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

April 27, 2015

10 CFR 50.4

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

Sequoyah Nuclear Plant, Units 1 and 2
Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327, 50-328, and 72-034

Subject: **Annual Radioactive Effluent Release Report for 2014 Monitoring Period**

Enclosed is the Annual Radioactive Effluent Release Report (ARERR) for the period of January 1 to December 31, 2014. 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 and Certificate of Compliance for Spent Fuel Storage Casks No. 1014, Section 5.4.

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. There were no changes to the ODCM during the reporting period.

There are no new regulatory commitments contained in this letter. If you have any questions concerning this matter, please contact Erin Henderson at (423) 843-7170.

Respectfully,

J. T. Carlin
Site Vice President
Sequoyah Nuclear Plant

Enclosures:
1. Annual Radioactive Effluent Release Report, Sequoyah Nuclear Plant, January - December 2014
2. Radiological Impact Assessment Report, Sequoyah Nuclear Plant, January - December 2014

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

IE48
NMSS26

ENCLOSURE 1

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

SEQUOYAH NUCLEAR PLANT

JANUARY - DECEMBER 2014

2014
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 (μCi/ml) total activity.

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

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

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

II. EFFLUENT CONCENTRATION LIMITS

A. Liquids

*1. The Effluent Concentration Limits (ECL) for liquids are those listed in 10 CFR 20, Appendix B, Table 2, Column 2. For dissolved and entrained gases, the ECL of 2.0E-04 μCi/ml is applied. This ECL is based on the 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 the ODCM Lower Limit of Detection (LLD) values are met. Whenever an analysis does not identify a radioisotope, a value of "0.00E-01 Ci" is recorded for the release. This does not necessarily mean that no activity was released for that particular radionuclide, but that the concentration was below the ODCM and analysis LLD. Refer to Tables A and B for estimates of these typical LLD values.

A. Fission and Activation Gases

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

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

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

B. Iodines and Particulates

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

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

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

C. Carbon-14 in Gaseous Releases

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

D. Liquid Effluents

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

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

There were no changes made to the radioactive waste systems and/or the Process Control Program (PCP) for this calendar year.

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

Total gamma isotopic activity and tritium concentrations are determined monthly on one composite sample each from the condensate system, and the turbine building sump. The tritium value is applied to releases over the month. Total gamma isotopic activity concentration for Units 1 and 2 steam generator blowdown is determined daily. In addition to ODCM Table 2.2-1, tritium concentrations are determined daily, averaged for the month, and applied to releases over the month. The total activity of the continuous release is determined by summing each nuclide's concentration and multiplying by the total volume discharged.

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 2014 from these non-REMP wells are listed below. Initial and follow up analyses for the semi-annual sampling procedure indicated no gamma activity.

Well ID	Date	Activity in pCi/L	Date	Activity in pCi/L
Well-24	1/10/2014	<234	3/31/2014	481
Well-24	7/9/2014	603	10/28/2014	550
Well-25	3/31/2014	<226	10/28/2014	507
Well-26	3/31/2014	238	10/28/2014	387
Well-27	4/1/2014	362	10/29/2014	532
Well-28	4/1/2014	<226	10/28/2014	384
Well-29	1/9/2014	476	4/2/2014	586
Well-29	7/10/2014	614	10/29/2014	812
Well-30	7/10/2014	<226	10/30/2014	422
Well-31	1/9/2014	2079	4/2/2014	5530
Well-31	7/10/2014	5240	10/29/2014	2700
Well-32	4/2/2014	<226	10/29/2014	307
Well-34	4/1/2014	477	10/29/2014	449
Well-35	4/1/2014	<226	10/29/2014	267
GP-7A	1/10/2014	538	3/6/2013	dry
GP-7A	7/11/2014	658	10/31/2014	1060
GP-10	1/9/2014	<234	4/3/2014	271
GP-10	10/30/2014	328	N/A	N/A
GP-13	1/9/2014	4852	4/2/2014	4270
GP-13	7/11/2014	4000	10/30/2014	4590
W-9	1/10/2014	<234	4/3/2014	<226
W-9	7/11/2014	248	10/30/2014	352
WE-10	1/9/2014	24018	2/23/2014	21240
WE-10	3/15/2014	25640	4/2/2014	26900
WE-10	5/25/2014	22690	6/29/2014	25700
WE-10	7/10/2014	24400	8/31/2014	23690
WE-10	9/30/2014	23640	10/28/2014	25360
WE-10	10/28/2014	26000	11/20/2014	26360
WE-10	12/29/2014	25060	N/A	N/A

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 being reported confirm that the drinking water pathway dose from I-131 was less than the 1 mrem limit and that the performance of the I-131 specific analysis is not required for SQN REMP drinking water samples.

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

V. BATCH RELEASES

1. Liquid (Radwaste only)	Value 1st Half	Value 2nd Half	Units
a. Number of releases	83	32	Each
b. Total time period of releases	12518.00	5946.00	Minutes
c. Maximum time period of release	640.00	883.00	Minutes
d. Average time period of releases	150.82	185.81	Minutes
e. Minimum time period of release	10.00	5.00	Minutes
f. Average dilution stream flow during release periods	30448.0	31014.0	CFS

2. Gaseous (Batches only - containment purges, and waste gas decay tanks)			
a. Number of releases	63	77	Each
b. Total time period of releases	241937.00	49956.00	Minutes
c. Maximum time period of release	39886.00	1403.00	Minutes
d. Average time period of releases	3840.27	648.78	Minutes
e. Minimum time period of release	48.00	11.00	Minutes

VI. ABNORMAL RELEASES

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

2. Gaseous	1st Half	2nd Half	Units
a. Number of releases	2	0	
b. Total activity released	1.44E-03	0.00E+01	Ci

Release Type: Gaseous (Steam)
Release Point: Unit 2 PORV's 2 & 3
Date(s) of Release: 2nd Quarter, 5/12/14 21:47 through 6/11/14 21:03

This evaluation is for the release to the environment that occurred from the Unit 2 PORV's 2 and 3 during the U2C19 Refueling Outage. Following the reactor trip, the Steam Generator PORVs were open for periods of time during the Outage. The following is data used to determine the curies and dose impacts as a result of the release:

- The evaluation assumed the release was continuous from PORV's 2 and 3 only.
- There have been no gamma emitting radionuclides identified in any Secondary Coolant samples during the previous cycle.

The volume of each steam generator was taken from Westinghouse Guidelines for Secondary Water Chemistry. The listed normal water level value of 3516 ft^3 was used as a conservative value. This calculation assumes that the total volume of all four generators was released and that all the tritium present in that initial volume was released. The calculation for the total tritium activity released is as follows:

3379 ft^3/generator * 2.832E+04 ml/ft^3 * 2 generators = 1.914E+08 ml

3.76E-06 µCi/ml * 1.914E+08 ml = 7.20E+02 µCi of H3 or 7.20E-04 Ci of H3

The activity of 7.20E-04 curies was added to the 2nd Quarter Table "Curies Released in Gaseous Ground Level Releases," and the 2nd Quarter doses in Table "Doses from Airborne Effluents."

Individual Doses

Pathway External	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
Gamma Air	0.00E+00 mrad	5 mrad	<1	N/1525/meters
Beta Air	0.00E+00 mrad	10 mrad	<1	N/1525/meters
Submersion				
Total Body	0.00E+00 mrad	10 mrad	<1	N/1389/meters
Skin	0.00E+00 mrad	10 mrad	<1	N/1389/meters
Organ Dose				
Child/Thyroid	8.61E-03 mrem	7.5 mrem	<1	N/1000/meters
Child/Total Body	8.61E-03 mrem	7.5 mrem	<1	N/1000/meters

Population Doses

Total Body Dose	9.51E-03 man-rem
Maximum Organ Dose (organ)	9.51E-03 man-rem (Thyroid)

Release Type: Gaseous (Steam)
Release Point: Unit 2 PORV's 1 & 4
Date(s) of Release: 4th Quarter, 6/2/14 13:26 through 6/11/14 21:23

This evaluation is for the release to the environment that occurred from the Unit 2 PORV's 1 and 4 during the U2C19 Refueling Outage. Following the reactor trip, the Steam Generator PORVs were open for periods of time during the Outage. The following is data used to determine the curies and dose impacts as a result of the release:
:

- The evaluation assumed the release was continuous from PORV's 1 and 4 only.
- There have been no gamma emitting radionuclides identified in any Secondary Coolant samples during the previous cycle.

The volume of each steam generator was taken from Westinghouse Guidelines for Secondary Water Chemistry. The listed normal water level value of 3516 ft^3 was used as a conservative value. This calculation assumes that the total volume of all four generators was released and that all the tritium present in that initial volume was released. The calculation for the total tritium activity released is as follows:

3379 ft^3/generator * 2.832E+04 ml/ft^3 * 2 generators = 1.914E+08 ml

3.76E-06 µCi/ml * 1.914E+08 ml = 7.20E+02 µCi of H3 or 7.20E-04 Ci of H3

The activity of 7.20E-04 curies was added to the 2nd Quarter Table "Curies Released in Gaseous Ground Level Releases," and the 2nd Quarter doses in Table "Doses from Airborne Effluents."

