



Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

April 30, 2018

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

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

Subject: 2017 Annual Radioactive Effluent Release Report

In accordance with the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, Technical Specifications Section 5.6.3, the Tennessee Valley Authority is submitting the BFN Annual Radioactive Effluent Release Report for the period January through December 2017. This document is in conformance with Title 10 of the Code of Federal Regulations (10 CFR) 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

Attachment 1 to Enclosure 1 documents deviations which have occurred from Offsite Dose Calculation Manual (ODCM) controls and surveillance requirements. Attachment 2 to Enclosure 1 provides information on radiological effluent instrumentation inoperable for greater than 30 days.

There are no new regulatory commitments contained in this letter. Should you have any questions concerning this submittal, please contact Jamie Paul, Site Licensing Manager, at (256) 729-7533.

Respectfully,

A handwritten signature in blue ink, appearing to read 'DLH', written over the word 'Respectfully,'.

D. L. Hughes
Site Vice President

U.S. Nuclear Regulatory Commission

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April 30, 2018

Enclosure: 2017 Annual Radioactive Effluent Release Report

cc (w/ Enclosure):

NRC Regional Administrator - Region II

NRC Senior Resident Inspector - Browns Ferry Nuclear Plant

NRC Project Manager - Browns Ferry Nuclear Plant

ENCLOSURE

**Browns Ferry Nuclear Plant
Units 1, 2, and 3**

2017 Annual Radioactive Effluent Release Report

See Enclosed

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

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Supplemental Information

1. Regulatory and BFN ODCM Limits

a. Fission and Activation Gases in Gaseous Effluent:

The release of fission and activation gases is regulated by the dose limits of Title 10 of the Code of Federal Regulations (10 CFR) 50 Appendix I and Browns Ferry Nuclear Plant (BFN) Offsite Dose Calculation Manual (ODCM). The air dose to areas at and beyond the site boundary due to noble gases released in gaseous effluents per unit shall be limited during any calendar quarter to ≤ 5 millirad (mrad) for gamma radiation and ≤ 10 mrad for beta radiation; and during any calendar year to ≤ 10 mrad for gamma radiation and ≤ 20 mrad for beta radiation.

b. Iodines and Particulates with Half-Lives Greater than Eight Days in Gaseous Effluents:

The release of iodines and particulates in gaseous effluent is regulated by the dose limits of 10 CFR 50 Appendix I and the BFN ODCM. The dose to a member of the public from radioiodines, radioactive materials in particulate form, and radionuclides other than noble gases with half-lives greater than eight days in gaseous effluent released per unit to areas at and beyond the site boundary shall be limited to any organ during any calendar quarter to ≤ 7.5 millirem (mrem), and during any calendar year to ≤ 15 mrem.

c. Liquid Effluents:

The release of radioactive liquid effluents is regulated by the dose limits of 10 CFR 50 Appendix I and the BFN ODCM. The doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas shall be limited during any calendar quarter to ≤ 1.5 mrem to the total body and ≤ 5 mrem to any organ and during any calendar year to ≤ 3 mrem to the total body and ≤ 10 mrem to any organ.

2. Limitation on Dose Rate

a. Fission and Activation Gases in Gaseous Effluent:

1. The instantaneous release rate of fission and activation gases is based on the dose rate limits of 10 CFR 20.1301 and the BFN ODCM. The dose rate at any time to areas at and beyond the site boundary due to noble gases released in gaseous effluents from the site shall be limited to ≤ 500 mrem per year to the total body and ≤ 3000 mrem per year to the skin.

2. The BFN ODCM Section 7.2 determines the maximum noble gas release rate.

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Supplemental Information

2. Limitation on Dose Rate (Continued)

b. Iodines and Particulates with Half-Lives Greater than Eight Days in Gaseous Effluents:

1. The instantaneous release rate of particulates and iodines is regulated by the dose rate limits of the BFN ODCM. The dose rate at any time to areas at and beyond the site boundary, due to I-131, I-133, H-3, and particulates with half-lives greater than eight days in gaseous effluent released from the site, shall be limited to ≤ 1500 mrem per year to any organ.
2. The BFN ODCM Section 7.3 determines the maximum particulate and iodine dose rates.

c. Liquid Effluents:

1. The concentration of radionuclides in liquid effluents released at any time from the site to unrestricted areas shall be limited to the concentrations specified in 10 CFR 20.1001-20.2402, Appendix B, Table 2, Column 2 for radionuclides other than dissolved or entrained noble gases
2. For dissolved or entrained noble gases, the concentration shall be limited to $2E-4$ μCi per milliliter (ml) total activity.

3. Average Energy

The BFN ODCM limits the dose equivalent rates due to the release of noble gases to less than or equal to 500 mrem/year to the total body and less than or equal to 3000 mrem/year to the skin. The use of dose rate is in accordance with NUREG-0133, "Preparation of Radiological Effluent Technical Specifications for Nuclear Power Plants." Since the release rate is not used for effluent control, the average beta and gamma energies (E) for gaseous effluents discussed in Regulatory Guide 1.21, "Measuring, Evaluation, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," are not applicable and not included in this report.

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4. Measurements and Approximations of Total Radioactivity

a. Fission and activation gases:

1. Noble gases in the building vent and stack (elevated) gaseous effluents are continuously monitored. The flow rate of the stack is continuously monitored and the building vent effluent flow rates are calculated once a shift based on the configuration of operating exhaust fans. The vent flow is calculated for each release. Gas grab samples of the stack are taken and analyzed weekly. Gas grab samples of in-service vents are taken and analyzed monthly. The specific noble gas activity concentrations and total volume of the gases are used to calculate the total Curies of noble gases released.
2. The tritium concentration is determined by the analysis of a monthly grab sample for each release point.

b. Iodines and Particulates:

1. Iodines and particulates are continuously sampled on impregnated charcoal filters and particulate filters, respectively. The charcoal and particulate samples are replaced at least weekly and analyzed to determine specific activity concentrations. The specific activity concentrations and vent flow rate data are used weekly to verify that release rate limits were not exceeded. The specific activity concentrations and total volume of gaseous effluent are used on a monthly basis to determine the total curies of each particulate and iodine released during the month.
2. The gross alpha concentration is determined by analysis of a monthly particulate filter composite sample, and strontium-89 and strontium-90 are determined by analysis of a quarterly particulate filter composite sample for each release point.

c. Liquid effluents:

1. The gamma ray emitting radionuclide concentrations are determined for each batch by gamma ray spectroscopy analysis of a grab sample. The allowable release rate is calculated for each batch based upon the known dilution flow. The flow rate of the liquid effluent is continuously monitored and the total volume released in each batch is determined. The total gamma activity released in each batch is determined by multiplying the radionuclide concentrations by the total volume discharged. The total gamma activity released during the month is then determined by summing the gamma activity content of each batch discharged during the month.

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Supplemental Information

4. Measurements and Approximations of Total Radioactivity (Continued)

c. Liquid effluents (Continued):

2. The gross alpha and tritium concentrations are measured on a monthly composite sample. The strontium-89, strontium-90, and iron-55 are measured on a quarterly composite sample.

d. The Radioactive Gaseous and Liquid Waste Monitoring Sampling and Analysis Program is specified in ODCM Sections 1/2.2.1 and 1/2.2.2. No liquid or gaseous concentration or dose limits were exceeded.

5. Batch Releases

		<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>	<u>Quarter</u>
A.	Liquid	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
	<u>Units</u>				
	1. Number of batches released	2	1	0	5
	2. Total time for batches released	780.00	180.00	0	2057.00
	3. Maximum time period for a batch release	420.00	180.00	0	505.00
	4. Average time period for a batch release	390.00	180.00	0	411.40
	5. Minimum time period for a batch release	360.00	180.00	0	295.00
	6. Average BFN beach flow during period of release into the river stream	44,432	50,741	36,086	39,131
		ft ³ /sec			
B.	Gaseous				
	None				

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6. Abnormal Releases

a. Liquid

1. Number of releases: 5
2. Total activity released (Curies):

<u>Destination</u>	<u>Nuclide</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
Leak to River	H-3	5.86E-02	4.79E-02	4.72E-02	2.33E-01
	F-18		3.615E-06		2.64E-05
	Na-24		1.454E-06		
	Mn-54		1.726E-07		
	Mn-56		6.662E-07		
	Co-58		4.145E-07		
	Co-60		1.200E-06		
	Zn-65		4.221E-07		
	Zn-69m		2.782E-07		
	As-76		4.183E-07		
	Nb-97		5.356E-08		
	I-134		2.214E-07		
	Xe-133		3.634E-07		
	Xe-135		3.066E-06		

b. Gaseous

1. Number of releases: 0

6. Abnormal Releases (Continued)

Summary of Abnormal/Unplanned Releases

The release of radioactive material to the environment from BFN has been a small fraction of the 10 CFR 20 Appendix B and 10 CFR 50 Appendix I limits. There were no limits exceeded as specified in 10 CFR 20 Appendix B and 10 CFR 50 Appendix I.

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Five abnormal liquid releases occurred in 2017.

1. Three of the abnormal releases were from the U-1, U-2, and U-3 Station Sumps. These releases occurred throughout 2017 and were the result of several identified sources including multiple steam leaks which occurred in the Steam Jet Air Ejector Rooms and Moisture Separator Rooms. (CRs 1256412, 1251481, 1249698, 1251479, 1256409, 1253461, 1282946, 1308933).
2. Leak from Condensate Head Tank valve 0-RTV-002-0738 (CR 1293308, 1292452) On 5/5/2017, Valve 0-RFV-002-0738, VAC Relief VLV CNDS HEAD TANK, stuck open and drained Condensate water onto Refuel Floor and scattered water onto duct work overhead and down the wall. The leak exited the Reactor Building and drained into U-1 Air Intake Plenum which drains to the Intake Channel. The estimated total water that leaked outside to the environment was less than 50 gallons.
3. Auxiliary Boiler C Feedwater was sampled on 1/28/17. The tritium analysis was greater than the Lower Limit of Detection(LLD). A resample confirmed the original result. Auxiliary Boilers drain to the U-1 Station Sump (CR 1255845).

7. Missed Compensatory Samples

During the reporting period , January 1, 2017 through December 31, 2017, there were no missed compensatory samples.

8. Changes to the Radwaste System and Changes to the Process Control Program

In calendar year 2017, BFN had one permanent change to the Radwaste System and no permanent change to the Process Control Program.

In 2017, BFN began a Radwaste Upgrade project to replace the Thermex System with Avantec Ultrex System. Under the project, BFN removed Floor Drain Sample Tank (FDST) A-2 and equalizing header under DCN 71436.

9. Revisions to the Offsite Dose Calculation Manual (ODCM)

During 2017 there were no revisions made to the Offsite Dose Calculation Manual (ODCM).

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GASEOUS EFFLUENTS

**TABLE 1A
Page 1 of 1
Gaseous Effluents - Summation of All Releases**

	<u>Units</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>	<u>Error %</u>
A. Fission and Activation Gases						
1. Total Releases	Curies	**	**	**	**	45
2. Average Release Rate for Period	μCi/sec	**	**	**	**	
3. Percent of Applicable Limit	%	****	****	****	****	
B. Iodines						
1. Total Iodine-131	Curies	2.276E-04	4.251E-04	5.284E-04	5.721E-04	36
2. Average Release Rate for Period	μCi/sec	2.927E-05	5.407E-05	6.648E-05	7.197E-05	
3. Percent of Applicable Limit	%	****	****	****	****	
C. Particulates						
1. Particulates with half-lives > eight days	Curies	6.746E-04	1.207E-04	8.591E-04	7.112E-04	35
2. Average Release Rate for Period	μCi/sec	8.676E-05	1.535E-05	1.081E-04	8.947E-05	
3. Percent of Applicable Limit	%	****	****	****	****	
4. Gross Alpha Radioactivity	Curies	**	7.769E-06	**	**	
D. Tritium						
1. Total Release	Curies	8.302E+01	6.655E+01	1.923E+02	1.235E+02	21
2. Average Release Rate for Period	μCi/sec	1.068E+01	8.464E+00	2.419E+01	1.553E+01	
3. Percent of Applicable Limit	%	****	****	****	****	
E. Carbon-14***						
1. Total Release	Curies	7.638	9.994	10.139	10.195	
2. Total as CO ₂	Curies	7.256	9.495	9.632	9.685	

* - Includes Activity from Abnormal Release
 ** - Not Detected.
 *** - Estimated using EPRI methodology provided in EPRI Report 1021106.
 **** - Applicable Limits are expressed in terms of dose. See Radiological Impact Section.

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**GASEOUS EFFLUENTS
(Continuous Mode Only)**

**TABLE 1B
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Gaseous Effluents - Elevated Releases**

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
1. Fission Gases				
Kr-85m	**	**	**	**
Kr-85	**	**	**	**
Kr-87	**	**	**	**
Kr-88	**	**	**	**
Xe-133	**	**	**	**
Xe-135m	**	**	**	**
Xe-135	**	**	**	**
Xe-138	**	**	**	**
Others (specify)	**	**	**	**
<u>Total for Period</u>	**	**	**	**
2. Iodines				
I-131	7.40E-05	8.12E-05	8.66E-05	5.06E-05
I-133	2.25E-04	2.98E-04	3.66E-04	1.99E-04
I-135	**	**	**	**
<u>Total for Period</u>	<u>2.99E-04</u>	<u>3.80E-04</u>	<u>4.53E-04</u>	<u>2.49E-04</u>

** - Not Detected.

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**GASEOUS EFFLUENTS
(Continuous Mode Only)**

**TABLE 1B (Continued)
Page 2 of 2
Gaseous Effluents - Elevated Releases**

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
3. Particulates*				
Sr-89	1.59E-05	1.43E-05	2.53E-05	1.26E-05
Sr-90	**	**	**	**
Cs-134	**	**	**	**
Cs-137	**	**	**	**
Cs-138	3.07E-03	1.44E-02	1.26E-02	2.12E-02
Ba-140	1.67E-06	6.29E-06	7.64E-06	1.10E-05
La-140	**	1.78E-06	1.15E-06	5.89E-06
Y-91m	8.24E-05	7.80E-05	1.18E-04	1.42E-04
Co-60	3.44E-05	1.59E-06	**	**
Ba-139	1.28E-02	2.21E-02	1.95E-02	2.57E-02
Co-58	5.79E-06	**	**	
Cr-51	2.07E-05	**	**	
Mn-54	3.20E-06	**	**	
Au-199	5.09E-05	2.04E-05	1.57E-05	1.63E-04
<u>Total for Period*</u>	<u>1.61E-02</u>	<u>3.67E-02</u>	<u>3.22E-02</u>	<u>4.72E-02</u>
4. Tritium	<u>1.94E+00</u>	<u>3.18E+00</u>	<u>9.98E+00</u>	<u>4.89E+00</u>
5. Carbon-14***	<u>7.256</u>	<u>9.495</u>	<u>9.632</u>	<u>9.685</u>

* - Includes all nuclides, even those with less than an eight day half-life.

** - Not Detected.

*** - Estimated using EPRI methodology provided in EPRI Report 1021106.

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**GASEOUS EFFLUENTS
 (Continuous Mode Only)**

**TABLE 1C
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 Gaseous Effluents - Ground Level Releases**

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
1. Fission Gases				
Kr-85m	**	**	**	**
Kr-85	**	**	**	**
Kr-87	**	**	**	**
Kr-88	**	**	**	**
Xe-133	**	**	**	**
Xe-135m	**	**	**	**
Xe-135	**	**	**	**
Xe-138	**	**	**	**
Others (specify)	**	**	**	**
<u>Total for Period</u>	**	**	**	**
2. Iodines				
I-131	2.17E-05	3.35E-05	1.70E-05	7.44E-05
I-133	7.62E-05	1.23E-04	1.10E-04	3.59E-04
I-135	**	**	**	**
<u>Total for Period</u>	<u>9.79E-05</u>	<u>1.56E-04</u>	<u>1.27E-04</u>	<u>4.34E-04</u>

** - Not Detected.

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**GASEOUS EFFLUENTS
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**TABLE 1C (Continued)
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Gaseous Effluents - Ground Level Releases**

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
3. Particulates*				
Sr-89	**	**	**	**
Sr-90	**	**	**	**
Cs-134	**	**	**	**
Cs-137	**	**	**	**
Ba-140	**	**	**	**
La-140	**	**	**	**
Co-60	8.13E-06	**	1.18E-05	6.14E-06
Co-58	**	**	**	5.70E-06
Y-91m	**	**	**	1.55E-05
Ba-139	6.71E-04	**	**	**
<u>Total for Period*</u>	<u>6.79E-04</u>	<u>**</u>	<u>1.25E-05</u>	<u>2.73E-05</u>
Gross Alpha	**	<u>5.16E-06</u>	**	**
Tritium	<u>3.29E+01</u>	<u>5.52E+00</u>	<u>1.91E+01</u>	<u>2.26E+01</u>

* - Include all nuclides even those with less than an eight day half-life.

** - Not Detected.

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**GASEOUS EFFLUENTS
(Continuous Mode Only)**

**TABLE 1D
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Gaseous Effluents - Mixed Mode Releases***

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
1. Fission Gases				
Kr-85m	**	**	**	**
Kr-85	**	**	**	**
Kr-87	**	**	**	**
Kr-88	**	**	**	**
Xe-133	**	**	**	**
Xe-135m	**	**	**	**
Xe-135	**	**	**	**
Xe-138	**	**	**	**
Others (specify)	**	**	**	**
<u>Total for Period</u>	<u>**</u>	<u>**</u>	<u>**</u>	<u>**</u>
2. Iodines				
I-131	1.32E-04	3.10E-04	4.25E-04	4.47E-04
I-133	1.26E-03	1.89E-03	3.06E-03	3.24E-03
I-135	**	**	**	**
<u>Total for Period</u>	<u>1.39E-03</u>	<u>2.20E-03</u>	<u>3.49E-03</u>	3.68E-03

* - The Reactor Building and Radwaste Building are treated as split-level releases.
** - Not Detected.

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**GASEOUS EFFLUENTS
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**TABLE 1D (Continued)
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Gaseous Effluents - Mixed Mode Releases***

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
3. Particulates***				
Sr-89	**	**	**	**
Sr-90				
Cs-134	**	**	**	**
Cs-137	3.77E-06	2.93E-06	**	**
Ba-140	**	**	6.99E-06	6.33E-05
La-140	**	**	**	3.48E-05
Ag-110m	9.49E-06	**	**	8.65E-05
Na-24	**	5.12E-05	1.12E-03	8.24E-04
Mn-54	1.59E-05	1.16E-06	1.37E-04	3.54E-05
Cr-51	9.22E-05	**	1.42E-05	**
Co-58	1.11E-05	**	1.63E-04	5.69E-05
Co-60	3.82E-04	7.41E-05	3.94E-04	1.75E-04
Zn-65	1.54E-05	**	8.18E-05	9.48E-05
Y-91m	2.71E-04	3.87E-04	5.68E-04	1.37E-03
Sr-91	**	**	1.50E-04	4.11E-04
Sr-92	**	**	**	3.55E-04
Ba-139	5.47E-03	6.04E-03	6.85E-03	2.17E-02
Au-199	4.44E-06	**	**	**

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**GASEOUS EFFLUENTS
(Continuous Mode Only)**

**TABLE 1D (Continued)
Page 3 of 3
Gaseous Effluents - Mixed Mode Releases***

<u>CURIES</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
3. Particulates***				
Tc-99m	**	**	**	2.53E-06
Mo-99	**	**	**	2.59E-06
Total for Period***	<u>6.27E-03</u>	<u>6.56E-03</u>	<u>9.49E-03</u>	<u>2.52E-02</u>
Gross Alpha	**	<u>2.61E-06</u>	**	**
Tritium	<u>4.82E+01</u>	<u>5.79E+01</u>	<u>1.63E+02</u>	<u>9.60E+01</u>

* - The Reactor Building and Radwaste Building are treated as split-level releases.

** - Not Detected.

*** - Includes all nuclides, even those with less than an eight day half-life.

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LIQUID EFFLUENTS

**TABLE 2A
Page 1 of 1
Liquid Effluents - Summation of All Releases**

	<u>Units</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>	<u>Error %</u>
A. Fission and Activation Products (Does not include tritium, gases, alpha)						
1. Total Release	Curies	2.343E-03	1.22E-03**	*	2.56E-04**	9
Average Diluted Concentration						
2. Released During the Period	μCi/ml	1.322E-09	2.98E-09**	*	5.86E-011**	
3. Percent of Applicable Limit	%	***	***	***	***	
B. Tritium						
1. Total Releases	Curies	9.78E-01**	1.05E-01**	4.72E-02**	4.40E+00**	6
Average Diluted Concentration						
2. Released During Period	μCi/ml	5.52E-07**	2.57E-07**	4.72E-02**	1.01E-06**	
3. Percent of Applicable Limit	%	***	***	***	***	
C. Dissolved and Entrained Noble Gases						
1. Total Releases	Curies	*	3.43E-06**	*	2.018E-05	8
Average Diluted Concentration						
2. Released During Period	μCi/ml	*	3.43E-06**	*	4.617E-12	
3. Percent of Applicable Limit	%	***	***	***	***	
D. Gross Alpha Radioactivity						
1. Total Releases	Curies	*	*	*	*	48
Average Diluted Concentration						
2. Released During Period	μCi/ml	*	*	*	*	
E. Volume of Liquid Waste to Discharge						
Canal (Prior to dilution)	Liters	2.545E+05	3.379E+04	*	6.112E+05	3
F. Volume of Dilution Water for Period						
	Liters	1.772E+09	4.088E+08	*	4.369E+09	10
G. Total CCW						
	Gigagal	2.32E+02	2.61E+02	2.65E+02	2.71E+02	

* - Not Detected.

** - Includes activity from abnormal releases. Dilution flow was not determined for all abnormal releases.

*** - The applicable limit is expressed in terms of dose. See Radiological Impact Report.

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LIQUID EFFLUENTS

**TABLE 2B
Liquid Effluents**

1. Fission and Activation Products

<u>Isotope in Curies</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
Sr-89	*	1.97E-06	*	*
Sr-90	*	8.85E-07	*	*
Cs-134	1.99E-05	1.30E-05	*	*
Cs-137	5.68E-04	8.69E-04	*	6.94E-05
I-131	*	*	*	8.25E-07
Co-58	*	1.59E-05	*	*
Co-60	3.59E-05	1.75E-04	*	1.29E-04
Fe-55	6.52E-06	1.01E-04	*	*
Zn-65	*	4.22E-07	*	*
Mn-54	4.82E-06	3.58E-05	*	3.68E-06
Cr-51	*	*	*	*
Zr-95	*	*	*	*
Nb-95	*	*	*	*
Mo-99	*	*	*	*
Te-99m	*	*	*	*
Ba-140	*	*	*	*
La-140	*	*	*	*
Ce-141	*	*	*	*
F-18	9.45E-04	3.62E-06	*	2.640E-05
Ag-110m	6.86E-06	*	*	*
Y-92	*	*	*	2.73E-05
Mn-56	*	6.66E-07	*	*
Na-24	7.42E-04	1.45E-06	*	*
Sb-124	2.21E-06	*	*	*
Sr-92	5.96E-06	*	*	*
Zn-69m	6.32E-06	2.78E-07	*	*
As-76	*	4.18E-07	*	*
Nb-97	*	5.36E-08	*	*

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LIQUID EFFLUENTS

**TABLE 2B
 Liquid Effluents**

1. Fission and Activation Products

<u>Isotope in Curies</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
I-134	*	2.21E-07	*	*
Total for period	<u>2.34E-03</u>	<u>1.22E-03</u>	*	<u>2.56E-04</u>

2. Dissolved and Entrained Gases

<u>Isotope in Curies</u>	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>
Xe-133	*	3.63E-07	*	1.35E-05
Xe-135	*	3.07E-06	*	6.68E-06
Total for Period	*	<u>3.43E-06</u>	*	<u>2.02E-05</u>

* - Not Detected.

