



Sequoyah Nuclear Plant, Post Office Box 2000, Soddy Daisy, Tennessee 37384

April 27, 2021

10 CFR 50.4
10 CFR 50.36a
10 CFR 50, Appendix I

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

Sequoyah Nuclear Plant, Units 1 and 2
Renewed 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 2020 Monitoring Period


Enclosed is the Annual Radioactive Effluent Release Report (ARERR) for the period of January 1 to December 31, 2020. This report (enclosure) is being submitted in accordance with the respective Sequoyah Nuclear Plant (SQN), Units 1 and 2, Technical Specification (TS) 5.6.2 and Certificate of Compliance for Spent Fuel Storage Casks Nos. 1014 and 1032, Chapter 5.

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 in the report. 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 Mr. Jeffrey Sowa at (423) 843-8129.

Respectfully,

Marshall,
Thomas B.

 Digitally signed by Marshall,
Thomas B.
Date: 2021.04.27 11:27:45 -04'00'

Thomas Marshall
Site Vice President
Sequoyah Nuclear Plant

Enclosure: Annual Radioactive Effluent Release Report, Sequoyah Nuclear Plant, January -
December 2020

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cc (Enclosure):

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRR Project Manager - Sequoyah Nuclear Plant

ENCLOSURE

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

SEQUOYAH NUCLEAR PLANT

JANUARY - DECEMBER 2020

Sequoyah Nuclear Power Plant

Tennessee Valley Authority

Annual Radioactive Effluent Release Report

2020



Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report

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I. Introduction

The Annual Radioactive Effluent Release Report covering the operation of both units is submitted pursuant to Sequoyah Nuclear Plant Technical Specification 5.6.2 and Offsite Dose Calculation Manual 5.2.

II. Supplemental Information

A. Regulatory Limits

1. Gaseous Effluents

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:

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.

Iodine-131 (I-131), Iodine-133 (I-133), tritium, and radionuclides in particulate form with half-lives greater than eight days

- Less than or equal to 1500 mrem/year to any organ.

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:

- Less than or equal to 7.5 mrem to any organ during any calendar quarter.
- Less than or equal to 15 mrem to any organ during any calendar year.

Air dose due to noble gases

- 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.
- 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.

2. Liquid Effluents

The annual average concentration of radioactivity released in liquid effluents to unrestricted areas shall be limited to the concentrations specified in Title 10 of the Code of Federal Regulations (CFR), Part 20 (Standards for Protection against Radiation), Appendix B, Table 2, Column 2, for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2.0E-04 microcuries/milliliter ($\mu\text{Ci/ml}$) total activity.

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

B. Limitation on Dose Rate

1. Gaseous Effluents

Concentration limits for gaseous releases are met through compliance with the maximum permissible dose rates for gaseous releases as defined in plant Offsite Dose Calculation Manual (ODCM). (These values are used as applicable limits for gaseous effluents.)

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.

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.

2. Liquid Effluents

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

C. Average Energy

Sequoyah Nuclear Plant'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 rates 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.

D. Measurements & Approximations of Total Radioactivity

Radioactivity measurements performed in support of the Sequoyah Nuclear Plant ODCM meet the Lower Limit of Detection requirements given in ODCM Tables 2.2-1 and 2.2-2.

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1. Gaseous Effluents

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.

Iodines and Particulates in Gaseous Releases:

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 shield and auxiliary building exhausts once per 24 hours for 2 days following startup, shutdown, or a rated thermal power change exceeding 15 percent within one 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.

Carbon-14 in Gaseous Releases:

The Carbon-14 production and effluent source term estimates were based on EPRI methodology provided in EPRI Report 1021106, "Estimation of Carbon-14 in Nuclear Power Plant Gaseous Effluents," dated December 2010. It was determined that 22.6 curies of Carbon-14 is generated annually at Sequoyah Nuclear Plant. However, only 98% is considered released as gas and only the carbon dioxide form (20%) of that is used in the gaseous dose calculations

2. Liquid Effluents

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

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

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

Total gamma isotopic activity 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 3 times a week. In addition to ODCM Table 2.2-1, tritium concentrations are determined 3 times a week, 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.

E. Batch Releases

1. Gaseous

Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
-------	-------------	-------------	-------------	-------------

Gaseous

1. Number of Batch Releases		33	35	31	26
2. Total duration of batch releases	minutes	2.27E+04	4.04E+04	1.88E+04	2.00E+04
3. Maximum batch release duration	minutes	1.22E+03	1.95E+04	1.02E+03	9.11E+02
4. Average batch release duration	minutes	6.87E+02	1.15E+03	6.08E+02	7.68E+02
5. Minimum batch release duration	minutes	1.30E+01	4.10E+01	2.10E+01	5.80E+02

2. Liquid

Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
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Liquids

1. Number of Batch Releases		36	40	30	27
2. Total duration of batch releases	minutes	5.95E+03	6.14E+03	4.73E+03	4.30E+03
3. Maximum batch release duration	minutes	1.95E+02	1.93E+02	1.95E+02	1.85E+02
4. Average batch release duration	minutes	1.65E+02	1.54E+02	1.58E+02	1.59E+02
5. Minimum batch release duration	minutes	1.25E+02	2.50E+01	1.21E+02	6.10E+01

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Release Type: Gaseous (Steam)

Release Point: Unit 2 Pressure Operated Relief Valves (PORV) 1, 2, 3, & 4

Date(s) of Release: 4/12/20 02:15 - 05/02/20 01:06

This evaluation is for the release to the environment that occurred from Unit 2 PORVs 1, 2, 3 and 4 during the U2R23 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 PORVs 1, 2, 3, and 4.
- There have been no gamma emitting radionuclides identified in any Secondary Coolant samples during the previous cycle.

The volume of the steam generator was taken from Westinghouse Guidelines for Secondary Water Chemistry. The listed normal water level value of 3516 ft³ was used as a conservative value. This calculation assumes that the total volume of the 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:

$$3516 \text{ ft}^3/\text{generator} * 2.832\text{E}+04 \text{ ml/ft}^3 * 4 \text{ generators} = 3.983\text{E}+08 \text{ ml}$$

$$3.13\text{E}-06 \text{ } \mu\text{Ci/ml} * 3.983\text{E}+08 \text{ ml} = 1.25\text{E}+03 \text{ } \mu\text{Ci of H3 or } 1.25\text{E}-03 \text{ Ci of H3}$$

The activity of 1.25E-03 Ci was added to the 2nd Quarter section of Table 1-A "Gaseous Effluents - Summation of All Releases" and Table 3-B "Doses from Airborne Effluents - 2nd Quarter."

Individual Doses

Pathway External	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Uni
Gamma Air	0.00E+01 mrad	5 mrad	<1	N/A
Beta Air	0.00E+01 mrad	10 mrad	<1	N/A
Submersion				
Total Body	0.00E+01 mrad	10 mrad	<1	N/A
Skin	0.00E+01 mrad	10 mrad	<1	N/A
Organ Dose				
Child/Thyroid	4.86E-07 mrad	7.5 mrem	<1	WSW/1152/meters
Child/Total Body	4.86E-07 mrad	7.5 mrem	<1	WSW/1152/meters

Population Doses

Total Body Dose 5.73e-06 man-rem

Maximum Organ Dose (organ) 5.73e-06 man-rem (Thyroid, Liver, Bone, GIT, Lung, Kidney)

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Release Type: Gaseous (Steam)

Release Point: Unit 1 PORVs 1, 2, 3, & 4

Date(s) of Release: 5/13/20 01:08 - 05/13/20 11:00

This evaluation is for the release to the environment that occurred from Unit 1 PORVs 1, 2, 3 and 4 during a Forced outage on Unit 1. Right after the Unit trip, the PORVs were opened and closed after the trip response had been completed. 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 PORVs 1, 2, 3, and 4.
- There have been no gamma emitting radionuclides identified in any Secondary Coolant samples during the previous cycle.

The volume of the steam generator was taken from Westinghouse Guidelines for Secondary Water Chemistry. The listed normal water level value of 3516 ft³ was used as a conservative value. This calculation assumes that the total volume of the 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:

$$3516 \text{ ft}^3/\text{generator} * 2.832\text{E}+04 \text{ ml/ft}^3 * 4 \text{ generators} = 3.983\text{E}+08 \text{ ml}$$

$$2.25\text{E}-06 \text{ } \mu\text{Ci/ml} * 3.983\text{E}+08 \text{ ml} = 8.95\text{E}+02 \text{ } \mu\text{Ci of H3 or } 8.95\text{E}-04 \text{ Ci of H3}$$

The activity of 8.95E-04 Ci was added to the 2nd Quarter section of Table 1-A "Gaseous Effluents - Summation of All Releases" and Table 3-B "Doses from Airborne Effluents - 2nd Quarter."

Individual Doses

Pathway External	Dose	Quarterly Limit	Percent of Limit	Location Sector/Distance/Unit
Gamma Air	0.00E+01 mrad	5 mrad	<1	N/A
Beta Air	0.00E+01 mrad	10 mrad	<1	N/A
Submersion				
Total Body	0.00E+01 mrad	10 mrad	<1	N/A
Skin	0.00E+01 mrad	10 mrad	<1	N/A
Organ Dose				
Child/Thyroid	3.48e-07 mrad	7.5 mrem	<1	WSW/1152/meters
Child/Total Body	3.48e-07 mrad	7.5 mrem	<1	WSW/1152/meters

Population Doses

Total Body Dose 4.10e-06 man-rem
Maximum Organ Dose (organ) 4.10e-06 man-rem (Thyroid, Liver, Bone, GIT, Lung, Kidney)

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F. Abnormal Releases

In calendar year 2020, there were no Abnormal gaseous or liquid releases.