Individual Doses

Pathway External	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
Gamma Air	0.00E+00 mrad	5 mrad	<1	N/1525/meters
Beta Air	0.00E+00 mrad	10 mrad	<1	N/1525/meters
Submersion				
Total Body	0.00E+00 mrad	10 mrad	<1	N/1389/meters
Skin	0.00E+00 mrad	10 mrad	<1	N/1389/meters
Organ Dose				
Child/Thyroid	8.61E-03 mrem	7.5 mrem	<1	N/1000/meters
Child/Total Body	8.61E-03 mrem	7.5 mrem	<1	N/1000/meters

Population Doses

Total Body Dose	9.51E-03 man-rem
Maximum Organ Dose (organ)	9.51E-03 man-rem (Thyroid)

Liquid Effluents-Summation of Releases

During the Period

Starting: 1-Jan-2014 Ending: 30-Jun-2014

Type Of Effluent	Units	Quarter 1	Quarter 2	Est. Total Error %
A. Fission & Activation Products				
1. Total Release (Not Including Tritium, Gases, Alpha)	Ci	3.64E-03	2.98E-03	18%
2. Average Diluted Concentration During Period	µCi/ml	2.04E-09	1.49E-09	
3. Percent Of Applicable Limit	%	*	*	
B. Tritium				
1. Total Release	Ci	2.03E+02	3.48E+02	18%
2. Average Diluted Concentration During Period	µCi/ml	1.14E-04	1.74E-04	
3. Percent Of Applicable Limit	%	*	*	
C. Dissolved And Entrained Gases				
1. Total Release	Ci	0.00E+01	2.13E-04	39%
2. Average Diluted Concentration During Period	µCi/ml	0.00E+01	1.07E-10	
3. Percent Of Applicable Limit	%	0.00E+01	5.34E-05	
D. Gross Alpha Radioactivity				
1. Total Release	Curies	0.00E+01**	0.00E+01	N/A***
E. Total Waste Volume Released (Pre-Dilution)	Liters	1.35E+08	1.76E+08	4%
F. Volume Of Dilution Water Used	Liters	1.65E+09	1.82E+09	4%
G. Radwaste Volume Released	Liters	1.11E+06	2.15E+06	N/A

* Applicable Limits are expressed in terms of dose. See Tables 5-8 of the 2014 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 Releases
During the Period
Starting: 1-Jul-2014 Ending: 31-Dec-2014

Type Of Effluent	Units	Quarter 3	Quarter 4	Est. Total Error %
A. Fission & Activation Products				
1. Total Release (Not Including Tritium, Gases, Alpha)	Ci	1.09E-03	6.66E-04	18%
2. Average Diluted Concentration During Period	µCi/ml	4.94E-10	3.95E-10	
3. Percent Of Applicable Limit	%	*	*	
B. Tritium				
1. Total Release	Ci	3.51E+01	9.27E+01	18%
2. Average Diluted Concentration During Period	µCi/ml	1.60E-05	5.50E-05	
3. Percent Of Applicable Limit	%	*	*	
C. Dissolved And Entrained Gases				
1. Total Release	Ci	0.00E+01	0.00E+01	39%
2. Average Diluted Concentration During Period	µCi/ml	0.00E+01	0.00E+01	
3. Percent Of Applicable Limit	%	0.00E+01	0.00E+01	
D. Gross Alpha Radioactivity				
1. Total Release	Curies	0.00E+01**	0.00E+01	N/A***
E. Total Waste Volume Released (Pre-Dilution)	Liters	7.02E+07	6.66E+07	4%
F. Volume Of Dilution Water Used	Liters	2.13E+09	1.62E+09	4%
G. Radwaste Volume Released	Liters	6.99E+05	2.24E+05	N/A

* Applicable Limits are expressed in terms of dose. See Tables 5-8 of the 2014Radiological 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-2014 Ending 31-Mar-2014

	Continuous	Batch	Total
Tritium	2.50E-01	2.03E+02	2.03E+02
FISSION & ACTIVATION PRODUCTS			
Colbalt-57	0.00E+01	1.61E-06	1.61E-06
Colbalt-58	0.00E+01	6.06E-04	6.06E-04
Colbalt-60	0.00E+01	1.17E-03	1.17E-03
Cesium-137	0.00E+01	9.63E-05	9.63E-05
Iron-55	0.00E+01	7.03E-04	7.03E-04
Manganese-54	0.00E+01	9.49E-06	9.49E-06
Sodium-24	0.00E+01	5.62E-06	5.62E-06
Antimony-124	0.00E+01	3.82E-04	3.82E-04
Antimony-125	0.00E+01	2.37E-04	2.37E-04
TOTALS	0.00E+01	3.21E-03	3.21E-03
DISSOLVED AND ENTRAINED GASES			
TOTALS	0.00E+01	0.00E+01	0.00E+01

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

Curies Released in Liquid Effluents
During the period
Starting: 1-Apr-2014 Ending 30-Jun-2014

	Continuous	Batch	Total
Tritium	3.18E-01	3.48E+02	3.48E+02
FISSION & ACTIVATION PRODUCTS			
Cobalt-58	0.00E+01	5.98E-04	5.98E-04
Cobalt-60	0.00E+01	8.07E-05	8.07E-5
Cseium-137	0.00E+01	1.12E-05	
Iron-55	0.00E+01	1.20E-04	1.20E-04
Antimony-125	0.00E+01	1.49E-05	1.49E-05
TOTALS	0.00E+01	8.25E-04	8.25E-04
DISSOLVED AND ENTRAINED GASES			
Xenon-133	0.00E+01	2.14E-04	2.14E-04
TOTALS	0.00E+01	2.14E-04	2.14E-04

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

Curies Released in Liquid Effluents
During the period
Starting: 1-Jul-2014 Ending 30-Sep-2014

	Continuous	Batch	Total
Tritium	2.28E-01	3.49E+01	3.51E+01
FISSION & ACTIVATION PRODUCTS			
Cobalt-58	0.00E+01	6.77E-04	6.77E-04
Cobalt-60	0.00E+01	4.02E-05	4.02E-05
Iron-55	0.00E+01	2.53E-05	2.53E-05
Antimony-125	0.00E+01	8.47E-06	8.47E-06
TOTALS	0.00E+01	7.51E-04	7.51E-04
DISSOLVED AND ENTRAINED GASES			
TOTALS	0.00E+01	0.00E+01	0.00E+01

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

Curies Released in Liquid Effluents
During the period
Starting: 1-Oct-2014 Ending 31-Dec-2014

	Continuous	Batch	Total
Tritium	2.43E-01	9.24E+01	9.27E+01
FISSION & ACTIVATION PRODUCTS			
Cobalt-58	0.00E+01	4.27E-04	4.27E-04
Cobalt-60	0.00E+01	6.83E-05	6.83E-05
Cesium-137	0.00E+01	3.73E-06	3.73E-06
Iron-55	0.00E+01	1.09E-04	1.09E-04
Antimony-125	0.00E+01	1.26E-04	1.26E-04
TOTALS	0.00E+01	7.34E-04	7.34E-04
DISSOLVED AND ENTRAINED GASES			
TOTALS	0.00E+01	0.00E+01	0.00E+01

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

TABLE A
LIQUID "TYPICAL LLD" EVALUATION[1]

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

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

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

Gaseous Effluents - Summation of Releases
During the Period
Starting: 1-Jan-2014 Ending: 30-Jun-2014

Type of Effluent	Units	Quarter 1	Quarter 2	Estimated Total Error %
A. Fission and Activation Products				
1. Total Release	Ci	2.28E+01	5.64E+01	11%
2. Average Release Rate For Period	µCi/sec	2.94E+00	7.18E+00	
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	1.03E-06	0.00E+01	N/A***
2. Average Release Rate For Period	µCi/sec	1.33E-07	0.00E+01	
3. Percent of Applicable Limit	%	*	*	
4. Gross Alpha Radioactiviy	Ci	0.00E+01	0.00E+01	
D. Tritium				
1. Total Release	Ci	4.48E+01	1.53E+01	15%
2. Average Release Rate For Period	µCi/sec	5.76E+00	1.94E+00	
3. Percent of Applicable Limit	%	*	*	
E. Carbon-14				
1. Total Release	Ci	1.12E+00	8.73E-01	N/A
2. Average Release Rate For Period	µCi/sec	1.38E-01	1.39E-01	
3. Percent of Applicable Limit	%	*	*	

* Applicable Limits are expressed in terms of dose. See Tables 1-4 of the2014 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 Releases
During the Period
Starting: 1-Jul-2014 Ending: 31-Dec-2014

Type of Effluent	Units	Quarter 3	Quarter 4	Estimated Total Error %
A. Fission and Activation Products				
1. Total Release	Ci	1.46E+00	9.76E+00	11%
2. Average Release Rate For Period	µCi/sec	1.84E-01	1.23E+00	
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	8.87E-05	16%
2. Average Release Rate For Period	µCi/sec	0.00E+01	1.12E-05	
3. Percent of Applicable Limit	%	*	*	
4. Gross Alpha Radioactiviy	Ci	0.00E+01	0.00E+01	
D. Tritium				
1. Total Release	Ci	9.00E+00	4.16E+00	15%
2. Average Release Rate For Period	µCi/sec	1.13E+00	5.65E-01	
3. Percent of Applicable Limit	%	*	*	
E. Carbon-14				
1. Total Release	Ci	1.15E+00	1.15E-01	N/A
2. Average Release Rate For Period	µCi/sec	1.48E-01	1.48E-01	
3. Percent of Applicable Limit	%	*	*	

