.000	0.000	2.864
ENE	0.000	0.045	0.591	0.000	0.000	0.000	0.000	0.000	0.000	0.636
E	0.000	0.000	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.273
ESE	0.000	0.091	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.409
SE	0.000	0.045	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.182
SSE	0.000	0.000	0.545	0.136	0.091	0.000	0.000	0.000	0.000	0.773
S	0.000	0.182	0.682	0.955	0.636	0.500	0.000	0.000	0.000	2.955
SSW	0.000	0.227	1.727	2.591	0.727	0.045	0.000	0.000	0.000	5.318
SW	0.000	0.182	1.227	2.227	0.500	0.364	0.045	0.000	0.000	4.545
WSW	0.000	0.045	0.636	0.545	0.273	0.273	0.045	0.000	0.000	1.818
W	0.000	0.000	0.364	0.182	0.318	0.182	0.000	0.000	0.000	1.045
WNW	0.000	0.000	0.182	0.227	0.682	0.136	0.000	0.000	0.000	1.227
NW	0.000	0.045	0.182	0.955	0.909	0.091	0.000	0.000	0.000	2.182
NNW	0.000	0.091	1.000	1.500	0.409	0.273	0.000	0.000	0.000	3.273
SUBTOTAL	0.000	0.955	13.045	15.409	8.045	4.545	0.136	0.000	0.000	42.136

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS D	927
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	927
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
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: 2010/02/10

MEAN WIND SPEED = 4.67

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, 2009 - DEC 31, 2009

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	0.009	0.545	3.591	1.136	0.136	0.000	0.000	0.000	0.000	5.418
NNE	0.010	0.364	4.273	1.864	0.136	0.091	0.000	0.000	0.000	6.737
NE	0.003	0.318	0.864	0.364	0.000	0.000	0.000	0.000	0.000	1.548
ENE	0.001	0.273	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.364
E	0.000	0.136	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.182
ESE	0.000	0.045	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.228
SE	0.001	0.227	0.182	0.045	0.000	0.000	0.000	0.000	0.000	0.455
SSE	0.000	0.045	0.136	0.227	0.091	0.045	0.000	0.000	0.000	0.546
S	0.003	0.364	1.182	0.636	0.227	0.318	0.000	0.000	0.000	2.731
SSW	0.004	0.227	1.864	0.864	0.273	0.045	0.000	0.000	0.000	3.277
SW	0.004	0.545	1.545	0.864	0.227	0.364	0.000	0.000	0.000	3.550
WSW	0.002	0.318	0.455	0.409	0.182	0.045	0.000	0.000	0.000	1.411
W	0.001	0.045	0.409	0.318	0.000	0.000	0.000	0.000	0.000	0.774
WNW	0.002	0.500	0.318	0.182	0.091	0.000	0.000	0.000	0.000	1.093
NW	0.002	0.409	0.455	0.045	0.045	0.000	0.000	0.000	0.000	0.956
NNW	0.003	0.318	1.045	0.455	0.045	0.000	0.000	0.000	0.000	1.867
SUBTOTAL	0.045	4.682	16.636	7.409	1.455	0.909	0.000	0.000	0.000	31.136

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS E	685
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	685
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
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: 2010/02/10

MEAN WIND SPEED = 3.03

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, 2009 - DEC 31, 2009

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	0.227	1.636	0.045	0.000	0.000	0.000	0.000	0.000	1.909
NNE	0.000	0.409	4.727	0.227	0.000	0.000	0.000	0.000	0.000	5.364
NE	0.000	0.636	1.773	0.136	0.045	0.000	0.000	0.000	0.000	2.591
ENE	0.000	0.455	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.591
E	0.000	0.273	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.455
ESE	0.000	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.273
SE	0.000	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.227
SSE	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.136
S	0.000	0.409	0.364	0.000	0.045	0.000	0.000	0.000	0.000	0.818
SSW	0.000	0.364	0.682	0.045	0.000	0.000	0.000	0.000	0.000	1.091
SW	0.000	0.136	0.636	0.045	0.000	0.000	0.000	0.000	0.000	0.818
WSW	0.000	0.000	0.364	0.091	0.000	0.000	0.000	0.000	0.000	0.455
W	0.000	0.000	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.136
WNW	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
NW	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.136
NNW	0.000	0.000	0.318	0.091	0.000	0.000	0.000	0.000	0.000	0.409
SUBTOTAL	0.000	3.409	11.273	0.727	0.091	0.000	0.000	0.000	0.000	15.500

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS F	341
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	341
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
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: 2010/02/10

MEAN WIND SPEED = 2.03

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, 2009 - DEC 31, 2009

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	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
NNE	0.000	0.045	0.636	0.000	0.000	0.000	0.000	0.000	0.000	0.682
NE	0.000	0.182	0.636	0.000	0.000	0.000	0.000	0.000	0.000	0.818
ENE	0.000	0.273	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.318
E	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.182
ESE	0.000	0.227	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.318
SE	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SSE	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.227
S	0.000	0.091	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.182
SSW	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.182
SW	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
WSW	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
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	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	1.136	2.091	0.000	0.000	0.000	0.000	0.000	0.000	3.227

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS G	71
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	71
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
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: 2010/02/10

MEAN WIND SPEED = 1.72

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Attachment 2.0

Deviations from ODCM Controls/Surveillance Requirements

Date	ODCM Requirement	Description of Deviation
June 6,2009	1/2 2.1 Table 1.1-2 Item 5.b	0-RM-90-132 was tagged on 6/5/2009 @1040 (clearance 2009 0-90-490 W/W). The clearance caused the Vent Flow Monitor 0-F-90-5132A to become inoperable. This was not recognized and ODCM 1.1.2 action 41 was not entered. This was discovered on 6/6/2009 @0800. ODCM 1.1.2 action 41 requires Service Building Vent Flow estimates per 2-SI-OPS-000-002.0 App. E every 4 hours. These readings were first taken on 6/6/09 @0800. None of the fans that discharge through this flow path were started or stopped during the period that the flow estimates were not taken. PER 173177.

Attachment 3.0

Radiation Monitors Inoperable for Greater than 30 days

0-RM-90-122 Liquid Radwaste Monitor	On March 3,2009 RM-122 was declared inoperable due to tripping on HI-Rad. It was discovered that the EMS software was calculating a lower setpoint than the 1.5 times the expected response allowed by the ODCM. The option in the software was selected and tested by running permits. The monitor was returned to service April 18,2009.
2-RM-90-400 U2 Shield Building Exhaust Monitor	On June 4, 2009 Kurxz flow instrumentation was erratic. I & C had call the Vendor several times for assistance in troubleshooting and repair. The instrument was returned to service July 24, 2009.
1-RM-90-112 U1 Upper Containment Monitor	On November 19, 2009 1-RM-90-112 received a filter failure alarm. The filter paper take up reel was slipping. The Vendor Mannual had to be updated to allow the reel to be torqued tighter than current specs. The monitor was returned to service December 23, 2009.

ENCLOSURE 3

**OFFSITE DOSE CALCULATION MANUAL
SEQUOYAH NUCLEAR PLANT
REVISION 55**