G. Non-routine, Planned Discharges

In calendar year 2020 there were no non-routine planned discharges.

H. Radioactive Waste System Treatment Changes

In calendar year 2020, there were no changes to the radwaste system or the process control program.

I. Land Use Census Changes

In calendar year 2020, there were no changes to the land use census.

J. Radiation Monitors Non Functional for Greater than 30 days

Date	Description of Non Functionality
June 20, 2016	Unit 2 Shield Building Exhaust Radiation Monitor: 2-RM-90-400 has been non-functional for greater than 30 days due to DCN D23440. The monitor was declared non-functional 6/20/16 at 09:20 and was declared Functional on 10/31/20 20:15 after successful implementation of DCN D23440. Compensatory sampling has been in place and continued until monitor was returned to functional.
June 25, 2016	Unit 1 Shield Building Exhaust Radiation Monitor:1-RM-90-400 has been non-functional for greater than 30 days due to DCN D23440. The monitor was declared non-functional 6/25/16 at 14:17 and was declared Functional 2/14/20 21:21 after successful implementation of DCN D23440. Compensatory sampling has been in place and continued until monitor was returned to functional status.
June 1, 2020	On 06/01/2020 17:55, Service Building Vent Flow Monitor, 0-F-90-5132A, was found outside of As Found tolerances per 0-SI-IFT-090-5132.0 on 06/01/2020 17:55 and was returned to functional on 09/03/2020 14:20 after successful recalibration. CR 1623286
September 4, 2020	During replacement of Turbine Building Sump (TBS) Discharge piping, temporary Turbine Building Sump pumps were aligned to the Low Volume Waste treatment pond. From 9/4/20 20:54 until 11/12/20 18:22, Turbine Building Sump Radiation Monitor 0-RM-90-212 and Turbine Building Sump Flow meter 0-F-40-3 were nonfunctional to support the TBS Discharge pipe replacement. CR 1686345

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K. Deviations from ODCM Controls/Surveillance Requirements

Date	Description of Deviation
9/12/2020 CR#1637051	<p>On 09/12, Chemistry technician was reviewing older log entries in eSoms and noticed the 0-RM-90-212 eSoms entry stating non-functional and entry into ODCM 1.1.1 Nonconformance C and H that was made on 9/4/20 at 20:54, which would have required compensatory samples to be taken of the Turbine Building Sump on a 1/24 hour frequency, making the first sample due at 9/5/20 20:54. No formal documentation of a notification to chemistry was found in either the Operations Logs or Chemistry logs of the entry into the associated nonconformances.</p> <p>TBS sampling was initiated on 9/12/20 to return to the required compensatory sample frequency. As a result of the missed sample, eSoms LCO Tracker for ODCM samples was implemented to track radiation monitor and ODCM non-conformances and their requisite compensatory actions.</p>

L. Offsite Dose Calculation Manual Changes

In calendar year 2020 there were no changes to the Offsite Dose Calculation Manual.

M. Groundwater Monitoring and Program (NEI 07-07)

Monitoring Wells

Sequoyah Nuclear Plant started investigating 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 29 non-REMP monitoring wells to support monitoring the onsite groundwater plume and for the presence or increase of radioactivity. SQN updated the number of wells in 2019 to better monitor the onsite groundwater. These wells are sampled periodically for tritium. The tritium concentrations obtained in 2020 from these non-REMP wells are listed below. Initial and follow up analyses for the semi-annual sampling procedure indicated no gamma activity.

Additional sampling was performed in 2020 to support high sample results obtained during late 2019 on Wells 47i and 47s. In addition to the increased sampling, an update to the Site Conceptual Model was also completed.

Sample results of > 20,000 pCi/L were obtained during the September, October, November and December 2020 evolutions. During the course of investigations, associated with CR# 1677302, the increases seen during the fourth quarter of 2020 are consistent with seasonal variation with sources being from legacy documented releases and there are no current leaks to the groundwater present.

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Well	Date	Tritium in pCi/L	Date	Tritium in pCi/L
W10	1/9/2020	4.53E+03	2/28/2020	5.21E+03
W10	3/18/2020	4.76E+03	4/27/2020	3.15E+03
W10	5/21/2020	3.65E+03	6/29/2020	3.47E+03
W10	7/22/2020	2.72E+03	8/28/2020	3.13E+03
W10	9/23/2020	3.05E+03	10/21/2020	1.32E+03
W10	11/12/2020	3.54E+03	12/7/2020	3.59E+03
W11	1/7/2020	< 2.480E+02	4/23/2020	< 1.830E+02
W11	7/22/2020	< 1.520E+02	10/21/2020	< 1.720E+02
W12	1/8/2020	7.79E+02	2/28/2020	7.05E+02
W12	3/18/2020	1.07E+03	4/23/2020	9.32E+02
W12	5/21/2020	1.02E+03	6/29/2020	6.16E+02
W12	7/22/2020	1.05E+03	8/28/2020	1.05E+03
W12	9/23/2020	1.20E+03	10/20/2020	1.15E+03
W12	11/12/2020	7.20E+02	12/7/2020	9.68E+02
W13	1/7/2020	< 2.400E+02	4/23/2020	< 1.940E+02
W13	7/20/2020	< 1.570E+02	10/20/2020	< 1.750E+02
W15	1/8/2020	< 2.370E+02	2/28/2020	< 2.200E+02
W15	3/18/2020	< 2.120E+02	4/23/2020	< 2.140E+02
W15	5/21/2020	2.83E+02	6/29/2020	2.67E+02
W15	7/21/2020	1.66E+02	8/28/2020	3.24E+02
W15	9/23/2020	2.41E+02	10/21/2020	1.34E+03
W15	11/12/2020	< 1.360E+02	12/7/2020	< 1.360E+02
W16	1/7/2020	4.80E+02	4/22/2020	8.71E+02
W16	7/21/2020	8.22E+02	10/19/2020	2.80E+02
W18	1/7/2020	4.08E+02	4/22/2020	5.49E+02
W18	7/21/2020	4.96E+02	10/20/2020	5.78E+02
W24	4/24/2020	< 1.840E+02	10/21/2020	< 1.720E+02
W25	4/24/2020	< 2.070E+02	10/21/2020	< 1.710E+02
W26	4/21/2020	< 2.100E+02	10/21/2020	< 1.730E+02
W27	4/23/2020	5.25E+02	10/20/2020	4.82E+02
W28	4/21/2020	< 1.850E+02	10/20/2020	< 1.680E+02
W36	1/6/2020	< 2.440E+02	4/23/2020	< 2.110E+02
W36	7/21/2020	< 1.600E+02	10/20/2020	< 1.680E+02
W37	4/21/2020	< 2.160E+02	10/21/2020	< 1.620E+02
W38	4/21/2020	< 2.100E+02	10/19/2020	2.40E+02
W39	1/6/2020	< 2.100E+02	4/21/2020	< 1.850E+02
W39	7/21/2020	< 1.560E+02	10/19/2020	< 1.690E+02
W40	4/21/2020	< 2.110E+02	10/20/2020	< 1.730E+02
W41	4/22/2020	< 1.820E+02	10/20/2020	< 1.710E+02
W42	1/9/2020	< 2.240E+02	4/22/2020	< 1.850E+02
W42	7/22/2020	< 1.580E+02	10/20/2020	< 1.720E+02
W43	1/8/2020	2.30E+02	4/22/2020	< 1.780E+02
W43	7/21/2020	< 1.840E+02	10/21/2020	< 1.710E+02
W44	1/8/2020	< 2.580E+02	4/22/2020	2.35E+02

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Well	Date	Tritium in pCi/L	Date	Tritium in pCi/L
W44	7/22/2020	3.88E+02	10/22/2020	2.75E+02
W45i	1/8/2020	< 2.330E+02	4/22/2020	3.41E+02
W45i	7/22/2020	3.15E+02	10/22/2020	2.42E+02
W45s	1/8/2020	1.41E+03	4/22/2020	5.62E+02
W45s	7/22/2020	1.66E+03	10/22/2020	1.81E+03
W46i	1/8/2020	4.94E+02	4/22/2020	6.49E+02
W46i	7/21/2020	6.01E+02	10/21/2020	5.00E+02
W46s	1/8/2020	< 2.310E+02	4/22/2020	2.45E+02
W46s	7/20/2020	1.93E+02	10/21/2020	< 1.720E+02
W47i	1/9/2020	1.85E+04	2/28/2020	1.48E+04
W47i	4/27/2020	1.28E+04	5/21/2020	1.21E+04
W47i	6/29/2020	1.84E+04	7/22/2020	1.80E+04
W47i	8/28/2020	1.75E+04	9/23/2020	2.01E+04
W47i	10/22/2020	2.20E+04	11/12/2020	2.45E+04
W47i	12/7/2020	2.57E+04	----	----
W47s	1/9/2020	7.38E+03	2/28/2020	8.19E+03
W47s	3/18/2020	1.69E+04	4/27/2020	1.37E+04
W47s	5/21/2020	7.74E+03	6/29/2020	8.96E+03
W47s	7/22/2020	8.81E+03	8/28/2020	1.17E+04
W47s	9/23/2020	1.11E+04	10/22/2020	1.44E+04
W47s	11/12/2020	1.37E+04	12/7/2020	1.55E+04
W48	1/7/2020	1.18E+03	4/22/2020	1.41E+03
W48	7/21/2020	1.55E+03	10/20/2020	1.56E+03
W49	1/6/2020	< 2.260E+02	4/21/2020	< 1.900E+02
W49	7/20/2020	< 1.570E+02	10/20/2020	< 1.730E+02

Sequoyah Nuclear Plant
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Doses from I-131 Water Ingestion Pathway

The REMP requirements as specified in Table 3.12-1 from NUREG 1301, "Offsite Does Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors," 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. 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 is calculated. The evaluation confirms 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.

	Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
I-131 Ci	0.00E+01	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	0.00E+01
Population / Thyroid (mrem)	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01

N. Errata/Corrections to Previous ARERRs

No Errata or corrections required for previous ARERRs.

Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report

III. Gaseous Effluents

Table 1-A Gaseous Effluents - Summation of all Releases

Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual	Error %
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A. Fission and Activation Gases

1. Total Release	Curies	4.03E-01	1.03E+00	2.43E-01	1.42E-01	1.817E+00	11%
2. Average Release Rate for Period	uCi/sec	5.12E-02	1.31E-01	3.05E-02	1.78E-02	5.745E-02	
3. Percent of Applicable Limit	%	*	*	*	*	*	

B. Iodines

1. Total Release	Curies	0.00E+01**	0.00E+01	0.00E+01	0.00E+01	0.00E+01	N/A***
2. Average Release Rate for Period	uCi/sec	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01	
3. Percent of Applicable Limit	%	*	*	*	*	*	

C. Particulates

1. Total Release	Curies	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01	N/A***
2. Average Release Rate for Period	uCi/sec	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01	
3. Percent of Applicable Limit	%	*	*	*	*	*	

D. Tritium

1. Total Release	Curies	1.29E+00	3.07E+00	1.32E+00	1.27E+00	6.950E+00	15%
2. Average Release Rate for Period	uCi/sec	1.64E-01	3.90E-01	1.66E-01	1.60E-01	2.198E-01	
3. Percent of Applicable Limit	%	*	*	*	*	*	

E. Carbon-14

1. Total Release	Curies	5.54E+00	5.36E+00	5.83E+00	5.86E+00	2.26E+01	
2. Average Release Rate for Period	uCi/sec	7.05E-01	6.82E-01	7.33E-01	7.37E-01	7.15E-01	
3. Percent of Applicable Limit	%	*	*	*	*	*	

* Applicable Limits are expressed in terms of dose. See Tables 3A-D.

** 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.

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Table 1-B Gaseous Effluents – Ground Level Releases (Batch)

	Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
A. Fission and Activation Gases						
Ar-41	Ci	2.59E-01	9.85E-01	2.12E-01	1.31E-01	1.59E+00
Xe-133m	Ci	0.00E+01*	1.88E-05	0.00E+01	5.21E-04	5.39E-04
Xe-133	Ci	1.36E-01	4.34E-02	3.03E-02	1.03E-02	2.20E-01
Xe-135m	Ci	0.00E+01	0.00E+01	2.72E-04	0.00E+01	2.72E-04
Xe-135	Ci	8.40E-03	1.24E-03	0.00E+01	1.01E-04	9.75E-03
Total For Period	Ci	4.03E-01	1.03E+00	2.43E-01	1.42E-01	1.82E+00
B. Iodines						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
C. Particulates						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
D. Gross Alpha						
Gross Alpha	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
E. Tritium						
H-3	Ci	6.29E-02	1.05E+00	1.38E-01	1.03E-01	1.35E+00
F. Carbon-14						
C-14	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01

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

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Table 1-B Gaseous Effluents – Ground Level Releases (Continuous)

	Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
A. Fission and Activation Gases						
Total For Period	Ci	0.00E+01*	0.00E+01	0.00E+01	0.00E+01	0.00E+01
B. Iodines						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
C. Particulates						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
D. Gross Alpha						
Gross Alpha	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
E. Tritium						
H-3	Ci	1.22E+00	2.02E+00	1.18E+00	1.17E+00	5.60E+00
F. Carbon-14						
C-14 (CO2 Form)	Ci	1.11E+00	1.07E+00	1.17E+00	1.17E+00	4.52E+00
C-14 (Total)	Ci	5.54E+00	5.36E+00	5.83E+00	5.86E+00	2.26E+01

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

Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report

IV. Liquid Effluents

Table 2-A Liquid Effluents - Summation of all Releases

Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual	Error %
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A. Fission and Activation Products

1. Total Release	Curies	4.74E-03	2.49E-03	2.83E-03	1.20E-02	2.210E-02	18%
2. Average Diluted Concentration	uCi/mL	1.99E-09	1.03E-09	1.18E-09	5.56E-09	2.361E-09	
3. Percent of Applicable Limit	%	*	*	*	*		

B. Tritium

1. Total Release	Curies	5.85E+02	2.39E+02	2.67E+02	3.61E+02	1.451E+03	18%
2. Average Diluted Concentration	uCi/mL	2.46E-04	9.91E-05	1.11E-04	1.67E-04	1.551E-04	
3. Percent of Applicable Limit	%	*	*	*	*		

C. Dissolved and Entrained Noble Gases

1. Total Release	Curies	2.53E-04	9.33E-05	1.03E-05	9.32E-05	4.497E-04	39%
2. Average Diluted Concentration	uCi/mL	1.06E-10	3.87E-11	4.28E-12	4.30E-11	4.806E-11	
3. Percent of Applicable Limit	%	*	*	*	*		

D. Gross Alpha Radioactivity

1. Total Release	Curies	0.00E+01 **	0.00E+01	0.00E+01	0.00E+01	0.00E+01	N/A***
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E. Volume of Liquid Waste to Discharge Canal (prior to dilution)

	Liters	2.85E+06	2.17E+06	1.69E+06	1.55E+06	8.26E+06	4%
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F. Volume of Dilution Water for Period

	Liters	2.30E+09	2.33E+09	2.32E+09	2.09E+09	9.040E+09	N/A
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* Applicable Limits are expressed in terms of dose. See Tables 4A-D.

** 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.

Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report

Table 2-B Liquid Effluents – Batch Mode

Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
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A. Fission and Activation Products

Cr-51	Ci	9.19E-05	7.35E-05	0.00E+01	0.00E+01	1.65E-04
Mn-54	Ci	5.03E-05	1.30E-05	0.00E+01	0.00E+01	6.32E-05
Co-57	Ci	0.00E+01	0.00E+01	0.00E+01	1.82E-06	1.82E-06
Co-58	Ci	8.76E-04	4.39E-04	1.32E-03	1.75E-03	4.38E-03
Fe-59	Ci	6.43E-06	0.00E+01	0.00E+01	0.00E+01	6.43E-06
Co-60	Ci	1.53E-03	6.64E-04	1.26E-03	2.67E-03	6.12E-03
Ni-63	Ci	9.11E-04	3.20E-04	2.14E-04	7.29E-03	8.74E-03
Zn-65	Ci	1.71E-05	0.00E+01	0.00E+01	0.00E+01	1.71E-05
Zr-95	Ci	1.36E-05	0.00E+01	0.00E+01	0.00E+01	1.36E-05
Nb-95	Ci	6.14E-05	1.15E-05	0.00E+01	0.00E+01	7.29E-05
Nb-97	Ci	3.63E-05	6.73E-06	4.35E-06	0.00E+01	4.74E-05
Ag-110m	Ci	1.13E-05	0.00E+01	0.00E+01	0.00E+01	1.13E-05
Sb-124	Ci	2.55E-04	2.15E-04	0.00E+01	0.00E+01	4.70E-04
Sb-125	Ci	8.67E-04	7.48E-04	0.00E+01	3.18E-04	1.93E-03
Cs-137	Ci	1.59E-05	0.00E+01	0.00E+01	4.57E-06	2.04E-05
Total For Period	Ci	4.74E-03	2.49E-03	2.83E-03	1.20E-02	2.21E-02

B. Dissolved and Entrained Gases

Ar-41	Ci	4.31E-06	0.00E+01	0.00E+01	0.00E+01	4.31E-06
Xe-133	Ci	2.49E-04	9.21E-05	1.03E-05	9.32E-05	4.44E-04
Xe-135	Ci	0.00E+01	1.19E-06	0.00E+01	0.00E+01	1.19E-06
Total For Period	Ci	2.53E-04	9.33E-05	1.03E-05	9.32E-05	4.50E-04

C. Tritium

Total For Period	Ci	5.85E+02	2.39E+02	2.67E+02	3.61E+02	1.45E+03
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D. Gross Alpha Activity

Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
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* Zeroes indicate that no activity was present at detectable levels.

Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report

Table 2-B Liquid Effluents – Continuous Mode

	Units	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
A. Fission and Activation Products						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
B. Dissolved and Entrained Gases						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01
C. Tritium						
Total For Period	Ci	1.040E-01	1.447E-01	1.408E-01	1.223E-01	5.117E-01
D. Gross Alpha Activity						
Total For Period	Ci	0.00E+01	0.00E+01	0.00E+01	0.00E+01	0.00E+01

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

Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report

V. Solid Waste Storage and Shipment

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

1. <u>Type of Waste</u>	<u>Unit</u>	<u>12 Month Period</u>	<u>Est. Tot. Error %</u>
a. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.	m ³	10.5	±5.00E-01
	Ci	1.26E+02	±2.29E+01
b. Dry Active Waste, Compressible Waste Contaminated Equipment, etc.	m ³	482	±1.00E+01
	Ci	3.31E+00	±2.29E+01
c. Irradiated Components, Control Rods, etc.	m ³	0.0155	±1.00E+01
	Ci	1.42E+00	±2.29E+01
d. Other: Glycol Sent for Processing	m ³	7.28	±1.00E+01
	Ci	1.68E-04	±2.29E+01

The reported volume for “category a” waste is based on the volume of the disposal container. Waste volumes for categories b, c, and d are based on the net waste volume rather than the shipping container volume. During transit, the waste for category b may settle resulting in an overall reduced volume. The reduction in disposal volume is estimated to be 10 percent due to settling. Volume estimates for category b wastes were based on a visual inspection of the container’s contents and its percent full.