* Applicable Limits are expressed in terms of dose. See Tables 1-4 of the2014 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-2014 Ending: 31-Mar-2014

	CONTINUOUS	BATCH	TOTAL
FISSION GASES			
Xenon-133	0.00E+01	1.91E+00	1.91E+00
Xenon-135	0.00E+01	3.33E-01	3.33E-01
Argon-41	0.00E+01	2.06E+01	2.06E+01
TOTALS	0.00E+01	2.28E+01	2.28E+01
IODINES			
Iodine-131	0.00E+01	0.00E+01	0.00E+01
TOTALS	0.00E+01	0.00E+01	0.00E+01
PARTICULATES			
Colbalt-58	1.03E-06	0.00E+01	1.03E-06
Bromine-82	2.76E-05	0.00E+01	2.76E-05
TOTALS	2.76E-05	0.00E+01	2.76E-05
TRITIUM			
Tritium	1.26E+01	3.22E+01	4.48E+01
CARBON-14			
Carbon-14 (CO_2 form)	1.12E+00	0.00E+00	1.12E+00
Carbon-14 (Total)	5.714E+00	0.00E+00	5.714E+00

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

Curies released Gaseous Ground Level Releases
During the period
Starting: 1-Apr-2014 Ending: 30-Jun-2014

	CONTINUOUS	BATCH	TOTAL
FISSION GASES			
Xenon-133	0.00E+01	2.74E-01	2.74E-01
Xenon-135	0.00E+01	3.70E+01	3.70E+01
Argon-41	0.00E+01	1.91E+01	1.91E+01
TOTALS	0.00E+01	5.64E+01	5.64E+01
IODINES			
TOTALS	0.00E+01	0.00E+01	0.00E+01
PARTICULATES			
Bromine-82	1.70E-06	0.00E+01	1.70E-06
TOTALS	1.70E-06	0.00E+01	1.70E-06
TRITIUM			
Tritium	5.78E+00	9.49E+00	1.53E+01
CARBON-14			
Carbon-14 (CO_2 form)	0.873E+00	0.00E+00	0.873E+00
Carbon-14 (Total)	4.45E+00	0.00E+00	4.45E+00

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

Curies released Gaseous Ground Level Releases
During the period
Starting: 1-July-2014 Ending: 30-Sep-2014

	CONTINUOUS	BATCH	TOTAL
FISSION GASES			
Xenon-133	1.09E+00	2.84E-02	1.12E+00
Xenon-135	0.00E+01	7.82E-04	7.82E-04
Argon-41	0.00E+01	3.38E-01	3.38E-01
TOTALS	1.09E+00	3.67E-01	1.46E+00
IODINES			
TOTALS	0.00E+01	0.00E+01	0.00E+01
PARTICULATES			
Bromine-82	2.07E-06	0.00E+01	2.07E-06
TOTALS	2.07E-06	0.00E+01	2.07E-06
TRITIUM			
Tritium	8.66E+00	3.38E-01	9.00E+00
CARBON-14			
Carbon-14 (CO_2 form)	1.15E+00	0.00E+00	1.15E+00
Carbon-14 (Total)	5.84E+00	0.00E+00	5.84E+00

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

Curies released Gaseous Ground Level Releases
During the period
Starting: 1-Oct-2014 Ending: 31-Dec-2014

	CONTINUOUS	BATCH	TOTAL
FISSION GASES			
Xenon-133	9.04E+00	8.54E-02	9.13E+00
Xenon-135	0.00E+01	6.11E-03	6.11E-03
Argon-41	0.00E+01	6.26E-01	6.26E-01
TOTALS	9.04E+00	7.18E-01	9.76E+00
IODINES			
TOTALS	0.00E+01	0.00E+01	0.00E+01
PARTICULATES			
TOTALS	0.00E+01	0.00E+01	0.00E+01
TRITIUM			
Tritium	3.91E+00	2.54E-01	4.16E+00
CARBON-14			
Carbon-14 (CO_2 form)	1.15E+00	0.00E+00	1.15E+00
Carbon-14 (Total)	5.85E+00	0.00E+00	5.85E+00

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

TABLE B
GASEOUS "TYPICAL" LLD EVALUATION[1]

Noble Gas

		$\Delta t^{(2)}$		
Nuclide	ODCM LLD	1 hr	1.5 hr	
Krypton-87	1.0E-04	2.08E-06	2.73E-06	
Krypton-88	1.0E-04	1.61E-06	1.81E-06	
Xenon-133	1.0E-04	6.61E-07	6.63E-07	
Xenon-133m	1.0E-04	2.34E-06	2.35E-06	
Xenon-135	1.0E-04	3.43E-07	3.56E-07	
Xenon-138	1.0E-04	1.40E-04	6.10E-04	
Particulate Sample[3]		1 hr	24 hr	7.0 day
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

Note:
(1) LLD values are in μCi/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)

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

NOTE:
(1) LLD values are in μCi/cc.

SOLID WASTE (RADIOACTIVE SHIPMENTS)

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

1. Type of Waste	Unit	12 Month Period	Est. Tot. Error %
a. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.	m^3	5.64	±1.00E+01
	Ci	6.80E+02	±2.29E+01
b. Dry Active Waste, Compressible Waste Contaminated Equipment, etc.	m^3	494	±1.00E+01
	Ci	1.06E+03	±2.29E+01
c. Irradiated Components, Control Rods, etc.	m^3	None	N/A
	Ci	None	N/A
d. Other: Mechanical Filters	m^3	None	N/A
	Ci	None	N/A

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

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

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

SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

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

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

		Curies	Percent
1.	Hydrogen-3	5.398E-03	0.01
2.	Carbon-14	4.608E-02	0.07
3.	Chlorine-36	6.500E-06	0.00
4.	Manganese-54	3.007E+00	4.43
5.	Iron-55	1.066E+01	15.69
6.	Cobalt-57	3.283E-01	0.48
7.	Cobalt-58	7.030E+00	10.35
8.	Cobalt-60	2.004E+01	29.49
9.	Nickel-59	3.050E-01	0.45
10.	Nickel-63	2.564E+01	37.73
11.	Zinc-65	3.873E-01	0.57
12.	Strontium-85	6.710E-12	0.00
13.	Strontium-89	3.386E-03	0.00
14.	Strontium-90	1.718E-03	0.00
15.	Yttrium-88	1.370E-09	0.00
16.	Yttrium-90	6.140E-28	0.00
17.	Technicium-99	1.650E-07	0.00
18.	Cadmium-109	4.520E-06	0.00
19.	Tin-113	1.140E-09	0.00
20.	Antimony-125	9.250E-03	0.01
21.	Cesium-134	4.550E-04	0.00
22.	Cesium-137	2.498E-01	0.37
23.	Barium-133	4.417E-07	0.00
24.	Cerium-139	2.250E-09	0.00
25.	Cerium-144	2.258E-01	0.33
26.	Europium-152	3.513E-07	0.00
27.	Mercury-203	5.060E-14	0.00
28.	Lead-210	5.027E-05	0.00
29.	Plutonium-238	2.123E-05	0.00
30.	Plutonium-239	4.339E-06	0.00
31.	Plutonium-240	4.339E-06	0.00
32.	Plutonium-241	9.909E-03	0.01
33.	Americium-241	1.840E-05	0.00
34.	Curium-243	1.572E-05	0.00
35.	Curium-244	1.570E-05	0.00

SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

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

		Curies	Percent
1.	Hydrogen-3	5.379E-03	0.51
2.	Carbon-14	2.542E-02	2.40
3.	Manganese-54	1.715E-02	1.62
4.	Iron-55	3.823E-01	36.15
5.	Cobalt-58	1.238E-02	1.17
6.	Cobalt-60	4.443E-01	42.00
7.	Nickel-63	1.364E-01	12.90
8.	Zinc-65	3.626E-03	0.34
9.	Strontium-90	7.288E-04	0.07
10.	Niobium-95	3.578E-03	0.34
11.	Cesium-137	1.987E-02	1.88
12.	Cesium-144	6.629E-03	0.63

c. Irradiated Componets	Curies	Percent
None	N/A	N/A

d. Other: Mechanical Filters	Curies	Percent
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	Type B	Motor Freight	Waste Control Specialists TSD Facility Andrews, TX
1	A-LSA II	Motor Freight	Waste Control Specialists Compact Waste Disposal Facility Andrews, TX

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

Number of Shipments	Type Quantity	Mode of Transportation	Destination
3	A-LSA II	Motor Freight	Energy*Solutions* Processing Facility Oak Ridge, TN
6	A-LSA II	Motor Freight	TOXCO Materials Management Center Oak Ridge, TN
4	A-LSA II	Motor Freight	Veoila ES ALARON WMG Processing Wampum, PA
5	A-LSA II Limited Quantity	Motor Freight	Energy*Solutions* Processing Facility Oak Ridge, TN
4	A-LSA II Limited Quantity	Motor Freight	TOXCO Materials Management Center Oak Ridge, TN
1	Limited Quantity	Motor Freight	TOXCO Materials Management Center Oak Ridge, 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

SQN implemented use of an independent spent fuel storage installation (ISFSI) on July13, 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). CoC 1014 Section 5.4 also provides that the ISFSI operations may be considered part of plant operations for the purposes of the radiological environmental monitoring program.