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Solid Waste

**TABLE 3
 Page 1 of 8
 Solid Waste and Irradiated Fuel Shipments**

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

1. Type of Waste	Unit	Jan - Jun 2017	July-Dec 2017	Error %
a. Spent resins, filters, filter sludge, evaporator bottoms, etc.	m ³	8.76E+01	8.51E+01	+/- 25%
	Ci	4.36E+02	1.40E+03	+/-25%
b. Dry compressible waste, contaminated equipment, etc.	m ³	1.41E+03	8.11E+02	+/- 25%
	Ci	1.62E+00	1.06E+00	+/- 25%
c. Irradiated Components, Control Rod blades & LPRMs with fission chambers	m ³	0.00E+00	0.00E+00	+/- 25%
	Ci	0.00E+00	0.00E+00	+/- 25%
d. Other - Combined Packages	m ³	0.00E+00	0.00E+00	+/- 25%
	Ci	0.00E+00	0.00E+00	+/- 25%

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Solid Waste

**TABLE 3 (Continued)
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Solid Waste and Irradiated Fuel Shipment**

2. Estimate of Major Nuclide Composition

**a. Spent resins, filters, filter sludge,
evaporator bottoms, etc.**

	<u>Nuclide</u>	<u>Percentage</u>	<u>Curies</u>
1)	H-3	2.88E-03	5.32E-02
2)	C-14	2.62E-02	4.83E-01
3)	CR-51	2.39E-02	4.40E-01
4)	MN-54	6.34E+00	1.17E+02
5)	FE-55	1.75E+01	3.22E+02
6)	FE-59	3.30E-03	6.08E-02
7)	CO-57	2.18E-02	4.02E-01
8)	CO-58	2.13E+00	3.93E+01
9)	CO-60	6.23E+01	1.15E+03
10)	NI-63	4.40E-01	8.11E+00
11)	ZN-65	6.83E+00	1.26E+02
12)	SR-89	1.21E-02	2.23E-01
13)	SR-90	6.72E-03	1.24E-01
14)	ZR-95	1.06E-01	1.96E+00
15)	NB-95	1.27E-01	2.34E+00
16)	TC-99	1.30E-01	2.39E+00
17)	AG-110M	2.31E+00	4.26E+01
18)	SB-124	4.65E-04	8.57E-03
19)	I-131	4.04E-04	7.46E-03
20)	CS-134	3.88E-02	7.15E-01
21)	CS-137	1.31E+00	2.41E+01
22)	LA-140	1.17E-08	2.16E-07
23)	CE-144	3.52E-01	6.49E+00
24)	PU-238	3.04E-06	5.61E-05
25)	PU-239	1.24E-06	2.28E-05

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Solid Waste

**TABLE 3 (Continued)
Page 3 of 8
Solid Waste and Irradiated Fuel Shipment**

2. Estimate of Major Nuclide Composition (Continued)

**a. Spent resins, filters, filter sludge,
evaporator bottoms, etc. (Continued)**

	<u>Nuclide</u>	<u>Percentage</u>	<u>Curies</u>
26)	PU-241	7.91E-05	1.46E-03
27)	AM-241	2.76E-06	5.09E-05
28)	CM-232	1.97E-05	3.63E-04
29)	CM-243	1.43E-05	2.64E-04

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Solid Waste

**TABLE 3 (Continued)
Page 4 of 8
Solid Waste and Irradiated Fuel Shipments**

2. Estimate of Major Nuclide Composition (Continued)

**b. Dry, Compressible Waste, Contaminated Equipment,
etc.**

	<u>Nuclide</u>	<u>Percentage</u>	<u>Curies</u>
1)	H-3	3.36E-03	9.02E-05
2)	C-14	2.86E-03	7.67E-05
3)	CR-51	2.21E-01	5.93E-03
4)	MN-54	3.61E+00	9.69E-02
5)	FE-55	1.25E+01	3.36E-01
6)	FE-59	5.82E-02	1.56E-03
7)	CO-58	4.25E-01	1.14E-02
8)	CO-60	6.97E+01	1.87E+00
9)	NI-63	6.00E-01	1.61E-02
10)	ZN-65	2.51E+00	6.73E-02
11)	SR-89	1.19E-03	3.18E-05
12)	SR-90	1.26E-02	3.37E-04
13)	NB-95	3.84E-02	1.03E-03
14)	TC-99	1.04E-02	2.80E-04
15)	AG-110M	1.34E+00	3.60E-02
16)	SB-125	2.31E-01	6.19E-03
17)	CS-134	3.49E-01	9.37E-03
18)	CS-137	8.20E+00	2.20E-01
19)	CE-144	1.22E-01	3.26E-03
20)	PU-238	4.74E-05	1.27E-06
21)	PU-239	2.39E-05	6.41E-07
22)	PU-241	2.61E-03	7.00E-05
23)	AM-241	5.03E-04	1.35E-05
24)	CM-242	2.32E-06	6.22E-08
25)	CM-243	1.19E-04	3.18E-06

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Solid Waste

**TABLE 3 (Continued)
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Solid Waste and Irradiated Fuel Shipments**

2. Estimate of Major Nuclide Composition (Continued)

**c. Irradiated Components, Control Rods, LPRM's
with fission chambers**

<u>Nuclide</u>	<u>Percentage</u>	<u>Curies</u>
None		

**BROWNS FERRY NUCLEAR PLANT
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Solid Waste

**TABLE 3 (Continued)
Page 6 of 8
Solid Waste and Irradiated Fuel Shipments**

2. Estimate of Major Nuclide Composition (Continued)

d Other (Combined Packages)

<u>Nuclide</u>	<u>Percentage</u>	<u>Curies</u>
None		

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Solid Waste

**TABLE 3 (Continued)
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 Solid Waste and Irradiated Fuel Shipments**

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
3	Hittman Transport Services	Alaron Nuclear Services 2138 State Route 18
4	Hittman Transport Services	Energy Solutions 1790 Dock Street
36	Hittman Transport Services	Energy Solutions LLC. (CLIVE)
25	Hittman Transport Services	Energy Solutions Services (Bear Creek)
1	Hittman Transport Services	Energy Solutions Inc. (Gallaher Road)
18	Hubbard Trucking	Omega Technical Services Inc.
3	Interstate Ventures	Energy Solutions Services (Bear Creek)
7	Interstate Ventures	Omega Technical Services Inc.
4	Interstate Ventures	TOXCO, Inc.
5	Specialty Transport	Omega Technical Services Inc.
1	Tennessee Valley Authority-TVA	Energy Solutions (Bear Creek)

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Solid Waste

**TABLE 3 (Continued)
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Solid Waste and Irradiated Fuel Shipments**

B. Irradiated Fuel Shipments

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
0	0	0

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RADIOLOGICAL IMPACT

1. Introduction

Potential doses to the “maximum exposed individual” and the population around Browns Ferry Nuclear Plant (BFN) are calculated for each quarter as required in Section 5.2 of the Offsite Dose Calculation Manual (ODCM). The methodology used to estimate dose for determining plant releases for the reporting period is specified in Sections 6 and 7 of the ODCM. Dispersion of radioactive effluents in the environment is estimated using meteorological data and river flow measured during the period. In this report, the doses resulting from releases are described and compared to limits established for BFN.

2. 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 air dose limits in areas at and beyond the Site Boundary due to noble gases released in gaseous effluents per unit are:

≤ 5 mrad per quarter and
 ≤ 10 mrad per year for gamma radiation.
- and -
 ≤ 10 mrad per quarter and
 ≤ 20 mrad per year for beta radiation.

The dose limits to a member of the public in an unrestricted area from radioiodines, radioactive materials in particulate form, and radionuclides other than noble gases with half-lives > 8 days released in gaseous effluents for each unit are:

≤ 7.5 mrem per quarter and
 ≤ 15 mrem per year to any organ.

The dose or dose commitment to a member of the public from radioactive material in liquid effluents released to unrestricted areas are:

≤ 1.5 mrem per quarter and
 ≤ 3 mrem per year to the total body,
- and -
 ≤ 5 mrem per quarter and
 ≤ 10 mrem per year to any organ.

The limit for the total effective dose equivalent to an individual member of the public inside the site boundary is:

100 mrem per year.

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RADIOLOGICAL IMPACT

2. Dose Limits (Continued)

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

≤ 25 mrem per year to the whole body,
≤ 75 mrem per year to the thyroid,
- and -
≤ 25 mrem per year to any other organ.

3. Dose Calculations

Estimated doses to members of the public are determined using computer models (the Gaseous Effluent Licensing Code, and the Quarterly Water Dose Assessment Code (QWATA)). These models are based on guidance provided by the Nuclear Regulatory Commission (NRC) 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 to ensure conservative reporting data. The values chosen will tend to overestimate the dose. The expected dose to actual individuals is lower. The calculated doses are presented in Tables 4, 5, and 6.

4. Doses From Airborne Effluents

For airborne effluents, members of 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 consumed by animals.

a. Airborne Release Points

There are four monitored release points from BFN: the turbine building, the radwaste building, the reactor building, and the stack.

Releases from the turbine building are considered ground-level releases. The ground-level Joint Frequency Distribution (JFD) is derived from wind speeds and directions measured 10.5 meters above the ground and from the vertical temperature difference between 10.03 and 45.30 meters, and are presented for each quarter in the 2017 Meteorological Data Tables 7A, 7B, 7C, and 7D.

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RADIOLOGICAL IMPACT

4. Doses From Airborne Effluents (Continued)

a. Airborne Release Points (Continued)

Releases from the radwaste and reactor buildings are considered split-level releases. Portions of the release are treated as ground-level while other portions are considered elevated depending on the ratio of the vertical exit velocity to the horizontal wind speed. The split-level dispersion approach is implemented using a model that requires two complete quarterly JFDs for each effluent vent, one for the ground-level releases and one for the elevated releases. The ground-level portion of the split-level JFD is based on wind speeds and directions measured 10.5 meters above ground-level and from the vertical temperature difference between 10.03 and 45.30 meters. The elevated portion of the split-level JFD is based on wind speeds and direction measurements at the 45.74 meter level and the vertical temperature difference between 10.03 and 89.59 meters. Both of these JFDs are given for each quarter in the 2017 Meteorological Data Tables 8A, 8B, 8C, and 8D.

Releases from the stack are considered to be elevated releases. The JFDs for elevated releases are based on wind directions and wind speeds measured at 90.29 meters and the vertical temperature difference between 10.03 and 89.59 meters, and are given for each quarter in the 2017 Meteorological Data Tables 9A, 9B, 9C, 9D.

b. Meteorological Data

Meteorological variables at BFN are measured continuously. Measurements collected include wind speed and wind direction at heights of 10.5, 45.74, and 90.29 meters above the ground, and temperature at heights of 10.03, 45.30, and 89.59 meters above the ground. Quarterly JFDs are calculated for each release point using the appropriate levels of meteorological data. A quarterly JFD gives the percentage of the time that the wind is blowing out of a particular upwind compass sector in a particular range of wind speeds for a given stability class A through G. The wind speeds are divided into nine wind speed ranges. Calms are distributed by direction in proportion to the distribution of noncalm wind directions less than 1.6 m/s (3.5 mph). Stability classes are determined from the vertical temperature difference between two measurement levels.

The generally open terrain around BFN does not cause any significant effects on the transport and dispersion of gaseous effluents from the plant. Within 30 kilometers of BFN, the terrain is mostly gently rolling hills (30-60 meters). Between 30 and 80 kilometers, the hills become larger to the north and south and mountainous to the east and northeast. The Tennessee River/Wheeler Lake may have a minor effect on transport and dispersion in the immediate vicinity of BFN during periods of winds with a southerly component, overcast skies, and relatively high wind speeds. Also, the lower layer (10-45 meters) stability class tends to be more stable. However, during this infrequent condition, dose estimates will be conservative.

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RADIOLOGICAL IMPACT

4. Doses From Airborne Effluents (Continued)

c. External Exposure Dose

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

d. Submersion Dose

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

e. Organ Dose

Dose to an organ 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/goat milk, ingestion of beef, and ingestion of vegetables. Doses from applicable pathways are calculated for each 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. However, for the ingestion dose, only those pathways that exist for each receptor are considered in the sum, e.g., milk ingestion doses are included only for locations where milk was consumed without commercial preparation and vegetable ingestion is included only for those locations where a garden was 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.

The maximum organ dose, thyroid dose, and total body dose from airborne effluents are presented in Table 4.

5. 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 concentration of radionuclides in the Tennessee River is calculated by a computer model which uses measured hydraulic data downstream of BFN. Parameters used to determine the doses are based on guidance given by the NRC for maximum ingestion rates, exposure times, etc.

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RADIOLOGICAL IMPACT

5. Doses From Liquid Effluents (Continued)

Wherever possible, parameters used in the dose calculation are site specific. The models that are used to estimate doses, as well as the parameters input to the models, are described in detail in the BFN ODCM.

a. Liquid Release Points and River Data

Radionuclide concentrations in the Tennessee River are calculated assuming that releases in liquid effluents are continuous. When necessary, liquid releases from BFN, located at Tennessee River Mile 294, are made through diffusers which extend into the Tennessee River. It is assumed that releases to the river through these diffusers will initially be entrained in one-fifth of the water which flows past the plant. The QWATA code makes the assumption that this mixing condition holds true until the water is completely mixed at the first downstream dam (Wheeler Dam), at Tennessee River Mile 283.

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's release point. The maximum exposed 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. The maximum exposed individual dose from drinking water is assumed to be that calculated at the nearest downstream public water supply [West Morgan - East Lawrence (WMEL)]. This could be interpreted as indicating that the maximum exposed individual, as assumed for liquid releases from BFN, is an individual who obtains all of his drinking water at WMEL, consumes fish caught from the Tennessee River between BFN and Wheeler Dam, and spends 500 hours per year on the shoreline just downstream of the plant's release point. Doses calculated for the maximum exposed individual due to liquid effluents for each quarter in the period are presented in Table 5 along with the average river flows past the plant site for the periods.

6. Population Doses

Population doses due to airborne effluents are calculated for people 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 are calculated assuming that each individual consumed milk, vegetables, and meat produced within the sector in which the individual resides.

Population doses 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 historical recreational data on the number of shoreline visits at downstream locations.

Population doses calculated for airborne and liquid effluents are presented in Tables 4 and 5.

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RADIOLOGICAL IMPACT

7. Offsite Direct Radiation Dose

External gamma radiation levels were measured by environmental dosimeters deployed around BFN as part of the offsite Radiological Environmental Monitoring Program (REMP). The quarterly gamma radiation levels determined from these dosimeters during this reporting period averaged approximately 17 mrem/quarter at onsite stations (at or near the site boundary) and approximately 14 mrem/quarter at offsite stations. The onsite stations are approximately 3 mrem/quarter higher than at offsite stations. This difference is consistent with levels measured for pre-operation and construction phases of the Tennessee Valley Authority nuclear plants where the average radiation levels onsite were generally 2-6 mrem/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other undetermined influences. Fluctuations in natural background dose rates and in dosimeter readings tend to mask any small increments which may be due to plant operations. Thus, there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents.

8. Dose To A Member Of The Public Inside The Site Boundary

Pursuant to ODCM Section 7.7.5, a review was performed to determine the highest dose to a member of the public in the site boundary. The dose to a member of the public consists of the sum of dose commitments from effluent releases as well as any direct radiation dose. The gaseous effluent dose commitment is negligible compared to the direct radiation dose.

The direct radiation dose was determined from area environmental dosimeters located onsite. It consisted of gamma dose from the plume, ground contamination, and from equipment sources (i.e., tanks, turbine shine, radioactive material storage areas, etc.). The critical location was determined to be an Optically Stimulated Luminescence (OSL) dosimeter near the Livewell Center (Training Center). The direct radiation dose accounting for background and occupancy was approximately 1.0 mrem/quarter during 2017.

The total annual dose commitment to a member of the public for 2017 was 4.1 mrem. It can be concluded that the dose limit for a member of the public at the site boundary as specified in 10 CFR 20.1301 was not exceeded.

9. Total Dose

To determine compliance with 40 CFR 190, annual total dose contributions to the maximum exposed individual from BFN radioactive effluents and all other nearby uranium fuel cycle sources are considered.

The annual dose to any organ other than the thyroid for the maximum exposed individual is conservatively calculated 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

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9. Total Dose (continued)

radiation dose levels as measured by the REMP. This dose is compared to the 40 CFR 190 limit for total body or any organ dose (other than the thyroid) to determine compliance.

The annual thyroid dose to the maximum exposed 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 REMP. This dose is compared to the 40 CFR 190 limit for thyroid dose to determine compliance.

Total dose from the fuel cycle is presented in Table 6.

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**TABLE 4
Page 1 of 4
Doses from Airborne Effluents**

First Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	4.92E-11 mrad	5 mrad	< 1 %	NNW/1650 meters
Beta Air	1.50E-10 mrad	10 mrad	< 1 %	NNW/1650 meters
Submersion				
Total Body	8.74E-04 mrem	NA	NA	N/2440 meters
Skin	1.03E-03 mrem	NA	NA	N/2440 meters
Organ Doses				
Child/Bone	3.32E-02 mrem	7.5 mrem	< 1 %	N/2540 meters
Child/Thyroid	3.06E-02 mrem	7.5 mrem	< 1 %	N/2540 meters
Child/Total Body	3.01E-02 mrem	7.5 mrem	< 1 %	N/2540 meters

Population Doses

Total Body Dose 1.38E-01 man-rem

Maximum Organ Dose (organ) 4.50E-01 man-rem (Bone)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

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RADIOLOGICAL IMPACT

**TABLE 4 (Continued)
Page 2 of 4
Doses from Airborne Effluents**

Second Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	4.16E-11 mrad	5 mrad	< 1 %	N/1525 meters
Beta Air	1.27E-10 mrad	10 mrad	< 1 %	N/1525 meters
Submersion				
Total Body	2.16E-04 mrad	NA	NA	E/1410 meters
Skin	2.54E-04 mrad	NA	NA	E/1410 meters
Organ Doses				
Child/Bone	2.74E-02	7.5 mrem	< 1 %	N/2540 meters
Child/Thyroid	1.37E-02 mrem	7.5 mrem	< 1 %	N/2540 meters
Child/Total Body	1.26E-02 mrem	7.5 mrem	< 1 %	N/2540 meters

Population Doses

Total Body Dose 1.85E-01 man-rem

Maximum Organ Dose (organ) 9.05E-01 man-rem (bone)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

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RADIOLOGICAL IMPACT

**TABLE 4 (Continued)
Page 3 of 4
Doses from Airborne Effluents**

Third Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	3.40E-11 mrad	5 mrad	< 1 %	NE/5200 meters
Beta Air	1.04E-10 mrad	10 mrad	< 1 %	NE/5200 meters
Submersion				
Total Body	7.21E-04 mrad	NA	NA	E/1410 meters
Skin	8.48E-04 mrad	NA	NA	E/1410 meters
Organ Doses				
Child/Bone	3.62E-02	7.5 mrem	< 1 %	NE/4290 meters
Child/Thyroid	1.97E-02	7.5 mrem	< 1 %	N/2540 meters
Child/Total Body	1.89E-02	7.5 mrem	< 1 %	N/2540 meters

Population Doses

Total Body Dose 2.75E-01 man-rem

Maximum Organ Dose (organ) 9.05E-01 man-rem (bone)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

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RADIOLOGICAL IMPACT

**TABLE 4 (Continued)
Page 4 of 4
Doses from Airborne Effluents**

Fourth Quarter

Individual Doses

Pathway	Dose	Quarterly Limit	Percent of Limit	Location
External				
Gamma Air	8.79E-11 mrad	5 mrad	< 1 %	NNW/1650 meters
Beta Air	2.69E-10 mrad	10 mrad	< 1 %	NNW/1650 meters
Submersion				
Total Body	4.24E-04 mrad	NA	NA	NNW/1650 meters
Skin	4.98E-04 mrad	NA	NA	NNW/1650 meters
Organ Doses				
Child/ Bone	3.10E-02	7.5 mrem	< 1 %	NNW/2290 meters
Child/Thyroid	2.45E-02 mrem	7.5 mrem	< 1 %	NNW/2290 meters
Child /Total Body	2.29E-02 mrem	7.5 mrem	< 1 %	NNW/2290 meters

Population Doses

Total Body Dose 1.99E-01 man-rem

Maximum Organ Dose (organ) 6.70E-01 man-rem (bone)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

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RADIOLOGICAL IMPACT

**Table 5
Page 1 of 4
Doses from Liquid Effluents**

First Quarter*

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	Fish Ingestion	1.5E-04		
		Recreation	1.1E-05		
		Water Ingestion	9.2E-06		
		Total	1.7E-04	1.5 mrem	< 1 %
Teen	Liver	Fish Ingestion	2.4E-04		
		Recreation	1.1E-05		
		Water Ingestion	8.5E-06		
		Total	2.6E-04	5 mrem	< 1 %
Child	Thyroid	Fish Ingestion	1.1E-07		
		Recreation	1.1E-05		
		Water Ingestion	8.8E-06		
		Total	2.0E-05	5 mrem	< 1 %

Average River Flow past BFN (cubic feet per second): 44,432

Population Doses

Total Body Dose 2.3E-03 man-rem

Maximum Organ Dose (organ) 3.1E-03 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

* Includes dose from abnormal releases.

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RADIOLOGICAL IMPACT

**Table 5 (Continued)
Page 2 of 4
Doses from Liquid Effluents**

Second Quarter*

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	Fish Ingestion	1.9E-04		
		Recreation	1.9E-05		
		Water Ingestion	4.2E-06		
		Total	2.1E-04	1.5 mrem	< 1 %
Teen	Liver	Fish Ingestion	3.0E-04		
		Recreation	1.9E-05		
		Water Ingestion	5.4E-06		
		Total	3.2E-04	5 mrem	< 1 %
Child	Thyroid	Fish Ingestion	9.9E-09		
		Recreation	1.9E-05		
		Water Ingestion	8.0E-07		
		Total	2.0E-05	5 mrem	< 1 %

Average River Flow past BFN (cubic feet per second): 50,741

Population Doses

Total Body Dose 3.2E-03 man-rem

Maximum Organ Dose (organ) 4.3E-03 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

* Includes dose from abnormal releases.

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**Table 5 (Continued)
Page 3 of 4
Doses from Liquid Effluents**

Third Quarter*

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Child	Total Body	Fish Ingestion	6.9E-09		
		Recreation	0.0E+00		
		Water Ingestion	5.6E-07		
		Total	5.7E-07	1.5 mrem	< 1 %
Child	Liver	Fish Ingestion	6.9E-09		
		Recreation	0.0E+00		
		Water Ingestion	5.6E-07		
		Total	5.7E-07	5 mrem	< 1 %
Child	Thyroid	Fish Ingestion	6.9E-09		
		Recreation	0.0E+00		
		Water Ingestion	5.6E-07		
		Total	5.7E-07	5 mrem	< 1 %

Average River Flow past BFN (cubic feet per second): 36,086

Population Doses

Total Body Dose 9.2E-06 man-rem

Maximum Organ Dose (organ) 9.2E-06 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

* Includes dose from abnormal releases.

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**Table 5 (Continued)
Page 4 of 4
Doses from Liquid Effluents**

Fourth Quarter*

Individual Doses (mrem)

Age Group	Organ	Dose Pathway	Dose	Quarterly Limit	Percent of Limit
Adult	Total Body	Fish Ingestion	2.0E-05		
		Recreation	6.7E-06		
		Water Ingestion	3.2E-05		
		Total	5.9E-05	1.5 mrem	< 1 %
Child	Bone	Fish Ingestion	2.9E-05		
		Recreation	6.7E-06		
		Water Ingestion	4.4E-05		
		Total	8.0E-05	5 mrem	< 1 %
Child	Thyroid	Fish Ingestion	6.2E-07		
		Recreation	6.7E-06		
		Water Ingestion	4.3E-05		
		Total	5.0E-05	5 mrem	< 1 %

Average Riverflow past BFN (cubic feet per second): 39,131

Population Doses

Total Body Dose 1.5E-03 man-rem

Maximum Organ Dose (organ) 1.6E-03 man-rem (liver)

Population doses can be compared to the natural background dose for the entire 50-mile population of about 70,044 man-rem/year (based on 90 mrem/yr for natural background).

* Includes dose from abnormal releases.

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**Table 5A
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 Total Dose from I-131 Water Ingestion Pathway**

Quarter	1	2	3	4	Totals
I-131 Ci	0	0	0	8.3E-07	8.3E-07
Infant/Thyroid (mrem)	0	0	0	2.9E-07	2.9E-07
Population/Thyroid (mrem)	0	0	0	2.1E-06	2.1E-06

Doses from I-131 Water Ingestion Pathway

The REMP requirements as specified in Table 3.12-1 from NUREG 1302, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Boiling Water Reactors," dated April 1991, requires an I-131 specific analysis for drinking water pathway samples if the annual dose from I-131 is greater than 1 mrem. In order to evaluate the need for implementation of this additional analysis, the drinking water pathway dose from I-131 to the maximum organ and age group was calculated. There was no drinking water pathway dose from I-131 and the performance of the I-131 specific analysis is not required for BFN REMP drinking water samples.