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 Curie evaluations, and “in-field” sampling techniques. The assigned values for these parameters were 20, 10, and 5 percent, respectively.

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

Sequoyah Nuclear Plant
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SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

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

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

		<u>Curies</u>	<u>Percent</u>
1	Hydrogen-3	1.03E-02	0.01
2	Beryllium-7	3.93E-01	0.31
3	Carbon-14	1.93E-01	0.15
4	Manganese-54	5.07E+00	4.03
5	Iron-55	1.96E+01	15.54
6	Cobalt-57	5.78E-02	0.05
7	Cobalt-58	4.89E-01	0.39
8	Cobalt-60	6.99E+01	55.50
9	Nickel-59	2.76E-01	0.22
10	Nickel-63	2.61E+01	20.69
11	Zinc-65	1.06E+00	0.84
12	Strontium-89	2.82E-03	0.00
13	Strontium-90	1.35E-02	0.01
14	Niobium-95	9.29E-03	0.01
15	Technitium-99	5.71E-03	0.00
16	Antimony-125	4.60E-01	0.37
17	Cesium-134	3.17E-03	0.00
18	Cesium-137	2.19E+00	1.74
19	Cerium-144	1.19E-01	0.09
20	Plutonium-238	1.77E-04	0.00
21	Plutonium-239	6.56E-05	0.00
22	Plutonium-240	6.56E-05	0.00
23	Plutonium-241	5.14E-02	0.04
24	Americium-241	2.55E-04	0.00
25	Curium-242	1.14E-04	0.00
26	Curium-243	2.08E-04	0.00
27	Curium-244	2.06E-04	0.00

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SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

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

		<u>Curies</u>	<u>Percent</u>
1	Hydrogen-3	7.28E-03	0.22
2	Chromium-51	1.44E+00	43.53
3	Manganese-54	9.02E-02	2.72
4	Iron-55	1.48E-01	4.47
5	Iron-59	3.77E-02	1.14
6	Cobalt-57	1.58E-03	0.05
7	Cobalt-58	4.34E-01	13.1
8	Cobalt-60	2.61E-01	7.87
9	Nickel-63	7.11E-03	0.21
10	Zinc-65	1.26E-02	0.38
11	Zirconium-95	2.97E-01	8.98
12	Niobium-95	5.51E-01	16.63
13	Antimony-124	2.15E-03	0.06
14	Cesium-137	5.28E-03	0.16
15	Cerium-144	1.57E-02	0.47

Sequoyah Nuclear Plant
 2020 Annual Radioactive Effluent Release Report
 SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

C. Irradiated Components

		<u>Curies</u>	<u>Percent</u>
1	Hydrogen-3	3.36E-04	0.02
2	Carbon-14	6.29E-05	0.00
3	Chromium-51	5.27E-01	37.13
4	Manganese-54	2.04E-03	0.14
5	Iron-55	5.25E-01	36.95
6	Iron-59	1.09E-02	0.77
7	Cobalt-58	4.31E-03	0.30
8	Cobalt-60	2.91E-01	20.52
9	Nickel-59	4.10E-04	0.03
10	Nickel-63	5.24E-02	3.69
11	Zinc-65	5.97E-05	0.00
12	Strontium-90	1.57E-03	0.11
13	Niobium-94	3.90E-07	0.00
14	Technitium-99	2.20E-08	0.00
15	Iodine-129	4.75E-10	0.00
16	Cesium-137	1.64E-03	0.12
17	Cerium-144	3.05E-03	0.21
18	Uranium-235	1.56E-05	0.00
19	Neptunium-237	6.27E-10	0.00
20	Plutonium-238	4.19E-10	0.00
21	Plutonium-239	6.10E-08	0.00
22	Plutonium-240	1.27E-11	0.00
23	Plutonium-241	6.58E-13	0.00
24	Americium-241	7.75E-15	0.00

Sequoyah Nuclear Plant
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SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

D. Other:

		<u>Curies</u>	<u>Percent</u>
1	Hydrogen-3	1.62E-04	96.62
2	Chromium-51	2.13E-06	1.27
3	Manganese-54	1.84E-07	0.11
4	Iron-55	3.08E-07	0.18
5	Iron-59	6.39E-08	0.04
6	Cobalt-57	3.20E-09	0.00
7	Cobalt-58	7.98E-07	0.47
8	Cobalt-60	5.45E-07	0.32
9	Nickel-63	1.49E-08	0.01
10	Zinc-65	2.54E-08	0.02
11	Zirconium-95	5.40E-07	0.32
12	Niobium-95	1.02E-06	0.61
13	Antimony-124	3.86E-09	0.00
14	Cesium-137	1.11E-08	0.01
15	Cerium-144	3.20E-08	0.02

Sequoyah Nuclear Plant
2020 Annual Radioactive Effluent Release Report
SOLID WASTE (RADIOACTIVE SHIPMENTS) (continued)

3. Solid Waste Disposition

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

Number of Shipments	Type Quantity	Mode of Transportation	Destination
1	A - LSA II	Motor Freight	EnergySolutions Services, LLC Clive Disposal Site Treatment Facility Interstate 80, Exit 49 Clive, UT 84029
2	Type B	Motor Freight	Waste Control Specialist, LLC Compact Waste Disposal Facility 9998 W. State Hwy. 176 Andrews, TX 79714

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

Number of Shipments	Type Quantity	Mode of Transportation	Destination
3	A - LSA II	Motor Freight	TOXCO Inc. TOXCO Materials Management Center 109 Flint Rd. Oak Ridge, TN 37830
4	A - LSA II Limited Quantity	Motor Freight	TOXCO Inc. TOXCO Materials Management Center 109 Flint Rd. Oak Ridge, TN 37830
3	Limited Quantity	Motor Freight	TOXCO Inc. TOXCO Materials Management Center 109 Flint Rd. Oak Ridge, TN 37830

C. Irradiated components, control rods, etc.

Number of Shipments	Type Quantity	Mode of Transportation	Destination
1	A - LSA II	Motor Freight	TOXCO Inc. TOXCO Materials Management Center 109 Flint Rd. Oak Ridge, TN 37830

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D. Other: Glycol for processing

Number of Shipments	Type Quantity	Mode of Transportation	Destination
1	Exempt Quantity	Motor Freight	EnergySolutions Services, Inc. 1560 Bear Creek Rd. Oak Ridge, TN 37830

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

Sequoyah Nuclear Plant
Units 1 and 2
2020 Annual Radioactive Effluent Release Report

Radiological Impact

VI. Independent Spent Fuel Storage Installation

SQN implemented use of an independent spent fuel storage installation (ISFSI) on July 13, 2004. 10 CFR 72.214 Certificate of Compliance (CoC) Nos. 1014 and 1032 correspond to the two certificates of the spent fuel storage systems in use at the ISFSI. The ISFSI is located on site, within the protected area and is designed to hold 90 spent fuel storage canisters (SFSCs). CoC Nos. 1014 and 1032 Appendix A Chapter 5 requires an annual report in accordance with 10 CFR 72.44(d)(3). CoC Nos. 1014 and 1032 Chapter 5 also provides that the ISFSI operations may be considered part of plant operations for the purposes of the radiological environmental monitoring program.

CoC No. 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 SFSC."

CoC No. 1032 Section 5.1a states, "The HI-STORM FW MPC Storage System does not create any radioactive materials 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 the SFSC."

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 Nos. 1014 and 1032 provide that the HI-STORM 100 Cask System and HI-STORM FW MPC Storage System do 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.

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VII. Radiological Impact to Man

A. 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 river flow data. In this report, the doses resulting from releases are described and compared to limits established for SQN.

B. 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
- 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
- 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,
- Less than or equal to 25 mrem per year to any other organ.

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C. 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 3 and 4.

D. 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

All releases from SQN are considered ground-level releases. The ground-level Joint Frequency Distribution (JFD) is derived from wind speeds and directions measured 10 meters above ground and from the vertical temperature difference between 10 and 46 meters, as presented for each quarter in Section VII Meteorological Data.

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 JFDs are calculated for each release point using the appropriate levels of meteorological data. A JFD provides 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 non-calm 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.

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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 three possible contributing pathways: ingestion of cow 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 Table 3.

E. 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 Guide 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 assumes that this mixing condition holds

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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 Table 4, 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.

F. Population Doses

Population doses for highest exposed organ due to airborne effluents are calculated for an estimated 1,060,000 persons living within a 50-mile radius of the plant site. Doses from external pathways and inhalation are based on the 50-mile human population distribution.

Ingestion population doses for total body and the maximum exposed organ due to liquid effluents are calculated for the entire downstream Tennessee River population. Water ingestion population doses are calculated using actual population figures for downstream public water supplies. Fish ingestion population doses are calculated assuming that all sport fish caught in the Tennessee River are consumed by the Tennessee River population. Recreation population doses are calculated using actual recreational data on the number of shoreline visits at downstream locations.

Population dose estimates for airborne and liquid effluents are presented in Tables 3 and 4.

G. Offsite Direct Radiation Dose

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 14.2 mrem/quarter at onsite (at or near the site boundary) stations and approximately 13.0 mrem/quarter at offsite stations, or approximately 1.2 mrem/quarter higher onsite than at offsite stations. This difference is consistent with levels measured for preoperational and construction phases of the TVA

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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 dosimeters 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.