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

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

Total Body	≤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 SQN ISFSI as part of the SQN 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

JANUARY - DECEMBER 2014

2014
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 dosimeters deployed around SQN as part of the offsite REMP. The quarterly gamma radiation levels determined from these dosimeters during this reporting period averaged approximately 15.75 mrem/quarter at onsite (at or near the site boundary) stations and approximately 14.50 mrem/quarter at offsite stations, or approximately 1.25 mrem/quarter higher at 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 1-3 mrem/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other undetermined influences. Fluctuations in natural background dose rates and in dosimeter 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 dosimeter measurements for the calendar year in question indicate that the highest onsite dosimeter reading was 84 mrem. Using this value, and subtracting an annual background value of 63 mrem/year (from perimeter dosimeters around Sequoyah from Area dosimeter posting data for the year), and multiplying by the ratio of the occupancy times (2000/8760), the external dose was 4.8 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	3.00E-02 mrad	5 mrad	<1	NNE/1300
Beta Air	1.10E-02 mrad	10 mrad	<1	NNE/1300
Submersion				
Total Body	1.29E-02 mrad	10 mrad	<1	SSW/2129/meters
Skin	1.91E-02 mrad	10 mrad	<1	SSW/2129/meters
Organ Doses[1]				
(Max) Child/Bone	6.77E-01 mrem	7.5 mrem	9.03	N/1000/meters
Child/Thyroid	1.89E-01 mrem	7.5 mrem	2.52	N/1000/meters
Child/Total Body	1.89E-01 mrem	7.5 mrem	2.52	N/1000/meters

Population Doses

Total Body Dose 1.81E-01 man-rem
Maximum Organ Dose (organ) 6.71E-01 man-rem (Bone)

Second Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
External				
Gamma Air	4.66E-02 mrad	5 mrad	<1	NNE/1300/meters
Beta Air	2.98E-02mrad	10 mrad	<1	NNE/1300/meters
Submersion				
Total Body	2.43E-02mrad	10 mrad	<1	NNW/864/meters
Skin	4.12E-02 mrad	10 mrad	<1	NNW/864/meters
Organ Doses[1]				
(Max) Child/Bone	7.72E-01 mrem	7.5 mrem	10.3	N/1000/meters
Child/Thyroid	2.12E-01 mrem	7.5 mrem	2.83	N/1000/meters
Child/Total Body	2.12E-01 mrem	7.5 mrem	2.83	N/1000/meters

Population Doses

Total Body Dose 1.41E-01 man-rem
Maximum Organ Dose (organ) 5.75E-01 man-rem (Bone)

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

[1]Organ Doses include contributions from Carbon-14 in the form of Carbon Dioxide.

Tables 3 and 4
Doses from Airborne Effluents

Third Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
External				
Gamma Air	4.63E-04 mrad	5 mrad	<1	NNE/1300/meters
Beta Air	3.17E-04 mrad	10 mrad	<1	NNE/1300/meters
Submersion				
Total Body	3.31E-04 mrad	10 mrad	<1	S/1764/meters
Skin	5.22E-04 mrad	10 mrad	<1	S/1764/meters
Organ Doses[1]				
(Max) Child/Bone	8.85E-01 mrem	7.5 mrem	11.8	S/2000/meters
Child/Thyroid	1.83E-01 mrem	7.5 mrem	2.44	S/2000/meters
Child/Total Body	1.83E-01 mrem	7.5 mrem	2.44	S/2000/meters

Population Doses

Total Body Dose 1.52E-01 man-rem
Maximum Organ Dose (organ) 7.11E-01 man-rem (Bone)

Fourth Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Units
External				
Gamma Air	1.27E-03 mrad	5 mrad	<1	NE/1250/meters
Beta Air	1.75E-03 mrad	10 mrad	<1	NE/1250/meters
Submersion				
Total Body	8.77E-04 mrad	10 mrad	<1	S/1764/meters
Skin	1.59E--03 mrad	10 mrad	<1	S/1764/meters
Organ Doses[1]				
(Max) Child/Bone	9.07E-01 mrem	7.5 mrem	12.1	S/2000/meters
Child/Thyroid	1.85E-01 mrem	7.5 mrem	2.47	S/2000/meters
Child/Total Body	1.85E-01 mrem	7.5 mrem	2.47	S/2000/meters

Population Doses

Total Body Dose 7.07E-01 man-rem
Maximum Organ Dose (organ) 1.46E-01 man-rem (Bone)

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

[1]Organ Doses include contributions from Carbon-14 in the form of Carbon Dioxide.

Tables 5 and 6
Doses from Liquid Effluents

First Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	5.40E-04	1.5 mrem	< 1 %
Child	Liver	5.60E-04	5 mrem	< 1 %
Child	Thyroid	5.40E-04	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 46166

Population Doses

Total Body Dose 5.10E-02 man-rem
Maximum Organ Dose (organ) 5.10E-02 man-rem (GIT, Bone, Thyroid, Liver, Kidney, Lung)

Second Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	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): 14729

Population Doses

Total Body Dose 2.40E-01man-rem
Maximum Organ Dose (organ) 2.40E-01 man-rem (GIT, Bone, Thyroid, Liver Kidney, Lung)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 95,400 man-rem/year (based on 90 mrem/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	1.80E-04	1.5 mrem	< 1 %
Child	Liver	1.80E-04	5 mrem	< 1 %
Child	Thyroid	1.80E-04	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 23852

Population Doses

Total Body Dose 1.60E-02man-rem
Maximum Organ Dose (organ) 1.60E-02 man-rem (GIT, Bone, Thyroid, Liver Kidney, Lung)

Fourth Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	2.90E-04	1.5 mrem	< 1 %
Child	Liver	2.90E-04	5 mrem	< 1 %
Child	Thyroid	2.90E-04	5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 38172

Population Doses

Total Body Dose 2.60E-02 man-rem
Maximum Organ Dose (organ) 2.60E-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	3.00E-02	4.66E-02	4.63E-04	1.27E-03	
Critical organ dose (air)	6.77E-01	7.72E-01	8.85E-01	9.07E-01	
Total body dose (liquid)	5.40E-04	2.80E-03	1.80E-04	2.90E-04	
Maximum organ dose (liquid)	5.40E-04	2.80E-03	1.80E-04	2.90E-04	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
Total	7.08E-01	8.24E-01	8.86E-01	9.09E-01	
Cumulative Total Dose (Total body or any other organ) mrem					3.33E+00
Annual Dose Limit (mrem)					25
Percent of Limit					13.3
Thyroid Dose (mrem)					
Total body air submersion	3.00E-02	4.66E-02	4.63E-04	1.27E-03	
Thyroid dose (airborne)	1.89E-01	2.12E-01	1.85E-01	1.85E-01	
Total body dose (liquid)	5.40E-04	2.80E-03	1.80E-04	2.90E-04	
Thyroid dose (liquid)	5.60E-04	2.80E-03	1.80E-04	2.90E-04	
Direct Radiation Dose	0.00E-00	0.00E-00	0.00E-00	0.00E-00	
Total	2.20E-01	2.64E-01	1.86E-01	1.87E-01	
Cumulative Total Dose (Thyroid) mrem					8.57E-01
Annual Dose Limit (mrem)					75
Percent of Limit					1.14

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, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.093	0.279	0.419	0.000	0.000	0.000	0.792
NNE	0.000	0.000	0.000	0.233	0.838	0.466	0.000	0.000	0.000	1.537
NE	0.000	0.000	0.000	0.419	0.699	0.279	0.000	0.000	0.000	1.397
ENE	0.000	0.000	0.000	0.186	0.047	0.000	0.000	0.000	0.000	0.233
E	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
ESE	0.000	0.000	0.000	0.093	0.047	0.000	0.000	0.000	0.000	0.140
SE	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.093
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	0.140	0.000	0.000	0.000	0.140
SSW	0.000	0.000	0.000	0.000	0.186	0.373	0.000	0.000	0.000	0.559
SW	0.000	0.000	0.000	0.047	0.093	0.047	0.000	0.000	0.000	0.186
WSW	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.093
W	0.000	0.000	0.000	0.047	0.093	0.140	0.000	0.000	0.000	0.279
WNW	0.000	0.000	0.000	0.000	0.047	0.140	0.000	0.000	0.000	0.186
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	0.047	0.000	0.140	0.000	0.000	0.000	0.186
SUBTOTAL	0.000	0.000	0.000	1.304	2.422	2.329	0.000	0.000	0.000	6.055

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS A	130
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	130
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 7.06