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**Table 6
Page 1 of 1
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	8.74E-04	2.16E-04	7.21E-04	4.24E-04	
Critical organ dose (air)	3.32E-02	2.74E-02	3.62E-02	3.10E-02	
Total body dose (liquid)	1.70E-04	2.10E-04	5.70E-07	5.90E-05	
Maximum organ dose (liquid)	2.60E-04	3.20E-04	5.70E-07	8.00E-05	
Direct Radiation Dose	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
Total	3.45E-02	2.81E-02	3.69E-02	3.16E-02	
Cumulative Total Dose (mrem) (Total body or any other organ)					1.31E-01
Annual Dose Limit (mrem)					2.5E+01
Percent of Limit					< 1%
Thyroid Dose (mrem)					
Total body air submersion	8.74E-04	2.16E-04	7.21E-04	4.24E-04	
Thyroid dose (airborne)	3.06E-02	1.37E-02	1.97E-02	2.45E-02	
Total body dose (liquid)	1.70E-04	2.10E-04	5.70E-07	5.90E-05	
Thyroid dose (liquid)	2.00E-05	2.00E-05	5.70E-07	5.00E-05	
Direct Radiation Dose	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
Total	3.17E-02	1.41E-02	2.04E-02	2.50E-02	
Cumulative Total Dose (Thyroid) mrem					9.12E-02
Annual Dose Limit (mrem)					7.5E+01
Percent of Limit					< 1%

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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 7A

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR GROUND LEVEL RELEASES

FIRST QUARTER

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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.510	0.093	0.000	0.000	0.603
NNE	0.000	0.000	0.000	0.000	0.000	0.278	0.000	0.000	0.000	0.278
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.046	0.000	0.000	0.000	0.000	0.093
SE	0.000	0.000	0.093	0.603	0.139	0.000	0.000	0.000	0.000	0.835
SSE	0.000	0.000	0.139	0.232	0.000	0.000	0.000	0.000	0.000	0.371
S	0.000	0.000	0.186	0.464	0.000	0.000	0.000	0.000	0.000	0.650
SSW	0.000	0.000	0.046	0.232	0.000	0.000	0.000	0.000	0.000	0.278
SW	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
WSW	0.000	0.000	0.000	0.000	0.046	0.186	0.000	0.000	0.000	0.232
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	0.046	0.093	0.000	0.000	0.139
NW	0.000	0.000	0.046	0.000	0.000	0.139	0.093	0.000	0.000	0.278
NNW	0.000	0.000	0.000	0.000	0.000	0.510	0.186	0.000	0.000	0.696
SUBTOTAL	0.000	0.000	0.510	1.671	0.232	1.717	0.464	0.000	0.000	4.594

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS A	99
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	99
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 7.34

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.464	0.000	0.000	0.000	0.464
NNE	0.000	0.000	0.000	0.000	0.139	0.093	0.000	0.000	0.000	0.232
NE	0.000	0.000	0.000	0.000	0.046	0.093	0.000	0.000	0.000	0.139
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	0.046	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.093	0.278	0.046	0.000	0.000	0.000	0.000	0.418
SSE	0.000	0.000	0.139	0.139	0.000	0.000	0.000	0.000	0.000	0.278
S	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.093
SSW	0.000	0.000	0.093	0.093	0.000	0.000	0.000	0.000	0.000	0.186
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.093
WNW	0.000	0.000	0.000	0.000	0.000	0.371	0.232	0.000	0.000	0.603
NW	0.000	0.000	0.000	0.000	0.000	0.325	0.139	0.000	0.000	0.464
NNW	0.000	0.000	0.000	0.000	0.000	0.278	0.093	0.000	0.000	0.371
SUBTOTAL	0.000	0.000	0.371	0.557	0.371	1.671	0.464	0.000	0.000	3.434

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS B	74
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	74
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 8.56

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.139	0.000	0.000	0.000	0.186
NNE	0.000	0.000	0.000	0.000	0.139	0.139	0.000	0.000	0.000	0.278
NE	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.000	0.093
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.139	0.093	0.000	0.000	0.000	0.000	0.000	0.232
SSE	0.000	0.000	0.046	0.093	0.000	0.000	0.000	0.000	0.000	0.139
S	0.000	0.000	0.232	0.093	0.046	0.000	0.000	0.000	0.000	0.371
SSW	0.000	0.000	0.232	0.139	0.000	0.000	0.000	0.000	0.000	0.371
SW	0.000	0.000	0.093	0.139	0.000	0.000	0.000	0.000	0.000	0.232
WSW	0.000	0.000	0.046	0.093	0.000	0.000	0.000	0.000	0.000	0.139
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.093	0.093	0.371	0.232	0.000	0.000	0.789
NW	0.000	0.000	0.000	0.046	0.093	0.325	0.093	0.000	0.000	0.557
NNW	0.000	0.000	0.000	0.000	0.093	0.093	0.000	0.000	0.000	0.186
SUBTOTAL	0.000	0.000	0.789	0.789	0.603	1.114	0.325	0.000	0.000	3.619

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
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	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 6.86

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.371	0.371	0.974	0.974	0.000	0.000	0.000	2.738
NNE	0.000	0.000	0.278	0.557	1.299	0.418	0.000	0.000	0.000	2.552
NE	0.000	0.000	0.278	0.278	0.418	0.557	0.000	0.000	0.000	1.531
ENE	0.000	0.000	0.232	0.000	0.046	0.000	0.000	0.000	0.000	0.278
E	0.000	0.000	0.186	0.093	0.046	0.000	0.000	0.000	0.000	0.325
ESE	0.000	0.000	0.325	0.928	0.093	0.000	0.000	0.000	0.000	1.346
SE	0.000	0.000	0.882	0.371	0.046	0.000	0.000	0.000	0.000	1.299
SSE	0.000	0.000	0.928	0.371	0.000	0.000	0.000	0.000	0.000	1.299
S	0.000	0.000	1.299	0.696	0.186	0.232	0.000	0.000	0.000	2.413
SSW	0.000	0.000	0.418	0.742	0.139	0.000	0.000	0.000	0.000	1.299
SW	0.000	0.000	0.510	0.139	0.000	0.000	0.000	0.000	0.000	0.650
WSW	0.000	0.000	0.464	0.278	0.186	0.139	0.000	0.000	0.000	1.067
W	0.000	0.000	0.464	0.835	0.742	0.510	0.000	0.000	0.000	2.552
WNW	0.000	0.000	0.232	0.557	0.510	1.114	0.603	0.000	0.000	3.016
NW	0.000	0.000	0.093	0.418	0.742	1.439	1.717	0.278	0.000	4.687
NNW	0.000	0.000	0.139	0.325	0.696	1.392	0.882	0.000	0.000	3.434
SUBTOTAL	0.000	0.046	7.100	6.961	6.125	6.775	3.202	0.278	0.000	30.487

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS D	657
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	657
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 6.76

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.464	0.835	0.232	0.139	0.000	0.000	0.000	1.717
NNE	0.000	0.093	0.418	0.557	1.160	0.093	0.000	0.000	0.000	2.320
NE	0.000	0.093	0.418	0.557	0.371	0.139	0.000	0.000	0.000	1.578
ENE	0.000	0.046	0.325	0.371	0.046	0.000	0.000	0.000	0.000	0.789
E	0.000	0.046	1.253	0.464	0.000	0.000	0.000	0.000	0.000	1.763
ESE	0.000	0.093	1.624	1.253	0.278	0.046	0.000	0.000	0.000	3.295
SE	0.000	0.232	1.299	0.557	0.139	0.000	0.000	0.000	0.000	2.227
SSE	0.000	0.603	1.578	0.557	0.046	0.000	0.000	0.000	0.000	2.784
S	0.000	0.139	2.227	2.181	1.995	0.510	0.000	0.000	0.000	7.053
SSW	0.000	0.186	0.510	0.742	1.114	0.000	0.000	0.000	0.000	2.552
SW	0.000	0.046	0.325	0.186	0.000	0.000	0.000	0.000	0.000	0.557
WSW	0.000	0.046	0.742	0.371	0.000	0.000	0.000	0.000	0.000	1.160
W	0.000	0.046	0.510	0.418	0.093	0.093	0.000	0.000	0.000	1.160
WNW	0.000	0.000	0.186	0.325	0.278	0.000	0.000	0.000	0.000	0.789
NW	0.000	0.000	0.278	0.232	0.186	0.325	0.278	0.000	0.000	1.299
NNW	0.000	0.000	0.603	0.696	1.021	0.742	0.046	0.000	0.000	3.109
SUBTOTAL	0.000	1.717	12.761	10.302	6.961	2.088	0.325	0.000	0.000	34.153

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS E	736
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	736
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 4.28

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.974	0.603	0.000	0.000	0.000	0.000	0.000	1.578
NNE	0.000	0.000	0.139	0.371	0.093	0.000	0.000	0.000	0.000	0.603
NE	0.000	0.046	0.093	0.093	0.000	0.000	0.000	0.000	0.000	0.232
ENE	0.000	0.000	0.325	0.093	0.000	0.000	0.000	0.000	0.000	0.418
E	0.000	0.278	0.835	0.046	0.000	0.000	0.000	0.000	0.000	1.160
ESE	0.000	0.139	0.696	0.046	0.000	0.000	0.000	0.000	0.000	0.882
SE	0.000	0.371	1.021	0.278	0.000	0.000	0.000	0.000	0.000	1.671
SSE	0.000	0.974	0.789	0.000	0.000	0.000	0.000	0.000	0.000	1.763
S	0.000	0.418	1.439	1.810	0.835	0.093	0.000	0.000	0.000	4.594
SSW	0.000	0.093	0.557	0.557	0.139	0.000	0.000	0.000	0.000	1.346
SW	0.000	0.046	0.186	0.046	0.000	0.000	0.000	0.000	0.000	0.278
WSW	0.000	0.139	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.186
W	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093
WNW	0.000	0.093	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.139
NW	0.000	0.093	0.232	0.046	0.000	0.000	0.000	0.000	0.000	0.371
NNW	0.000	0.139	0.232	0.464	0.093	0.046	0.000	0.000	0.000	0.974
SUBTOTAL	0.000	2.923	7.610	4.455	1.160	0.139	0.000	0.000	0.000	16.288

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS F	351
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	351
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 3.04

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.093	0.278	0.046	0.000	0.000	0.000	0.000	0.000	0.420
NNE	0.001	0.000	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.187
NE	0.001	0.046	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.140
ENE	0.002	0.093	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.280
E	0.002	0.093	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.280
ESE	0.003	0.139	0.232	0.000	0.000	0.000	0.000	0.000	0.000	0.374
SE	0.003	0.325	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.421
SSE	0.014	0.928	1.067	0.000	0.000	0.000	0.000	0.000	0.000	2.009
S	0.017	0.278	2.135	0.603	0.000	0.000	0.000	0.000	0.000	3.033
SSW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.001	0.046	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.140
SUBTOTAL	0.046	2.042	4.548	0.789	0.000	0.000	0.000	0.000	0.000	7.425

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS G	160
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	160
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 2.10

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 7B

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR GROUND LEVEL RELEASES

SECOND QUARTER

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.046	0.000	0.000	0.000	0.046
NNE	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.414	0.184	0.000	0.000	0.000	0.000	0.000	0.597
SSE	0.000	0.000	0.781	0.138	0.000	0.000	0.000	0.000	0.000	0.919
S	0.000	0.000	1.149	0.230	0.000	0.000	0.000	0.000	0.000	1.379
SSW	0.000	0.000	0.414	0.689	0.000	0.000	0.000	0.000	0.000	1.103
SW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
WSW	0.000	0.000	0.046	0.092	0.000	0.000	0.000	0.000	0.000	0.138
W	0.000	0.000	0.000	0.000	0.000	0.276	0.000	0.000	0.000	0.276
WNW	0.000	0.000	0.000	0.000	0.000	0.184	0.138	0.000	0.000	0.322
NW	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.092
NNW	0.000	0.000	0.000	0.000	0.000	0.184	0.000	0.000	0.000	0.184
SUBTOTAL	0.000	0.000	2.849	1.333	0.046	0.781	0.184	0.000	0.000	5.193

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS A	113
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	113
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 4.47

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.138	0.000	0.000	0.000	0.184
NNE	0.000	0.000	0.000	0.000	0.000	0.138	0.000	0.000	0.000	0.138
NE	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.184	0.000	0.000	0.000	0.000	0.000	0.184
SE	0.000	0.000	0.184	0.276	0.000	0.000	0.000	0.000	0.000	0.460
SSE	0.000	0.000	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.230
S	0.000	0.000	0.368	0.092	0.000	0.000	0.000	0.000	0.000	0.460
SSW	0.000	0.000	0.414	0.138	0.000	0.000	0.000	0.000	0.000	0.551
SW	0.000	0.000	0.138	0.184	0.092	0.000	0.000	0.000	0.000	0.414
WSW	0.000	0.000	0.046	0.230	0.000	0.092	0.000	0.000	0.000	0.368
W	0.000	0.000	0.046	0.092	0.046	0.138	0.000	0.000	0.000	0.322
WNW	0.000	0.000	0.000	0.000	0.092	0.184	0.138	0.000	0.000	0.414
NW	0.000	0.000	0.000	0.138	0.184	0.184	0.184	0.000	0.000	0.689
NNW	0.000	0.000	0.000	0.046	0.046	0.138	0.000	0.000	0.000	0.230
SUBTOTAL	0.000	0.000	1.425	1.425	0.506	1.057	0.322	0.000	0.000	4.733

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS B	103
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	103
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 5.77

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.184	0.000	0.000	0.000	0.368
NNE	0.000	0.000	0.000	0.092	0.276	0.046	0.000	0.000	0.000	0.414
NE	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.092
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	0.046	0.000	0.000	0.000	0.000	0.000	0.046
ESE	0.000	0.000	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.138
SE	0.000	0.000	0.506	0.184	0.000	0.000	0.000	0.000	0.000	0.689
SSE	0.000	0.000	0.689	0.000	0.000	0.000	0.000	0.000	0.000	0.689
S	0.000	0.000	0.597	0.000	0.000	0.000	0.000	0.000	0.000	0.597
SSW	0.000	0.000	0.368	0.322	0.000	0.000	0.000	0.000	0.000	0.689
SW	0.000	0.000	0.276	0.138	0.000	0.000	0.000	0.000	0.000	0.414
WSW	0.000	0.000	0.184	0.138	0.000	0.092	0.000	0.000	0.000	0.414
W	0.000	0.000	0.046	0.322	0.138	0.230	0.000	0.000	0.000	0.735
WNW	0.000	0.000	0.000	0.230	0.138	0.184	0.092	0.092	0.000	0.735
NW	0.000	0.000	0.000	0.184	0.138	0.230	0.046	0.046	0.000	0.643
NNW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
SUBTOTAL	0.000	0.000	2.665	1.838	0.827	1.057	0.184	0.138	0.000	6.710

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS C	146
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	146
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 5.29

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.368	0.460	0.322	0.092	0.000	0.000	0.000	1.241
NNE	0.000	0.000	0.276	0.643	0.551	0.643	0.000	0.000	0.000	2.114
NE	0.000	0.046	0.138	0.414	0.322	0.368	0.046	0.000	0.000	1.333
ENE	0.000	0.000	0.092	0.092	0.092	0.046	0.000	0.000	0.000	0.322
E	0.000	0.092	0.414	0.230	0.046	0.000	0.000	0.000	0.000	0.781
ESE	0.000	0.092	0.735	0.919	0.322	0.092	0.000	0.000	0.000	2.160
SE	0.000	0.046	2.068	0.368	0.000	0.046	0.000	0.000	0.000	2.528
SSE	0.000	0.000	2.482	0.092	0.000	0.000	0.000	0.000	0.000	2.574
S	0.000	0.046	2.849	0.230	0.000	0.000	0.000	0.000	0.000	3.125
SSW	0.000	0.276	1.976	0.873	0.092	0.000	0.000	0.000	0.000	3.217
SW	0.000	0.092	0.873	0.092	0.046	0.000	0.000	0.000	0.000	1.103
WSW	0.000	0.092	1.333	0.597	0.046	0.046	0.000	0.000	0.000	2.114
W	0.000	0.138	1.333	2.574	1.471	0.781	0.643	0.000	0.000	6.939
WNW	0.000	0.000	0.276	0.689	0.322	0.597	0.322	0.138	0.000	2.344
NW	0.000	0.000	0.184	0.506	0.689	0.781	0.276	0.000	0.000	2.436
NNW	0.000	0.000	0.276	0.460	0.735	0.460	0.092	0.000	0.000	2.022
SUBTOTAL	0.000	0.919	15.671	9.237	5.055	3.952	1.379	0.138	0.000	36.351

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS D	791
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	791
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 4.71

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.781	0.506	0.092	0.000	0.000	0.000	0.000	1.425
NNE	0.000	0.276	0.873	0.919	0.322	0.092	0.000	0.000	0.000	2.482
NE	0.000	0.230	0.643	0.184	0.230	0.092	0.000	0.000	0.000	1.379
ENE	0.000	0.276	0.551	0.092	0.000	0.000	0.000	0.000	0.000	0.919
E	0.000	0.276	1.608	0.368	0.000	0.000	0.000	0.000	0.000	2.252
ESE	0.000	0.551	1.563	0.460	0.138	0.000	0.000	0.000	0.000	2.711
SE	0.000	0.414	0.919	0.046	0.000	0.000	0.000	0.000	0.000	1.379
SSE	0.000	0.551	0.735	0.000	0.000	0.000	0.000	0.000	0.000	1.287
S	0.000	0.551	1.517	0.322	0.000	0.000	0.000	0.000	0.000	2.390
SSW	0.000	0.551	1.930	0.735	0.092	0.000	0.000	0.000	0.000	3.309
SW	0.000	0.597	0.919	0.046	0.046	0.000	0.000	0.000	0.000	1.608
WSW	0.000	0.322	0.506	0.046	0.092	0.000	0.000	0.000	0.000	0.965
W	0.000	0.184	1.149	0.781	0.276	0.046	0.000	0.000	0.000	2.436
WNW	0.000	0.138	0.368	0.138	0.092	0.138	0.000	0.000	0.000	0.873
NW	0.000	0.184	0.184	0.184	0.000	0.414	0.000	0.000	0.000	0.965
NNW	0.000	0.230	0.460	0.414	0.092	0.184	0.000	0.000	0.000	1.379
SUBTOTAL	0.000	5.377	14.706	5.239	1.471	0.965	0.000	0.000	0.000	27.757

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS E	604
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	604
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 2.90

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.015	0.322	1.379	0.138	0.000	0.000	0.000	0.000	0.000	1.853
NNE	0.006	0.276	0.414	0.230	0.046	0.000	0.000	0.000	0.000	0.971
NE	0.007	0.414	0.322	0.046	0.000	0.000	0.000	0.000	0.000	0.788
ENE	0.012	0.643	0.689	0.138	0.000	0.000	0.000	0.000	0.000	1.483
E	0.011	0.506	0.735	0.184	0.000	0.000	0.000	0.000	0.000	1.436
ESE	0.010	0.184	0.919	0.046	0.000	0.046	0.000	0.000	0.000	1.205
SE	0.003	0.230	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.325
SSE	0.002	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.232
S	0.006	0.276	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.649
SSW	0.005	0.092	0.414	0.000	0.000	0.000	0.000	0.000	0.000	0.510
SW	0.003	0.092	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.371
WSW	0.002	0.138	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.232
W	0.002	0.184	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.278
WNW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NW	0.004	0.230	0.184	0.046	0.046	0.000	0.000	0.000	0.000	0.509
NNW	0.004	0.184	0.276	0.046	0.092	0.000	0.000	0.000	0.000	0.602
SUBTOTAL	0.092	3.906	6.342	0.919	0.184	0.046	0.000	0.000	0.000	11.489

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS F	250
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	250
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	2

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 2.13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.012	1.103	0.689	0.414	0.000	0.000	0.000	0.000	0.000	2.218
NNE	0.005	0.506	0.276	0.184	0.000	0.000	0.000	0.000	0.000	0.970
NE	0.003	0.322	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.462
ENE	0.004	0.276	0.322	0.046	0.000	0.000	0.000	0.000	0.000	0.647
E	0.002	0.184	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.278
ESE	0.003	0.276	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.416
SE	0.001	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.139
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.004	0.322	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.555
SSW	0.001	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.185
SW	0.001	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
WNW	0.001	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.139
NW	0.003	0.230	0.184	0.000	0.000	0.000	0.000	0.000	0.000	0.416
NNW	0.008	0.827	0.322	0.046	0.000	0.000	0.000	0.000	0.000	1.202
SUBTOTAL	0.046	4.550	2.436	0.735	0.000	0.000	0.000	0.000	0.000	7.767

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS G	169
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	169
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2176
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 1.66

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 7C

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR GROUND LEVEL RELEASES

THIRD QUARTER

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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.273	0.000	0.000	0.000	0.273
NNE	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
ESE	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
SE	0.000	0.000	0.045	0.227	0.000	0.000	0.000	0.000	0.000	0.273
SSE	0.000	0.000	0.591	0.136	0.000	0.000	0.000	0.000	0.000	0.727
S	0.000	0.000	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.318
SSW	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SW	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
WSW	0.000	0.000	0.045	0.045	0.091	0.000	0.000	0.000	0.000	0.182
W	0.000	0.000	0.000	0.182	0.182	0.000	0.000	0.000	0.000	0.364
WNW	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.000	0.000	0.000	0.318	0.000	0.000	0.000	0.318
NNW	0.000	0.000	0.000	0.000	0.045	0.182	0.000	0.000	0.000	0.227
SUBTOTAL	0.000	0.000	1.136	0.636	0.364	0.864	0.000	0.000	0.000	3.000

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS A	66
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	66
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 5.30

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.182	0.318	0.000	0.000	0.000	0.500
NNE	0.000	0.000	0.000	0.000	0.045	0.364	0.000	0.000	0.000	0.409
NE	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
SE	0.000	0.000	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.227
SSE	0.000	0.000	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.273
S	0.000	0.000	0.318	0.091	0.000	0.000	0.000	0.000	0.000	0.409
SSW	0.000	0.000	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.227
SW	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
WSW	0.000	0.000	0.091	0.273	0.045	0.045	0.000	0.000	0.000	0.455
W	0.000	0.000	0.000	0.364	0.318	0.091	0.000	0.000	0.000	0.773
WNW	0.000	0.000	0.000	0.091	0.273	0.409	0.000	0.000	0.000	0.773
NW	0.000	0.000	0.000	0.000	0.136	0.364	0.000	0.000	0.000	0.500
NNW	0.000	0.000	0.000	0.000	0.091	0.091	0.000	0.000	0.000	0.182
SUBTOTAL	0.000	0.000	1.000	1.045	1.091	1.727	0.000	0.000	0.000	4.864

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS B	107
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	107
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 6.03

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.000	0.136	0.000	0.000	0.000	0.000	0.182
NNE	0.000	0.000	0.045	0.000	0.091	0.182	0.000	0.000	0.000	0.318
NE	0.000	0.000	0.000	0.000	0.136	0.227	0.000	0.000	0.000	0.364
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	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.091
ESE	0.000	0.000	0.091	0.000	0.091	0.000	0.000	0.000	0.000	0.182
SE	0.000	0.000	0.409	0.182	0.000	0.000	0.000	0.000	0.000	0.591
SSE	0.000	0.000	0.909	0.045	0.000	0.000	0.000	0.000	0.000	0.955
S	0.000	0.000	0.591	0.045	0.000	0.000	0.000	0.000	0.000	0.636
SSW	0.000	0.000	0.364	0.091	0.000	0.000	0.000	0.000	0.000	0.455
SW	0.000	0.000	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.273
WSW	0.000	0.000	0.227	0.227	0.091	0.045	0.000	0.000	0.000	0.591
W	0.000	0.000	0.136	0.682	0.364	0.045	0.000	0.000	0.000	1.227
WNW	0.000	0.000	0.000	0.182	0.091	0.500	0.000	0.000	0.000	0.773
NW	0.000	0.000	0.000	0.182	0.091	0.136	0.000	0.000	0.000	0.409
NNW	0.000	0.000	0.045	0.045	0.045	0.091	0.000	0.000	0.000	0.227
SUBTOTAL	0.000	0.000	3.182	1.727	1.136	1.227	0.000	0.000	0.000	7.273

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS C	160
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	160
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 4.82

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.136	0.318	0.773	0.273	0.045	0.000	0.000	1.545
NNE	0.000	0.045	0.136	0.545	0.955	0.364	0.000	0.000	0.000	2.045
NE	0.000	0.045	0.136	0.682	1.091	1.091	0.000	0.000	0.000	3.045
ENE	0.000	0.045	0.273	0.500	0.182	0.136	0.000	0.000	0.000	1.136
E	0.000	0.000	0.545	0.591	0.591	0.000	0.000	0.000	0.000	1.727
ESE	0.000	0.091	0.955	0.636	0.409	0.091	0.000	0.000	0.000	2.182
SE	0.000	0.000	2.727	0.409	0.000	0.000	0.000	0.000	0.000	3.136
SSE	0.000	0.136	2.409	0.136	0.000	0.000	0.000	0.000	0.000	2.682
S	0.000	0.273	2.545	0.091	0.000	0.000	0.000	0.000	0.000	2.909
SSW	0.000	0.091	3.636	0.409	0.045	0.000	0.000	0.000	0.000	4.182
SW	0.000	0.091	1.864	0.273	0.000	0.000	0.000	0.000	0.000	2.227
WSW	0.000	0.091	2.273	0.545	0.045	0.000	0.000	0.000	0.000	2.955
W	0.000	0.000	1.455	1.545	0.727	0.273	1.045	0.000	0.000	4.045
WNW	0.000	0.000	0.318	0.409	0.727	0.409	0.136	0.000	0.000	2.000
NW	0.000	0.000	0.182	0.318	0.182	0.136	0.182	0.000	0.000	1.000
NNW	0.000	0.045	0.227	0.182	0.136	0.091	0.000	0.000	0.000	0.682
SUBTOTAL	0.000	0.955	19.818	7.591	5.864	2.864	0.409	0.000	0.000	37.500

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS D	825
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	825
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 4.04

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	1.091	0.500	0.091	0.182	0.091	0.000	0.000	1.955
NNE	0.000	0.045	0.773	1.500	0.955	0.455	0.000	0.000	0.000	3.727
NE	0.000	0.091	0.591	0.636	0.455	0.773	0.000	0.000	0.000	2.545
ENE	0.000	0.136	1.182	0.318	0.045	0.000	0.000	0.000	0.000	1.682
E	0.000	0.273	1.500	0.500	0.045	0.045	0.000	0.000	0.000	2.364
ESE	0.000	0.455	1.409	0.455	0.045	0.045	0.000	0.000	0.000	2.409
SE	0.000	0.545	0.364	0.000	0.000	0.000	0.000	0.000	0.000	0.909
SSE	0.000	0.545	0.682	0.000	0.000	0.000	0.000	0.000	0.000	1.227
S	0.000	0.727	0.955	0.045	0.000	0.000	0.000	0.000	0.000	1.727
SSW	0.000	0.273	0.773	0.000	0.000	0.000	0.000	0.000	0.000	1.045
SW	0.000	0.318	0.409	0.000	0.000	0.000	0.000	0.000	0.000	0.727
WSW	0.000	0.045	0.864	0.091	0.000	0.000	0.000	0.000	0.000	1.000
W	0.000	0.182	0.636	0.364	0.182	0.045	0.000	0.000	0.000	1.409
WNW	0.000	0.000	0.182	0.091	0.045	0.045	0.000	0.000	0.000	0.364
NW	0.000	0.045	0.182	0.091	0.000	0.136	0.000	0.000	0.000	0.455
NNW	0.000	0.136	0.500	0.273	0.136	0.045	0.000	0.000	0.000	1.091
SUBTOTAL	0.000	3.818	12.091	4.864	2.000	1.773	0.091	0.000	0.000	24.636

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS E	542
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	542
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 3.36

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.182	1.364	0.409	0.000	0.000	0.000	0.000	0.000	1.955
NNE	0.000	0.318	1.455	1.364	0.182	0.000	0.000	0.000	0.000	3.318
NE	0.000	0.455	0.591	0.318	0.045	0.000	0.000	0.000	0.000	1.409
ENE	0.000	0.409	1.455	0.455	0.091	0.000	0.000	0.000	0.000	2.409
E	0.000	0.136	1.455	0.409	0.000	0.000	0.000	0.000	0.000	2.000
ESE	0.000	0.136	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.318
SE	0.000	0.227	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.455
SSE	0.000	0.227	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.273
S	0.000	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.227
SSW	0.000	0.182	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.227
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	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.136
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.136
NW	0.000	0.136	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.182
NNW	0.000	0.273	0.364	0.045	0.000	0.000	0.000	0.000	0.000	0.682
SUBTOTAL	0.000	2.955	7.455	3.000	0.318	0.000	0.000	0.000	0.000	13.727

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS F	302
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	302
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 2.59

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	1.364	0.955	0.318	0.000	0.000	0.000	0.000	0.000	2.636
NNE	0.000	0.682	0.909	0.318	0.000	0.000	0.000	0.000	0.000	1.909
NE	0.000	0.545	0.682	0.000	0.000	0.000	0.000	0.000	0.000	1.227
ENE	0.000	0.182	0.773	0.000	0.000	0.000	0.000	0.000	0.000	0.955
E	0.000	0.182	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.500
ESE	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.182
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	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
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	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
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	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.136
NNW	0.000	1.136	0.091	0.000	0.000	0.000	0.000	0.000	0.000	1.227
SUBTOTAL	0.000	4.500	3.864	0.636	0.000	0.000	0.000	0.000	0.000	9.000

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS G	198
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	198
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 1.71

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 7D

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR GROUND LEVEL RELEASES

FOURTH QUARTER

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.047	0.655	0.000	0.000	0.000	0.701
NNE	0.000	0.000	0.000	0.000	0.047	0.140	0.000	0.000	0.000	0.187
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.047	0.187	0.047	0.000	0.000	0.000	0.281
SE	0.000	0.000	0.234	0.327	0.000	0.000	0.000	0.000	0.000	0.561
SSE	0.000	0.000	0.795	0.327	0.000	0.000	0.000	0.000	0.000	1.122
S	0.000	0.000	0.374	0.281	0.000	0.000	0.000	0.000	0.000	0.655
SSW	0.000	0.000	0.094	0.234	0.047	0.000	0.000	0.000	0.000	0.374
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
NNW	0.000	0.000	0.000	0.000	0.000	0.094	0.000	0.000	0.000	0.094
SUBTOTAL	0.000	0.000	1.496	1.216	0.327	1.029	0.000	0.000	0.000	4.067

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS A	88
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	87
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 5.13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.047	0.187	0.000	0.000	0.000	0.234
NNE	0.000	0.000	0.000	0.000	0.140	0.281	0.000	0.000	0.000	0.421
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.047	0.234	0.000	0.000	0.000	0.000	0.281
SE	0.000	0.000	0.140	0.281	0.000	0.000	0.000	0.000	0.000	0.421
SSE	0.000	0.047	0.234	0.094	0.000	0.000	0.000	0.000	0.000	0.374
S	0.000	0.000	0.094	0.140	0.000	0.000	0.000	0.000	0.000	0.234
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
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	0.281	0.047	0.000	0.000	0.327
NW	0.000	0.000	0.000	0.000	0.000	0.187	0.047	0.000	0.000	0.234
NNW	0.000	0.000	0.000	0.047	0.094	0.047	0.000	0.000	0.000	0.187
SUBTOTAL	0.000	0.047	0.468	0.655	0.514	0.982	0.094	0.000	0.000	2.758

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS B	61
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	59
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 6.64

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.047	0.000	0.234	0.047	0.000	0.000	0.000	0.327
NNE	0.000	0.000	0.047	0.000	0.187	0.094	0.000	0.000	0.000	0.327
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.047	0.140	0.094	0.000	0.000	0.000	0.281
SE	0.000	0.047	0.187	0.281	0.047	0.000	0.000	0.000	0.000	0.561
SSE	0.000	0.000	0.281	0.187	0.000	0.000	0.000	0.000	0.000	0.468
S	0.000	0.000	0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.187
SSW	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.094
SW	0.000	0.000	0.094	0.047	0.000	0.000	0.000	0.000	0.000	0.140
WSW	0.000	0.000	0.047	0.047	0.047	0.000	0.000	0.000	0.000	0.140
W	0.000	0.000	0.000	0.000	0.000	0.094	0.000	0.000	0.000	0.094
WNW	0.000	0.000	0.000	0.000	0.094	0.094	0.047	0.000	0.000	0.234
NW	0.000	0.000	0.000	0.000	0.047	0.047	0.140	0.000	0.000	0.234
NNW	0.000	0.000	0.000	0.000	0.094	0.187	0.000	0.000	0.000	0.281
SUBTOTAL	0.000	0.047	0.935	0.655	0.888	0.655	0.187	0.000	0.000	3.366

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS C	72
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	72
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 5.99

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.047	0.187	0.842	1.683	0.374	0.000	0.000	0.000	3.132
NNE	0.000	0.000	0.281	0.748	1.496	0.327	0.000	0.000	0.000	2.852
NE	0.000	0.000	0.234	0.842	0.374	0.094	0.000	0.000	0.000	1.543
ENE	0.000	0.000	0.234	0.140	0.094	0.327	0.000	0.000	0.000	0.795
E	0.000	0.140	0.187	0.234	0.234	0.000	0.000	0.000	0.000	0.795
ESE	0.000	0.094	0.701	0.608	0.608	0.187	0.000	0.000	0.000	2.197
SE	0.000	0.187	1.636	0.655	0.000	0.000	0.000	0.000	0.000	2.478
SSE	0.000	0.094	1.543	0.281	0.000	0.000	0.000	0.000	0.000	1.917
S	0.000	0.140	1.169	0.327	0.140	0.000	0.000	0.000	0.000	1.777
SSW	0.000	0.094	0.701	0.094	0.047	0.000	0.000	0.000	0.000	0.935
SW	0.000	0.094	0.468	0.140	0.000	0.000	0.000	0.000	0.000	0.701
WSW	0.000	0.047	0.842	0.468	0.094	0.047	0.000	0.000	0.000	1.496
W	0.000	0.000	0.748	0.795	0.468	0.421	0.000	0.000	0.000	2.431
WNW	0.000	0.047	0.374	0.608	0.748	1.122	0.187	0.094	0.047	3.226
NW	0.000	0.000	0.047	0.514	0.608	0.982	0.561	0.094	0.000	2.805
NNW	0.000	0.000	0.140	0.514	1.356	1.777	0.140	0.000	0.000	3.927
SUBTOTAL	0.000	0.982	9.490	7.807	7.948	5.657	0.888	0.187	0.047	33.006

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS D	714
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	706
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 5.51

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.005	0.281	0.748	0.982	0.187	0.234	0.000	0.000	0.000	2.436
NNE	0.003	0.094	0.468	0.655	0.701	0.000	0.000	0.000	0.000	1.920
NE	0.001	0.000	0.140	0.421	0.327	0.000	0.000	0.000	0.000	0.889
ENE	0.002	0.094	0.281	0.094	0.000	0.000	0.000	0.000	0.000	0.469
E	0.008	0.327	1.216	0.935	0.140	0.000	0.000	0.000	0.000	2.626
ESE	0.015	0.468	2.525	1.823	0.234	0.000	0.000	0.000	0.000	5.065
SE	0.010	0.701	1.216	0.281	0.000	0.000	0.000	0.000	0.000	2.207
SSE	0.016	0.748	2.338	0.234	0.000	0.000	0.000	0.000	0.000	3.335
S	0.013	0.234	2.291	1.029	0.468	0.140	0.000	0.000	0.000	4.174
SSW	0.005	0.327	0.561	0.140	0.047	0.094	0.000	0.000	0.000	1.173
SW	0.003	0.234	0.281	0.047	0.000	0.000	0.000	0.000	0.000	0.564
WSW	0.002	0.094	0.327	0.094	0.000	0.000	0.000	0.000	0.000	0.516
W	0.003	0.094	0.514	0.842	0.374	0.094	0.000	0.000	0.000	1.920
WNW	0.002	0.140	0.187	0.140	0.140	0.000	0.047	0.000	0.000	0.656
NW	0.001	0.094	0.094	0.234	0.140	0.561	0.047	0.000	0.000	1.170
NNW	0.005	0.187	0.795	1.029	0.701	0.561	0.000	0.000	0.000	3.278
SUBTOTAL	0.094	4.114	13.978	8.976	3.460	1.683	0.094	0.000	0.000	32.398

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS E	713
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	693
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	2

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 3.58

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.005	0.047	1.262	0.561	0.000	0.000	0.000	0.000	0.000	1.875
NNE	0.002	0.140	0.421	0.421	0.047	0.000	0.000	0.000	0.000	1.031
NE	0.001	0.094	0.187	0.094	0.000	0.000	0.000	0.000	0.000	0.375
ENE	0.003	0.234	0.514	0.140	0.000	0.000	0.000	0.000	0.000	0.891
E	0.008	0.421	1.590	0.795	0.000	0.000	0.000	0.000	0.000	2.813
ESE	0.007	0.421	1.309	0.187	0.000	0.000	0.000	0.000	0.000	1.924
SE	0.003	0.327	0.421	0.000	0.000	0.000	0.000	0.000	0.000	0.751
SSE	0.006	0.608	0.982	0.000	0.000	0.000	0.000	0.000	0.000	1.596
S	0.002	0.094	0.468	0.187	0.234	0.094	0.000	0.000	0.000	1.078
SSW	0.002	0.187	0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.376
SW	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.094
WSW	0.001	0.094	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.141
W	0.001	0.094	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.141
WNW	0.001	0.047	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.141
NW	0.001	0.047	0.281	0.047	0.000	0.000	0.000	0.000	0.000	0.375
NNW	0.003	0.047	0.701	0.374	0.094	0.000	0.000	0.000	0.000	1.219
SUBTOTAL	0.047	2.945	8.555	2.805	0.374	0.094	0.000	0.000	0.000	14.820

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS F	326
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	317
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	1

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 2.60

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.055	0.561	1.496	0.327	0.000	0.000	0.000	0.000	0.000	2.440
NNE	0.026	0.561	0.421	0.047	0.000	0.000	0.000	0.000	0.000	1.055
NE	0.020	0.234	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.768
ENE	0.034	0.281	0.982	0.047	0.000	0.000	0.000	0.000	0.000	1.343
E	0.028	0.374	0.655	0.047	0.000	0.000	0.000	0.000	0.000	1.103
ESE	0.008	0.047	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.288
SE	0.006	0.047	0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.240
SSE	0.005	0.140	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.192
S	0.003	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.096
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.001	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.003	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096
WNW	0.003	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096
NW	0.006	0.140	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.240
NNW	0.036	0.514	0.842	0.187	0.000	0.000	0.000	0.000	0.000	1.579
SUBTOTAL	0.234	3.179	5.517	0.655	0.000	0.000	0.000	0.000	0.000	9.584

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS G	223
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	205
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2139
TOTAL HOURS CALM	5

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND SPEED AND DIRECTION MEASURED AT 10.50 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 2.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 8A

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR SPLIT LEVEL RELEASES

(GROUND LEVEL RELEASE MODE AND ELEVATED RELEASE MODE)

FIRST QUARTER

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.092	0.031	0.000	0.000	0.123
NNE	0.000	0.000	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.043
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.003	0.005	0.000	0.000	0.000	0.000	0.008
SE	0.000	0.000	0.007	0.052	0.026	0.000	0.000	0.000	0.000	0.084
SSE	0.000	0.000	0.008	0.029	0.000	0.000	0.000	0.000	0.000	0.038
S	0.000	0.000	0.026	0.069	0.000	0.000	0.000	0.000	0.000	0.095
SSW	0.000	0.000	0.001	0.017	0.000	0.000	0.000	0.000	0.000	0.019
SW	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002
WSW	0.000	0.000	0.000	0.000	0.005	0.034	0.000	0.000	0.000	0.039
W	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.008
WNW	0.000	0.000	0.000	0.000	0.000	0.008	0.018	0.000	0.000	0.026
NW	0.000	0.000	0.000	0.000	0.000	0.023	0.018	0.000	0.000	0.041
NNW	0.000	0.000	0.000	0.000	0.000	0.090	0.036	0.000	0.000	0.126
SUBTOTAL	0.000	0.000	0.043	0.173	0.036	0.298	0.103	0.000	0.000	0.652

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
TOTAL HOURS OF STABILITY CLASS A 24.760
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 14.060

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.077	0.000	0.000	0.000	0.077
NNE	0.000	0.000	0.000	0.000	0.013	0.017	0.000	0.000	0.000	0.030
NE	0.000	0.000	0.000	0.000	0.005	0.014	0.000	0.000	0.000	0.019
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	0.004	0.000	0.000	0.000	0.000	0.004
ESE	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.008
SE	0.000	0.000	0.004	0.029	0.009	0.000	0.000	0.000	0.000	0.042
SSE	0.000	0.000	0.008	0.010	0.000	0.000	0.000	0.000	0.000	0.018
S	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.006
SSW	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.013
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.006	0.009	0.000	0.000	0.000	0.015
WNW	0.000	0.000	0.000	0.000	0.000	0.059	0.051	0.000	0.000	0.110
NW	0.000	0.000	0.000	0.000	0.000	0.051	0.027	0.000	0.000	0.078
NNW	0.000	0.000	0.000	0.000	0.000	0.045	0.018	0.000	0.000	0.063
SUBTOTAL	0.000	0.000	0.012	0.058	0.045	0.273	0.095	0.000	0.000	0.484

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
TOTAL HOURS OF STABILITY CLASS B 25.950
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B 10.420

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.006	0.024	0.000	0.000	0.000	0.030
NNE	0.000	0.000	0.000	0.000	0.008	0.022	0.000	0.000	0.000	0.031
NE	0.000	0.000	0.000	0.000	0.003	0.005	0.000	0.000	0.000	0.008
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	0.009	0.000	0.000	0.000	0.000	0.009
SE	0.000	0.000	0.004	0.006	0.000	0.000	0.000	0.000	0.000	0.010
SSE	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.015
S	0.000	0.000	0.012	0.008	0.040	0.000	0.000	0.000	0.000	0.061
SSW	0.000	0.000	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.020
SW	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.004
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	0.009	0.053	0.047	0.000	0.000	0.110
NW	0.000	0.000	0.000	0.000	0.006	0.042	0.019	0.000	0.000	0.067
NNW	0.000	0.000	0.000	0.000	0.008	0.017	0.000	0.000	0.000	0.025
SUBTOTAL	0.000	0.000	0.022	0.048	0.091	0.163	0.066	0.000	0.000	0.391

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
TOTAL HOURS OF STABILITY CLASS C 76.080
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 8.420

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.020	0.141	0.182	0.000	0.000	0.000	0.343
NNE	0.000	0.000	0.000	0.026	0.161	0.065	0.000	0.000	0.000	0.252
NE	0.000	0.000	0.000	0.005	0.030	0.079	0.000	0.000	0.000	0.114
ENE	0.000	0.000	0.002	0.000	0.005	0.000	0.000	0.000	0.000	0.007
E	0.000	0.000	0.002	0.007	0.004	0.000	0.000	0.000	0.000	0.013
ESE	0.000	0.000	0.014	0.098	0.018	0.000	0.000	0.000	0.000	0.131
SE	0.000	0.000	0.063	0.058	0.008	0.000	0.000	0.000	0.000	0.129
SSE	0.000	0.000	0.072	0.142	0.000	0.000	0.000	0.000	0.000	0.214
S	0.000	0.000	0.105	0.159	0.140	0.226	0.000	0.000	0.000	0.630
SSW	0.000	0.000	0.013	0.103	0.040	0.000	0.000	0.000	0.000	0.156
SW	0.000	0.000	0.007	0.017	0.000	0.000	0.000	0.000	0.000	0.025
WSW	0.000	0.000	0.008	0.028	0.026	0.027	0.000	0.000	0.000	0.090
W	0.000	0.000	0.001	0.054	0.098	0.084	0.000	0.000	0.000	0.237
WNW	0.000	0.000	0.000	0.008	0.037	0.170	0.142	0.000	0.000	0.357
NW	0.000	0.000	0.000	0.003	0.054	0.236	0.560	0.246	0.000	1.099
NNW	0.000	0.000	0.000	0.011	0.077	0.252	0.303	0.000	0.000	0.643
SUBTOTAL	0.000	0.000	0.289	0.740	0.839	1.322	1.005	0.246	0.000	4.440

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
TOTAL HOURS OF STABILITY CLASS D 781.080
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 95.690

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.014	0.089	0.039	0.025	0.000	0.000	0.000	0.167
NNE	0.000	0.000	0.007	0.069	0.164	0.017	0.000	0.000	0.000	0.258
NE	0.000	0.000	0.011	0.052	0.047	0.023	0.000	0.000	0.000	0.133
ENE	0.000	0.000	0.010	0.038	0.007	0.000	0.000	0.000	0.000	0.055
E	0.000	0.000	0.076	0.052	0.000	0.000	0.000	0.000	0.000	0.127
ESE	0.000	0.000	0.145	0.185	0.062	0.009	0.000	0.000	0.000	0.401
SE	0.000	0.007	0.139	0.119	0.058	0.000	0.000	0.000	0.000	0.323
SSE	0.000	0.026	0.289	0.284	0.044	0.000	0.000	0.000	0.000	0.643
S	0.000	0.002	0.320	0.560	1.062	0.422	0.000	0.000	0.000	2.366
SSW	0.000	0.001	0.040	0.126	0.285	0.000	0.000	0.000	0.000	0.452
SW	0.000	0.000	0.031	0.026	0.000	0.000	0.000	0.000	0.000	0.056
WSW	0.000	0.000	0.036	0.036	0.000	0.000	0.000	0.000	0.000	0.072
W	0.000	0.000	0.007	0.038	0.013	0.021	0.000	0.000	0.000	0.078
WNW	0.000	0.000	0.002	0.024	0.034	0.000	0.000	0.000	0.000	0.060
NW	0.000	0.000	0.001	0.015	0.024	0.057	0.120	0.000	0.000	0.217
NNW	0.000	0.000	0.009	0.060	0.149	0.133	0.010	0.000	0.000	0.361
SUBTOTAL	0.000	0.037	1.136	1.770	1.987	0.708	0.130	0.000	0.000	5.768

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
TOTAL HOURS OF STABILITY CLASS E 911.560
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 124.300

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.059	0.077	0.000	0.000	0.000	0.000	0.000	0.135
NNE	0.000	0.000	0.001	0.050	0.015	0.000	0.000	0.000	0.000	0.066
NE	0.000	0.000	0.006	0.011	0.000	0.000	0.000	0.000	0.000	0.018
ENE	0.000	0.000	0.021	0.012	0.000	0.000	0.000	0.000	0.000	0.033
E	0.000	0.002	0.074	0.005	0.000	0.000	0.000	0.000	0.000	0.080
ESE	0.000	0.008	0.082	0.006	0.000	0.000	0.000	0.000	0.000	0.097
SE	0.000	0.019	0.078	0.058	0.000	0.000	0.000	0.000	0.000	0.155
SSE	0.000	0.067	0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.217
S	0.000	0.021	0.213	0.403	0.375	0.088	0.000	0.000	0.000	1.100
SSW	0.000	0.006	0.062	0.095	0.030	0.000	0.000	0.000	0.000	0.193
SW	0.000	0.000	0.023	0.008	0.000	0.000	0.000	0.000	0.000	0.031
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	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.002
NW	0.000	0.000	0.004	0.006	0.000	0.000	0.000	0.000	0.000	0.010
NNW	0.000	0.000	0.007	0.058	0.016	0.009	0.000	0.000	0.000	0.090
SUBTOTAL	0.000	0.124	0.783	0.788	0.436	0.097	0.000	0.000	0.000	2.228

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
TOTAL HOURS OF STABILITY CLASS F 286.670
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 48.010

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.001	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.016
NNE	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
NE	0.000	0.002	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.006
ENE	0.000	0.003	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.006
E	0.000	0.009	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.017
ESE	0.000	0.011	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.026
SE	0.000	0.040	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.055
SSE	0.000	0.130	0.220	0.000	0.000	0.000	0.000	0.000	0.000	0.351
S	0.000	0.041	0.401	0.183	0.000	0.000	0.000	0.000	0.000	0.625
SSW	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.006
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.005
NNW	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.006
SUBTOTAL	0.000	0.238	0.678	0.206	0.000	0.000	0.000	0.000	0.000	1.123

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
 TOTAL HOURS OF GROUND LEVEL RELEASE 325.090
 TOTAL HOURS OF STABILITY CLASS G 48.900
 TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 24.190

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
 WIND DIRECTION MEASURED AT 10.50 METER LEVEL
 WIND SPEED MEASURED AT 10.50 METER LEVEL
 EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.000	0.000	0.039
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.045	0.041	0.000	0.000	0.000	0.086
SSE	0.000	0.000	0.000	0.000	0.000	0.045	0.082	0.000	0.000	0.000	0.127
S	0.000	0.000	0.000	0.000	0.000	0.045	0.039	0.116	0.000	0.000	0.199
SSW	0.000	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	0.000
WSW	0.000	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	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.046	0.000	0.135	0.161	0.154	0.000	0.000	0.000	0.497

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF ELEVATED RELEASES 1829.910
TOTAL HOURS OF STABILITY CLASS A 24.760
TOTAL HOURS OF ELEVATED STABILITY CLASS A 10.700

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.039	0.264	0.000	0.000	0.303
NNE	0.000	0.000	0.000	0.000	0.000	0.039	0.039	0.000	0.000	0.078
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.041	0.000	0.000	0.000	0.041
SE	0.000	0.000	0.000	0.000	0.044	0.043	0.000	0.000	0.000	0.086
SSE	0.000	0.000	0.000	0.000	0.000	0.039	0.000	0.000	0.000	0.039
S	0.000	0.000	0.000	0.000	0.045	0.081	0.000	0.000	0.000	0.127
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	0.046	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	0.000	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	0.000	0.046	0.089	0.283	0.302	0.000	0.000	0.721

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF ELEVATED RELEASES 1829.910
TOTAL HOURS OF STABILITY CLASS B 25.950
TOTAL HOURS OF ELEVATED STABILITY CLASS B 15.530

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.046	0.000	0.000	0.196	0.419	0.025	0.000	0.686
NNE	0.000	0.000	0.000	0.000	0.000	0.161	0.115	0.000	0.000	0.275
NE	0.000	0.000	0.000	0.000	0.000	0.082	0.000	0.000	0.000	0.082
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	0.044	0.043	0.000	0.000	0.000	0.087
SE	0.000	0.000	0.000	0.093	0.046	0.204	0.150	0.000	0.000	0.492
SSE	0.000	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.000	0.043
S	0.000	0.000	0.000	0.000	0.000	0.000	0.077	0.000	0.000	0.077
SSW	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.093
SW	0.000	0.000	0.000	0.000	0.044	0.039	0.037	0.000	0.000	0.121
WSW	0.000	0.000	0.000	0.000	0.000	0.082	0.114	0.000	0.000	0.196
W	0.000	0.000	0.000	0.000	0.000	0.000	0.076	0.000	0.000	0.076
WNW	0.000	0.000	0.000	0.000	0.000	0.039	0.190	0.000	0.000	0.229
NW	0.000	0.000	0.000	0.000	0.000	0.039	0.151	0.000	0.000	0.191
NNW	0.000	0.000	0.000	0.000	0.000	0.039	0.454	0.000	0.000	0.493
SUBTOTAL	0.000	0.000	0.046	0.186	0.177	0.924	1.782	0.025	0.000	3.140

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF ELEVATED RELEASES 1829.910
TOTAL HOURS OF STABILITY CLASS C 76.080
TOTAL HOURS OF ELEVATED STABILITY CLASS C 67.660

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.093	0.232	0.178	1.162	1.247	0.097	0.000	3.056
NNE	0.000	0.000	0.139	0.186	0.357	1.701	0.267	0.000	0.000	2.650
NE	0.000	0.000	0.232	0.046	0.351	0.605	0.000	0.000	0.000	1.235
ENE	0.000	0.000	0.000	0.186	0.181	0.124	0.000	0.000	0.000	0.490
E	0.000	0.000	0.046	0.046	0.045	0.000	0.000	0.000	0.000	0.137
ESE	0.000	0.000	0.000	0.046	0.354	0.533	0.038	0.000	0.000	0.971
SE	0.000	0.000	0.186	0.510	0.534	0.611	0.340	0.068	0.000	2.249
SSE	0.000	0.000	0.186	0.093	0.090	0.644	0.640	0.094	0.000	1.746
S	0.000	0.000	0.139	0.325	0.220	0.328	0.343	0.249	0.032	1.636
SSW	0.000	0.000	0.139	0.186	0.136	1.018	0.604	0.042	0.000	2.124
SW	0.000	0.000	0.418	0.557	0.088	0.369	0.038	0.000	0.000	1.470
WSW	0.000	0.000	0.186	0.232	0.316	0.779	0.075	0.000	0.000	1.587
W	0.000	0.000	0.278	0.232	0.361	1.055	0.230	0.000	0.000	2.156
WNW	0.000	0.000	0.093	0.371	0.358	1.243	1.130	0.381	0.000	3.577
NW	0.000	0.000	0.000	0.510	0.355	1.054	1.468	0.527	0.019	3.934
NNW	0.000	0.000	0.093	0.186	0.266	0.858	1.161	0.226	0.000	2.788
SUBTOTAL	0.000	0.046	2.227	3.944	4.188	12.082	7.581	1.685	0.051	31.805

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF ELEVATED RELEASES 1829.910
TOTAL HOURS OF STABILITY CLASS D 781.080
TOTAL HOURS OF ELEVATED STABILITY CLASS D 685.390

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.093	0.000	0.670	0.884	0.380	0.000	0.000	2.026
NNE	0.000	0.000	0.046	0.093	0.400	1.381	0.384	0.000	0.000	2.304
NE	0.000	0.000	0.139	0.046	0.179	0.901	0.039	0.000	0.000	1.304
ENE	0.000	0.000	0.046	0.278	0.090	0.284	0.039	0.000	0.000	0.738
E	0.000	0.000	0.139	0.139	0.313	0.458	0.000	0.000	0.000	1.049
ESE	0.000	0.000	0.046	0.139	0.927	1.645	0.268	0.000	0.000	3.025
SE	0.000	0.000	0.232	0.418	0.484	1.465	1.060	0.276	0.011	3.945
SSE	0.000	0.000	0.139	0.232	0.361	1.096	0.975	0.575	0.030	3.409
S	0.000	0.046	0.046	0.139	0.763	1.377	1.837	1.148	0.090	5.447
SSW	0.000	0.000	0.093	0.186	0.492	1.252	1.805	0.629	0.005	4.462
SW	0.000	0.000	0.139	0.325	0.497	1.028	0.455	0.000	0.000	2.444
WSW	0.000	0.000	0.000	0.186	0.406	0.367	0.000	0.033	0.000	0.992
W	0.000	0.000	0.139	0.232	0.408	0.528	0.039	0.000	0.000	1.345
WNW	0.000	0.000	0.093	0.139	0.222	0.289	0.076	0.000	0.000	0.819
NW	0.000	0.000	0.139	0.046	0.089	0.603	0.419	0.000	0.000	1.297
NNW	0.000	0.000	0.046	0.046	0.355	0.969	0.454	0.056	0.000	1.926
SUBTOTAL	0.000	0.046	1.578	2.645	6.657	14.525	8.229	2.716	0.136	36.532

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
 TOTAL HOURS OF ELEVATED RELEASES 1829.910
 TOTAL HOURS OF STABILITY CLASS E 911.560
 TOTAL HOURS OF ELEVATED STABILITY CLASS E 787.260

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
 WIND DIRECTION MEASURED AT 45.74 METER LEVEL
 WIND SPEED MEASURED AT 45.74 METER LEVEL
 EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.044	0.326	0.039	0.000	0.000	0.408
NNE	0.000	0.000	0.000	0.046	0.227	0.125	0.000	0.000	0.000	0.399
NE	0.000	0.000	0.000	0.186	0.090	0.123	0.000	0.000	0.000	0.399
ENE	0.000	0.000	0.046	0.093	0.176	0.247	0.000	0.000	0.000	0.563
E	0.000	0.000	0.046	0.046	0.133	0.250	0.000	0.000	0.000	0.476
ESE	0.000	0.046	0.046	0.139	0.308	0.251	0.000	0.000	0.000	0.790
SE	0.000	0.000	0.093	0.139	0.222	1.140	0.038	0.078	0.000	1.710
SSE	0.000	0.000	0.046	0.093	0.043	0.764	0.942	0.183	0.000	2.072
S	0.000	0.000	0.139	0.000	0.178	0.875	1.136	0.191	0.000	2.520
SSW	0.000	0.046	0.093	0.000	0.131	0.241	0.077	0.000	0.000	0.588
SW	0.000	0.000	0.046	0.046	0.090	0.292	0.000	0.000	0.000	0.475
WSW	0.000	0.046	0.046	0.093	0.090	0.000	0.000	0.000	0.000	0.276
W	0.000	0.000	0.046	0.046	0.045	0.000	0.000	0.000	0.000	0.137
WNW	0.000	0.000	0.046	0.000	0.000	0.042	0.000	0.000	0.000	0.088
NW	0.000	0.046	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.093
NNW	0.000	0.000	0.000	0.000	0.000	0.080	0.000	0.000	0.000	0.080
SUBTOTAL	0.000	0.186	0.742	0.928	1.777	4.757	2.232	0.452	0.000	11.075

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF ELEVATED RELEASES 1829.910
TOTAL HOURS OF STABILITY CLASS F 286.670
TOTAL HOURS OF ELEVATED STABILITY CLASS F 238.660

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JAN 1, 2017 - MAR 31, 2017

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	0.000
NNE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NE	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.046
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.046	0.044	0.000	0.000	0.000	0.000	0.000	0.090
ESE	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
SE	0.000	0.000	0.000	0.139	0.264	0.000	0.000	0.000	0.000	0.000	0.403
SSE	0.000	0.000	0.000	0.000	0.176	0.000	0.075	0.097	0.000	0.000	0.348
S	0.000	0.000	0.000	0.000	0.000	0.080	0.000	0.000	0.000	0.000	0.080
SSW	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.000	0.000	0.000	0.041
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.278	0.575	0.121	0.075	0.097	0.000	0.000	1.147

TOTAL HOURS OF VALID OBSERVATIONS 2155.000
TOTAL HOURS OF ELEVATED RELEASES 1829.910
TOTAL HOURS OF STABILITY CLASS G 48.900
TOTAL HOURS OF ELEVATED STABILITY CLASS G 24.710

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/05/05

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 8B

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR SPLIT LEVEL RELEASES

(GROUND LEVEL RELEASE MODE AND ELEVATED RELEASE MODE)

SECOND QUARTER

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.009	0.000	0.000	0.000	0.009
NNE	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.009
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.036	0.000	0.000	0.000	0.000	0.036
SE	0.000	0.000	0.038	0.018	0.000	0.000	0.000	0.000	0.000	0.056
SSE	0.000	0.000	0.048	0.033	0.000	0.000	0.000	0.000	0.000	0.081
S	0.000	0.000	0.112	0.045	0.000	0.000	0.000	0.000	0.000	0.157
SSW	0.000	0.000	0.036	0.089	0.000	0.000	0.000	0.000	0.000	0.125
SW	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
WSW	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.011
W	0.000	0.000	0.000	0.000	0.000	0.044	0.000	0.000	0.000	0.044
WNW	0.000	0.000	0.000	0.000	0.000	0.027	0.026	0.000	0.000	0.053
NW	0.000	0.000	0.000	0.000	0.000	0.006	0.009	0.000	0.000	0.015
NNW	0.000	0.000	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.029
SUBTOTAL	0.000	0.000	0.234	0.197	0.036	0.123	0.035	0.000	0.000	0.626

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS A 16.790
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 13.620

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.004	0.024	0.000	0.000	0.000	0.028
NNE	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.024
NE	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.009
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	0.002	0.000	0.000	0.000	0.000	0.000	0.002
ESE	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.013
SE	0.000	0.000	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.040
SSE	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.004
S	0.000	0.000	0.033	0.016	0.000	0.000	0.000	0.000	0.000	0.049
SSW	0.000	0.000	0.023	0.016	0.000	0.000	0.000	0.000	0.000	0.040
SW	0.000	0.000	0.009	0.001	0.018	0.000	0.000	0.000	0.000	0.028
WSW	0.000	0.000	0.001	0.007	0.000	0.023	0.000	0.000	0.000	0.032
W	0.000	0.000	0.000	0.004	0.003	0.020	0.000	0.000	0.000	0.027
WNW	0.000	0.000	0.000	0.000	0.006	0.026	0.027	0.000	0.000	0.058
NW	0.000	0.000	0.000	0.003	0.008	0.029	0.063	0.000	0.000	0.103
NNW	0.000	0.000	0.000	0.000	0.006	0.018	0.000	0.000	0.000	0.024
SUBTOTAL	0.000	0.000	0.090	0.084	0.044	0.175	0.090	0.000	0.000	0.483

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS B 28.890
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B 10.500

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.001	0.010	0.029	0.000	0.000	0.000	0.040
NNE	0.000	0.000	0.000	0.002	0.018	0.006	0.000	0.000	0.000	0.027
NE	0.000	0.000	0.000	0.000	0.000	0.006	0.010	0.000	0.000	0.015
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	0.002	0.000	0.000	0.000	0.000	0.000	0.002
ESE	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.013
SE	0.000	0.000	0.005	0.011	0.000	0.000	0.000	0.000	0.000	0.016
SSE	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.007
S	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.028
SSW	0.000	0.000	0.008	0.047	0.000	0.000	0.000	0.000	0.000	0.055
SW	0.000	0.000	0.017	0.010	0.000	0.000	0.000	0.000	0.000	0.027
WSW	0.000	0.000	0.002	0.006	0.000	0.023	0.000	0.000	0.000	0.030
W	0.000	0.000	0.000	0.016	0.017	0.042	0.000	0.000	0.000	0.074
WNW	0.000	0.000	0.000	0.000	0.009	0.028	0.018	0.068	0.000	0.123
NW	0.000	0.000	0.000	0.002	0.009	0.031	0.008	0.038	0.000	0.088
NNW	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.008
SUBTOTAL	0.000	0.000	0.068	0.108	0.063	0.173	0.036	0.106	0.000	0.554

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS C 109.390
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 12.050

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.001	0.011	0.037	0.017	0.000	0.000	0.000	0.067
NNE	0.000	0.000	0.000	0.027	0.064	0.109	0.000	0.000	0.000	0.200
NE	0.000	0.000	0.000	0.006	0.029	0.058	0.009	0.000	0.000	0.103
ENE	0.000	0.000	0.000	0.004	0.010	0.008	0.000	0.000	0.000	0.021
E	0.000	0.000	0.008	0.008	0.008	0.000	0.000	0.000	0.000	0.023
ESE	0.000	0.000	0.062	0.135	0.083	0.018	0.000	0.000	0.000	0.298
SE	0.000	0.005	0.112	0.080	0.000	0.046	0.000	0.000	0.000	0.243
SSE	0.000	0.000	0.181	0.035	0.000	0.000	0.000	0.000	0.000	0.216
S	0.000	0.001	0.197	0.091	0.000	0.000	0.000	0.000	0.000	0.288
SSW	0.000	0.001	0.086	0.221	0.031	0.000	0.000	0.000	0.000	0.339
SW	0.000	0.000	0.040	0.017	0.009	0.000	0.000	0.000	0.000	0.066
WSW	0.000	0.000	0.019	0.034	0.007	0.008	0.000	0.000	0.000	0.069
W	0.000	0.000	0.014	0.125	0.156	0.165	0.335	0.000	0.000	0.794
WNW	0.000	0.000	0.000	0.014	0.024	0.096	0.111	0.125	0.000	0.370
NW	0.000	0.000	0.000	0.004	0.048	0.115	0.070	0.000	0.000	0.237
NNW	0.000	0.000	0.002	0.011	0.077	0.072	0.018	0.000	0.000	0.180
SUBTOTAL	0.000	0.007	0.721	0.823	0.585	0.712	0.544	0.125	0.000	3.515

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS D 1051.290
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 76.490

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.043	0.046	0.015	0.000	0.000	0.000	0.000	0.104
NNE	0.000	0.000	0.019	0.098	0.050	0.017	0.000	0.000	0.000	0.184
NE	0.000	0.000	0.011	0.008	0.032	0.015	0.000	0.000	0.000	0.066
ENE	0.000	0.002	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.016
E	0.000	0.007	0.109	0.043	0.000	0.000	0.000	0.000	0.000	0.159
ESE	0.000	0.011	0.130	0.068	0.025	0.000	0.000	0.000	0.000	0.233
SE	0.000	0.009	0.109	0.007	0.000	0.000	0.000	0.000	0.000	0.125
SSE	0.000	0.021	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.098
S	0.000	0.018	0.189	0.227	0.000	0.000	0.000	0.000	0.000	0.434
SSW	0.000	0.023	0.240	0.240	0.044	0.000	0.000	0.000	0.000	0.547
SW	0.000	0.020	0.102	0.006	0.009	0.000	0.000	0.000	0.000	0.138
WSW	0.000	0.000	0.025	0.007	0.014	0.000	0.000	0.000	0.000	0.046
W	0.000	0.000	0.025	0.069	0.036	0.007	0.000	0.000	0.000	0.137
WNW	0.000	0.009	0.009	0.009	0.010	0.023	0.000	0.000	0.000	0.059
NW	0.000	0.000	0.005	0.004	0.000	0.074	0.000	0.000	0.000	0.082
NNW	0.000	0.001	0.016	0.042	0.012	0.033	0.000	0.000	0.000	0.105
SUBTOTAL	0.000	0.121	1.120	0.875	0.248	0.168	0.000	0.000	0.000	2.533

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS E 649.510
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 55.120

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.019	0.119	0.017	0.000	0.000	0.000	0.000	0.000	0.156
NNE	0.000	0.010	0.015	0.030	0.007	0.000	0.000	0.000	0.000	0.063
NE	0.000	0.031	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.048
ENE	0.000	0.039	0.050	0.016	0.000	0.000	0.000	0.000	0.000	0.105
E	0.000	0.033	0.051	0.013	0.000	0.000	0.000	0.000	0.000	0.097
ESE	0.000	0.013	0.081	0.006	0.000	0.031	0.000	0.000	0.000	0.131
SE	0.000	0.020	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.034
SSE	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011
S	0.000	0.025	0.066	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SSW	0.000	0.015	0.075	0.000	0.000	0.000	0.000	0.000	0.000	0.091
SW	0.000	0.006	0.054	0.000	0.000	0.000	0.000	0.000	0.000	0.060
WSW	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.009
W	0.000	0.017	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.022
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.008	0.009	0.006	0.007	0.000	0.000	0.000	0.000	0.031
NNW	0.000	0.000	0.012	0.006	0.016	0.000	0.000	0.000	0.000	0.034
SUBTOTAL	0.002	0.246	0.571	0.101	0.030	0.031	0.000	0.000	0.000	0.980

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS F 241.450
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 21.330

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.014	0.038	0.052	0.000	0.000	0.000	0.000	0.000	0.104
NNE	0.000	0.000	0.008	0.022	0.000	0.000	0.000	0.000	0.000	0.030
NE	0.000	0.037	0.004	0.006	0.000	0.000	0.000	0.000	0.000	0.047
ENE	0.000	0.018	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.034
E	0.000	0.013	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.021
ESE	0.000	0.032	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.041
SE	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	0.000	0.043	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.071
SSW	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021
SW	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
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	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
NNW	0.000	0.006	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.017
SUBTOTAL	0.000	0.199	0.112	0.094	0.000	0.000	0.000	0.000	0.000	0.405

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF GROUND LEVEL RELEASE 197.920
TOTAL HOURS OF STABILITY CLASS G 78.680
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 8.810

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.084	0.000	0.021	0.000	0.105
S	0.000	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.000	0.000	0.041
SSW	0.000	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	0.000
WSW	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.125	0.000	0.021	0.000	0.000	0.146

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF ELEVATED RELEASES 1978.080
TOTAL HOURS OF STABILITY CLASS A 16.790
TOTAL HOURS OF ELEVATED STABILITY CLASS A 3.170

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.092	0.043	0.000	0.000	0.000	0.000	0.010	0.145
SSE	0.000	0.000	0.000	0.000	0.043	0.041	0.000	0.000	0.000	0.000	0.084
S	0.000	0.000	0.000	0.046	0.090	0.040	0.112	0.000	0.000	0.000	0.287
SSW	0.000	0.000	0.000	0.000	0.045	0.042	0.000	0.000	0.000	0.000	0.086
SW	0.000	0.000	0.000	0.000	0.090	0.000	0.038	0.000	0.000	0.000	0.128
WSW	0.000	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	0.039	0.076	0.000	0.000	0.000	0.115
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.138	0.310	0.162	0.226	0.000	0.010	0.845	

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF ELEVATED RELEASES 1978.080
TOTAL HOURS OF STABILITY CLASS B 28.890
TOTAL HOURS OF ELEVATED STABILITY CLASS B 18.390

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.040	0.151	0.000	0.000	0.191
NNE	0.000	0.000	0.000	0.000	0.045	0.081	0.188	0.000	0.000	0.313
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.089	0.000	0.000	0.000	0.000	0.089
SE	0.000	0.000	0.046	0.276	0.177	0.042	0.038	0.000	0.000	0.579
SSE	0.000	0.000	0.000	0.230	0.224	0.079	0.000	0.000	0.000	0.532
S	0.000	0.000	0.046	0.092	0.089	0.363	0.111	0.000	0.000	0.700
SSW	0.000	0.000	0.000	0.092	0.178	0.447	0.150	0.000	0.000	0.867
SW	0.000	0.000	0.000	0.046	0.090	0.041	0.074	0.000	0.000	0.250
WSW	0.000	0.000	0.000	0.000	0.043	0.043	0.000	0.000	0.000	0.086
W	0.000	0.000	0.000	0.000	0.043	0.239	0.074	0.000	0.000	0.356
WNW	0.000	0.000	0.000	0.000	0.000	0.041	0.299	0.000	0.000	0.340
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.037	0.056	0.000	0.092
NNW	0.000	0.000	0.000	0.000	0.000	0.078	0.000	0.000	0.000	0.078
SUBTOTAL	0.000	0.000	0.092	0.735	0.977	1.493	1.121	0.056	0.000	4.473

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
 TOTAL HOURS OF ELEVATED RELEASES 1978.080
 TOTAL HOURS OF STABILITY CLASS C 109.390
 TOTAL HOURS OF ELEVATED STABILITY CLASS C 97.340

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
 WIND DIRECTION MEASURED AT 45.74 METER LEVEL
 WIND SPEED MEASURED AT 45.74 METER LEVEL
 EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.138	0.322	0.401	0.487	0.266	0.000	0.000	1.613
NNE	0.000	0.000	0.138	0.276	0.483	0.980	0.416	0.000	0.000	2.293
NE	0.000	0.046	0.138	0.092	0.265	0.280	0.224	0.000	0.000	1.045
ENE	0.000	0.000	0.000	0.092	0.134	0.082	0.038	0.000	0.000	0.346
E	0.000	0.000	0.046	0.138	0.133	0.000	0.000	0.000	0.000	0.317
ESE	0.000	0.000	0.092	0.230	0.358	0.248	0.151	0.000	0.000	1.078
SE	0.000	0.046	0.460	1.057	0.355	1.208	0.522	0.053	0.000	3.701
SSE	0.000	0.000	0.643	0.919	1.016	1.153	0.935	0.125	0.001	4.794
S	0.000	0.046	0.643	1.241	0.625	1.448	1.419	0.402	0.005	5.828
SSW	0.000	0.000	0.643	1.608	0.882	0.980	0.523	0.011	0.000	4.648
SW	0.000	0.000	0.643	1.057	0.929	0.533	0.074	0.064	0.000	3.300
WSW	0.000	0.000	0.551	1.241	0.765	0.905	0.113	0.074	0.000	3.648
W	0.000	0.000	0.230	1.011	1.200	1.463	0.483	0.354	0.006	4.747
WNW	0.000	0.000	0.000	0.506	0.527	0.840	0.450	0.187	0.032	2.542
NW	0.000	0.000	0.138	0.551	0.717	1.177	0.372	0.086	0.000	3.041
NNW	0.000	0.000	0.046	0.322	0.264	0.924	0.302	0.000	0.000	1.858
SUBTOTAL	0.000	0.138	4.550	10.662	9.053	12.708	6.287	1.357	0.045	44.798

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF ELEVATED RELEASES 1978.080
TOTAL HOURS OF STABILITY CLASS D 1051.290
TOTAL HOURS OF ELEVATED STABILITY CLASS D 974.800

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.138	0.138	0.444	0.637	0.038	0.000	0.000	1.395
NNE	0.000	0.000	0.046	0.184	0.703	0.884	0.227	0.000	0.000	2.044
NE	0.000	0.000	0.138	0.506	0.308	0.438	0.000	0.000	0.000	1.390
ENE	0.000	0.000	0.184	0.184	0.089	0.000	0.000	0.000	0.000	0.456
E	0.000	0.000	0.138	0.460	0.223	0.125	0.000	0.000	0.000	0.946
ESE	0.000	0.000	0.046	0.184	0.307	0.449	0.075	0.015	0.000	1.077
SE	0.000	0.000	0.138	0.092	1.052	1.020	0.076	0.000	0.000	2.378
SSE	0.000	0.000	0.276	0.551	0.621	1.485	0.668	0.120	0.000	3.722
S	0.000	0.000	0.414	0.276	0.438	1.522	1.119	0.500	0.014	4.284
SSW	0.000	0.000	0.460	0.460	0.617	0.653	0.224	0.000	0.000	2.413
SW	0.000	0.000	0.460	1.195	0.713	0.120	0.075	0.000	0.000	2.563
WSW	0.000	0.046	0.230	0.368	0.219	0.362	0.000	0.000	0.000	1.224
W	0.000	0.000	0.138	0.322	0.439	0.330	0.038	0.000	0.000	1.267
WNW	0.000	0.000	0.000	0.276	0.089	0.163	0.038	0.000	0.000	0.565
NW	0.000	0.000	0.092	0.184	0.089	0.162	0.338	0.000	0.000	0.864
NNW	0.000	0.000	0.046	0.184	0.219	0.241	0.038	0.000	0.000	0.728
SUBTOTAL	0.000	0.046	2.941	5.561	6.571	8.593	2.954	0.636	0.014	27.316

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF ELEVATED RELEASES 1978.080
TOTAL HOURS OF STABILITY CLASS E 649.510
TOTAL HOURS OF ELEVATED STABILITY CLASS E 594.390

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.092	0.173	0.367	0.000	0.000	0.000	0.724
NNE	0.000	0.000	0.138	0.138	0.179	0.644	0.000	0.000	0.000	1.099
NE	0.000	0.000	0.046	0.092	0.347	0.160	0.000	0.000	0.000	0.645
ENE	0.000	0.000	0.046	0.092	0.044	0.161	0.000	0.000	0.000	0.343
E	0.000	0.000	0.046	0.046	0.045	0.165	0.000	0.000	0.000	0.302
ESE	0.000	0.000	0.092	0.138	0.087	0.289	0.000	0.000	0.000	0.606
SE	0.000	0.000	0.046	0.046	0.130	0.444	0.000	0.000	0.000	0.666
SSE	0.000	0.000	0.046	0.230	0.134	0.441	0.038	0.000	0.000	0.888
S	0.000	0.000	0.046	0.138	0.264	1.048	0.488	0.000	0.000	1.984
SSW	0.000	0.000	0.230	0.092	0.269	0.200	0.000	0.000	0.000	0.791
SW	0.000	0.000	0.000	0.230	0.221	0.042	0.000	0.000	0.000	0.493
WSW	0.000	0.000	0.184	0.092	0.045	0.000	0.000	0.000	0.000	0.321
W	0.000	0.000	0.138	0.138	0.091	0.000	0.000	0.000	0.000	0.366
WNW	0.000	0.000	0.138	0.092	0.043	0.000	0.000	0.000	0.000	0.273
NW	0.000	0.046	0.138	0.092	0.043	0.000	0.000	0.000	0.000	0.319
NNW	0.000	0.046	0.046	0.000	0.089	0.078	0.038	0.000	0.000	0.296
SUBTOTAL	0.000	0.092	1.471	1.746	2.204	4.040	0.563	0.000	0.000	10.116

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
TOTAL HOURS OF ELEVATED RELEASES 1978.080
TOTAL HOURS OF STABILITY CLASS F 241.450
TOTAL HOURS OF ELEVATED STABILITY CLASS F 220.120

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

APR 1, 2017 - JUN 30, 2017

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	0.122	0.000	0.000	0.000	0.122
NNE	0.000	0.000	0.138	0.000	0.000	0.040	0.000	0.000	0.000	0.178
NE	0.000	0.000	0.000	0.184	0.090	0.120	0.000	0.000	0.000	0.394
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	0.092	0.046	0.000	0.042	0.000	0.000	0.000	0.180
ESE	0.000	0.000	0.184	0.138	0.000	0.043	0.000	0.000	0.000	0.364
SE	0.000	0.000	0.138	0.092	0.044	0.123	0.000	0.000	0.000	0.397
SSE	0.000	0.000	0.000	0.000	0.000	0.041	0.000	0.000	0.000	0.041
S	0.000	0.000	0.046	0.000	0.000	0.119	0.000	0.000	0.000	0.165
SSW	0.000	0.092	0.138	0.092	0.089	0.000	0.000	0.000	0.000	0.411
SW	0.000	0.000	0.000	0.092	0.000	0.000	0.000	0.000	0.000	0.092
WSW	0.000	0.000	0.138	0.000	0.000	0.000	0.000	0.000	0.000	0.138
W	0.000	0.046	0.184	0.046	0.000	0.000	0.000	0.000	0.000	0.276
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	0.092	0.046	0.000	0.000	0.000	0.000	0.000	0.138
NNW	0.000	0.000	0.230	0.046	0.000	0.040	0.000	0.000	0.000	0.315
SUBTOTAL	0.000	0.138	1.379	0.781	0.223	0.690	0.000	0.000	0.000	3.211

TOTAL HOURS OF VALID OBSERVATIONS 2176.000
 TOTAL HOURS OF ELEVATED RELEASES 1978.080
 TOTAL HOURS OF STABILITY CLASS G 78.680
 TOTAL HOURS OF ELEVATED STABILITY CLASS G 69.870

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
 WIND DIRECTION MEASURED AT 45.74 METER LEVEL
 WIND SPEED MEASURED AT 45.74 METER LEVEL
 EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/08/18

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 8C

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR SPLIT LEVEL RELEASES

(GROUND LEVEL RELEASE MODE AND ELEVATED RELEASE MODE)

THIRD QUARTER

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.040	0.000	0.000	0.000	0.040
NNE	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.006
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.004
ESE	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.007
SE	0.000	0.000	0.003	0.025	0.000	0.000	0.000	0.000	0.000	0.028
SSE	0.000	0.000	0.017	0.010	0.000	0.000	0.000	0.000	0.000	0.027
S	0.000	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.029
SSW	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.008
SW	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.005
WSW	0.000	0.000	0.003	0.000	0.010	0.000	0.000	0.000	0.000	0.013
W	0.000	0.000	0.000	0.008	0.019	0.000	0.000	0.000	0.000	0.027
WNW	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.007
NW	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
NNW	0.000	0.000	0.000	0.000	0.005	0.030	0.000	0.000	0.000	0.035
SUBTOTAL	0.000	0.000	0.064	0.046	0.041	0.129	0.000	0.000	0.000	0.280

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS A 8.930
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 6.160

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.021	0.048	0.000	0.000	0.000	0.069
NNE	0.000	0.000	0.000	0.000	0.005	0.052	0.000	0.000	0.000	0.057
NE	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.006
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	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.005
SSE	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
S	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.022
SSW	0.000	0.000	0.000	0.033	0.000	0.000	0.000	0.000	0.000	0.033
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.003	0.005	0.010	0.000	0.000	0.000	0.017
W	0.000	0.000	0.000	0.014	0.030	0.017	0.000	0.000	0.000	0.061
WNW	0.000	0.000	0.000	0.000	0.017	0.051	0.000	0.000	0.000	0.069
NW	0.000	0.000	0.000	0.000	0.009	0.045	0.000	0.000	0.000	0.054
NNW	0.000	0.000	0.000	0.000	0.005	0.012	0.000	0.000	0.000	0.017
SUBTOTAL	0.000	0.000	0.028	0.053	0.093	0.240	0.000	0.000	0.000	0.414

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS B 25.880
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B 9.100

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.012	0.000	0.000	0.000	0.000	0.012
NNE	0.000	0.000	0.000	0.000	0.010	0.029	0.000	0.000	0.000	0.039
NE	0.000	0.000	0.000	0.000	0.010	0.029	0.000	0.000	0.000	0.039
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	0.002	0.000	0.000	0.000	0.000	0.000	0.002
ESE	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.016
SE	0.000	0.000	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.011
SSE	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
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	0.015	0.009	0.000	0.000	0.000	0.000	0.000	0.024
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.001	0.005	0.011	0.010	0.000	0.000	0.000	0.026
W	0.000	0.000	0.005	0.014	0.042	0.007	0.000	0.000	0.000	0.068
WNW	0.000	0.000	0.000	0.001	0.003	0.071	0.000	0.000	0.000	0.075
NW	0.000	0.000	0.000	0.002	0.006	0.017	0.000	0.000	0.000	0.025
NNW	0.000	0.000	0.000	0.001	0.005	0.013	0.000	0.000	0.000	0.019
SUBTOTAL	0.000	0.000	0.028	0.040	0.114	0.176	0.000	0.000	0.000	0.358

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS C 89.800
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 7.880

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.019	0.097	0.056	0.020	0.000	0.000	0.192
NNE	0.000	0.000	0.000	0.025	0.112	0.065	0.000	0.000	0.000	0.203
NE	0.000	0.000	0.000	0.021	0.091	0.159	0.000	0.000	0.000	0.271
ENE	0.000	0.000	0.000	0.017	0.018	0.018	0.000	0.000	0.000	0.053
E	0.000	0.000	0.001	0.031	0.076	0.000	0.000	0.000	0.000	0.109
ESE	0.000	0.000	0.034	0.090	0.084	0.019	0.000	0.000	0.000	0.226
SE	0.000	0.000	0.032	0.025	0.000	0.000	0.000	0.000	0.000	0.057
SSE	0.000	0.000	0.038	0.003	0.000	0.000	0.000	0.000	0.000	0.041
S	0.000	0.000	0.150	0.008	0.000	0.000	0.000	0.000	0.000	0.158
SSW	0.000	0.000	0.179	0.166	0.037	0.000	0.000	0.000	0.000	0.382
SW	0.000	0.000	0.030	0.012	0.000	0.000	0.000	0.000	0.000	0.042
WSW	0.000	0.000	0.020	0.020	0.009	0.000	0.000	0.000	0.000	0.049
W	0.000	0.000	0.004	0.066	0.078	0.058	0.014	0.000	0.000	0.220
WNW	0.000	0.000	0.000	0.013	0.054	0.055	0.055	0.000	0.000	0.177
NW	0.000	0.000	0.000	0.004	0.020	0.019	0.045	0.000	0.000	0.088
NNW	0.000	0.000	0.000	0.005	0.014	0.015	0.000	0.000	0.000	0.034
SUBTOTAL	0.000	0.000	0.488	0.525	0.689	0.464	0.135	0.000	0.000	2.301

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS D 1050.510
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 50.630

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.065	0.051	0.015	0.046	0.055	0.000	0.000	0.233
NNE	0.000	0.000	0.036	0.191	0.142	0.079	0.000	0.000	0.000	0.448
NE	0.000	0.000	0.012	0.059	0.061	0.127	0.000	0.000	0.000	0.258
ENE	0.000	0.000	0.035	0.021	0.005	0.000	0.000	0.000	0.000	0.061
E	0.000	0.003	0.055	0.046	0.007	0.033	0.000	0.000	0.000	0.145
ESE	0.000	0.001	0.077	0.099	0.007	0.024	0.000	0.000	0.000	0.208
SE	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.003
SSE	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.035
S	0.000	0.016	0.048	0.043	0.000	0.000	0.000	0.000	0.000	0.107
SSW	0.000	0.008	0.068	0.000	0.000	0.000	0.000	0.000	0.000	0.075
SW	0.000	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.008
WSW	0.000	0.000	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.008
W	0.000	0.000	0.000	0.020	0.023	0.008	0.000	0.000	0.000	0.051
WNW	0.000	0.000	0.000	0.005	0.006	0.007	0.000	0.000	0.000	0.018
NW	0.000	0.000	0.000	0.005	0.000	0.023	0.000	0.000	0.000	0.027
NNW	0.000	0.000	0.019	0.030	0.019	0.008	0.000	0.000	0.000	0.075
SUBTOTAL	0.000	0.031	0.462	0.574	0.285	0.354	0.055	0.000	0.000	1.762

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS E 580.720
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 38.760

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.115	0.055	0.000	0.000	0.000	0.000	0.000	0.170
NNE	0.000	0.000	0.065	0.201	0.031	0.000	0.000	0.000	0.000	0.298
NE	0.000	0.000	0.018	0.039	0.007	0.000	0.000	0.000	0.000	0.064
ENE	0.000	0.003	0.033	0.031	0.015	0.000	0.000	0.000	0.000	0.082
E	0.000	0.000	0.067	0.033	0.000	0.000	0.000	0.000	0.000	0.100
ESE	0.000	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.008
SE	0.000	0.012	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.014
SSE	0.000	0.004	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.008
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.030	0.007	0.000	0.000	0.000	0.000	0.000	0.037
SUBTOTAL	0.000	0.022	0.341	0.366	0.054	0.000	0.000	0.000	0.000	0.782

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS F 367.810
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 17.210

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.002	0.070	0.041	0.000	0.000	0.000	0.000	0.000	0.114
NNE	0.000	0.002	0.037	0.027	0.000	0.000	0.000	0.000	0.000	0.066
NE	0.000	0.001	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.012
ENE	0.000	0.001	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.020
E	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.010
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	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.006	0.148	0.068	0.000	0.000	0.000	0.000	0.000	0.222

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF GROUND LEVEL RELEASE 134.630
TOTAL HOURS OF STABILITY CLASS G 76.350
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 4.890

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.042	0.041	0.000	0.000	0.000	0.084
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.000	0.000	0.000	0.042
WSW	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.085	0.041	0.000	0.000	0.000	0.000	0.126

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF ELEVATED RELEASES 2065.370
TOTAL HOURS OF STABILITY CLASS A 8.930
TOTAL HOURS OF ELEVATED STABILITY CLASS A 2.770

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.079	0.037	0.000	0.000	0.116
NNE	0.000	0.000	0.000	0.000	0.000	0.156	0.000	0.000	0.000	0.156
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.122	0.000	0.000	0.000	0.122
SSE	0.000	0.000	0.000	0.045	0.045	0.042	0.000	0.000	0.000	0.132
S	0.000	0.000	0.000	0.000	0.000	0.079	0.000	0.000	0.000	0.079
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	0.043	0.000	0.000	0.000	0.000	0.043
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	0.038	0.000	0.000	0.038
NNW	0.000	0.000	0.000	0.000	0.000	0.039	0.038	0.000	0.000	0.077
SUBTOTAL	0.000	0.000	0.000	0.045	0.088	0.517	0.113	0.000	0.000	0.763

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF ELEVATED RELEASES 2065.370
TOTAL HOURS OF STABILITY CLASS B 25.880
TOTAL HOURS OF ELEVATED STABILITY CLASS B 16.780

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.437	0.038	0.000	0.000	0.475
NNE	0.000	0.000	0.000	0.000	0.000	0.280	0.075	0.000	0.000	0.355
NE	0.000	0.000	0.000	0.000	0.000	0.362	0.000	0.000	0.000	0.362
ENE	0.000	0.000	0.000	0.000	0.045	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	0.087	0.038	0.037	0.000	0.000	0.162
SE	0.000	0.000	0.045	0.318	0.128	0.082	0.000	0.000	0.000	0.574
SSE	0.000	0.000	0.000	0.045	0.085	0.000	0.000	0.000	0.000	0.131
S	0.000	0.000	0.000	0.000	0.000	0.161	0.038	0.000	0.000	0.199
SSW	0.000	0.000	0.000	0.045	0.044	0.041	0.000	0.000	0.000	0.130
SW	0.000	0.000	0.000	0.000	0.090	0.080	0.000	0.000	0.000	0.170
WSW	0.000	0.000	0.000	0.227	0.134	0.081	0.000	0.000	0.000	0.443
W	0.000	0.000	0.000	0.000	0.130	0.199	0.000	0.000	0.000	0.329
WNW	0.000	0.000	0.000	0.000	0.000	0.040	0.038	0.000	0.000	0.077
NW	0.000	0.000	0.000	0.000	0.000	0.119	0.038	0.000	0.000	0.156
NNW	0.000	0.000	0.000	0.000	0.000	0.040	0.075	0.000	0.000	0.116
SUBTOTAL	0.000	0.000	0.045	0.636	0.744	1.960	0.338	0.000	0.000	3.724

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF ELEVATED RELEASES 2065.370
TOTAL HOURS OF STABILITY CLASS C 89.800
TOTAL HOURS OF ELEVATED STABILITY CLASS C 81.920

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.273	0.173	1.040	0.186	0.059	0.000	1.821
NNE	0.000	0.000	0.091	0.227	0.520	1.280	0.370	0.000	0.000	2.487
NE	0.000	0.000	0.273	0.136	0.394	1.129	0.150	0.000	0.000	2.082
ENE	0.000	0.000	0.136	0.273	0.216	0.203	0.000	0.000	0.000	0.828
E	0.000	0.000	0.045	0.273	0.300	0.478	0.000	0.000	0.000	1.097
ESE	0.000	0.000	0.227	0.500	0.348	0.475	0.073	0.000	0.000	1.623
SE	0.000	0.045	1.364	1.909	0.881	0.355	0.443	0.105	0.000	5.102
SSE	0.000	0.000	1.227	1.000	0.440	0.163	0.037	0.032	0.000	2.900
S	0.000	0.045	0.545	1.227	0.965	0.952	1.049	0.025	0.036	4.846
SSW	0.000	0.000	1.500	2.000	0.712	0.922	0.110	0.000	0.000	5.244
SW	0.000	0.000	0.773	1.818	1.020	0.290	0.073	0.000	0.000	3.974
WSW	0.000	0.000	0.500	2.045	0.749	0.885	0.038	0.065	0.000	4.282
W	0.000	0.000	0.227	1.318	1.093	0.762	0.074	0.065	0.000	3.539
WNW	0.000	0.000	0.091	0.409	0.866	1.558	0.075	0.081	0.000	3.081
NW	0.000	0.000	0.136	0.364	0.217	0.759	0.149	0.100	0.000	1.725
NNW	0.000	0.000	0.227	0.136	0.175	0.279	0.000	0.000	0.000	0.818
SUBTOTAL	0.000	0.091	7.455	13.909	9.070	11.530	2.826	0.532	0.036	45.449

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
 TOTAL HOURS OF ELEVATED RELEASES 2065.370
 TOTAL HOURS OF STABILITY CLASS D 1050.510
 TOTAL HOURS OF ELEVATED STABILITY CLASS D 999.880

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
 WIND DIRECTION MEASURED AT 45.74 METER LEVEL
 WIND SPEED MEASURED AT 45.74 METER LEVEL
 EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.136	0.273	0.346	1.041	0.223	0.061	0.000	2.080
NNE	0.000	0.000	0.136	0.227	0.351	1.662	0.520	0.000	0.000	2.897
NE	0.000	0.000	0.091	0.045	0.302	1.140	0.488	0.000	0.000	2.066
ENE	0.000	0.000	0.091	0.182	0.350	0.245	0.000	0.000	0.000	0.869
E	0.000	0.000	0.182	0.455	0.262	0.249	0.000	0.000	0.000	1.147
ESE	0.000	0.045	0.182	0.545	1.136	0.446	0.000	0.034	0.000	2.388
SE	0.000	0.045	0.182	0.818	0.619	0.365	0.037	0.000	0.000	2.066
SSE	0.000	0.045	0.364	0.955	0.134	0.194	0.074	0.028	0.010	1.804
S	0.000	0.045	0.364	1.045	0.176	0.565	0.038	0.000	0.000	2.233
SSW	0.000	0.000	0.455	0.500	0.480	0.285	0.038	0.000	0.000	1.757
SW	0.000	0.000	0.545	0.591	0.135	0.082	0.000	0.000	0.000	1.354
WSW	0.000	0.000	0.364	0.727	0.175	0.000	0.000	0.000	0.000	1.265
W	0.000	0.045	0.273	0.409	0.485	0.121	0.038	0.000	0.000	1.370
WNW	0.000	0.000	0.045	0.136	0.086	0.079	0.000	0.000	0.000	0.346
NW	0.000	0.000	0.091	0.045	0.044	0.082	0.038	0.000	0.000	0.300
NNW	0.000	0.000	0.136	0.091	0.179	0.285	0.000	0.000	0.000	0.691
SUBTOTAL	0.000	0.227	3.636	7.045	5.260	6.839	1.494	0.123	0.010	24.635

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF ELEVATED RELEASES 2065.370
TOTAL HOURS OF STABILITY CLASS E 580.720
TOTAL HOURS OF ELEVATED STABILITY CLASS E 541.960

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.002	0.000	0.136	0.136	0.088	0.635	0.000	0.000	0.000	0.997
NNE	0.001	0.000	0.091	0.182	0.264	0.947	0.490	0.000	0.000	1.975
NE	0.002	0.000	0.182	0.273	0.522	1.289	0.075	0.000	0.000	2.343
ENE	0.002	0.000	0.182	0.455	0.436	0.363	0.075	0.000	0.000	1.513
E	0.004	0.000	0.318	0.318	0.780	0.492	0.000	0.000	0.000	1.913
ESE	0.005	0.000	0.364	0.636	0.829	0.574	0.000	0.000	0.000	2.407
SE	0.009	0.045	0.682	0.545	0.577	0.084	0.000	0.000	0.000	1.943
SSE	0.004	0.045	0.227	0.091	0.223	0.000	0.000	0.000	0.000	0.590
S	0.001	0.000	0.091	0.091	0.221	0.042	0.000	0.000	0.000	0.447
SSW	0.002	0.000	0.182	0.045	0.045	0.000	0.000	0.000	0.000	0.274
SW	0.004	0.045	0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.276
WSW	0.002	0.045	0.091	0.000	0.000	0.000	0.000	0.000	0.000	0.138
W	0.002	0.045	0.136	0.091	0.000	0.000	0.000	0.000	0.000	0.275
WNW	0.001	0.000	0.091	0.045	0.000	0.000	0.000	0.000	0.000	0.138
NW	0.004	0.000	0.273	0.136	0.000	0.000	0.000	0.000	0.000	0.413
NNW	0.000	0.000	0.000	0.136	0.000	0.159	0.000	0.000	0.000	0.295
SUBTOTAL	0.045	0.227	3.273	3.182	3.985	4.584	0.640	0.000	0.000	15.936

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF ELEVATED RELEASES 2065.370
TOTAL HOURS OF STABILITY CLASS F 367.810
TOTAL HOURS OF ELEVATED STABILITY CLASS F 350.600

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

JUL 1, 2017 - SEP 30, 2017

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	0.274	0.000	0.000	0.000	0.319
NNE	0.000	0.000	0.000	0.136	0.175	0.116	0.038	0.000	0.000	0.466
NE	0.000	0.045	0.000	0.045	0.045	0.118	0.000	0.000	0.000	0.255
ENE	0.000	0.000	0.091	0.182	0.000	0.042	0.000	0.000	0.000	0.315
E	0.000	0.000	0.091	0.136	0.087	0.042	0.000	0.000	0.000	0.356
ESE	0.000	0.045	0.045	0.136	0.045	0.000	0.000	0.000	0.000	0.273
SE	0.000	0.045	0.091	0.273	0.000	0.000	0.000	0.000	0.000	0.409
SSE	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.182
S	0.000	0.000	0.182	0.000	0.000	0.000	0.000	0.000	0.000	0.182
SSW	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000	0.000	0.136
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
W	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
WNW	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
NW	0.000	0.091	0.045	0.045	0.000	0.000	0.000	0.000	0.000	0.182
NNW	0.000	0.000	0.000	0.000	0.000	0.038	0.000	0.000	0.000	0.038
SUBTOTAL	0.000	0.273	0.955	1.000	0.353	0.630	0.038	0.000	0.000	3.248

TOTAL HOURS OF VALID OBSERVATIONS 2200.000
TOTAL HOURS OF ELEVATED RELEASES 2065.370
TOTAL HOURS OF STABILITY CLASS G 76.350
TOTAL HOURS OF ELEVATED STABILITY CLASS G 71.460

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2017/10/13

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 8D

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR SPLIT LEVEL RELEASES

(GROUND LEVEL RELEASE MODE AND ELEVATED RELEASE MODE)

FOURTH QUARTER

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.006	0.106	0.000	0.000	0.000	0.112
NNE	0.000	0.000	0.000	0.000	0.005	0.022	0.000	0.000	0.000	0.027
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.008	0.032	0.009	0.000	0.000	0.000	0.050
SE	0.000	0.000	0.024	0.051	0.000	0.000	0.000	0.000	0.000	0.075
SSE	0.000	0.000	0.088	0.032	0.000	0.000	0.000	0.000	0.000	0.121
S	0.000	0.000	0.036	0.046	0.000	0.000	0.000	0.000	0.000	0.081
SSW	0.000	0.000	0.009	0.027	0.008	0.000	0.000	0.000	0.000	0.045
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.009
NW	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.008
NNW	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.017
SUBTOTAL	0.000	0.000	0.158	0.164	0.052	0.172	0.000	0.000	0.000	0.546

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS A 23.500
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS A 11.610

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.005	0.031	0.000	0.000	0.000	0.035
NNE	0.000	0.000	0.000	0.000	0.019	0.042	0.000	0.000	0.000	0.061
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.008	0.042	0.000	0.000	0.000	0.000	0.049
SE	0.000	0.000	0.017	0.040	0.000	0.000	0.000	0.000	0.000	0.057
SSE	0.000	0.005	0.015	0.001	0.000	0.000	0.000	0.000	0.000	0.021
S	0.000	0.000	0.007	0.025	0.000	0.000	0.000	0.000	0.000	0.032
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003
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	0.046	0.009	0.000	0.000	0.055
NW	0.000	0.000	0.000	0.000	0.000	0.033	0.009	0.000	0.000	0.042
NNW	0.000	0.000	0.000	0.000	0.009	0.008	0.000	0.000	0.000	0.016
SUBTOTAL	0.000	0.005	0.039	0.077	0.074	0.159	0.019	0.000	0.000	0.373

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS B 29.570
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS B 7.920

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.027	0.009	0.000	0.000	0.000	0.036
NNE	0.000	0.000	0.000	0.000	0.019	0.013	0.000	0.000	0.000	0.032
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.003	0.024	0.035	0.000	0.000	0.000	0.063
SE	0.000	0.006	0.003	0.021	0.047	0.000	0.000	0.000	0.000	0.077
SSE	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.023
S	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.012
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	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.007
WSW	0.000	0.000	0.005	0.004	0.006	0.000	0.000	0.000	0.000	0.015
W	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.015
WNW	0.000	0.000	0.000	0.000	0.008	0.015	0.009	0.000	0.000	0.032
NW	0.000	0.000	0.000	0.000	0.002	0.009	0.030	0.000	0.000	0.041
NNW	0.000	0.000	0.000	0.000	0.010	0.028	0.000	0.000	0.000	0.038
SUBTOTAL	0.000	0.006	0.047	0.031	0.143	0.123	0.040	0.000	0.000	0.389

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS C 65.490
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS C 8.280

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.054	0.226	0.068	0.000	0.000	0.000	0.349
NNE	0.000	0.000	0.000	0.026	0.199	0.056	0.000	0.000	0.000	0.281
NE	0.000	0.000	0.000	0.013	0.027	0.012	0.000	0.000	0.000	0.052
ENE	0.000	0.000	0.000	0.000	0.007	0.060	0.000	0.000	0.000	0.067
E	0.000	0.000	0.005	0.011	0.052	0.000	0.000	0.000	0.000	0.069
ESE	0.000	0.000	0.040	0.065	0.135	0.058	0.000	0.000	0.000	0.298
SE	0.000	0.021	0.116	0.101	0.000	0.000	0.000	0.000	0.000	0.238
SSE	0.000	0.002	0.106	0.012	0.000	0.000	0.000	0.000	0.000	0.120
S	0.000	0.000	0.047	0.070	0.063	0.000	0.000	0.000	0.000	0.181
SSW	0.000	0.000	0.012	0.017	0.009	0.000	0.000	0.000	0.000	0.038
SW	0.000	0.000	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.013
WSW	0.000	0.000	0.007	0.023	0.011	0.009	0.000	0.000	0.000	0.050
W	0.000	0.000	0.003	0.025	0.048	0.071	0.000	0.000	0.000	0.147
WNW	0.000	0.000	0.000	0.001	0.048	0.193	0.054	0.071	0.047	0.415
NW	0.000	0.000	0.000	0.009	0.041	0.162	0.185	0.090	0.000	0.487
NNW	0.000	0.000	0.000	0.012	0.146	0.284	0.029	0.000	0.000	0.472
SUBTOTAL	0.000	0.023	0.341	0.449	1.015	0.973	0.268	0.161	0.047	3.277

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS D 871.350
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS D 69.670

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.017	0.101	0.028	0.045	0.000	0.000	0.000	0.191
NNE	0.000	0.000	0.017	0.073	0.104	0.000	0.000	0.000	0.000	0.194
NE	0.000	0.000	0.000	0.037	0.039	0.000	0.000	0.000	0.000	0.076
ENE	0.000	0.000	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.006
E	0.000	0.016	0.095	0.123	0.022	0.000	0.000	0.000	0.000	0.256
ESE	0.000	0.032	0.283	0.325	0.065	0.000	0.000	0.000	0.000	0.705
SE	0.000	0.017	0.145	0.060	0.000	0.000	0.000	0.000	0.000	0.222
SSE	0.000	0.026	0.280	0.083	0.000	0.000	0.000	0.000	0.000	0.389
S	0.000	0.000	0.286	0.261	0.230	0.131	0.000	0.000	0.000	0.908
SSW	0.000	0.005	0.042	0.024	0.010	0.075	0.000	0.000	0.000	0.156
SW	0.000	0.001	0.002	0.005	0.000	0.000	0.000	0.000	0.000	0.009
WSW	0.000	0.000	0.001	0.004	0.000	0.000	0.000	0.000	0.000	0.005
W	0.000	0.000	0.010	0.070	0.044	0.016	0.000	0.000	0.000	0.140
WNW	0.000	0.008	0.004	0.010	0.018	0.000	0.047	0.000	0.000	0.086
NW	0.000	0.001	0.000	0.015	0.021	0.101	0.010	0.000	0.000	0.148
NNW	0.000	0.000	0.015	0.091	0.100	0.101	0.000	0.000	0.000	0.306
SUBTOTAL	0.000	0.107	1.200	1.286	0.681	0.468	0.057	0.000	0.000	3.799

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS E 748.740
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS E 80.760

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.085	0.069	0.000	0.000	0.000	0.000	0.000	0.154
NNE	0.000	0.000	0.020	0.060	0.008	0.000	0.000	0.000	0.000	0.088
NE	0.000	0.005	0.012	0.006	0.000	0.000	0.000	0.000	0.000	0.024
ENE	0.000	0.017	0.026	0.012	0.000	0.000	0.000	0.000	0.000	0.056
E	0.000	0.027	0.140	0.092	0.000	0.000	0.000	0.000	0.000	0.260
ESE	0.000	0.025	0.118	0.025	0.000	0.000	0.000	0.000	0.000	0.169
SE	0.000	0.027	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.060
SSE	0.000	0.050	0.113	0.000	0.000	0.000	0.000	0.000	0.000	0.163
S	0.000	0.008	0.028	0.035	0.175	0.067	0.000	0.000	0.000	0.313
SSW	0.000	0.031	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.049
SW	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
WSW	0.000	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.011
W	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
WNW	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
NW	0.000	0.000	0.007	0.003	0.000	0.000	0.000	0.000	0.000	0.009
NNW	0.000	0.000	0.040	0.047	0.014	0.000	0.000	0.000	0.000	0.101
SUBTOTAL	0.000	0.203	0.648	0.350	0.197	0.067	0.000	0.000	0.000	1.465

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS F 278.180
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS F 31.140

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 1 OF 2 GROUND LEVEL RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.102	0.048	0.000	0.000	0.000	0.000	0.000	0.150
NNE	0.000	0.002	0.019	0.007	0.000	0.000	0.000	0.000	0.000	0.028
NE	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.009
ENE	0.000	0.012	0.046	0.003	0.000	0.000	0.000	0.000	0.000	0.061
E	0.000	0.035	0.041	0.005	0.000	0.000	0.000	0.000	0.000	0.081
ESE	0.000	0.006	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.016
SE	0.000	0.002	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.015
SSE	0.000	0.010	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.019
S	0.000	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.012
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
NW	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003
NNW	0.000	0.000	0.048	0.024	0.000	0.000	0.000	0.000	0.000	0.071
SUBTOTAL	0.000	0.071	0.309	0.086	0.000	0.000	0.000	0.000	0.000	0.466

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF GROUND LEVEL RELEASE 219.290
TOTAL HOURS OF STABILITY CLASS G 109.170
TOTAL HOURS OF GROUND LEVEL STABILITY CLASS G 9.910

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 45.30 METERS
WIND DIRECTION MEASURED AT 10.50 METER LEVEL
WIND SPEED MEASURED AT 10.50 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.000	0.000	0.038
SE	0.000	0.000	0.000	0.000	0.000	0.084	0.039	0.000	0.000	0.000	0.123
SSE	0.000	0.000	0.000	0.000	0.091	0.084	0.076	0.069	0.000	0.000	0.320
S	0.000	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	0.040	0.039	0.000	0.000	0.000	0.078
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.091	0.207	0.191	0.069	0.000	0.000	0.559

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF ELEVATED RELEASES 1906.710
TOTAL HOURS OF STABILITY CLASS A 23.500
TOTAL HOURS OF ELEVATED STABILITY CLASS A 11.890

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.040	0.231	0.000	0.000	0.271
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	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	0.038	0.000	0.000	0.038
SE	0.000	0.000	0.000	0.000	0.135	0.124	0.115	0.000	0.000	0.374
SSE	0.000	0.000	0.000	0.000	0.091	0.042	0.000	0.000	0.000	0.133
S	0.000	0.000	0.000	0.000	0.000	0.082	0.000	0.000	0.000	0.082
SSW	0.000	0.000	0.000	0.000	0.000	0.082	0.039	0.000	0.000	0.121
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.226	0.370	0.423	0.000	0.000	1.018

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
 TOTAL HOURS OF ELEVATED RELEASES 1906.710
 TOTAL HOURS OF STABILITY CLASS B 29.570
 TOTAL HOURS OF ELEVATED STABILITY CLASS B 21.650

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
 STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
 WIND DIRECTION MEASURED AT 45.74 METER LEVEL
 WIND SPEED MEASURED AT 45.74 METER LEVEL
 EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.366	0.154	0.000	0.000	0.520
NNE	0.000	0.000	0.000	0.000	0.000	0.327	0.038	0.000	0.000	0.365
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.088	0.120	0.077	0.000	0.000	0.285
SE	0.000	0.000	0.000	0.094	0.228	0.120	0.076	0.023	0.000	0.541
SSE	0.000	0.000	0.000	0.094	0.089	0.043	0.156	0.000	0.000	0.382
S	0.000	0.000	0.000	0.047	0.000	0.042	0.039	0.000	0.000	0.128
SSW	0.000	0.000	0.000	0.047	0.045	0.169	0.000	0.000	0.000	0.262
SW	0.000	0.000	0.000	0.000	0.044	0.000	0.000	0.000	0.000	0.044
WSW	0.000	0.000	0.000	0.000	0.044	0.041	0.000	0.000	0.000	0.086
W	0.000	0.000	0.000	0.000	0.000	0.040	0.000	0.000	0.000	0.040
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	0.039	0.000	0.000	0.039
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	0.000	0.282	0.539	1.269	0.578	0.023	0.000	2.691

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF ELEVATED RELEASES 1906.710
TOTAL HOURS OF STABILITY CLASS C 65.490
TOTAL HOURS OF ELEVATED STABILITY CLASS C 57.210

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.094	0.188	0.329	0.497	2.843	0.999	0.000	0.000	4.951
NNE	0.000	0.000	0.235	0.517	0.405	2.046	0.346	0.000	0.000	3.550
NE	0.000	0.000	0.094	0.188	0.684	0.169	0.000	0.000	0.000	1.135
ENE	0.000	0.000	0.141	0.141	0.275	0.085	0.153	0.000	0.000	0.794
E	0.000	0.047	0.000	0.094	0.000	0.040	0.077	0.000	0.000	0.258
ESE	0.000	0.047	0.094	0.376	0.269	0.289	0.269	0.000	0.000	1.344
SE	0.000	0.000	0.188	1.129	0.592	0.666	0.958	0.311	0.000	3.844
SSE	0.000	0.000	0.706	0.376	0.322	1.025	0.884	0.238	0.000	3.551
S	0.000	0.000	0.329	0.517	0.178	0.649	0.381	0.214	0.000	2.270
SSW	0.000	0.000	0.376	0.235	0.044	0.166	0.308	0.040	0.000	1.169
SW	0.000	0.047	0.470	0.376	0.272	0.213	0.000	0.000	0.000	1.378
WSW	0.000	0.047	0.329	0.659	0.272	0.294	0.039	0.000	0.000	1.639
W	0.000	0.000	0.470	0.470	0.588	0.997	0.422	0.000	0.000	2.948
WNW	0.000	0.000	0.188	0.423	0.448	0.785	0.730	0.110	0.009	2.693
NW	0.000	0.000	0.141	0.235	0.503	0.782	0.723	0.312	0.004	2.701
NNW	0.000	0.000	0.094	0.094	0.498	1.963	0.805	0.028	0.000	3.483
SUBTOTAL	0.000	0.282	4.045	6.162	5.849	13.009	7.094	1.254	0.013	37.708

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF ELEVATED RELEASES 1906.710
TOTAL HOURS OF STABILITY CLASS D 871.350
TOTAL HOURS OF ELEVATED STABILITY CLASS D 801.680

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.188	0.329	0.634	0.992	0.077	0.000	0.000	2.220
NNE	0.000	0.000	0.141	0.188	0.135	0.940	0.039	0.000	0.000	1.443
NE	0.000	0.094	0.141	0.282	0.311	0.625	0.000	0.000	0.000	1.453
ENE	0.000	0.000	0.000	0.188	0.091	0.000	0.000	0.000	0.000	0.279
E	0.000	0.000	0.047	0.282	0.179	0.080	0.000	0.000	0.000	0.588
ESE	0.000	0.000	0.188	0.282	0.638	1.952	0.078	0.000	0.000	3.138
SE	0.000	0.000	0.094	0.188	0.450	1.844	0.730	0.045	0.000	3.351
SSE	0.000	0.000	0.376	0.517	0.451	1.513	1.264	0.226	0.000	4.348
S	0.000	0.047	0.329	0.329	0.857	1.233	0.959	0.365	0.018	4.137
SSW	0.000	0.047	0.376	1.082	0.505	0.579	0.574	0.133	0.033	3.329
SW	0.000	0.000	0.470	0.659	0.364	0.212	0.000	0.000	0.000	1.705
WSW	0.000	0.000	0.141	0.282	0.181	0.128	0.077	0.000	0.000	0.810
W	0.000	0.000	0.047	0.141	0.272	0.501	0.038	0.000	0.000	0.999
WNW	0.000	0.000	0.047	0.047	0.179	0.082	0.078	0.000	0.000	0.433
NW	0.000	0.000	0.188	0.141	0.224	0.866	0.308	0.000	0.000	1.727
NNW	0.000	0.000	0.000	0.188	0.452	0.664	0.155	0.000	0.000	1.459
SUBTOTAL	0.000	0.188	2.775	5.127	5.921	12.213	4.375	0.769	0.051	31.420

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF ELEVATED RELEASES 1906.710
TOTAL HOURS OF STABILITY CLASS E 748.740
TOTAL HOURS OF ELEVATED STABILITY CLASS E 667.980

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.047	0.228	1.207	0.078	0.000	0.000	1.560
NNE	0.000	0.000	0.047	0.094	0.091	0.488	0.000	0.000	0.000	0.720
NE	0.000	0.000	0.000	0.047	0.046	0.244	0.000	0.000	0.000	0.337
ENE	0.000	0.000	0.047	0.141	0.092	0.169	0.000	0.000	0.000	0.449
E	0.000	0.000	0.141	0.141	0.179	0.425	0.000	0.000	0.000	0.886
ESE	0.000	0.000	0.047	0.141	0.404	1.003	0.000	0.000	0.000	1.595
SE	0.000	0.000	0.094	0.047	0.585	1.179	0.000	0.000	0.000	1.905
SSE	0.000	0.000	0.141	0.094	0.407	0.294	0.116	0.000	0.000	1.052
S	0.000	0.047	0.094	0.094	0.270	0.331	0.115	0.000	0.000	0.952
SSW	0.000	0.000	0.000	0.376	0.182	0.041	0.000	0.000	0.000	0.599
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
W	0.000	0.000	0.000	0.047	0.046	0.000	0.000	0.000	0.000	0.093
WNW	0.000	0.000	0.047	0.188	0.183	0.000	0.000	0.000	0.000	0.419
NW	0.000	0.000	0.047	0.047	0.225	0.169	0.000	0.000	0.000	0.488
NNW	0.000	0.000	0.000	0.000	0.271	0.246	0.000	0.000	0.000	0.517
SUBTOTAL	0.000	0.047	0.706	1.552	3.210	5.796	0.310	0.000	0.000	11.620

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF ELEVATED RELEASES 1906.710
TOTAL HOURS OF STABILITY CLASS F 278.180
TOTAL HOURS OF ELEVATED STABILITY CLASS F 247.040

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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SPLIT JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

PART 2 OF 2 ELEVATED RELEASE MODE

OCT 1, 2017 - DEC 31, 2017

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	0.141	0.047	0.250	0.000	0.000	0.000	0.438
NNE	0.000	0.000	0.000	0.000	0.045	0.041	0.000	0.000	0.000	0.086
NE	0.000	0.000	0.094	0.141	0.000	0.000	0.000	0.000	0.000	0.235
ENE	0.000	0.000	0.000	0.000	0.045	0.040	0.000	0.000	0.000	0.086
E	0.000	0.000	0.047	0.188	0.044	0.044	0.000	0.000	0.000	0.323
ESE	0.000	0.000	0.047	0.659	0.416	0.298	0.000	0.000	0.000	1.419
SE	0.000	0.000	0.141	0.141	0.543	0.130	0.000	0.000	0.000	0.955
SSE	0.000	0.047	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.141
S	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
W	0.000	0.000	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.094
WNW	0.000	0.000	0.235	0.047	0.046	0.000	0.000	0.000	0.000	0.328
NW	0.000	0.000	0.141	0.047	0.046	0.000	0.000	0.000	0.000	0.234
NNW	0.000	0.000	0.094	0.141	0.000	0.000	0.000	0.000	0.000	0.235
SUBTOTAL	0.000	0.094	0.941	1.599	1.231	0.804	0.000	0.000	0.000	4.669

TOTAL HOURS OF VALID OBSERVATIONS 2126.000
TOTAL HOURS OF ELEVATED RELEASES 1906.710
TOTAL HOURS OF STABILITY CLASS G 109.170
TOTAL HOURS OF ELEVATED STABILITY CLASS G 99.260

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND DIRECTION MEASURED AT 45.74 METER LEVEL
WIND SPEED MEASURED AT 45.74 METER LEVEL
EFFLUENT VELOCITY = 12.60 M/S

DATE PRINTED: 2018/02/20

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 9A

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR ELEVATED RELEASES

FIRST QUARTER

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.046
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.093
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.000	0.093
SSE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
S	0.000	0.000	0.000	0.000	0.046	0.000	0.186	0.000	0.000	0.000	0.232
SSW	0.000	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	0.000
WSW	0.000	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	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.046	0.000	0.093	0.186	0.232	0.000	0.000	0.000	0.557

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS A	12
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	12
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 10.01

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.278	0.139	0.000	0.418
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.046
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.139	0.000	0.000	0.000	0.139
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	0.046	0.000	0.000	0.046
S	0.000	0.000	0.000	0.000	0.046	0.093	0.000	0.000	0.000	0.139
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	0.046	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	0.000	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	0.000	0.046	0.046	0.232	0.371	0.139	0.000	0.835

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS B	18
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	18
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 13.01

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.046	0.000	0.000	0.000	0.696	0.093	0.000	0.835
NNE	0.000	0.000	0.000	0.000	0.000	0.139	0.232	0.000	0.000	0.371
NE	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.046	0.186	0.046	0.000	0.000	0.278
SE	0.000	0.000	0.000	0.046	0.046	0.000	0.139	0.093	0.000	0.325
SSE	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.093
S	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.093
SSW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
SW	0.000	0.000	0.000	0.046	0.000	0.046	0.046	0.046	0.000	0.186
WSW	0.000	0.000	0.000	0.000	0.000	0.046	0.093	0.093	0.000	0.232
W	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.093
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.232	0.046	0.000	0.278
NW	0.000	0.000	0.000	0.000	0.000	0.046	0.186	0.000	0.000	0.232
NNW	0.000	0.000	0.000	0.000	0.000	0.046	0.557	0.000	0.000	0.603
SUBTOTAL	0.000	0.000	0.046	0.139	0.093	0.650	2.367	0.418	0.000	3.712

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS C	80
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	80
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 14.00

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.000	0.093	0.139	0.650	1.763	0.650	0.000	3.341
NNE	0.000	0.000	0.093	0.232	0.325	1.067	1.206	0.093	0.000	3.016
NE	0.000	0.000	0.232	0.046	0.046	0.882	0.325	0.000	0.000	1.531
ENE	0.000	0.000	0.046	0.139	0.046	0.278	0.000	0.000	0.000	0.510
E	0.000	0.046	0.046	0.093	0.046	0.046	0.000	0.000	0.000	0.278
ESE	0.000	0.000	0.093	0.139	0.325	0.603	0.371	0.093	0.000	1.624
SE	0.000	0.000	0.186	0.232	0.046	0.696	0.742	0.186	0.000	2.088
SSE	0.000	0.000	0.000	0.046	0.046	0.603	0.510	0.325	0.139	1.671
S	0.000	0.000	0.186	0.186	0.139	0.510	0.325	0.418	0.464	2.227
SSW	0.000	0.000	0.000	0.139	0.139	0.974	0.928	0.232	0.046	2.459
SW	0.000	0.046	0.232	0.139	0.139	0.418	0.139	0.046	0.000	1.160
WSW	0.000	0.000	0.464	0.325	0.093	0.974	0.603	0.046	0.000	2.506
W	0.000	0.000	0.139	0.371	0.186	0.603	1.160	0.093	0.000	2.552
WNW	0.000	0.000	0.093	0.278	0.371	1.114	1.439	1.253	0.046	4.594
NW	0.000	0.000	0.046	0.371	0.325	0.835	1.299	1.021	0.650	4.548
NNW	0.000	0.000	0.046	0.139	0.186	0.882	1.067	0.696	0.186	3.202
SUBTOTAL	0.000	0.139	1.903	2.970	2.599	11.137	11.879	5.151	1.531	37.309

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS D	804
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	804
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 12.77

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.742	1.392	0.093	0.000	2.227
NNE	0.000	0.000	0.093	0.000	0.139	1.206	1.392	0.000	0.000	2.831
NE	0.000	0.000	0.046	0.093	0.046	0.557	0.742	0.046	0.000	1.531
ENE	0.000	0.000	0.046	0.093	0.046	0.232	0.418	0.093	0.000	0.928
E	0.000	0.000	0.232	0.093	0.139	0.325	0.139	0.046	0.000	0.974
ESE	0.000	0.000	0.186	0.093	0.139	1.021	1.160	0.186	0.000	2.784
SE	0.000	0.000	0.046	0.325	0.046	1.299	1.485	0.974	0.093	4.269
SSE	0.000	0.000	0.000	0.046	0.093	1.346	1.671	1.346	0.418	4.919
S	0.000	0.000	0.093	0.046	0.371	1.160	1.903	2.135	1.578	7.285
SSW	0.000	0.000	0.046	0.046	0.093	1.021	2.552	2.088	0.232	6.079
SW	0.000	0.000	0.000	0.139	0.139	1.624	0.650	0.232	0.046	2.831
WSW	0.000	0.000	0.000	0.046	0.232	1.160	0.232	0.000	0.046	1.717
W	0.000	0.000	0.000	0.139	0.278	0.418	0.510	0.000	0.000	1.346
WNW	0.000	0.000	0.046	0.093	0.278	0.325	0.046	0.046	0.000	0.835
NW	0.000	0.000	0.046	0.093	0.093	0.510	0.650	0.139	0.000	1.531
NNW	0.000	0.000	0.046	0.046	0.000	0.510	0.789	0.232	0.046	1.671
SUBTOTAL	0.000	0.000	0.928	1.392	2.135	13.457	15.731	7.657	2.459	43.759

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS E	943
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	943
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 14.42

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.046	0.000	0.000	0.046	0.139	0.046	0.000	0.278
NNE	0.000	0.000	0.046	0.000	0.000	0.232	0.139	0.000	0.000	0.418
NE	0.000	0.000	0.000	0.000	0.000	0.139	0.093	0.000	0.000	0.232
ENE	0.000	0.000	0.046	0.139	0.186	0.186	0.000	0.046	0.000	0.603
E	0.000	0.000	0.093	0.000	0.046	0.278	0.093	0.000	0.000	0.510
ESE	0.000	0.000	0.000	0.046	0.046	0.371	0.232	0.000	0.000	0.696
SE	0.000	0.046	0.000	0.000	0.186	0.371	0.325	0.093	0.046	1.067
SSE	0.000	0.000	0.046	0.046	0.139	0.510	1.810	0.603	0.046	3.202
S	0.000	0.000	0.046	0.093	0.000	0.278	2.227	0.696	0.000	3.341
SSW	0.000	0.000	0.046	0.000	0.139	0.186	0.278	0.000	0.000	0.650
SW	0.000	0.000	0.000	0.046	0.093	0.278	0.278	0.046	0.000	0.742
WSW	0.000	0.000	0.046	0.046	0.046	0.093	0.000	0.000	0.000	0.232
W	0.000	0.000	0.000	0.000	0.046	0.139	0.000	0.000	0.000	0.186
WNW	0.000	0.046	0.000	0.046	0.000	0.046	0.000	0.000	0.000	0.139
NW	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.093	0.000	0.000	0.000	0.139	0.000	0.000	0.232
SUBTOTAL	0.000	0.093	0.510	0.510	0.928	3.155	5.754	1.531	0.093	12.575

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS F	271
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	271
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 12.96

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JAN 1, 2017 - MAR 31, 2017

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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.093
ESE	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.000	0.046
SE	0.000	0.000	0.000	0.000	0.046	0.232	0.000	0.000	0.000	0.278
SSE	0.000	0.000	0.000	0.000	0.000	0.139	0.046	0.186	0.000	0.371
S	0.000	0.000	0.000	0.000	0.000	0.325	0.046	0.000	0.000	0.371
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.093
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.093	0.000	0.093	0.696	0.186	0.186	0.000	1.253

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2155
TOTAL HOURS OF STABILITY CLASS G	27
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	27
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2155
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/05/05

MEAN WIND SPEED = 11.53

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 9B

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR ELEVATED RELEASES

SECOND QUARTER

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.094	0.000	0.000	0.047	0.140
S	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.047
SSW	0.000	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	0.000
WSW	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.140	0.000	0.000	0.047	0.187

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS A	4
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	4
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 14.15

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.047	0.000	0.000	0.000	0.047
SE	0.000	0.000	0.000	0.094	0.000	0.000	0.000	0.000	0.047	0.140
SSE	0.000	0.000	0.000	0.000	0.094	0.047	0.000	0.047	0.000	0.187
S	0.000	0.000	0.000	0.047	0.047	0.000	0.094	0.047	0.000	0.234
SSW	0.000	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.047
SW	0.000	0.000	0.000	0.000	0.000	0.094	0.000	0.047	0.000	0.140
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	0.140	0.000	0.000	0.140
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	0.000	0.140	0.187	0.187	0.234	0.140	0.047	0.936

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS B	21
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	20
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 12.61

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.187	0.047	0.000	0.234
NNE	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.140	0.140	0.374
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.047	0.140	0.000	0.000	0.187
SE	0.000	0.000	0.047	0.328	0.094	0.140	0.047	0.000	0.000	0.655
SSE	0.000	0.000	0.000	0.187	0.047	0.094	0.047	0.000	0.000	0.374
S	0.000	0.000	0.000	0.187	0.000	0.374	0.094	0.094	0.000	0.749
SSW	0.000	0.000	0.000	0.047	0.094	0.328	0.374	0.047	0.000	0.889
SW	0.000	0.000	0.047	0.094	0.000	0.094	0.047	0.000	0.140	0.421
WSW	0.000	0.000	0.000	0.000	0.000	0.094	0.047	0.000	0.000	0.140
W	0.000	0.000	0.000	0.000	0.000	0.094	0.187	0.094	0.000	0.374
WNW	0.000	0.000	0.000	0.000	0.000	0.047	0.234	0.140	0.000	0.421
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.094	0.047	0.000	0.140
NNW	0.000	0.000	0.000	0.000	0.000	0.047	0.047	0.000	0.000	0.094
SUBTOTAL	0.000	0.000	0.094	0.842	0.328	1.497	1.544	0.608	0.140	5.054

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS C	109
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	108
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 11.88

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.047	0.094	0.140	0.515	0.702	0.468	0.000	0.000	1.965
NNE	0.000	0.000	0.047	0.187	0.374	0.936	0.796	0.047	0.000	2.387
NE	0.000	0.000	0.047	0.000	0.140	0.374	0.328	0.140	0.000	1.029
ENE	0.000	0.094	0.000	0.047	0.140	0.140	0.047	0.000	0.000	0.468
E	0.000	0.000	0.047	0.000	0.187	0.094	0.000	0.000	0.000	0.328
ESE	0.000	0.000	0.094	0.374	0.374	0.608	0.094	0.140	0.000	1.685
SE	0.000	0.000	0.608	0.936	0.328	0.842	0.655	0.468	0.094	3.931
SSE	0.000	0.000	0.281	0.187	0.562	0.983	1.310	0.889	0.281	4.492
S	0.000	0.000	0.421	0.562	0.702	1.310	1.731	0.983	0.281	5.990
SSW	0.000	0.000	0.281	0.983	0.842	1.451	0.608	0.468	0.047	4.679
SW	0.000	0.000	0.281	0.562	0.562	1.778	0.468	0.094	0.094	3.837
WSW	0.000	0.000	0.562	0.936	0.889	1.263	0.328	0.140	0.140	4.258
W	0.000	0.000	0.187	0.796	0.796	1.965	1.076	0.328	0.796	5.943
WNW	0.000	0.000	0.000	0.374	0.702	1.076	0.749	0.421	0.328	3.650
NW	0.000	0.000	0.234	0.328	0.655	1.076	0.562	0.140	0.000	2.995
NNW	0.000	0.000	0.047	0.187	0.328	0.983	0.562	0.094	0.000	2.199
SUBTOTAL	0.000	0.140	3.229	6.598	8.095	15.583	9.780	4.352	2.059	49.836

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS D	1080
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	1065
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 10.83

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.047	0.094	0.234	0.515	0.749	0.000	0.000	1.638
NNE	0.000	0.000	0.000	0.047	0.140	0.562	0.983	0.140	0.000	1.872
NE	0.000	0.047	0.047	0.234	0.187	0.562	0.421	0.000	0.000	1.497
ENE	0.000	0.000	0.047	0.234	0.187	0.140	0.000	0.000	0.000	0.608
E	0.000	0.000	0.140	0.140	0.187	0.234	0.000	0.000	0.000	0.702
ESE	0.000	0.000	0.094	0.094	0.000	0.702	0.187	0.140	0.000	1.217
SE	0.000	0.000	0.187	0.094	0.234	1.170	0.421	0.000	0.047	2.153
SSE	0.000	0.047	0.047	0.047	0.421	1.123	1.263	0.702	0.187	3.837
S	0.000	0.000	0.047	0.187	0.281	1.123	1.825	1.310	0.281	5.054
SSW	0.000	0.000	0.234	0.328	0.281	1.029	0.796	0.140	0.000	2.808
SW	0.000	0.047	0.187	0.421	0.421	1.544	0.468	0.094	0.000	3.182
WSW	0.000	0.000	0.140	0.187	0.421	0.749	0.234	0.000	0.000	1.731
W	0.000	0.047	0.140	0.234	0.140	0.562	0.187	0.000	0.000	1.310
WNW	0.000	0.000	0.094	0.047	0.234	0.281	0.187	0.000	0.000	0.842
NW	0.000	0.000	0.000	0.000	0.094	0.328	0.234	0.281	0.000	0.936
NNW	0.000	0.000	0.047	0.094	0.187	0.094	0.234	0.000	0.000	0.655
SUBTOTAL	0.000	0.187	1.497	2.480	3.650	10.716	8.189	2.808	0.515	30.042

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS E	653
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	642
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 11.46

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.094	0.047	0.000	0.140	0.187	0.000	0.000	0.468
NNE	0.000	0.000	0.047	0.140	0.094	0.234	0.468	0.047	0.000	1.029
NE	0.000	0.047	0.047	0.140	0.047	0.374	0.374	0.094	0.000	1.123
ENE	0.000	0.000	0.000	0.047	0.047	0.187	0.234	0.000	0.000	0.515
E	0.000	0.000	0.047	0.000	0.094	0.094	0.000	0.000	0.000	0.234
ESE	0.000	0.047	0.000	0.187	0.047	0.281	0.094	0.000	0.000	0.655
SE	0.000	0.000	0.047	0.047	0.047	0.094	0.234	0.000	0.000	0.468
SSE	0.000	0.000	0.047	0.047	0.000	0.562	0.421	0.000	0.000	1.076
S	0.000	0.000	0.047	0.140	0.000	0.234	1.029	0.374	0.000	1.825
SSW	0.000	0.000	0.000	0.000	0.047	0.234	0.515	0.000	0.000	0.796
SW	0.000	0.000	0.047	0.000	0.047	0.328	0.281	0.000	0.000	0.702
WSW	0.000	0.000	0.094	0.047	0.140	0.187	0.047	0.000	0.000	0.515
W	0.000	0.000	0.047	0.140	0.094	0.187	0.000	0.000	0.000	0.468
WNW	0.000	0.047	0.140	0.094	0.000	0.140	0.000	0.000	0.000	0.421
NW	0.000	0.000	0.047	0.140	0.000	0.000	0.047	0.000	0.000	0.234
NNW	0.000	0.000	0.047	0.000	0.000	0.047	0.000	0.094	0.000	0.187
SUBTOTAL	0.000	0.140	0.796	1.217	0.702	3.322	3.931	0.608	0.000	10.716

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS F	237
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	229
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 10.84

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

APR 1, 2017 - JUN 30, 2017

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	0.140	0.000	0.047	0.000	0.094	0.000	0.000	0.281
NNE	0.000	0.000	0.047	0.047	0.047	0.047	0.047	0.000	0.000	0.234
NE	0.000	0.000	0.047	0.000	0.000	0.000	0.047	0.000	0.000	0.094
ENE	0.000	0.094	0.047	0.094	0.047	0.094	0.140	0.000	0.000	0.515
E	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
ESE	0.000	0.000	0.094	0.094	0.187	0.094	0.000	0.000	0.000	0.468
SE	0.000	0.000	0.047	0.000	0.047	0.000	0.000	0.000	0.000	0.094
SSE	0.000	0.000	0.094	0.000	0.000	0.094	0.047	0.000	0.000	0.234
S	0.000	0.000	0.000	0.000	0.000	0.047	0.140	0.000	0.000	0.187
SSW	0.000	0.047	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.094
SW	0.000	0.000	0.047	0.140	0.094	0.047	0.000	0.000	0.000	0.328
WSW	0.000	0.047	0.094	0.000	0.047	0.000	0.000	0.000	0.000	0.187
W	0.000	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.047
WNW	0.000	0.000	0.047	0.000	0.000	0.000	0.000	0.000	0.000	0.047
NW	0.000	0.000	0.047	0.047	0.000	0.000	0.000	0.000	0.000	0.094
NNW	0.000	0.000	0.140	0.094	0.000	0.000	0.047	0.000	0.000	0.281
SUBTOTAL	0.000	0.187	0.889	0.608	0.515	0.468	0.562	0.000	0.000	3.229

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2176
TOTAL HOURS OF STABILITY CLASS G	72
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	69
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2137
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/08/18

MEAN WIND SPEED = 6.79

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 9C

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR ELEVATED RELEASES

THIRD QUARTER

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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
SSE	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
WSW	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.136	0.000	0.000	0.000	0.136

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS A	3
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	3
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 9.67

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.091	0.091	0.000	0.000	0.182
NNE	0.000	0.000	0.000	0.000	0.000	0.091	0.045	0.000	0.000	0.136
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.045	0.000	0.000	0.045
SE	0.000	0.000	0.000	0.000	0.045	0.136	0.000	0.000	0.000	0.182
SSE	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.091
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	0.045	0.000	0.000	0.000	0.045
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	0.000	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	0.045	0.000	0.000	0.045
NNW	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.091
SUBTOTAL	0.000	0.000	0.000	0.000	0.091	0.455	0.318	0.000	0.000	0.864

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS B	19
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	19
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 11.51

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.409	0.227	0.000	0.000	0.636
NNE	0.000	0.000	0.000	0.000	0.000	0.273	0.045	0.000	0.000	0.318
NE	0.000	0.000	0.000	0.000	0.000	0.364	0.000	0.000	0.000	0.364
ENE	0.000	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.000	0.091
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.091	0.045	0.045	0.000	0.182
SE	0.000	0.000	0.045	0.273	0.136	0.182	0.000	0.000	0.000	0.636
SSE	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.045
S	0.000	0.000	0.000	0.045	0.000	0.182	0.045	0.000	0.000	0.273
SSW	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.091
SW	0.000	0.000	0.000	0.045	0.000	0.091	0.091	0.000	0.000	0.227
WSW	0.000	0.000	0.000	0.045	0.182	0.227	0.000	0.000	0.000	0.455
W	0.000	0.000	0.000	0.000	0.045	0.182	0.182	0.000	0.000	0.409
WNW	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.000	0.000	0.000	0.136	0.045	0.000	0.000	0.182
NNW	0.000	0.000	0.000	0.000	0.000	0.045	0.091	0.000	0.000	0.136
SUBTOTAL	0.000	0.000	0.045	0.409	0.455	2.318	0.818	0.045	0.000	4.091

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS C	90
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	90
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 10.10

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.136	0.182	0.182	0.909	0.682	0.182	0.045	2.318
NNE	0.000	0.000	0.136	0.136	0.182	1.273	0.727	0.136	0.000	2.591
NE	0.000	0.045	0.000	0.182	0.409	1.182	0.273	0.000	0.000	2.091
ENE	0.000	0.000	0.182	0.136	0.227	0.318	0.000	0.000	0.000	0.864
E	0.000	0.000	0.136	0.273	0.091	0.409	0.409	0.000	0.000	1.318
ESE	0.000	0.000	0.500	0.773	0.591	0.636	0.318	0.091	0.045	2.955
SE	0.000	0.045	0.955	1.273	0.727	0.545	0.364	0.409	0.000	4.318
SSE	0.000	0.000	0.773	0.636	0.273	0.273	0.182	0.045	0.045	2.227
S	0.000	0.000	0.727	0.682	0.500	0.818	1.727	0.091	0.318	4.864
SSW	0.000	0.000	0.773	1.318	0.909	1.227	0.636	0.045	0.045	4.955
SW	0.000	0.000	0.909	1.045	0.727	1.545	0.409	0.091	0.000	4.727
WSW	0.000	0.000	0.500	1.409	1.091	1.455	0.682	0.045	0.045	5.227
W	0.000	0.000	0.318	0.727	0.864	1.682	0.500	0.000	0.136	4.227
WNW	0.000	0.000	0.227	0.409	0.364	1.591	0.545	0.045	0.091	3.273
NW	0.000	0.000	0.091	0.182	0.364	0.682	0.136	0.182	0.000	1.636
NNW	0.000	0.000	0.091	0.136	0.182	0.318	0.136	0.000	0.000	0.864
SUBTOTAL	0.000	0.091	6.455	9.500	7.682	14.864	7.727	1.364	0.773	48.455

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS D	1066
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	1066
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 8.60

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.045	0.045	0.182	0.727	0.818	0.136	0.182	2.182
NNE	0.000	0.000	0.000	0.091	0.091	0.955	1.455	0.500	0.000	3.091
NE	0.000	0.045	0.000	0.000	0.000	0.227	1.136	0.818	0.000	2.227
ENE	0.000	0.000	0.136	0.000	0.227	0.682	0.227	0.000	0.000	1.273
E	0.000	0.091	0.045	0.045	0.136	0.227	0.000	0.000	0.000	0.545
ESE	0.000	0.045	0.182	0.318	0.273	0.909	0.182	0.000	0.091	2.000
SE	0.000	0.045	0.227	0.500	0.955	0.955	0.045	0.045	0.045	2.818
SSE	0.000	0.000	0.091	0.136	0.682	0.273	0.273	0.045	0.045	1.545
S	0.000	0.045	0.227	0.545	0.636	0.773	0.227	0.000	0.000	2.455
SSW	0.000	0.000	0.136	0.273	0.318	1.000	0.273	0.000	0.000	2.000
SW	0.000	0.000	0.227	0.409	0.364	0.682	0.000	0.045	0.000	1.727
WSW	0.000	0.000	0.136	0.273	0.409	0.318	0.000	0.000	0.000	1.136
W	0.000	0.000	0.182	0.364	0.318	0.500	0.045	0.045	0.000	1.455
WNW	0.000	0.045	0.091	0.182	0.091	0.182	0.091	0.000	0.000	0.682
NW	0.000	0.000	0.000	0.182	0.000	0.182	0.045	0.000	0.000	0.409
NNW	0.000	0.000	0.136	0.091	0.182	0.273	0.045	0.000	0.000	0.727
SUBTOTAL	0.000	0.364	1.864	3.455	4.864	8.864	4.864	1.636	0.364	26.273

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS E	578
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	578
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 9.70

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.000	0.091	0.045	0.227	0.455	0.091	0.000	0.955
NNE	0.000	0.045	0.045	0.000	0.091	0.364	0.545	0.545	0.000	1.636
NE	0.000	0.000	0.136	0.045	0.091	0.455	0.818	0.273	0.000	1.818
ENE	0.000	0.000	0.136	0.045	0.091	0.955	0.682	0.000	0.000	1.909
E	0.000	0.000	0.227	0.227	0.273	0.545	0.045	0.000	0.000	1.318
ESE	0.000	0.000	0.136	0.318	0.318	1.000	0.273	0.000	0.000	2.045
SE	0.000	0.091	0.545	0.636	0.455	0.955	0.091	0.000	0.000	2.773
SSE	0.000	0.045	0.364	0.318	0.409	0.409	0.000	0.000	0.000	1.545
S	0.000	0.000	0.182	0.045	0.136	0.227	0.000	0.000	0.000	0.591
SSW	0.000	0.000	0.136	0.136	0.045	0.000	0.227	0.000	0.000	0.545
SW	0.000	0.136	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.182
WSW	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
W	0.000	0.045	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.136
WNW	0.000	0.045	0.136	0.091	0.045	0.000	0.000	0.000	0.000	0.318
NW	0.000	0.045	0.227	0.091	0.091	0.000	0.000	0.000	0.000	0.455
NNW	0.000	0.000	0.182	0.136	0.000	0.091	0.136	0.000	0.000	0.545
SUBTOTAL	0.000	0.500	2.545	2.227	2.136	5.227	3.273	0.909	0.000	16.818

TOTAL HOURS OF VALID STABILITY OBSERVATIONS 2200
TOTAL HOURS OF STABILITY CLASS F 370
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F 370
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS 2200
TOTAL HOURS CALM 0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 8.80

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

JUL 1, 2017 - SEP 30, 2017

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	0.091	0.045	0.000	0.182
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.227	0.091	0.000	0.318
NE	0.000	0.000	0.136	0.000	0.045	0.045	0.136	0.000	0.000	0.364
ENE	0.000	0.091	0.000	0.000	0.045	0.045	0.091	0.000	0.000	0.273
E	0.000	0.045	0.045	0.091	0.000	0.045	0.000	0.000	0.000	0.227
ESE	0.000	0.000	0.136	0.273	0.000	0.136	0.000	0.000	0.000	0.545
SE	0.000	0.000	0.091	0.136	0.091	0.045	0.000	0.000	0.000	0.364
SSE	0.000	0.045	0.136	0.091	0.045	0.000	0.000	0.000	0.000	0.318
S	0.000	0.045	0.045	0.091	0.045	0.000	0.000	0.000	0.000	0.227
SSW	0.000	0.000	0.000	0.045	0.045	0.000	0.000	0.000	0.000	0.091
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.045
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	0.045	0.000	0.000	0.000	0.000	0.000	0.045
NW	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.045
NNW	0.000	0.045	0.045	0.045	0.000	0.000	0.136	0.000	0.000	0.273
SUBTOTAL	0.000	0.273	0.727	0.909	0.318	0.318	0.682	0.136	0.000	3.364

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2200
TOTAL HOURS OF STABILITY CLASS G	74
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	74
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2200
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2017/10/13

MEAN WIND SPEED = 7.29

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
2017 Annual Radioactive EFFLUENT Release REPORT**

BROWNS FERRY NUCLEAR PLANT

2017 METEOROLOGICAL DATA

TABLE 9D

JOINT FREQUENCY DISTRIBUTION IN PERCENT

FOR ELEVATED RELEASES

FOURTH QUARTER

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.000
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.046
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.092	0.000	0.000	0.139
SSE	0.000	0.000	0.000	0.000	0.000	0.046	0.139	0.046	0.139	0.000	0.369
S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.092
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	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	0.000
WNW	0.000	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	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.046	0.185	0.231	0.185	0.000	0.000	0.646

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS A	14
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS A	14
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 14.67

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.277	0.046	0.000	0.323
NNE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ESE	0.000	0.000	0.000	0.000	0.046	0.000	0.046	0.046	0.000	0.139
SE	0.000	0.000	0.000	0.000	0.046	0.231	0.092	0.000	0.000	0.369
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	0.000	0.092	0.000	0.000	0.000	0.092
SSW	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.000	0.139
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NNW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SUBTOTAL	0.000	0.000	0.000	0.000	0.139	0.416	0.462	0.139	0.000	1.154

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS B	25
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS B	25
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 13.32

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.323	0.462	0.000	0.000	0.785
NNE	0.000	0.000	0.000	0.000	0.000	0.139	0.000	0.046	0.000	0.185
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
E	0.000	0.000	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	0.185	0.092	0.231	0.092	0.000	0.646
SE	0.000	0.000	0.000	0.046	0.000	0.231	0.092	0.000	0.046	0.416
SSE	0.000	0.000	0.000	0.092	0.000	0.046	0.139	0.046	0.000	0.323
S	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.092
SSW	0.000	0.000	0.000	0.000	0.000	0.185	0.000	0.000	0.000	0.185
SW	0.000	0.000	0.000	0.000	0.046	0.092	0.000	0.000	0.000	0.139
WSW	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.000	0.000	0.092
W	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.046
WNW	0.000	0.000	0.000	0.000	0.000	0.000	0.046	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	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.092
SUBTOTAL	0.000	0.000	0.000	0.185	0.231	1.200	1.200	0.185	0.046	3.047

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS C	66
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS C	66
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 12.33

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.139	0.369	2.447	2.447	0.139	0.000	5.633
NNE	0.000	0.000	0.185	0.323	0.508	0.877	0.508	0.046	0.000	2.447
NE	0.000	0.000	0.139	0.092	0.369	0.646	0.000	0.000	0.000	1.247
ENE	0.000	0.000	0.046	0.139	0.092	0.185	0.000	0.139	0.000	0.600
E	0.000	0.000	0.000	0.046	0.046	0.000	0.046	0.139	0.000	0.277
ESE	0.000	0.000	0.369	0.323	0.600	0.369	0.369	0.323	0.000	2.355
SE	0.000	0.000	0.092	0.600	0.369	0.785	0.923	0.646	0.369	3.786
SSE	0.000	0.046	0.323	0.508	0.369	0.508	1.200	0.508	0.231	3.693
S	0.000	0.000	0.277	0.092	0.139	0.462	0.600	0.323	0.231	2.124
SSW	0.000	0.000	0.369	0.323	0.185	0.139	0.231	0.231	0.046	1.524
SW	0.000	0.000	0.231	0.231	0.323	0.323	0.185	0.000	0.000	1.293
WSW	0.000	0.000	0.277	0.185	0.600	0.739	0.185	0.000	0.000	1.985
W	0.000	0.000	0.323	0.554	0.369	1.200	0.831	0.508	0.046	3.832
WNW	0.000	0.046	0.046	0.139	0.508	0.785	0.785	0.277	0.231	2.816
NW	0.000	0.046	0.185	0.092	0.369	0.739	1.339	0.831	0.139	3.740
NNW	0.000	0.000	0.092	0.046	0.092	1.477	1.939	0.277	0.000	3.924
SUBTOTAL	0.000	0.139	3.047	3.832	5.309	11.681	11.588	4.386	1.293	41.274

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS D	913
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS D	894
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 11.54

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.046	0.831	0.970	0.185	0.000	2.124
NNE	0.000	0.000	0.000	0.092	0.000	0.923	1.016	0.000	0.000	2.031
NE	0.000	0.000	0.092	0.046	0.046	0.877	0.369	0.000	0.000	1.431
ENE	0.000	0.000	0.139	0.092	0.185	0.139	0.046	0.000	0.000	0.600
E	0.000	0.092	0.046	0.046	0.185	0.092	0.092	0.000	0.000	0.554
ESE	0.000	0.046	0.000	0.231	0.092	0.462	1.616	0.139	0.000	2.585
SE	0.000	0.000	0.231	0.185	0.139	1.016	1.985	0.554	0.092	4.201
SSE	0.000	0.000	0.092	0.092	0.185	1.247	1.801	1.108	0.046	4.571
S	0.000	0.000	0.092	0.231	0.462	1.431	1.754	0.877	0.416	5.263
SSW	0.000	0.000	0.139	0.231	0.462	0.970	0.970	0.185	0.508	3.463
SW	0.000	0.000	0.046	0.554	0.462	1.247	0.139	0.000	0.046	2.493
WSW	0.000	0.000	0.092	0.139	0.277	0.646	0.185	0.046	0.000	1.385
W	0.000	0.000	0.092	0.046	0.046	0.462	0.277	0.000	0.000	0.923
WNW	0.000	0.046	0.046	0.092	0.046	0.323	0.231	0.000	0.000	0.785
NW	0.000	0.000	0.046	0.092	0.139	0.323	0.970	0.139	0.000	1.708
NNW	0.000	0.000	0.092	0.092	0.231	0.600	0.369	0.000	0.000	1.385
SUBTOTAL	0.000	0.185	1.339	2.262	3.001	11.588	12.789	3.232	1.108	35.503

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS E	781
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS E	769
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 12.46

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.277	1.247	0.092	0.000	1.616
NNE	0.000	0.000	0.092	0.000	0.000	0.092	0.646	0.092	0.000	0.923
NE	0.000	0.000	0.046	0.046	0.092	0.046	0.323	0.000	0.000	0.554
ENE	0.000	0.000	0.000	0.046	0.046	0.185	0.139	0.046	0.000	0.462
E	0.000	0.000	0.000	0.046	0.046	0.139	0.139	0.000	0.000	0.369
ESE	0.000	0.000	0.046	0.092	0.092	0.831	0.462	0.000	0.000	1.524
SE	0.000	0.000	0.046	0.092	0.139	1.293	0.739	0.046	0.000	2.355
SSE	0.000	0.000	0.046	0.139	0.092	0.877	0.462	0.000	0.000	1.616
S	0.000	0.000	0.092	0.046	0.185	0.231	0.277	0.092	0.000	0.923
SSW	0.000	0.000	0.000	0.139	0.046	0.139	0.231	0.000	0.000	0.554
SW	0.000	0.046	0.000	0.000	0.231	0.185	0.046	0.000	0.000	0.508
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	0.046	0.000	0.046	0.139	0.000	0.000	0.000	0.231
WNW	0.000	0.000	0.046	0.092	0.092	0.092	0.000	0.000	0.000	0.323
NW	0.000	0.000	0.000	0.000	0.092	0.277	0.046	0.000	0.000	0.416
NNW	0.000	0.000	0.046	0.000	0.000	0.369	0.323	0.046	0.000	0.785
SUBTOTAL	0.000	0.046	0.508	0.785	1.200	5.171	5.078	0.416	0.000	13.204

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS F	286
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS F	286
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 11.45

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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JOINT PERCENTAGE FREQUENCIES OF WIND SPEED BY WIND DIRECTION FOR

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

BROWNS FERRY NUCLEAR PLANT

OCT 1, 2017 - DEC 31, 2017

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	0.046	0.139	0.000	0.092	0.092	0.046	0.000	0.416
NNE	0.000	0.000	0.092	0.139	0.000	0.185	0.046	0.000	0.000	0.462
NE	0.000	0.000	0.000	0.000	0.000	0.000	0.092	0.000	0.000	0.092
ENE	0.000	0.000	0.000	0.046	0.139	0.046	0.185	0.000	0.000	0.416
E	0.000	0.000	0.000	0.092	0.000	0.092	0.000	0.000	0.000	0.185
ESE	0.000	0.000	0.000	0.092	0.277	0.323	0.000	0.000	0.000	0.693
SE	0.000	0.000	0.139	0.185	0.508	0.554	0.185	0.000	0.000	1.570
SSE	0.000	0.000	0.046	0.046	0.092	0.277	0.000	0.000	0.000	0.462
S	0.000	0.000	0.000	0.046	0.046	0.046	0.000	0.000	0.000	0.139
SSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WSW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WNW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
NW	0.000	0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.046
NNW	0.000	0.000	0.092	0.139	0.139	0.092	0.139	0.046	0.000	0.646
SUBTOTAL	0.000	0.000	0.416	0.923	1.200	1.801	0.739	0.092	0.000	5.171

TOTAL HOURS OF VALID STABILITY OBSERVATIONS	2197
TOTAL HOURS OF STABILITY CLASS G	112
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY CLASS G	112
TOTAL HOURS OF VALID WIND DIRECTION-WIND SPEED-STABILITY OBSERVATIONS	2166
TOTAL HOURS CALM	0

METEOROLOGICAL FACILITY: BROWNS FERRY NUCLEAR PLANT
STABILITY BASED ON DELTA-T BETWEEN 10.03 AND 89.59 METERS
WIND SPEED AND DIRECTION MEASURED AT 90.29 METER LEVEL

DATE PRINTED: 2018/02/20

MEAN WIND SPEED = 8.34

NOTE: TOTALS AND SUBTOTALS ARE OBTAINED FROM UNROUNDED NUMBERS

**BROWNS FERRY NUCLEAR PLANT
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ATTACHMENT 1

Deviations from ODCM Controls and Surveillance Requirements

This report is to comply with Browns Ferry Nuclear Plant Offsite Dose Calculation Manual (ODCM). The ODCM requires that all deviations be reported in the Annual Radioactive Effluent Release Report.

During the reporting period, January 1, 2017 through December 31, 2017, there were no deviations to the ODCM.

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Attachment 2

2017 Inoperable Radiological Effluent Instrumentation Report

This report is to comply with Browns Ferry Nuclear Plant Offsite Dose Calculation Manual (ODCM) Sections 1/2.1.1 and 1/2.1.2. The ODCM requires the exertion of best efforts to return inoperable instruments to operable status within 30 days. Failure to return such instruments to an operable status within the prescribed interval requires a description in the Annual Radioactive Effluent Release Report.

During the reporting period, January 1, 2017 through December 31, 2017, there were three radiological instruments inoperable for greater than 30 days.

The 0-FIC-77-60 Radwaste Discharge Valve Flow Loop was declared inoperable on 4/6/2017 during performance of 0-SI-4.8.A.1-1, Liquid Effluent Permit (CR 1281231, WO 118631674, LCOT# 0-077-ODCM-2017-0016). The 0-FIC-77-60 average flow rate was out of tolerance as per the Acceptance Criteria and calculations in 0-SI-4.8.A.1-1. The expected percent tolerance is +/- 8%, whereas the value determined as a result of the SI performance was 34% due to the average flow rate being outside the plus or minus 8% of flow rate calculated based on tank volume change over time (ODCM Table 2.1-1.d Channel Functional Test). Monitor declared operable per LCOT logs on 7/14/2017 (WO 118114405).

The 2-FCV-77-61 Radwaste Discharge Valve Flow Loop was declared inoperable on 7/14/2016 under LCOT# 2-077-ODCM-2016-0020. 2-SI-4.8.A.3, Automatic Isolation Logic Functional Test of Radwaste Discharge Valve, was not performed as scheduled because U-2 was on cooling towers. (CR 1190109)

On 11/14/2016, only partial performance with Attachment 3 of 2-SI-4.8.A.3 to be performed at a later date (WO 116798018, 118410520).

On 12/29/16, determination made that work could not be completed as scheduled due to on-going Radwaste upgrades. Performance of Attachment 3 and any other necessary sections of 2-SI-4.8.A.3 will be scheduled following completion of Radwaste upgrades (WO 118315571).

The 2-FCV-7761 Radwaste Discharge Valve Flow Loop still remains inoperable; this inoperability also places the 0-RM-90-130 (Liquid RW Effluent monitor) in a potential LCO if a liquid release is made through the U-2 CCW discharge canal. Per ODCM, "A system, subsystem, train, component, or device shall be Operable or have Operability when it is capable of performing its specified function(s)."

The 3-FCV-77-61 Radwaste Discharge Valve was declared inoperable on 6/18/2013 under LCOT# 3-77-ODCM-2013-0022 due to failed A/C steps during the performance of 3-SI-4.8.A.3, Automatic Isolation Logic Functional Test of Radwaste Discharge Canal Valve 3-FCV-77-61 (CR 946463 and WO 116248474).

The 3-FCV-7761 Radwaste Discharge Valve Flow Loop still remains inoperable; this inoperability also places the 0-RM-90-130 (Liquid RW Effluent monitor) in a potential LCO if a liquid release is made through the U-3 CCW discharge canal. Per ODCM, "A system, subsystem, train, component, or device shall be Operable or have Operability when it is capable of performing its specified function(s)."

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Groundwater Protection Program

In 2007, the Nuclear Energy Institute (NEI) established the Groundwater Protection Initiative (GPI), NEI 07-07. The Groundwater Protection Initiative was established to 1) improve management of situations involving inadvertent radiological releases that get into groundwater and 2) to improve communication with external stakeholders to enhance trust and confidence on the part of local communities, States, the NRC, and the public in the nuclear industry's commitment to a high standard of public radiation safety and protection of the environment. This section provides information and sample results from on-site groundwater locations that were sampled in support of the Groundwater Protection Initiative at Browns Ferry Nuclear Plant. The groundwater wells described in this section are not part of the Radiological Environmental Monitoring Program (REMP).

In the early 2000s, BFN initiated a groundwater study to identify the source low levels of tritium detected on-site. Results from the groundwater study (*Investigation of Tritium Releases to Groundwater* Prepared by H. Julian June 2006), suggest the source of tritiated groundwater was from historical leaks and spills associated with Radwaste/Condensate transfer tunnel. Groundwater and surface water level measurements during the study indicated the return channel and subsequently the Tennessee River will ultimately be recipient to tritiated groundwater discharge from the site. It has been determined that there are no groundwater wells onsite or within 2-miles of the site that are used as a source of drinking water. Groundwater movement in the area has been determined to be from the plant site toward the Tennessee River.

Onsite groundwater monitoring was performed in 2017. The purpose of on-site groundwater monitoring is to ensure timely detection of inadvertent radiological releases to groundwater. Non REMP groundwater wells monitor for potential leaks from plant equipment. As part of the GPI, BFN monitored a total of 16 groundwater wells located in the Protected Area and the Owner Controlled Area during 2017. Normal sampling frequencies are quarterly and semiannually with some wells sampled monthly if certain criteria are met or for investigation purposes. Samples are routinely analyzed for environmental level tritium (H-3) and principle gamma emitters (PGE) with selected wells analyzed for Hard-to-Detect (HTD) radionuclides (Gross Alpha, Fe-55, Ni-63, Sr-89, and Sr-90). In support of the groundwater program the site also monitors onsite storm drains, catch basins and surface water.

In 2017, low levels of tritium were detected in on-site groundwater wells as indicated in Table 10, Groundwater Data. This table demonstrates all on-site groundwater wells that indicated detectable tritium concentrations. Tritium concentrations ranged from non-detectable, at less than 270 pCi/L, up to a maximum concentration of 6,856 pCi/L. No other plant related radionuclides were detected in any groundwater well; No activity was detected in any surface water, catch basin, or storm drain in 2017. As determined in the 2006 Groundwater study, the estimated groundwater/channel water dilution ratio is 1:20,000 at a rate of approximately 0.5 gpm. Using the highest measured groundwater tritium concentration in 2017, 6,856 pCi/L, the aqueous tritium concentration in the channel, after dilution, would be 0.34 pCi/L. Assuming 0.34 pCi/L concentration at a release rate of 0.5 gpm for the entire year results in a total release of approximately 3.41E-07 Curies. This is a small fraction of the liquid radwaste releases and is a small fraction of the reported dose for 2017.

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There were no instances of any on-site spills or leaks that occurred during the reporting period that were communicated to offsite agencies. Groundwater well results were well below the voluntary communication reporting level of 20,000 pCi/L as established by the EPA Drinking Water Standard.

Table 10 - Groundwater Data

Sample Date	Well ID	Tritium Activity (pCi/L)
1st Quarter		
1/31/2017	Dewat-A	2,422
2/23/2017	Dewat-A	6,856
3/17/2017	Dewat-A	3,824
2/22/2017	MW-01	2,985
3/24/2017	MW-01	1,961
2/21/2017	MW-02	1,214
2/21/2017	MW-03	626
2/21/2017	MW-04	920
2/21/2017	MW-07	803
2/22/2017	MW-08	2,070
3/17/2017	MW-08	3,493
2/22/2017	MW-09	255
2nd Quarter		
4/13/2017	Dewat-A	2,316
5/11/2017	Dewat-A	5,280
5/11/2017	MW-01	883
5/11/2017	MW-02	620
5/11/2017	MW-03	500
5/11/2017	MW-04	689
5/11/2017	MW-07	735
5/11/2017	MW-08	2,700
3rd Quarter		
8/1/2017	Dewat-A	3,010
8/1/2017	MW-02	277
8/1/2017	MW-03	402
8/1/2017	MW-07	753
8/1/2017	MW-08	2,240
4th Quarter		
11/15/2017	Dewat-A	1,460
11/15/2017	MW-01	1,050
11/15/2017	MW-02	427
11/15/2017	MW-03	400
11/15/2017	MW-04	236
11/14/2017	MW-07	1,350
11/16/2017	MW-08	1,350