H. Dose to a Member of the Public Inside the Site 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 boundary for an entire work year (2000 hours). Results from onsite dosimeter measurements for 2020 indicate that the highest onsite dosimeter reading was 20 mrem after subtraction of the annual background value of 46 mrem/year (from perimeter dosimeters around Sequoyah). Using this value and multiplying by the ratio of the occupancy times (2000/8760), the external dose was 4.57 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.

I. 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 5.

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J. Tables

Table 3-A Doses from Airborne Effluents – 1st Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	3.99E-04	5 mrad	<1%	N/950/meters
Beta Air	1.66E-04	10 mrad	<1%	N/950/meters
Submersion				
Total Body	2.04E-04	10 mrad	<1%	N/1389/meters
Skin	3.05E-04	10 mrad	<1%	N/1389/meters
Organ Doses (Iodine, Tritium, Particulates with >8-Day half-life)				
Child / Bone (Max)	3.92E-01	7.5 mrem	5.2%	NNE/3770/meters
Child / Thyroid	7.89E-02	7.5 mrem	1.1%	NNE/3770/meters
Child / Total Body	7.89E-02	7.5 mrem	1.1%	NNE/3770/meters

Population Doses

Total Body Dose 3.49E-01 man-rem
Maximum Organ Dose (Organ) 1.73E+00 man-rem (Bone)

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Table 3-B Doses from Airborne Effluents – 2nd Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	1.48E-03	5 mrad	<1%	N/950/meters
Beta Air	5.31E-04	10 mrad	<1%	N/950/meters
Submersion				
Total Body	7.45E-04	10 mrad	<1%	N/1389/meters
Skin	1.10E-03	10 mrad	<1%	N/1389/meters
Organ Doses (Iodine, Tritium, Particulates with >8-Day half-life)				
Child / Bone (Max)	4.06E-01	7.5 mrem	5.4%	WSW/1152/meters
Child / Thyroid	8.25E-02	7.5 mrem	1.1%	WSW/1152/meters
Child / Total Body	8.25E-02	7.5 mrem	1.1%	WSW/1152/meters

Population Doses

Total Body Dose 4.77E-01 man-rem
 Maximum Organ Dose (Organ) 2.33E+00 man-rem (Bone)

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Table 3-C Doses from Airborne Effluents – 3rd Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	2.47E-04	5 mrad	<1%	N/950/meters
Beta Air	9.10E-05	10 mrad	<1%	N/950/meters
Submersion				
Total Body	1.88E-04	10 mrad	<1%	S/1764/meters
Skin	2.77E-04	10 mrad	<1%	S/1764/meters
Organ Doses (Iodine, Tritium, Particulates with >8-Day half-life)				
Child / Bone (Max)	3.21E-01	7.5 mrem	4.3%	S/4010/meters
Child / Thyroid	6.45E-02	7.5 mrem	<1%	S/4010/meters
Child / Total Body	6.45E-02	7.5 mrem	<1%	S/4010/meters

Population Doses

Total Body Dose 4.32E-01 man-rem
Maximum Organ Dose (Organ) 2.14E+00 man-rem (Bone)

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Table 3-D Doses from Airborne Effluents – 4th Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	1.80E-04	5 mrad	<1%	SSW/1840/meters
Beta Air	6.56E-05	10 mrad	<1%	SSW/1840/meters
Submersion				
Total Body	1.34E-04	10 mrad	<1%	SSW/2129/meters
Skin	1.98E-04	10 mrad	<1%	SSW/2129/meters
Organ Doses (Iodine, Tritium, Particulates with >8-Day half-life)				
Child / Bone (Max)	4.52E-01	7.5 mrem	6.0%	SSW/4363/meters
Child / Thyroid	9.07E-02	7.5 mrem	1.2%	SSW/4363/meters
Child / Total Body	9.07E-02	7.5 mrem	1.2%	SSW/4363/meters

Population Doses

Total Body Dose 6.01E-01 man-rem
Maximum Organ Dose (Organ) 2.98E+00 man-rem (Bone)

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Table 4-A Doses from Liquid Effluents – 1st Quarter

Individual Doses

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Bone/GIT	7.60E-04	5 mrem	< 1 %
Child	Thyroid	7.50E-04	5 mrem	< 1 %
Child	Total Body	7.50E-04	1.5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 93,971

Population Doses

Total Body Dose 6.50e-02 man-rem
Maximum Organ Dose (Organ) 6.60E-02 man-rem (Bone/GIT)

Table 4-B Doses from Liquid Effluents – 2nd Quarter

Individual Doses

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Bone/GIT/Liver Kidney/Lung	5.60E-04	5 mrem	< 1 %
Child	Thyroid	5.60E-04	5 mrem	< 1 %
Child	Total Body	5.60E-04	1.5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 52,008

Population Doses

Total Body Dose 5.00E-02 man-rem
Maximum Organ Dose (Organ) 5.00E-02 man-rem (Bone/GIT/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).

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Table 4-C Doses from Liquid Effluents – 3rd Quarter

Individual Doses

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Bone/GIT/Liver Kidney/Lung	1.20E-03	5 mrem	< 1 %
Child	Thyroid	1.20E-03	5 mrem	< 1 %
Child	Total Body	1.20E-03	1.5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 28,516

Population Doses

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

Table 4-D Doses from Liquid Effluents – 4th Quarter

Individual Doses

Age Group	Organ	Dose	Quarterly Limit	Percent of Limit
Child	Bone	1.00E-03	5 mrem	< 1 %
Child	Thyroid	8.90E-04	5 mrem	< 1 %
Child	Total Body	9.00E-04	1.5 mrem	< 1 %

Average Riverflow past SQN (cubic feet per second): 50,032

Population Doses

Total Body Dose 8.30E-02 man-rem
Maximum Organ Dose (Organ) 8.60E-02 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).

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Table 5 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)	2.04E-04	7.45E-04	1.88E-04	1.34E-04	
Critical organ dose (airborne)	3.92E-01	4.06E-01	3.21E-01	4.52E-01	
Total body dose (liquid)	7.50E-04	5.60E-04	1.20E-03	9.00E-04	
Maximum organ dose (liquid)	7.60E-04	5.60E-04	1.20E-03	1.00E-03	
Direct Radiation Dose	0.00E+01	0.00E+01	0.00E+01	0.00E+01	
Total	3.94E-01	4.08E-01	3.24E-01	4.54E-01	
Cumulative Total Dose (mrem)					1.58E+00
Annual Dose Limit (mrem)					25
Percent of Limit					6.32
Thyroid					
Total body air (submersion)	2.04E-04	7.45E-04	1.88E-04	1.34E-04	
Thyroid dose (airborne)	7.89E-02	8.25E-02	6.45E-02	9.07E-02	
Total body dose (liquid)	7.50E-04	5.60E-04	1.20E-03	9.00E-04	
Thyroid dose (liquid)	7.50E-04	5.60E-04	1.20E-03	8.90E-04	
Total	8.06E-02	8.44E-02	6.71E-02	9.26E-02	
Cumulative Total Dose (mrem)					3.25E-01
Annual Dose Limit (mrem)					75
Percent of Limit					<1

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VIII. 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, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.046	0.504	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.092	0.092	0.138	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.138	0.183	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.092	0.229	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.046	0.092	0.367	1.146	0.000	0.000	0.000	1.651

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS A 36
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 36
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 8.15

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, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.092	0.138	0.000	0.000	0.000	0.229
NNE	0.000	0.000	0.046	0.000	0.092	0.367	0.000	0.000	0.000	0.504
NE	0.000	0.000	0.046	0.138	0.000	0.000	0.000	0.000	0.000	0.183
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.092
SSW	0.000	0.000	0.000	0.000	0.321	0.183	0.000	0.000	0.000	0.504
SW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
WSW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.138	0.000	0.000	0.000	0.138
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.046
SUBTOTAL	0.000	0.000	0.092	0.138	0.642	0.871	0.046	0.000	0.000	1.788

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS B 39
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 39
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 7.53

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, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.229	0.138	0.000	0.000	0.000	0.367
NNE	0.000	0.000	0.046	0.092	0.138	0.321	0.000	0.000	0.000	0.596
NE	0.000	0.000	0.183	0.092	0.046	0.000	0.000	0.000	0.000	0.321
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	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.138
SSW	0.000	0.000	0.000	0.138	0.367	0.092	0.000	0.000	0.000	0.596
SW	0.000	0.000	0.000	0.092	0.642	0.046	0.000	0.000	0.000	0.779
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.138
NW	0.000	0.000	0.000	0.000	0.046	0.092	0.000	0.000	0.000	0.138
NNW	0.000	0.000	0.000	0.000	0.046	0.138	0.092	0.000	0.000	0.275
SUBTOTAL	0.000	0.000	0.504	0.504	1.605	0.871	0.092	0.000	0.000	3.576

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS C 78
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 78
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 6.49