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, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.047	0.047	0.373	0.000	0.000	0.000	0.466
NNE	0.000	0.000	0.000	0.186	0.279	0.093	0.000	0.000	0.000	0.559
NE	0.000	0.000	0.093	0.093	0.140	0.047	0.000	0.000	0.000	0.373
ENE	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
E	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
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	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.047	0.000	0.000	0.047	0.000	0.000	0.000	0.093
SSW	0.000	0.000	0.000	0.047	0.419	0.373	0.000	0.000	0.000	0.838
SW	0.000	0.000	0.000	0.047	0.093	0.093	0.000	0.000	0.000	0.233
WSW	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.093
W	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.093
WNW	0.000	0.000	0.000	0.000	0.047	0.093	0.047	0.000	0.000	0.186
NW	0.000	0.000	0.000	0.000	0.047	0.140	0.047	0.000	0.000	0.233
NNW	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.093
SUBTOTAL	0.000	0.000	0.140	0.652	1.164	1.444	0.093	0.000	0.000	3.493

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS B	75
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	75
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 7.14

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, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.000	0.093	0.279	0.186	0.000	0.000	0.000	0.559
NNE	0.000	0.000	0.140	0.140	0.419	0.233	0.000	0.000	0.000	0.932
NE	0.000	0.000	0.233	0.233	0.047	0.186	0.000	0.000	0.000	0.699
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	0.093	0.000	0.000	0.000	0.000	0.000	0.140
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	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SSE	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.093
S	0.000	0.000	0.000	0.140	0.047	0.047	0.000	0.000	0.000	0.233
SSW	0.000	0.000	0.000	0.326	0.652	0.093	0.000	0.000	0.000	1.071
SW	0.000	0.000	0.000	0.466	0.699	0.093	0.000	0.000	0.000	1.258
WSW	0.000	0.000	0.047	0.000	0.000	0.047	0.000	0.000	0.000	0.093
W	0.000	0.000	0.000	0.093	0.047	0.047	0.000	0.000	0.000	0.186
WNW	0.000	0.000	0.047	0.047	0.000	0.000	0.093	0.000	0.000	0.186
NW	0.000	0.000	0.000	0.093	0.000	0.279	0.047	0.000	0.000	0.419
NNW	0.000	0.000	0.000	0.000	0.140	0.233	0.000	0.000	0.000	0.373
SUBTOTAL	0.000	0.000	0.605	1.770	2.329	1.444	0.140	0.000	0.000	6.288

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS C	135
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	135
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 6.38

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JAN 1, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.559	1.118	1.444	2.329	0.000	0.000	0.000	5.449
NNE	0.000	0.047	0.978	2.422	2.608	3.074	0.000	0.000	0.000	9.129
NE	0.000	0.186	0.745	0.512	0.186	0.233	0.000	0.000	0.000	1.863
ENE	0.000	0.093	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.233
E	0.000	0.000	0.279	0.047	0.000	0.000	0.000	0.000	0.000	0.326
ESE	0.000	0.000	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.186
SE	0.000	0.047	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.186
SSE	0.000	0.000	0.233	0.000	0.047	0.047	0.000	0.000	0.000	0.326
S	0.000	0.000	0.373	0.326	0.326	0.512	0.000	0.000	0.000	1.537
SSW	0.000	0.093	0.978	2.375	1.584	1.071	0.000	0.000	0.000	6.102
SW	0.000	0.000	0.745	2.375	1.211	0.140	0.000	0.000	0.000	4.471
WSW	0.000	0.000	0.093	0.093	0.093	0.093	0.000	0.000	0.000	0.373
W	0.000	0.093	0.093	0.233	0.093	0.093	0.000	0.000	0.000	0.605
WNW	0.000	0.000	0.000	0.279	0.233	0.419	0.000	0.000	0.000	0.932
NW	0.000	0.000	0.047	0.373	0.745	1.397	0.000	0.000	0.000	2.562
NNW	0.000	0.093	0.233	0.140	0.652	1.816	0.047	0.000	0.000	2.981
SUBTOTAL	0.000	0.652	5.822	10.293	9.222	11.225	0.047	0.000	0.000	37.261

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS D	800
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	800
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 5.96

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, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.047	2.096	1.211	0.512	0.093	0.000	0.000	0.000	3.959
NNE	0.000	0.093	2.748	2.236	0.326	0.093	0.000	0.000	0.000	5.496
NE	0.000	0.140	0.932	0.140	0.047	0.000	0.000	0.000	0.000	1.258
ENE	0.000	0.093	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.140
E	0.000	0.047	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.233
ESE	0.000	0.140	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.233
SE	0.000	0.000	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.186
SSE	0.000	0.093	0.466	0.047	0.000	0.047	0.000	0.000	0.000	0.652
S	0.000	0.186	1.258	0.605	0.326	0.279	0.000	0.000	0.000	2.655
SSW	0.000	0.093	2.329	2.049	1.490	0.233	0.000	0.000	0.000	6.195
SW	0.000	0.093	1.723	0.792	0.279	0.140	0.000	0.000	0.000	3.027
WSW	0.000	0.233	0.186	0.140	0.047	0.000	0.000	0.000	0.000	0.605
W	0.000	0.093	0.419	0.186	0.093	0.093	0.000	0.000	0.000	0.885
WNW	0.000	0.093	0.233	0.140	0.047	0.000	0.000	0.000	0.000	0.512
NW	0.000	0.047	0.605	0.373	0.419	0.000	0.000	0.000	0.000	1.444
NNW	0.000	0.093	0.745	0.885	0.047	0.093	0.000	0.000	0.000	1.863
SUBTOTAL	0.000	1.584	14.252	8.803	3.633	1.071	0.000	0.000	0.000	29.343

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS E	630
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	630
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 3.67

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, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.047	0.745	0.047	0.000	0.000	0.000	0.000	0.000	0.838
NNE	0.000	0.093	2.049	0.279	0.000	0.000	0.000	0.000	0.000	2.422
NE	0.000	0.093	1.025	0.093	0.000	0.000	0.000	0.000	0.000	1.211
ENE	0.000	0.093	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.186
E	0.000	0.186	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.373
ESE	0.000	0.047	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.140
SE	0.000	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.140
SSE	0.000	0.326	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.373
S	0.000	0.140	0.792	0.000	0.000	0.000	0.000	0.000	0.000	0.932
SSW	0.000	0.279	1.910	0.093	0.047	0.000	0.000	0.000	0.000	2.329
SW	0.000	0.186	1.211	0.466	0.093	0.000	0.000	0.000	0.000	1.956
WSW	0.000	0.000	0.373	0.047	0.000	0.000	0.000	0.000	0.000	0.419
W	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.093
WNW	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.093
NW	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.093
NNW	0.000	0.047	0.233	0.000	0.000	0.000	0.000	0.000	0.000	0.279
SUBTOTAL	0.000	1.723	8.943	1.071	0.140	0.000	0.000	0.000	0.000	11.877

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS F	255
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	255
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 2.32

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, 2014 - MAR 31, 2014

WIND DIRECTION	WIND SPEED (MPH) CALM	0.6-1.4	1.5-3.4	3.5-5.4	5.5-7.4	7.5-12.4	12.5-18.4	18.5-24.4	>=24.5	TOTAL
N	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.093
NNE	0.000	0.047	0.792	0.000	0.000	0.000	0.000	0.000	0.000	0.838
NE	0.000	0.047	0.512	0.000	0.000	0.000	0.000	0.000	0.000	0.559
ENE	0.000	0.186	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.373
E	0.000	0.140	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.233
ESE	0.000	0.140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.140
SE	0.000	0.186	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.279
SSE	0.000	0.093	0.233	0.000	0.000	0.000	0.000	0.000	0.000	0.326
S	0.000	0.279	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.559
SSW	0.000	0.047	0.885	0.140	0.000	0.000	0.000	0.000	0.000	1.071
SW	0.000	0.000	0.978	0.047	0.000	0.000	0.000	0.000	0.000	1.025
WSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
W	0.000	0.047	0.000	0.000	0.000	0.000	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	0.047	0.000	0.000	0.000	0.000	0.000	0.047
NNW	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SUBTOTAL	0.000	1.258	4.145	0.279	0.000	0.000	0.000	0.000	0.000	5.682

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2147
TOTAL HOURS OF STABILITY CLASS G	122
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	122
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2147
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/05/07

MEAN WIND SPEED = 2.10

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERSJOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.000	0.000	0.092	0.276	0.000	0.000	0.000	0.368
NNE	0.000	0.000	0.046	0.368	0.368	0.276	0.000	0.000	0.000	1.058
NE	0.000	0.000	0.138	0.138	0.414	0.138	0.000	0.000	0.000	0.828
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.184
S	0.000	0.000	0.000	0.092	0.414	0.322	0.000	0.000	0.000	0.828
SSW	0.000	0.000	0.046	0.276	0.920	0.414	0.000	0.000	0.000	1.656
SW	0.000	0.000	0.000	0.368	0.414	0.092	0.000	0.000	0.000	0.874
WSW	0.000	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.138
W	0.000	0.000	0.046	0.092	0.046	0.046	0.000	0.000	0.000	0.230
WNW	0.000	0.000	0.000	0.046	0.046	0.046	0.000	0.000	0.000	0.138
NW	0.000	0.000	0.000	0.046	0.138	0.000	0.000	0.000	0.000	0.184
NNW	0.000	0.000	0.000	0.000	0.138	0.138	0.000	0.000	0.000	0.276
SUBTOTAL	0.000	0.000	0.322	1.518	3.220	1.748	0.000	0.000	0.000	6.808

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174
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 2174
TOTAL HOURS CALM 0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 6.46

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED (MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.046	0.000	0.092	0.092	0.000	0.000	0.000	0.230
NNE	0.000	0.000	0.184	0.276	0.138	0.046	0.000	0.000	0.000	0.644
NE	0.000	0.000	0.230	0.184	0.046	0.000	0.000	0.000	0.000	0.460
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.046	0.138	0.322	0.046	0.000	0.000	0.000	0.552
SSW	0.000	0.000	0.092	1.196	1.104	0.322	0.000	0.000	0.000	2.714
SW	0.000	0.000	0.046	0.874	0.230	0.000	0.000	0.000	0.000	1.150
WSW	0.000	0.000	0.000	0.046	0.138	0.000	0.000	0.000	0.000	0.184
W	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.092
WNW	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
NW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	0.000	0.644	2.944	2.162	0.552	0.000	0.000	0.000	6.302

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2174
TOTAL HOURS OF STABILITY CLASS B	137
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	137
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2174
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 5.33

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.092	0.046	0.046	0.046	0.000	0.000	0.000	0.230
NNE	0.000	0.000	0.184	0.184	0.092	0.046	0.000	0.000	0.000	0.506
NE	0.000	0.000	0.276	0.092	0.046	0.000	0.000	0.000	0.000	0.414
ENE	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
E	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.092	0.138	0.000	0.000	0.000	0.000	0.000	0.230
SSE	0.000	0.000	0.092	0.046	0.000	0.092	0.000	0.000	0.000	0.230
S	0.000	0.000	0.092	0.322	0.184	0.230	0.000	0.000	0.000	0.828
SSW	0.000	0.000	0.184	1.702	0.736	0.184	0.000	0.000	0.000	2.806
SW	0.000	0.000	0.276	0.966	0.414	0.138	0.000	0.000	0.000	1.794
WSW	0.000	0.000	0.000	0.184	0.046	0.046	0.000	0.000	0.000	0.276
W	0.000	0.000	0.046	0.092	0.046	0.092	0.000	0.000	0.000	0.276
WNW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
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	1.472	3.818	1.702	0.966	0.000	0.000	0.000	7.958

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174
TOTAL HOURS OF STABILITY CLASS C 173
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 173
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174
TOTAL HOURS CALM 0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 5.07

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.046	0.966	0.460	0.230	0.092	0.000	0.000	0.000	1.794
NNE	0.000	0.046	0.460	1.150	0.782	0.276	0.000	0.000	0.000	2.714
NE	0.000	0.000	0.920	0.276	0.184	0.092	0.000	0.000	0.000	1.472
ENE	0.000	0.046	0.414	0.000	0.000	0.000	0.000	0.000	0.000	0.460
E	0.000	0.000	0.184	0.092	0.000	0.000	0.000	0.000	0.000	0.276
ESE	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.184
SE	0.000	0.092	0.276	0.046	0.000	0.000	0.000	0.000	0.000	0.414
SSE	0.000	0.046	0.966	0.322	0.184	0.046	0.000	0.000	0.000	1.564
S	0.000	0.046	2.392	2.806	1.334	0.506	0.046	0.000	0.000	7.130
SSW	0.000	0.046	3.634	3.588	1.334	0.598	0.000	0.000	0.000	9.200
SW	0.000	0.000	1.380	1.196	0.874	0.184	0.000	0.000	0.000	3.634
WSW	0.000	0.046	0.322	0.506	0.276	0.092	0.000	0.000	0.000	1.242
W	0.000	0.138	0.138	0.322	0.138	0.046	0.000	0.000	0.000	0.782
WNW	0.000	0.000	0.184	0.368	0.092	0.000	0.000	0.000	0.000	0.644
NW	0.000	0.000	0.046	0.368	0.138	0.000	0.000	0.000	0.000	0.552
NNW	0.000	0.046	0.138	0.322	0.322	0.000	0.000	0.000	0.000	0.828
SUBTOTAL	0.000	0.598	12.603	11.822	5.888	1.932	0.046	0.000	0.000	32.889

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2174
TOTAL HOURS OF STABILITY CLASS D 715
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 715
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2174
TOTAL HOURS CALM 0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 4.24

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED (MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.414	2.162	0.598	0.184	0.000	0.000	0.000	0.000	3.358
NNE	0.000	0.230	2.944	0.920	0.000	0.000	0.000	0.000	0.000	4.094
NE	0.000	0.138	0.506	0.092	0.000	0.000	0.000	0.000	0.000	0.736
ENE	0.000	0.230	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.276
E	0.000	0.138	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.184
ESE	0.000	0.092	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.276
SE	0.000	0.138	0.368	0.046	0.000	0.000	0.000	0.000	0.000	0.552
SSE	0.000	0.230	0.874	0.092	0.092	0.092	0.000	0.000	0.000	1.380
S	0.000	0.276	2.024	0.690	0.506	0.184	0.000	0.000	0.000	3.680
SSW	0.000	0.276	3.496	1.104	0.276	0.046	0.000	0.000	0.000	5.198
SW	0.000	0.690	3.082	0.920	0.138	0.000	0.000	0.000	0.000	4.830
WSW	0.000	0.368	1.334	0.368	0.000	0.000	0.000	0.000	0.000	2.070
W	0.000	0.322	0.782	0.322	0.000	0.000	0.000	0.000	0.000	1.426
WNW	0.000	0.092	0.322	0.000	0.092	0.000	0.000	0.000	0.000	0.506
NW	0.000	0.276	0.506	0.368	0.046	0.000	0.000	0.000	0.000	1.196
NNW	0.000	0.230	1.196	0.368	0.000	0.000	0.000	0.000	0.000	1.794
SUBTOTAL	0.000	4.140	19.779	5.980	1.334	0.322	0.000	0.000	0.000	31.555

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2174
TOTAL HOURS OF STABILITY CLASS E	686
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	686
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2174
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 2.75

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.230	0.966	0.000	0.000	0.000	0.000	0.000	0.000	1.196
NNE	0.000	0.138	2.622	0.092	0.000	0.000	0.000	0.000	0.000	2.852
NE	0.000	0.276	0.598	0.000	0.000	0.000	0.000	0.000	0.000	0.874
ENE	0.000	0.092	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.230
E	0.000	0.322	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.368
ESE	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.230	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.276
SSE	0.000	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.230
S	0.000	0.184	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.552
SSW	0.000	0.230	1.012	0.138	0.000	0.000	0.000	0.000	0.000	1.380
SW	0.000	0.230	1.058	0.092	0.000	0.000	0.000	0.000	0.000	1.380
WSW	0.000	0.046	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.414
W	0.000	0.000	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.230
WNW	0.000	0.046	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.276
NW	0.000	0.046	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.230
NNW	0.000	0.046	0.276	0.092	0.000	0.000	0.000	0.000	0.000	0.414
SUBTOTAL	0.000	2.300	8.096	0.552	0.000	0.000	0.000	0.000	0.000	10.948

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2174
TOTAL HOURS OF STABILITY CLASS F	238
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	238
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2174
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 2.04

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2014 - JUN 30, 2014

WIND DIRECTION	WIND SPEED (MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.368
NE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ENE	0.000	0.138	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.276
E	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.184
ESE	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.184
SE	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SSE	0.000	0.230	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.322
S	0.000	0.046	0.414	0.000	0.000	0.000	0.000	0.000	0.000	0.460
SSW	0.000	0.138	0.874	0.000	0.000	0.000	0.000	0.000	0.000	1.012
SW	0.000	0.000	0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.506
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	0.000	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	1.012	2.438	0.092	0.000	0.000	0.000	0.000	0.000	3.542

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2174
TOTAL HOURS OF STABILITY CLASS G	77
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	77
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2174
TOTAL HOURS CALM	0

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

DATE PRINTED: 2014/07/30

MEAN WIND SPEED = 1.99

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, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.276	0.046	0.138	0.000	0.000	0.000	0.000	0.460
NNE	0.000	0.000	0.460	1.841	0.966	0.414	0.000	0.000	0.000	3.682
NE	0.000	0.000	0.506	0.414	0.230	0.000	0.000	0.000	0.000	1.150
ENE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.138	0.046	0.000	0.000	0.000	0.184
SW	0.000	0.000	0.000	0.092	0.046	0.046	0.000	0.000	0.000	0.184
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	0.000	1.427	2.485	1.519	0.506	0.000	0.000	0.000	5.936

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2173
TOTAL HOURS OF STABILITY CLASS A	129
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	129
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
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: 2014/10/28

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.046	0.046	0.092	0.000	0.000	0.000	0.000	0.184
NNE	0.000	0.000	0.184	0.506	0.506	0.092	0.000	0.000	0.000	1.289
NE	0.000	0.000	0.322	0.092	0.000	0.000	0.000	0.000	0.000	0.414
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	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.138
ESE	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SSW	0.000	0.000	0.046	0.644	0.184	0.000	0.000	0.000	0.000	0.874
SW	0.000	0.000	0.092	0.552	0.092	0.000	0.000	0.000	0.000	0.736
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	0.000	1.012	1.933	0.874	0.092	0.000	0.000	0.000	3.912

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2173
TOTAL HOURS OF STABILITY CLASS B 85
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 85
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2173
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: 2014/10/28

MEAN WIND SPEED = 4.49

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, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.230	0.276	0.138	0.000	0.000	0.000	0.000	0.644
NNE	0.000	0.000	0.184	0.552	0.322	0.000	0.000	0.000	0.000	1.058
NE	0.000	0.000	0.506	0.276	0.046	0.000	0.000	0.000	0.000	0.828
ENE	0.000	0.000	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.230
E	0.000	0.000	0.322	0.046	0.000	0.000	0.000	0.000	0.000	0.368
ESE	0.000	0.000	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.230
SE	0.000	0.000	0.046	0.046	0.046	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.000	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.184
S	0.000	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.184
SSW	0.000	0.000	0.092	1.104	0.552	0.000	0.000	0.000	0.000	1.749
SW	0.000	0.000	0.414	0.552	0.184	0.000	0.000	0.000	0.000	1.150
WSW	0.000	0.000	0.184	0.092	0.000	0.000	0.000	0.000	0.000	0.276
W	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
WNW	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
NW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.046	0.092	0.092	0.000	0.000	0.000	0.000	0.230
SUBTOTAL	0.000	0.000	2.623	3.497	1.381	0.000	0.000	0.000	0.000	7.501

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2173
TOTAL HOURS OF STABILITY CLASS C	163
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	163
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
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: 2014/10/28

MEAN WIND SPEED = 4.13

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, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.046	1.058	0.966	0.736	0.000	0.000	0.000	0.000	2.807
NNE	0.000	0.000	1.243	2.531	1.150	0.276	0.000	0.000	0.000	5.200
NE	0.000	0.000	0.828	0.230	0.000	0.000	0.000	0.000	0.000	1.058
ENE	0.000	0.000	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.184
E	0.000	0.000	0.276	0.138	0.000	0.000	0.000	0.000	0.000	0.414
ESE	0.000	0.046	0.414	0.000	0.000	0.000	0.000	0.000	0.000	0.460
SE	0.000	0.046	0.644	0.184	0.000	0.000	0.000	0.000	0.000	0.874
SSE	0.000	0.000	0.920	0.368	0.092	0.000	0.000	0.000	0.000	1.381
S	0.000	0.046	3.037	2.255	0.322	0.000	0.000	0.000	0.000	5.660
SSW	0.000	0.046	3.728	4.924	0.644	0.000	0.000	0.000	0.000	9.342
SW	0.000	0.138	1.381	1.197	0.874	0.276	0.000	0.000	0.000	3.866
WSW	0.000	0.138	0.598	0.184	0.046	0.000	0.000	0.000	0.000	0.966
W	0.000	0.000	0.414	0.230	0.000	0.000	0.000	0.000	0.000	0.644
WNW	0.000	0.000	0.276	0.276	0.000	0.000	0.000	0.000	0.000	0.552
NW	0.000	0.092	0.184	0.092	0.000	0.046	0.000	0.000	0.000	0.414
NNW	0.000	0.000	0.506	0.368	0.506	0.000	0.000	0.000	0.000	1.381
SUBTOTAL	0.000	0.598	15.647	13.990	4.372	0.598	0.000	0.000	0.000	35.205

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2173
TOTAL HOURS OF STABILITY CLASS D 765
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 765
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2173
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: 2014/10/28

MEAN WIND SPEED = 3.76

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.552	4.786	1.381	0.000	0.000	0.000	0.000	0.000	6.719
NNE	0.000	0.736	2.715	1.749	0.138	0.000	0.000	0.000	0.000	5.338
NE	0.000	0.506	0.460	0.046	0.000	0.000	0.000	0.000	0.000	1.012
ENE	0.000	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.184
E	0.000	0.230	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.368
ESE	0.000	0.322	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.368
SE	0.000	0.368	0.598	0.000	0.000	0.000	0.000	0.000	0.000	0.966
SSE	0.000	0.276	0.552	0.000	0.000	0.000	0.000	0.000	0.000	0.828
S	0.000	0.690	1.749	0.230	0.046	0.000	0.000	0.000	0.000	2.715
SSW	0.000	0.644	2.669	0.322	0.000	0.000	0.000	0.000	0.000	3.636
SW	0.000	0.276	3.636	0.736	0.184	0.138	0.000	0.000	0.000	4.970
WSW	0.000	0.552	1.887	0.184	0.092	0.000	0.000	0.000	0.000	2.715
W	0.000	0.690	1.335	0.092	0.000	0.000	0.000	0.000	0.000	2.117
WNW	0.000	0.092	1.104	0.000	0.000	0.000	0.000	0.000	0.000	1.197
NW	0.000	0.184	0.552	0.046	0.000	0.000	0.000	0.000	0.000	0.782
NNW	0.000	0.092	1.841	0.414	0.046	0.000	0.000	0.000	0.000	2.393
SUBTOTAL	0.000	6.351	24.068	5.246	0.506	0.138	0.000	0.000	0.000	36.309

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2173
TOTAL HOURS OF STABILITY CLASS E	789
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	789
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
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: 2014/10/28

MEAN WIND SPEED = 2.40

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JUL 1, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.230	2.623	0.644	0.000	0.000	0.000	0.000	0.000	3.497
NNE	0.000	0.690	2.577	0.230	0.000	0.000	0.000	0.000	0.000	3.497
NE	0.000	0.322	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.414
ENE	0.000	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.230
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SE	0.000	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.276	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.368
S	0.000	0.092	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.460
SSW	0.000	0.092	0.322	0.000	0.000	0.000	0.000	0.000	0.000	0.414
SW	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
WSW	0.000	0.000	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.276
W	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.092
WNW	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
NW	0.000	0.000	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.230
NNW	0.000	0.046	0.644	0.138	0.046	0.000	0.000	0.000	0.000	0.874
SUBTOTAL	0.000	2.255	7.501	1.012	0.046	0.000	0.000	0.000	0.000	10.815

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2173
TOTAL HOURS OF STABILITY CLASS F	235
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	235
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
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: 2014/10/28

MEAN WIND SPEED = 2.12

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, 2014 - SEP 30, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
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	0.092	0.000	0.000	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	0.138	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.322

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2173
TOTAL HOURS OF STABILITY CLASS G	7
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	7
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2173
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: 2014/10/28

MEAN WIND SPEED = 2.30

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.045	0.091	0.363	0.091	0.000	0.000	0.000	0.590
NNE	0.000	0.000	0.045	0.545	1.135	0.590	0.000	0.000	0.000	2.316
NE	0.000	0.000	0.136	0.545	0.091	0.136	0.000	0.000	0.000	0.908
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	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.136
ESE	0.000	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.091
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	0.045	0.000	0.000	0.000	0.045
S	0.000	0.000	0.045	0.045	0.000	0.045	0.000	0.000	0.000	0.136
SSW	0.000	0.000	0.045	0.136	0.363	0.000	0.000	0.000	0.000	0.545
SW	0.000	0.000	0.000	0.590	0.272	0.091	0.000	0.000	0.000	0.954
WSW	0.000	0.000	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.091
W	0.000	0.000	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.182
WNW	0.000	0.000	0.000	0.000	0.091	0.045	0.000	0.000	0.000	0.136
NW	0.000	0.000	0.000	0.091	0.227	0.000	0.000	0.000	0.000	0.318
NNW	0.000	0.000	0.000	0.136	0.136	0.045	0.000	0.000	0.000	0.318
SUBTOTAL	0.000	0.000	0.500	2.271	2.952	1.090	0.000	0.000	0.000	6.812

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS A	150
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	150
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2202
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: 2015/01/09

MEAN WIND SPEED = 5.95

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.045	0.091	0.136	0.045	0.000	0.000	0.000	0.318
NNE	0.000	0.000	0.045	0.227	0.363	0.182	0.000	0.000	0.000	0.817
NE	0.000	0.000	0.091	0.227	0.000	0.000	0.000	0.000	0.000	0.318
ENE	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.136
SSW	0.000	0.000	0.091	0.454	0.409	0.045	0.000	0.000	0.000	0.999
SW	0.000	0.000	0.045	0.454	0.318	0.136	0.000	0.000	0.000	0.954
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	0.045	0.000	0.000	0.000	0.000	0.045
WNW	0.000	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.000	0.091
NW	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NNW	0.000	0.000	0.000	0.045	0.136	0.045	0.000	0.000	0.000	0.227
SUBTOTAL	0.000	0.045	0.500	1.680	1.453	0.500	0.000	0.000	0.000	4.178

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS B	92
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	92
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2202
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: 2015/01/09

MEAN WIND SPEED = 5.34

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED (MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.000	0.091	0.272	0.136	0.000	0.000	0.000	0.500
NNE	0.000	0.000	0.091	0.227	0.272	0.136	0.000	0.000	0.000	0.727
NE	0.000	0.000	0.182	0.091	0.091	0.000	0.000	0.000	0.000	0.363
ENE	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.182
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	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SSE	0.000	0.000	0.000	0.000	0.045	0.091	0.000	0.000	0.000	0.136
S	0.000	0.000	0.091	0.136	0.045	0.045	0.000	0.000	0.000	0.318
SSW	0.000	0.000	0.182	0.590	0.182	0.000	0.000	0.000	0.000	0.954
SW	0.000	0.000	0.227	0.363	0.227	0.045	0.000	0.000	0.000	0.863
WSW	0.000	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.091
W	0.000	0.000	0.000	0.045	0.045	0.091	0.000	0.000	0.000	0.182
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	0.091	0.000	0.000	0.000	0.000	0.091
NNW	0.000	0.000	0.091	0.000	0.272	0.182	0.000	0.000	0.000	0.545
SUBTOTAL	0.000	0.000	1.135	1.635	1.544	0.727	0.000	0.000	0.000	5.041

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2202
TOTAL HOURS OF STABILITY CLASS C 111
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 111
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2202
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: 2015/01/09

MEAN WIND SPEED = 5.37

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	1.135	1.135	2.225	1.635	0.000	0.000	0.000	6.131
NNE	0.000	0.045	1.362	2.407	1.953	1.680	0.000	0.000	0.000	7.448
NE	0.000	0.045	0.545	0.136	0.045	0.045	0.000	0.000	0.000	0.817
ENE	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.136
E	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SE	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.227
SSE	0.000	0.045	0.045	0.000	0.000	0.045	0.000	0.000	0.000	0.136
S	0.000	0.091	0.363	0.636	0.500	0.227	0.000	0.000	0.000	1.817
SSW	0.000	0.045	1.135	2.770	0.863	0.182	0.000	0.000	0.000	4.995
SW	0.000	0.182	1.726	1.998	0.908	0.409	0.000	0.000	0.000	5.223
WSW	0.000	0.136	0.863	0.681	0.227	0.000	0.000	0.000	0.000	1.907
W	0.000	0.045	0.500	0.545	0.272	0.091	0.000	0.000	0.000	1.453
WNW	0.000	0.045	0.136	0.272	0.363	0.091	0.000	0.000	0.000	0.908
NW	0.000	0.000	0.363	0.227	0.545	0.182	0.000	0.000	0.000	1.317
NNW	0.000	0.000	0.500	0.636	1.317	0.863	0.000	0.000	0.000	3.315
SUBTOTAL	0.000	0.817	9.083	11.444	9.219	5.450	0.000	0.000	0.000	36.013

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2202
TOTAL HOURS OF STABILITY CLASS D 793
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 793
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2202
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: 2015/01/09

MEAN WIND SPEED = 5.09

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.363	3.996	2.089	0.409	0.045	0.000	0.000	0.000	6.903
NNE	0.000	0.227	3.451	2.089	0.863	0.000	0.000	0.000	0.000	6.630
NE	0.000	0.091	0.272	0.045	0.000	0.000	0.000	0.000	0.000	0.409
ENE	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.136
E	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.227
ESE	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SE	0.000	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.136
SSE	0.000	0.091	0.454	0.136	0.000	0.000	0.000	0.000	0.000	0.681
S	0.000	0.227	0.545	0.636	0.091	0.182	0.000	0.000	0.000	1.680
SSW	0.000	0.363	2.316	1.317	0.590	0.272	0.000	0.000	0.000	4.859
SW	0.000	0.182	2.906	1.045	0.227	0.045	0.000	0.000	0.000	4.405
WSW	0.000	0.182	2.134	0.363	0.045	0.000	0.000	0.000	0.000	2.725
W	0.000	0.182	0.590	0.272	0.091	0.045	0.000	0.000	0.000	1.181
WNW	0.000	0.091	0.227	0.045	0.182	0.000	0.000	0.000	0.000	0.545
NW	0.000	0.227	0.727	0.409	0.045	0.000	0.000	0.000	0.000	1.408
NNW	0.000	0.182	1.272	0.454	0.182	0.000	0.000	0.000	0.000	2.089
SUBTOTAL	0.000	2.725	19.119	8.901	2.725	0.590	0.000	0.000	0.000	34.060

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS E	750
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	750
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2202
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: 2015/01/09

MEAN WIND SPEED = 3.22

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.049	0.136	2.861	0.136	0.000	0.000	0.000	0.000	0.000	3.182
NNE	0.055	0.409	2.952	0.227	0.000	0.000	0.000	0.000	0.000	3.643
NE	0.006	0.272	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.369
ENE	0.004	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.231
E	0.001	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.001	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092
SSE	0.001	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
S	0.015	0.545	0.363	0.000	0.000	0.000	0.000	0.000	0.000	0.923
SSW	0.012	0.227	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.738
SW	0.016	0.136	0.863	0.045	0.000	0.000	0.000	0.000	0.000	1.061
WSW	0.007	0.045	0.409	0.000	0.000	0.000	0.000	0.000	0.000	0.462
W	0.005	0.091	0.227	0.045	0.000	0.000	0.000	0.000	0.000	0.368
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.003	0.000	0.182	0.045	0.000	0.000	0.000	0.000	0.000	0.230
NNW	0.007	0.182	0.227	0.272	0.000	0.000	0.000	0.000	0.000	0.688
SUBTOTAL	0.182	2.452	8.674	0.772	0.000	0.000	0.000	0.000	0.000	12.080

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS F	266
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	266
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2202
TOTAL HOURS CALM	4

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

DATE PRINTED: 2015/01/09

MEAN WIND SPEED = 2.14

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, 2014 - DEC 31, 2014

WIND DIRECTION	WIND SPEED(MPH) CALM	0.60-1.40	1.41-3.40	3.41-5.40	5.41-7.40	7.41-12.40	12.41-18.40	18.41-24.40	>=24.41	TOTAL
N	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
NNE	0.000	0.000	0.409	0.000	0.000	0.000	0.000	0.000	0.000	0.409
NE	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
ENE	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
S	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SSW	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.136
SW	0.000	0.136	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.636
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NNW	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SUBTOTAL	0.000	0.545	1.181	0.091	0.000	0.000	0.000	0.000	0.000	1.817

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2202
TOTAL HOURS OF STABILITY CLASS G	40
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	40
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2202
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: 2015/01/09

MEAN WIND SPEED = 2.06

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

Attachment 2.0

Deviations from ODCM Controls/Surveillance Requirements

Date	ODCM Requirement	Description of Deviation
April 30, 2014	1/2.1.2 Table 1.1-2 ,	During performance of 0-SO-30-3 for placing 'B' Train Purge to lower containment found 2-RM-90-130/131 aligned to 'A' Train Purge. This was noted as the night before 'B' Train Purge was shut down due to the Tornado Warning. After research it was determined that 'A' Train Purge had not been in-service since 4/8/14. The procedure in the open procedures book contained an open procedure dated 3/31/14 that had swapped 2-RM-90-130/131 to 'A' Train. Since 4/8/14 'B' Train Purge has been stopped and restarted 3 times. 2-SO-90-2 section 8.5 was immediately performed prior to placing 'B' Train Purge in-service to swap 2-RM-90-130/131 from 'A' to 'B' to both get them aligned properly and to verify that indeed the rad monitors were aligned to 'A' Train. PER 878321
May 7,2014	1/2.2 Table 1.1-2 item 3.band	1-R-90-400 is inoperable and there is a compensatory sampler monitoring the U1 Shield Bld. Stack iaw the Offsite Dose Calculation Manual . On May 7 at 0241 Operations transferred Turbine Bld. Lighting Boards 1 and 2 from alternate to normal supply iaw 0-SO-201-13. U1 was purging containment. Chemistry went out to U1 Sping Room to perform 4 hour compensatory flow check on the temporary sampler. Chemistry discovered the temporary was not running. Chemistry informed the Shift Mgr and Purge was secured. The release was monitored with the Purge Monitors. This event will be included in the 2014 Radiological Effluent Report as an ODCM deviation Table 1.1-2 Action 45.

Attachment 3.0

Radiation Monitors Inoperable for Greater than 30 days

Date	Description of Inoperability
June 11, 2012	Unit 1 Shield Building Exhaust System Radiation Monitor, 1-RM-90-400 was declared inoperable on June 11, 2012 due to inoperable Kurz system. It was removed from service to replace sampling pumps. The Kurz system allows Monitor operation in the mid and high ranges. The Monitor still maintains low range detection functions. The ADAM microprocessor failed. It has not been returned to operability.
March 31, 2014	ERCW Radiation Monitor 0-RM-90-134/141 was declared in-operable due to a failed pump. The pump was replaced and the monitor was returned to service May 12, 2014.

ADDENDUM 1

Sequoyah sewage sample collected October 17, 2013 had detectable tritium in the sample. The sample had 3.19 E-06 uCi/ml. The follow up sample collected November 1, 2013 showed a tritium concentration of 2.88E-06 uCi/ml. There were no other indications of a positive tritium value detected. The samples were analyzed for HTD's. The HTD's analyses were less than the LLD's.

Third Quarter

Individual Doses (mrem)

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	5.80E-06	1.5 mrem	< 1 %
Child	Liver	5.80E-06	5 mrem	< 1 %
Child	Thyroid	5.80E-06	5 mrem	< 1 %

Population Doses

Total Body Dose	5.20E-04man-rem
Maximum Organ Dose (organ)	5.20E-04 man-rem (GIT)