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, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.046	0.596	1.284	2.155	1.421	0.000	0.000	0.000	5.502
NNE	0.000	0.046	1.146	1.972	2.201	3.439	0.000	0.000	0.000	8.803
NE	0.000	0.000	0.504	0.046	0.092	0.229	0.000	0.000	0.000	0.871
ENE	0.000	0.092	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.275
E	0.000	0.046	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.275
ESE	0.000	0.000	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.183
SE	0.000	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.000	0.229	0.046	0.000	0.000	0.000	0.000	0.000	0.275
S	0.000	0.046	0.917	0.642	0.229	0.550	0.138	0.000	0.000	2.522
SSW	0.000	0.138	1.926	2.247	1.834	0.779	0.000	0.000	0.000	6.923
SW	0.000	0.046	1.284	1.926	0.871	0.138	0.000	0.000	0.000	4.264
WSW	0.000	0.000	0.275	0.459	0.275	0.046	0.000	0.000	0.000	1.055
W	0.000	0.092	0.092	0.596	0.642	0.459	0.000	0.000	0.000	1.880
WNW	0.000	0.046	0.092	0.459	0.275	0.871	0.000	0.000	0.000	1.742
NW	0.000	0.046	0.138	0.504	0.504	1.055	0.046	0.000	0.000	2.293
NNW	0.000	0.046	0.138	0.504	0.596	0.367	0.046	0.000	0.000	1.696
SUBTOTAL	0.000	0.734	8.024	10.683	9.674	9.354	0.229	0.000	0.000	38.698

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS D 844
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 844
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 5.64

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, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.459	1.421	1.146	0.275	0.092	0.000	0.000	0.000	3.393
NNE	0.000	0.550	2.613	1.284	0.413	0.092	0.000	0.000	0.000	4.952
NE	0.000	0.275	0.459	0.138	0.000	0.000	0.000	0.000	0.000	0.871
ENE	0.000	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.183
E	0.000	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.183
ESE	0.000	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.183
SE	0.000	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.229
SSE	0.000	0.321	0.367	0.000	0.046	0.046	0.000	0.000	0.000	0.779
S	0.000	0.367	2.109	1.055	0.917	0.504	0.229	0.000	0.000	5.181
SSW	0.000	0.367	4.539	3.851	1.284	0.413	0.000	0.000	0.000	10.454
SW	0.000	0.275	4.172	2.430	0.321	0.092	0.000	0.000	0.000	7.290
WSW	0.000	0.183	1.559	0.275	0.046	0.000	0.000	0.000	0.000	2.063
W	0.000	0.092	0.642	0.413	0.092	0.000	0.000	0.000	0.000	1.238
WNW	0.000	0.046	0.504	0.321	0.092	0.046	0.000	0.000	0.000	1.009
NW	0.000	0.183	0.550	0.138	0.183	0.046	0.000	0.000	0.000	1.100
NNW	0.000	0.046	0.229	0.504	0.092	0.000	0.000	0.000	0.000	0.871
SUBTOTAL	0.000	3.622	19.486	11.554	3.760	1.330	0.229	0.000	0.000	39.982

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS E 872
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 872
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 3.48

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

JAN 1, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.092	0.413	0.046	0.046	0.046	0.000	0.000	0.000	0.642
NNE	0.000	0.459	1.880	0.000	0.000	0.000	0.000	0.000	0.000	2.338
NE	0.000	0.183	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.688
ENE	0.000	0.046	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.183
E	0.000	0.046	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.183
ESE	0.000	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.183
SE	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.092
S	0.000	0.138	0.642	0.275	0.046	0.000	0.000	0.000	0.000	1.100
SSW	0.000	0.046	2.568	0.504	0.229	0.000	0.000	0.000	0.000	3.347
SW	0.000	0.046	1.284	0.229	0.000	0.000	0.000	0.000	0.000	1.559
WSW	0.000	0.092	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.321
W	0.000	0.000	0.046	0.000	0.000	0.046	0.000	0.000	0.000	0.092
WNW	0.000	0.000	0.138	0.000	0.046	0.000	0.000	0.000	0.000	0.183
NW	0.000	0.046	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.183
NNW	0.000	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.183
SUBTOTAL	0.000	1.559	8.299	1.100	0.367	0.092	0.000	0.000	0.000	11.417

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS F 249
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 249
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 2.49

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, 2020 - MAR 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
NNE	0.000	0.046	0.367	0.000	0.000	0.000	0.000	0.000	0.000	0.413
NE	0.000	0.229	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.367
ENE	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.092
E	0.000	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.229
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.138
SSE	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.138
S	0.000	0.229	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.367
SSW	0.000	0.092	0.596	0.000	0.000	0.000	0.000	0.000	0.000	0.688
SW	0.000	0.000	0.092	0.138	0.000	0.000	0.000	0.000	0.000	0.229
WSW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	1.009	1.742	0.138	0.000	0.000	0.000	0.000	0.000	2.889

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2181
 TOTAL HOURS OF STABILITY CLASS G 63
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 63
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/05/05

MEAN WIND SPEED = 1.92

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT

APR 1, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.046	0.092	0.229	0.000	0.000	0.000	0.367
NNE	0.000	0.000	0.046	1.192	0.504	1.009	0.000	0.000	0.000	2.751
NE	0.000	0.000	0.183	1.146	0.779	0.229	0.000	0.000	0.000	2.338
ENE	0.000	0.000	0.000	0.138	0.046	0.000	0.000	0.000	0.000	0.183
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.092
S	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SSW	0.000	0.000	0.046	0.092	0.504	0.183	0.000	0.000	0.000	0.825
SW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
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	0.092	0.000	0.000	0.000	0.092
NNW	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.092
SUBTOTAL	0.000	0.000	0.275	2.751	2.017	1.880	0.000	0.000	0.000	6.923

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS A 151
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 151
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

MEAN WIND SPEED = 6.17

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, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.046	0.138	0.046	0.000	0.000	0.000	0.229
NNE	0.000	0.000	0.092	0.504	0.459	0.138	0.000	0.000	0.000	1.192
NE	0.000	0.000	0.183	0.275	0.138	0.000	0.000	0.000	0.000	0.596
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.092
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	0.092	0.000	0.000	0.000	0.000	0.000	0.092
S	0.000	0.000	0.000	0.229	0.138	0.275	0.000	0.000	0.000	0.642
SSW	0.000	0.000	0.000	0.734	0.596	0.000	0.000	0.000	0.000	1.330
SW	0.000	0.000	0.046	0.183	0.046	0.000	0.000	0.000	0.000	0.275
WSW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.092
NW	0.000	0.000	0.000	0.000	0.000	0.183	0.000	0.000	0.000	0.183
NNW	0.000	0.000	0.000	0.000	0.183	0.138	0.000	0.000	0.000	0.321
SUBTOTAL	0.000	0.000	0.459	2.109	1.742	0.917	0.000	0.000	0.000	5.227

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS B 114
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 114
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

MEAN WIND SPEED = 5.81

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, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.183	0.092	0.000	0.000	0.000	0.000	0.275
NNE	0.000	0.000	0.321	0.367	0.229	0.092	0.000	0.000	0.000	1.009
NE	0.000	0.000	0.413	0.046	0.092	0.000	0.000	0.000	0.000	0.550
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	0.046	0.000	0.046	0.000	0.000	0.000	0.000	0.092
SSE	0.000	0.000	0.000	0.183	0.046	0.000	0.000	0.000	0.000	0.229
S	0.000	0.000	0.000	0.413	0.275	0.046	0.000	0.000	0.000	0.734
SSW	0.000	0.000	0.046	1.100	0.321	0.000	0.000	0.000	0.000	1.467
SW	0.000	0.000	0.092	0.550	0.138	0.000	0.000	0.000	0.000	0.779
WSW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.138	0.000	0.000	0.000	0.138
NW	0.000	0.000	0.000	0.000	0.046	0.275	0.000	0.000	0.000	0.321
NNW	0.000	0.000	0.000	0.000	0.138	0.138	0.000	0.000	0.000	0.275
SUBTOTAL	0.000	0.000	1.009	2.889	1.421	0.688	0.000	0.000	0.000	6.006

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS C 131
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 131
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

MEAN WIND SPEED = 5.19

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, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.092	1.146	0.825	0.550	0.550	0.000	0.000	0.000	3.164
NNE	0.000	0.138	1.284	1.742	0.504	0.183	0.000	0.000	0.000	3.851
NE	0.000	0.092	0.550	0.321	0.138	0.000	0.000	0.000	0.000	1.100
ENE	0.000	0.000	0.321	0.000	0.000	0.000	0.000	0.000	0.000	0.321
E	0.000	0.000	0.321	0.000	0.000	0.000	0.000	0.000	0.000	0.321
ESE	0.000	0.000	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.229
SE	0.000	0.046	0.321	0.000	0.046	0.000	0.000	0.000	0.000	0.413
SSE	0.000	0.046	0.871	0.321	0.138	0.000	0.000	0.000	0.000	1.376
S	0.000	0.000	2.247	1.742	0.917	0.459	0.000	0.000	0.000	5.365
SSW	0.000	0.229	3.760	3.943	0.963	0.183	0.000	0.000	0.000	9.078
SW	0.000	0.092	1.513	1.146	0.871	0.092	0.000	0.000	0.000	3.714
WSW	0.000	0.000	0.734	0.229	0.275	0.275	0.000	0.000	0.000	1.513
W	0.000	0.046	0.321	0.321	0.321	0.138	0.000	0.000	0.000	1.146
WNW	0.000	0.092	0.000	0.092	0.229	0.183	0.000	0.000	0.000	0.596
NW	0.000	0.000	0.183	0.092	0.367	0.413	0.000	0.000	0.000	1.055
NNW	0.000	0.092	0.367	0.413	0.596	0.321	0.000	0.000	0.000	1.788
SUBTOTAL	0.000	0.963	14.122	11.233	5.915	2.797	0.000	0.000	0.000	35.030

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS D 764
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 764
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

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, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.596	2.247	0.779	0.413	0.046	0.000	0.000	0.000	4.081
NNE	0.000	0.550	2.293	0.871	0.138	0.000	0.000	0.000	0.000	3.851
NE	0.000	0.413	0.413	0.000	0.000	0.000	0.000	0.000	0.000	0.825
ENE	0.000	0.092	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.321
E	0.000	0.092	0.183	0.000	0.000	0.046	0.000	0.000	0.000	0.321
ESE	0.000	0.000	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.138
SE	0.000	0.092	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.321
SSE	0.000	0.183	0.413	0.229	0.000	0.046	0.000	0.000	0.000	0.871
S	0.000	0.459	1.100	0.367	0.183	0.000	0.000	0.000	0.000	2.109
SSW	0.000	0.504	3.118	1.009	0.275	0.000	0.000	0.000	0.000	4.906
SW	0.000	0.275	2.843	1.376	0.367	0.092	0.000	0.000	0.000	4.952
WSW	0.000	0.092	0.963	0.321	0.046	0.092	0.000	0.000	0.000	1.513
W	0.000	0.229	0.642	0.183	0.000	0.046	0.000	0.000	0.000	1.100
WNW	0.000	0.183	0.367	0.183	0.092	0.000	0.000	0.000	0.000	0.825
NW	0.000	0.321	0.688	0.367	0.183	0.000	0.000	0.000	0.000	1.559
NNW	0.000	0.275	1.284	0.229	0.138	0.046	0.000	0.000	0.000	1.972
SUBTOTAL	0.000	4.356	17.056	6.006	1.834	0.413	0.000	0.000	0.000	29.665

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS E 649
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 647
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

MEAN WIND SPEED = 2.88

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, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.275	1.330	0.046	0.000	0.000	0.000	0.000	0.000	1.651
NNE	0.000	0.871	2.934	0.092	0.000	0.000	0.000	0.000	0.000	3.897
NE	0.000	0.688	0.825	0.000	0.000	0.000	0.000	0.000	0.000	1.513
ENE	0.000	0.367	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.459
E	0.000	0.321	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.321
ESE	0.000	0.275	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.275
SE	0.000	0.275	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.367
SSE	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.138
S	0.000	0.367	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.596
SSW	0.000	0.275	1.192	0.092	0.000	0.000	0.000	0.000	0.000	1.559
SW	0.000	0.046	0.779	0.092	0.000	0.046	0.000	0.000	0.000	0.963
WSW	0.000	0.092	0.138	0.046	0.000	0.000	0.000	0.000	0.000	0.275
W	0.000	0.046	0.183	0.000	0.046	0.000	0.000	0.000	0.000	0.275
WNW	0.000	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.138
NW	0.000	0.046	0.321	0.000	0.000	0.000	0.000	0.000	0.000	0.367
NNW	0.000	0.046	0.229	0.138	0.000	0.000	0.000	0.000	0.000	0.413
SUBTOTAL	0.000	4.172	8.345	0.596	0.046	0.046	0.000	0.000	0.000	13.205

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS F 288
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 288
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

MEAN WIND SPEED = 1.97

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, 2020 - JUN 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.092
NNE	0.000	0.229	0.321	0.000	0.000	0.000	0.000	0.000	0.000	0.550
NE	0.000	0.229	0.459	0.000	0.000	0.000	0.000	0.000	0.000	0.688
ENE	0.000	0.275	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.275
E	0.000	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.229
ESE	0.000	0.229	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.275
SE	0.000	0.275	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.275
SSE	0.000	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183
S	0.000	0.229	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.413
SSW	0.000	0.046	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.596
SW	0.000	0.046	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.229
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	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.092
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	2.063	1.880	0.000	0.000	0.000	0.000	0.000	0.000	3.943

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2183
 TOTAL HOURS OF STABILITY CLASS G 86
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 86
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2181
 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: 2020/08/10

MEAN WIND SPEED = 1.52

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NNE	0.000	0.000	0.000	0.636	0.545	0.045	0.000	0.000	0.000	1.227
NE	0.000	0.000	0.273	0.682	0.363	0.045	0.000	0.000	0.000	1.363
ENE	0.000	0.000	0.045	0.136	0.000	0.000	0.000	0.000	0.000	0.182
E	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
ESE	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SE	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.045	0.000	0.136	0.000	0.000	0.000	0.000	0.182
SSW	0.000	0.000	0.000	0.136	0.363	0.091	0.000	0.000	0.000	0.591
SW	0.000	0.000	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.182
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.363	1.772	1.590	0.182	0.000	0.000	0.000	3.907

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS A 86
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 86
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 5.30

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.136
NNE	0.000	0.000	0.273	0.818	0.182	0.091	0.000	0.000	0.000	1.363
NE	0.000	0.000	0.500	0.454	0.000	0.045	0.000	0.000	0.000	1.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.227
ESE	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.136
SE	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SSE	0.000	0.000	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.136
S	0.000	0.000	0.000	0.182	0.045	0.045	0.000	0.000	0.000	0.273
SSW	0.000	0.000	0.000	0.363	0.636	0.136	0.000	0.000	0.000	1.136
SW	0.000	0.000	0.000	0.363	0.045	0.000	0.000	0.000	0.000	0.409
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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NNW	0.000	0.000	0.000	0.045	0.227	0.000	0.000	0.000	0.000	0.273
SUBTOTAL	0.000	0.000	1.090	2.635	1.136	0.318	0.000	0.000	0.000	5.179

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS B 114
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 114
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 4.67

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.227	0.273	0.091	0.000	0.000	0.000	0.000	0.591
NNE	0.000	0.000	0.273	0.727	0.136	0.045	0.000	0.000	0.000	1.181
NE	0.000	0.000	0.636	0.273	0.136	0.000	0.000	0.000	0.000	1.045
ENE	0.000	0.000	0.227	0.045	0.000	0.000	0.000	0.000	0.000	0.273
E	0.000	0.000	0.182	0.045	0.000	0.000	0.000	0.000	0.000	0.227
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	0.182	0.091	0.000	0.000	0.000	0.000	0.000	0.273
SSE	0.000	0.000	0.045	0.136	0.000	0.000	0.000	0.000	0.000	0.182
S	0.000	0.000	0.000	0.454	0.136	0.000	0.000	0.000	0.000	0.591
SSW	0.000	0.000	0.091	1.181	0.454	0.000	0.000	0.000	0.000	1.726
SW	0.000	0.000	0.091	0.727	0.091	0.136	0.000	0.000	0.000	1.045
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	0.091	0.000	0.000	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	0.045	0.045	0.136	0.000	0.000	0.000	0.000	0.227
SUBTOTAL	0.000	0.000	1.999	4.134	1.227	0.182	0.000	0.000	0.000	7.542

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS C 166
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 166
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 4.41

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.045	1.863	1.000	0.273	0.000	0.000	0.000	0.000	3.180
NNE	0.000	0.091	1.636	1.954	1.408	0.954	0.000	0.000	0.000	6.043
NE	0.000	0.045	0.863	0.545	0.091	0.000	0.000	0.000	0.000	1.545
ENE	0.000	0.000	0.409	0.091	0.000	0.000	0.000	0.000	0.000	0.500
E	0.000	0.000	0.318	0.045	0.000	0.000	0.000	0.000	0.000	0.363
ESE	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.182
SE	0.000	0.000	0.273	0.045	0.000	0.000	0.000	0.000	0.000	0.318
SSE	0.000	0.000	1.000	0.318	0.045	0.000	0.000	0.000	0.000	1.363
S	0.000	0.045	3.044	2.135	0.500	0.091	0.000	0.000	0.000	5.816
SSW	0.000	0.182	3.498	4.316	1.045	0.091	0.000	0.000	0.000	9.132
SW	0.000	0.091	1.590	1.817	0.500	0.045	0.000	0.000	0.000	4.044
WSW	0.000	0.000	1.045	0.545	0.045	0.000	0.000	0.000	0.000	1.636
W	0.000	0.045	0.682	0.363	0.045	0.000	0.000	0.000	0.000	1.136
WNW	0.000	0.045	0.273	0.227	0.091	0.091	0.000	0.000	0.000	0.727
NW	0.000	0.045	0.454	0.500	0.045	0.000	0.000	0.000	0.000	1.045
NNW	0.000	0.000	0.636	0.863	0.136	0.045	0.000	0.000	0.000	1.681
SUBTOTAL	0.000	0.636	17.765	14.766	4.225	1.318	0.000	0.000	0.000	38.710

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS D 852
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 852
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 3.81

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.010	1.454	5.043	0.591	0.182	0.000	0.000	0.000	0.000	7.279
NNE	0.006	1.090	2.953	0.591	0.091	0.000	0.000	0.000	0.000	4.731
NE	0.001	0.500	0.318	0.045	0.000	0.000	0.000	0.000	0.000	0.864
ENE	0.001	0.182	0.182	0.045	0.000	0.000	0.000	0.000	0.000	0.409
E	0.001	0.227	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.455
ESE	0.000	0.091	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.228
SE	0.001	0.136	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.455
SSE	0.001	0.000	0.545	0.091	0.000	0.000	0.000	0.000	0.000	0.637
S	0.002	0.227	0.863	0.091	0.000	0.045	0.000	0.000	0.000	1.228
SSW	0.004	0.182	2.272	0.182	0.182	0.000	0.000	0.000	0.000	2.821
SW	0.006	0.409	3.362	0.818	0.091	0.000	0.000	0.000	0.000	4.685
WSW	0.003	0.182	1.772	0.182	0.091	0.000	0.000	0.000	0.000	2.229
W	0.002	0.273	0.909	0.136	0.045	0.000	0.000	0.000	0.000	1.365
WNW	0.002	0.363	0.682	0.136	0.045	0.000	0.000	0.000	0.000	1.228
NW	0.004	0.454	1.999	0.227	0.000	0.045	0.000	0.000	0.000	2.730
NNW	0.005	0.727	2.544	0.636	0.000	0.000	0.000	0.000	0.000	3.912
SUBTOTAL	0.045	6.497	24.125	3.771	0.727	0.091	0.000	0.000	0.000	35.257

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS E 776
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 776
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 1

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 2.34

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.227	1.772	0.000	0.000	0.000	0.000	0.000	0.000	1.999
NNE	0.000	0.772	1.999	0.000	0.000	0.000	0.000	0.000	0.000	2.771
NE	0.000	0.273	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.454
ENE	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.182
E	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.136
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	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.273	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.363
SSW	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SW	0.000	0.091	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.318
WSW	0.000	0.000	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.227
W	0.000	0.045	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.363
WNW	0.000	0.091	0.182	0.045	0.000	0.000	0.000	0.000	0.000	0.318
NW	0.000	0.136	0.409	0.000	0.045	0.000	0.000	0.000	0.000	0.591
NNW	0.000	0.318	0.772	0.000	0.000	0.000	0.000	0.000	0.000	1.090
SUBTOTAL	0.000	2.590	6.270	0.136	0.045	0.000	0.000	0.000	0.000	9.041

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS F 199
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 199
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 1.82

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

JUL 1, 2020 - SEP 30, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ENE	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
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	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.091
W	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
WNW	0.000	0.000	0.000	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	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SUBTOTAL	0.000	0.227	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.363

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2201
 TOTAL HOURS OF STABILITY CLASS G 8
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 8
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2201
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2020/10/13

MEAN WIND SPEED = 1.50

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.091
NNE	0.000	0.000	0.000	0.412	0.183	0.000	0.000	0.000	0.000	0.595
NE	0.000	0.000	0.000	0.320	0.046	0.000	0.000	0.000	0.000	0.366
ENE	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.046	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.000	0.091	0.046	0.000	0.000	0.000	0.137
SSW	0.000	0.000	0.091	0.229	0.000	0.046	0.000	0.000	0.000	0.366
SW	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.091
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	0.046	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	0.046	0.091	0.000	0.000	0.000	0.137
NNW	0.000	0.000	0.000	0.000	0.091	0.046	0.000	0.000	0.000	0.137
SUBTOTAL	0.000	0.046	0.183	1.052	0.549	0.320	0.000	0.000	0.000	2.150

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS A 47
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A 47
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 5.49

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.000	0.091	0.046	0.046	0.000	0.000	0.000	0.183
NNE	0.000	0.000	0.046	0.595	0.457	0.091	0.000	0.000	0.000	1.189
NE	0.000	0.000	0.000	0.091	0.046	0.046	0.000	0.000	0.000	0.183
ENE	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.046	0.000	0.091	0.000	0.000	0.000	0.137
SW	0.000	0.000	0.000	0.091	0.137	0.091	0.000	0.000	0.000	0.320
WSW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.000	0.000	0.046	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	0.091	0.000	0.000	0.000	0.091
SUBTOTAL	0.000	0.000	0.091	0.961	0.732	0.457	0.000	0.000	0.000	2.242

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS B 49
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B 49
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 5.77

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.000	0.091	0.320	0.000	0.000	0.000	0.000	0.000	0.412
NNE	0.000	0.000	0.091	0.732	0.595	0.046	0.000	0.000	0.000	1.464
NE	0.000	0.000	0.137	0.000	0.229	0.000	0.000	0.000	0.000	0.366
ENE	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.091	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	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.091
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	0.046	0.046	0.091	0.000	0.000	0.000	0.229
SSW	0.000	0.000	0.000	0.320	0.274	0.046	0.000	0.000	0.000	0.640
SW	0.000	0.000	0.000	0.274	0.183	0.046	0.000	0.000	0.000	0.503
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	0.229	0.046	0.000	0.000	0.000	0.274
WNW	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.000	0.046	0.091	0.046	0.000	0.000	0.000	0.183
NNW	0.000	0.000	0.000	0.091	0.137	0.091	0.000	0.000	0.000	0.320
SUBTOTAL	0.000	0.000	0.549	1.921	1.830	0.412	0.000	0.000	0.000	4.712

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS C 103
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C 103
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 5.41

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.091	1.327	1.510	1.372	0.732	0.000	0.000	0.000	5.032
NNE	0.000	0.046	1.830	3.339	1.235	0.640	0.046	0.000	0.000	7.136
NE	0.000	0.091	0.869	0.366	0.183	0.000	0.000	0.000	0.000	1.510
ENE	0.000	0.000	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.229
E	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.000	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.183
SE	0.000	0.000	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.183
SSE	0.000	0.000	0.183	0.046	0.000	0.000	0.000	0.000	0.000	0.229
S	0.000	0.000	0.823	0.961	0.183	0.366	0.000	0.000	0.000	2.333
SSW	0.000	0.000	1.601	3.385	1.647	0.549	0.000	0.000	0.000	7.182
SW	0.000	0.046	1.327	1.921	0.640	0.229	0.000	0.000	0.000	4.163
WSW	0.000	0.229	0.503	0.457	0.183	0.183	0.000	0.000	0.000	1.555
W	0.000	0.000	0.229	0.549	0.640	0.274	0.000	0.000	0.000	1.693
WNW	0.000	0.046	0.457	0.549	0.686	0.549	0.000	0.000	0.000	2.287
NW	0.000	0.046	0.412	0.732	0.503	0.503	0.000	0.000	0.000	2.196
NNW	0.000	0.046	0.320	0.274	0.274	0.274	0.000	0.000	0.000	1.189
SUBTOTAL	0.000	0.686	10.430	14.181	7.548	4.300	0.046	0.000	0.000	37.191

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS D 813
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D 813
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 4.75

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.457	2.425	1.006	0.229	0.000	0.000	0.000	0.000	4.117
NNE	0.000	0.595	3.202	1.327	0.137	0.000	0.000	0.000	0.000	5.261
NE	0.000	0.320	0.320	0.229	0.046	0.000	0.000	0.000	0.000	0.915
ENE	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.091
E	0.000	0.000	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.183
ESE	0.000	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.183
SE	0.000	0.046	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.183
SSE	0.000	0.137	0.503	0.000	0.000	0.000	0.000	0.000	0.000	0.640
S	0.000	0.183	1.784	0.457	0.412	0.274	0.046	0.000	0.000	3.156
SSW	0.000	0.457	2.379	1.693	0.915	0.137	0.000	0.000	0.000	5.581
SW	0.000	0.366	2.653	1.006	0.183	0.046	0.000	0.000	0.000	4.254
WSW	0.000	0.229	0.457	0.000	0.000	0.000	0.000	0.000	0.000	0.686
W	0.000	0.091	0.412	0.274	0.046	0.000	0.000	0.000	0.000	0.823
WNW	0.000	0.229	0.732	0.229	0.091	0.000	0.000	0.000	0.000	1.281
NW	0.000	0.229	0.457	0.274	0.091	0.046	0.000	0.000	0.000	1.098
NNW	0.000	0.229	1.144	0.229	0.183	0.137	0.000	0.000	0.000	1.921
SUBTOTAL	0.000	3.751	16.880	6.725	2.333	0.640	0.046	0.000	0.000	30.375

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS E 664
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E 664
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 3.10

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.000	0.778	2.882	0.274	0.000	0.000	0.000	0.000	0.000	3.934
NNE	0.000	1.693	4.392	0.137	0.000	0.000	0.000	0.000	0.000	6.221
NE	0.000	0.274	0.732	0.046	0.000	0.000	0.000	0.000	0.000	1.052
ENE	0.000	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.274
E	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.137
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.137	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.229
SSE	0.000	0.366	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.503
S	0.000	0.183	0.320	0.000	0.000	0.000	0.000	0.000	0.000	0.503
SSW	0.000	0.412	0.823	0.412	0.000	0.000	0.000	0.000	0.000	1.647
SW	0.000	0.183	0.915	0.183	0.000	0.000	0.000	0.000	0.000	1.281
WSW	0.000	0.046	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.229
W	0.000	0.137	0.366	0.000	0.000	0.000	0.000	0.000	0.000	0.503
WNW	0.000	0.091	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.320
NW	0.000	0.183	0.595	0.046	0.000	0.000	0.000	0.000	0.000	0.823
NNW	0.000	0.183	0.778	0.137	0.000	0.000	0.000	0.000	0.000	1.098
SUBTOTAL	0.000	5.078	12.397	1.281	0.000	0.000	0.000	0.000	0.000	18.756

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS F 410
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 410
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 0

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 2.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

SEQUOYAH NUCLEAR PLANT STA 57 A - Validated Edited Data

OCT 1, 2020 - DEC 31, 2020

WIND DIRECTION	WIND SPEED (MPH)									TOTAL
	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	
N	0.003	0.046	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.277
NNE	0.008	0.091	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.740
NE	0.005	0.183	0.274	0.000	0.000	0.000	0.000	0.000	0.000	0.462
ENE	0.001	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.139
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	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SSE	0.004	0.274	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.370
S	0.006	0.320	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.555
SSW	0.011	0.274	0.778	0.137	0.046	0.000	0.000	0.000	0.000	1.246
SW	0.002	0.046	0.137	0.046	0.000	0.000	0.000	0.000	0.000	0.231
WSW	0.002	0.046	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.185
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	0.002	0.046	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.185
NNW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
SUBTOTAL	0.046	1.510	2.745	0.229	0.046	0.000	0.000	0.000	0.000	4.575

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2186
 TOTAL HOURS OF STABILITY CLASS G 100
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G 100
 TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2186
 TOTAL HOURS CALM 1

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

DATE PRINTED: 2021/01/06

MEAN WIND SPEED = 1.94

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS