



Dresden Generating Station

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10 CFR 50.36a (a)(2)

April 24, 2015

SVPLTR: #15-0030

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

Dresden Nuclear Power Station, Units 1, 2, and 3
Facility Operating License No. DPR-2
Renewed Facility Operation License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-010, 50-237, and 50-249

Subject: Dresden Nuclear Power Station 2014 Radioactive Effluent Release Report and
Offsite Dose Calculation Manual

The Radioactive Effluent Release Report for January through December 2014 for Dresden Nuclear Power Station (DNPS) is submitted in accordance with Sections 6.9.A.4 and 5.6.3, "Radioactive Effluent Release Report," of the DNPS Unit 1 and Units 2 and 3 Technical Specifications, respectively and 10 CFR 50.36a(a)(2), "Technical specifications on effluents from nuclear power reactors."

Should you have any questions concerning this letter, please contact Bruce Franzen, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Shane Marik", written in a cursive style.

Shane Marik
Site Vice President
Dresden Nuclear Power Station

Attachments: DNPS 2014 Annual Radioactive Effluent Release Report

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector, Dresden Nuclear Power Station

TE48
NMSS20

Attachment

DNPS 2014 Annual Radioactive Effluent Release Report

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT, SUPPLEMENTAL INFORMATION

Facility: Dresden Nuclear Power Station Units 1,2,3

Licensee: Exelon Nuclear

1. Regulatory Limits

a. Fission and activation gases:

Dose Rate (site)

- 1) Less than 500 mrem/year to the whole body.
- 2) Less than 3000 mrem/year to the skin.

Gamma Air Dose (each unit)

- 1) Less than or equal to 5 mrad/quarter.
- 2) Less than or equal to 10 mrad/year.

Beta Air Dose (each unit)

- 1) Less than or equal to 10 mrad/quarter.
- 2) Less than or equal to 20 mrad/year.

b.,c. Iodine-131, Iodine-133, and all radionuclides in particulate form with half-lives greater than 8 days:

Dose Rate (site)

- 1) Less than 1500 mrem/year.

Dose (each unit)

- 1) Less than or equal to 7.5 mrem/quarter to any organ.
- 2) Less than or equal to 15 mrem/year to any organ.

d. Liquid effluents (each unit):

- 1) Less than or equal to 1.5 mrem to the whole body during any calendar quarter.
- 2) Less than or equal to 5 mrem to any organ during any calendar quarter.
- 3) Less than or equal to 3 mrem to the whole body during any calendar year.
- 4) Less than or equal to 10 mrem to any organ during any calendar year.

e. 40CFR190 and 10CFR72 (all uranium fuel cycle operations in the region):

- 1) Less than or equal to 25 mrem annual whole body dose.
- 2) Less than or equal to 75 mrem annual thyroid dose.
- 3) Less than or equal to 25 mrem annual dose to any other critical organ.

2. Effluent Concentration Limits

Dose rates, rather than effluent concentrations, are used to calculate permissible release rates for gaseous effluents. The maximum permissible dose rates for gaseous releases are defined in Dresden Offsite Dose Calculation Manual (ODCM) Radiological Effluent Control (REC) 12.4.1.

Liquid effluent concentrations are limited per ODCM REC 12.3.1 to 10 times the concentration specified in 10CFR20 Appendix B, Table 2, Column 2 for radionuclides other than dissolved or entrained noble gases and $2.00\text{E-}04 \mu\text{Ci/ml}$ total activity for all dissolved or entrained noble gases.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT, SUPPLEMENTAL INFORMATION

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3. Average Energy

The ODCM limits dose rates at or beyond the site boundary due to the release of noble gases to less than or equal to 500 mrem per year to the total body and less than or equal to 3,000 mrem per year to the skin, and average energy is not used to determine dose to the public. Compliance with these limits is demonstrated based on dose calculations using measured isotopic concentrations of effluent streams and not based on gross count rate measuring systems. Therefore, the average beta and gamma energies (\bar{E}) for gaseous effluents as described in Regulatory Guide 1.21, "Measuring, Evaluating, 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.

4. Measurement and Approximations of Total Radioactivity

- a. Fission and Activation Gases:
- b. Iodines:
- c. Particulates:
- d. Tritium:
- e. Gross Alpha

The 2/3 Chimney, 2/3 Reactor Building Vent, and Chemical Cleaning Building effluents are continuously sampled for iodines and particulates. These samples are changed weekly and analyzed by gamma spectroscopy. The particulate filters are composited and sent to a vendor for gross alpha, Sr-89, Sr-90, and Fe-55 analysis. Noble gas grab samples of the 2/3 Chimney and 2/3 Reactor Building Vent are obtained weekly and analyzed by gamma spectroscopy. Contributing streams of the 2/3 Chimney and 2/3 Reactor Building Vent are also sampled and analyzed by gamma spectroscopy. Tritium samples of the 2/3 Chimney and 2/3 Reactor Building Vent are obtained monthly and analyzed by liquid scintillation.

For the 2/3 Chimney and 2/3 Reactor Building Vent effluents, measured flow at the release points is used to calculate the curies released. Chemical Cleaning Building effluents, the design basis flows are used to calculate curies released.

- f. Carbon-14:

Carbon-14 activity released is estimated using Electric Power Research Institute Technical Report 1021106 Boiling Water Reactor proxy values (5.1 Ci per GWth year, Section 3.7) and the rated thermal capacity maintained for the entire calendar year. Resultant dose is calculated using approved methodologies.

- g. Liquid Effluents:

The river discharge tank is analyzed for gamma-emitting nuclides by gamma spectroscopy and for tritium by liquid scintillation prior to discharge. A representative portion of this sample is saved and composited with other discharges that occur during the calendar month. The composite is sent to a vendor for analyses of gross alpha, Sr-89, Sr-90, and Fe-55. The tank volumes and activities are used to calculate the diluted activity released at the discharge point from batch discharges.

Containment Cooling Service Water (CCSW) is sampled from the Low Pressure Coolant Injection (LPCI) heat exchangers monthly and analyzed for gamma-emitting nuclides by gamma spectroscopy. These samples are composited quarterly and analyzed for tritium, gross alpha, Sr-89, Sr-90, and Fe-55. Batch release volume is based on LPCI heat exchanger volume.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT, SUPPLEMENTAL INFORMATION

Facility: Dresden Nuclear Power Station Units 1,2,3

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h. Estimated Total Errors:

The estimated total errors were calculated as the square root of the sum of the squares of significant errors present in the sampling and analysis process.

i. Less than the Lower Limit of Detection (<LLD)

Samples are analyzed such that the ODCM LLD requirements are met. When a nuclide is not detected, then <LLD is reported.

5. Batch Releases (does not include Abnormal / Unmonitored Releases described below)

a. Liquid - Radwaste Liquid Effluents - None

b. Liquid - Containment Cooling Service Water (CCSW)

1. Number of batch releases: 0
2. Total time period for batch releases: 0.00E+00 minutes
3. Maximum time period for a batch release: 0.00E+00 minutes
4. Average time period for a batch release: 0.00E+00 minutes
5. Minimum time period for a batch release: 0.00E+00 minutes
6. Average stream flow during periods of release of effluent into a flowing stream: 0.00E+00 lpm

c. Gaseous - None

6. Abnormal Releases*

a. Liquid

1. Number of releases: 1 (Sewage Treatment Plant)
2. Total activity released: 9.01E-02 Ci

Water in the Sewage Treatment Plant effluent is routinely sampled and analyzed for tritium content. In early June 2014, a high concentration of tritium was measured during the routine monthly sampling. On 6/4/14, the tritium concentration was determined to be 57,500 pCi/l. The last sample with no detectable activity was on 4/2/14. An abnormal release was calculated using this concentration (57,500 pCi/l) for the months of April and May. The total activity released during this period was calculated to be 9.01E-02 Ci. From June 2014 through December 2014, activity released through this path is considered an unmonitored release for the purpose of this report (see Section 8 below)

b. Gaseous

1. Number of releases: 0
2. Total activity released: 0.00E+00 Ci

7. Summary of Offsite Dose Calculation Manual (ODCM) Changes by Dresden Nuclear Power Station (DNPS) in 2014:
None: Revision 12 of the ODCM was issued in 2012.

8. Unmonitored Releases*

a. Liquid

1. Number of releases: 2 (Storm Sewers and Sewage Treatment Plant)
2. Total activity released: 4.36E+00 Ci

Water in on-site storm sewers is routinely sampled and analyzed for tritium content. The highest storm drain

* These releases are included in the Effluents Summation of all Releases Tables and in the Radiological Impact on Man.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT, SUPPLEMENTAL INFORMATION

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concentrations measured during each month of 2014 was used to calculate the released activity for each month. The total activity released is based on an estimated typical discharge flow of 10 gallons per minute. Tritium was detected in the storm sewers in 7 of 12 months. An estimated $5.66\text{E-}01$ Ci of tritium was released to the environment during 2014.

Following the discovery of tritium in the Sewage Treatment Plant Effluent in June of 2014, continued sampling indicated that tritium was discharged in the remaining months of 2014 (June through December). The total activity released via this path was $3.79\text{E+}00$ Ci of tritium.

b. Gaseous

1. Number of releases: 5 (U1 Main Turbine Floor and Fuel Building, Chem Lab, Heating Steam, Unit 2 Isolation Condenser, and East Turbine Building Ventilation)
2. Total activity released: $2.34\text{E-}04$ Ci

The Unit 1 Main Turbine Floor is used as an area to work on contaminated equipment. The Unit 1 Fuel Building is used as a storage area and potentially as a work area. The ventilation systems to these areas are no longer operational and the areas are at ambient pressure with the outside environment. The potential exists for airborne activity to be released to the environment through various points. Based on the work normally performed in these areas, an estimated $7.20\text{E-}05$ Ci of Cs-137 was released from this area during 2014.

The Chemistry Laboratory Ventilation System exhausts directly into the environment and is not monitored. Based on an evaluation of activities performed in the area, the estimated activity released to the environment from the laboratory in 2014 is $9.91\text{E-}05$ Ci of noble gases and $3.78\text{E-}06$ Ci of iodines and particulates.

The Unit 2/3 Heating Steam System has been contaminated in the past. The system continues to contain low-level tritium contamination. During normal operation, the condensate is converted to steam, a portion of which gets vented to the atmosphere. An estimated $1.08\text{E-}05$ Ci of activity was released to the environment during 2014.

The Unit 2 Isolation Condenser was actuated during planned testing on September 7, 2014. Low level tritium was detected in samples at the time of the test and $4.59\text{E-}05$ Ci were released during the test.

The East turbine Building Ventilation System exhausts directly into the environment and is not monitored. Removable contamination has been detected in the system in the past. A release calculation indicates that, in 2014, $9.97\text{E-}06$ Ci of activity were released via this path.

9. Errata:

None

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

UNIT 1 GASEOUS EFFLUENTS SUMMATION OF ALL RELEASES

Units	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Est. Total Error, %
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A. Fission & activation gases

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	1.31E+01
2. Average release rate for period	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of ODCM dose limit	%γ	N/A	N/A	N/A	N/A	
	%β	N/A	N/A	N/A	N/A	

B. Iodines

1. Total iodine-131	Ci	<LLD	<LLD	<LLD	<LLD	2.60E+01
2. Average release rate for period (I-131)	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of ODCM dose limit *	%	N/A	N/A	N/A	N/A	

C. Particulates

1. Particulates with half-lives > 8 days	Ci	4.71E-07	2.53E-06	7.61E-07	7.20E-05	2.94E+01
2. Average release rate for period	μCi/sec	6.06E-08	3.22E-07	9.57E-08	9.06E-06	
3. Percent of ODCM dose limit *	%	3.48E-05	1.87E-04	5.62E-05	2.47E-02	

D. Tritium

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	7.56E+00
2. Average release rate for period	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of ODCM dose limit *	%	N/A	N/A	N/A	N/A	

E. Gross Alpha

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.94E+01
2. Average release rate for period	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of ODCM dose limit	%	N/A	N/A	N/A	N/A	

F. Carbon-14

1. Total release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
2. Average release rate for period	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

* Percent of ODCM dose limit indicates combined total of Iodines, Particulates, and Tritium

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

UNIT 2 GASEOUS EFFLUENTS SUMMATION OF ALL RELEASES

Units	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Est. Total Error, %
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A. Fission & activation gases

1. Total release	Ci	6.49E+00	2.97E+00	4.12E+00	6.13E+00	1.31E+01
2. Average release rate for period	μCi/sec	8.35E-01	3.77E-01	5.18E-01	7.72E-01	
3. Percent of ODCM dose limit	%γ	4.61E-03	2.69E-03	2.92E-03	3.84E-03	
	%β	1.62E-04	5.77E-05	1.17E-04	9.01E-05	

B. Iodines

1. Total iodine-131	Ci	3.99E-05	1.20E-04	1.11E-04	2.63E-04	2.60E+01
2. Average release rate for period (I-131)	μCi/sec	5.13E-06	1.53E-05	1.40E-05	3.30E-05	
3. Percent of ODCM dose limit *	%	1.47E-01	1.20E-01	1.50E-01	1.60E-01	

C. Particulates

1. Particulates with half-lives > 8 days	Ci	2.02E-04	6.76E-04	4.30E-04	1.08E-03	2.94E+01
2. Average release rate for period	μCi/sec	2.60E-05	8.59E-05	5.40E-05	1.36E-04	
3. Percent of ODCM dose limit *	%	1.47E-01	1.20E-01	1.50E-01	1.60E-01	

D. Tritium

1. Total release	Ci	1.86E+00	4.63E+00	1.82E+00	3.44E+00	7.56E+00
2. Average release rate for period	μCi/sec	2.39E-01	5.89E-01	2.29E-01	4.33E-01	
3. Percent of ODCM dose limit *	%	1.47E-01	1.20E-01	1.50E-01	1.60E-01	

E. Gross Alpha

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.94E+01
2. Average release rate for period	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of ODCM dose limit	%	N/A	N/A	N/A	N/A	

F. Carbon-14

1. Total release	Ci	3.69E+00	2.90E+00	3.74E+00	3.77E+00	
2. Average release rate for period	μCi/sec	4.75E-01	3.69E-01	4.71E-01	4.74E-01	

* Percent of ODCM dose limit indicates combined total of Iodines, Particulates, and Tritium

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

UNIT 3 GASEOUS EFFLUENTS SUMMATION OF ALL RELEASES

Units	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Est. Total Error, %
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A. Fission & activation gases

1. Total release	Ci	3.43E+01	1.84E+01	1.33E+01	1.18E+01	1.31E+01
2. Average release rate for period	μCi/sec	4.41E+00	2.34E+00	1.67E+00	1.48E+00	
3. Percent of ODCM dose limit	%γ	2.33E-02	1.10E-02	1.00E-02	8.88E-03	
	%β	9.31E-04	2.53E-04	4.21E-04	1.90E-04	

B. Iodines

1. Total iodine-131	Ci	1.01E-04	1.42E-04	3.07E-04	2.63E-04	2.60E+01
2. Average release rate for period (I-131)	μCi/sec	1.30E-05	1.81E-05	3.87E-05	3.31E-05	
3. Percent of ODCM dose limit *	%	1.50E-01	1.52E-01	1.55E-01	1.39E-01	

C. Particulates

1. Particulates with half-lives > 8 days	Ci	4.57E-04	6.57E-04	1.03E-03	1.34E-03	2.94E+01
2. Average release rate for period	μCi/sec	5.88E-05	8.35E-05	1.30E-04	1.68E-04	
3. Percent of ODCM dose limit *	%	1.50E-01	1.52E-01	1.55E-01	1.39E-01	

D. Tritium

1. Total release	Ci	4.39E+00	4.52E+00	4.62E+00	3.29E+00	7.56E+00
2. Average release rate for period	μCi/sec	5.65E-01	5.75E-01	5.81E-01	4.14E-01	
3. Percent of ODCM dose limit *	%	1.50E-01	1.52E-01	1.55E-01	1.39E-01	

E. Gross Alpha

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.94E+01
2. Average release rate for period	μCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of ODCM dose limit	%	N/A	N/A	N/A	N/A	

F. Carbon-14

1. Total release	Ci	3.69E+00	3.73E+00	3.75E+00	2.99E+00	
2. Average release rate for period	μCi/sec	4.75E-01	4.74E-01	4.72E-01	3.76E-01	

* Percent of ODCM dose limit indicates combined total of Iodines, Particulates, and Tritium

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

TABLE OF LOWER LIMITS OF DETECTABILITY
FOR GASEOUS EFFLUENTS

1.	FISSION / ACTIVATION GASES	μCi/cc
	Kr-87	1.00E-04
	Kr-88	1.00E-04
	Xe-133	1.00E-04
	Xe-133m	1.00E-04
	Xe-135	1.00E-04
	Xe-138	1.00E-04
2.	IODINES	μCi/cc
	I-131	1.00E-12
	I-133	1.00E-10
3.	PARTICULATES	μCi/cc
	Sr-89	1.00E-11
	Sr-90	1.00E-11
	Mn-54	1.00E-11
	Co-58	1.00E-11
	Fe-59	1.00E-11
	Co-60	1.00E-11
	Zn-65	1.00E-11
	Mo-99	1.00E-11
	Cs-134	1.00E-11
	Cs-137	1.00E-11
	Ce-141	1.00E-11
	Ce-144	1.00E-11
4.	OTHER	μCi/cc
	H-3	1.00E-06
	Gross Alpha	1.00E-11

The above values are the ODCM-required LLDs.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 1 MAIN CHIMNEY

ELEVATED RELEASES

CONTINUOUS MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci					
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*

* No releases via this release path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 1 MAIN CHIMNEY

ELEVATED RELEASES

BATCH MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*

* No batch releases via this release path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 1 CHEMICAL CLEANING BUILDING

MIXED MODE RELEASES

CONTINUOUS MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci	N/A	N/A	N/A	N/A	N/A
Kr-85	Ci	N/A	N/A	N/A	N/A	N/A
Kr-85m	Ci	N/A	N/A	N/A	N/A	N/A
Kr-87	Ci	N/A	N/A	N/A	N/A	N/A
Kr-88	Ci	N/A	N/A	N/A	N/A	N/A
Xe-133	Ci	N/A	N/A	N/A	N/A	N/A
Xe-133m	Ci	N/A	N/A	N/A	N/A	N/A
Xe-135	Ci	N/A	N/A	N/A	N/A	N/A
Xe-135m	Ci	N/A	N/A	N/A	N/A	N/A
Xe-138	Ci	N/A	N/A	N/A	N/A	N/A
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
3. Particulates						
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	4.71E-07	2.53E-06	7.61E-07	<LLD	3.76E-06
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	4.71E-07	2.53E-06	7.61E-07	<LLD	3.76E-06
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*

* Analysis not required per Dresden Station ODCM

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 1 CHEMICAL CLEANING BUILDING

MIXED MODE RELEASES

BATCH MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*

* No batch releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 2 REACTOR BUILDING VENT

MIXED MODE RELEASES

CONTINUOUS MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	4.54E-01	<LLD	4.54E-01
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	<LLD	<LLD	4.54E-01	<LLD	4.54E-01
2. Iodines						
I-131	Ci	<LLD	<LLD	2.59E-06	3.99E-06	6.58E-06
I-133	Ci	<LLD	7.15E-06	2.16E-05	5.21E-7	2.92E-05
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	<LLD	7.15E-06	2.41E-05	4.51E-06	3.58E-05
3. Particulates						
Cr-51	Ci	<LLD	<LLD	<LLD	9.03E-05	9.03E-05
Mn-54	Ci	<LLD	<LLD	<LLD	1.48E-05	1.48E-05
Fe-55	Ci	1.43E-06	7.58E-05	4.26E-05	<LLD	1.20E-04
Co-58	Ci	<LLD	2.34E-06	<LLD	9.81E-06	1.22E-05
Fe-59	Ci	<LLD	<LLD	<LLD	5.38E-06	5.38E-06
Co-60	Ci	3.02E-06	1.31E-05	3.00E-06	5.93E-05	7.85E-05
Zn-65	Ci	<LLD	<LLD	<LLD	8.62E-06	8.62E-06
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Nb-95	Ci	7.21E-07	<LLD	<LLD	<LLD	7.21E-07
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	6.31E-07	<LLD	<LLD	6.31E-07
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	5.17E-06	9.19E-05	4.56E-05	1.88E-04	3.31E-04
4. Tritium						
Total for period	Ci	2.10E-01	6.61E-01	3.25E-01	2.90E-01	1.49E+00

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 2 REACTOR BUILDING VENT

MIXED MODE RELEASES

BATCH MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*

* No batch releases via this release path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 3 REACTOR BUILDING VENT

MIXED MODE RELEASES

CONTINUOUS MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	1.72E+00	<LLD	1.72E+00
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
2. Iodines						
I-131	Ci	<LLD	8.17E-06	3.11E-05	5.08E-06	4.43E-05
I-133	Ci	<LLD	4.83E-05	1.86E-04	2.18E-06	2.36E-04
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	<LLD	5.65E-05	2.17E-04	7.26E-06	2.80E-04
3. Particulates						
Fe-55	Ci	1.37E-06	6.73E-05	3.64E-05	<LLD	1.05E-04
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	6.30E-05	6.30E-05
Mn-54	Ci	<LLD	1.36E-06	<LLD	1.37E-05	1.51E-05
Co-58	Ci	<LLD	<LLD	<LLD	6.59E-06	6.59E-06
Fe-59	Ci	<LLD	<LLD	<LLD	3.61E-06	3.61E-06
Co-60	Ci	1.68E-05	1.48E-05	1.64E-05	1.13E-04	1.61E-04
Zn-65	Ci	<LLD	<LLD	1.57E-06	4.03E-05	4.19E-05
Nb-95	Ci	9.44E-07	<LLD	<LLD	<LLD	9.44E-07
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	1.02E-04	1.02E-04
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	9.41E-07	<LLD	<LLD	<LLD	9.41E-07
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	2.01E-05	8.35E-05	5.44E-05	3.42E-04	5.00E-04
4. Tritium						
Total for period	Ci	4.67E-01	6.32E-01	8.47E-01	3.82E-01	2.33E+00

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 3 REACTOR BUILDING VENT

MIXED MODE RELEASES

BATCH MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*

* No batch releases via this release path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 2 MAIN CHIMNEY

ELEVATED RELEASES

CONTINUOUS MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci	2.53E-01	9.01E-02	1.02E-01	7.42E-02	5.19E-01
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85m	Ci	1.16E-01	4.00E-02	1.02E-01	3.17E-02	2.90E-01
Kr-87	Ci	1.67E+00	7.47E-02	8.15E-02	9.73E-02	1.92E+00
Kr-88	Ci	6.74E-02	4.96E-02	6.07E-02	5.43E-02	2.32E-01
Xe-133	Ci	1.98E-01	6.51E-02	3.83E-01	2.66E+00	3.31E+00
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	1.70E+00	4.99E-01	2.36E-01	7.36E-02	2.51E+00
Xe-135m	Ci	7.93E-01	4.05E-01	9.93E-01	4.85E-01	2.68E+00
Xe-138	Ci	1.70E+00	1.74E+00	1.70E+00	2.66E+00	7.80E+00
Total for period	Ci	6.49E+00	2.97E+00	3.66E+00	6.13E+00	1.93E+01
2. Iodines						
I-131	Ci	3.99E-05	1.20E-04	1.08E-04	2.59E-04	5.27E-04
I-133	Ci	2.28E-04	6.52E-04	5.63E-04	1.17E-03	2.61E-03
I-135	Ci	<LLD	2.12E-04	1.83E-04	4.74E-04	8.68E-04
Total for period	Ci	2.68E-04	9.84E-04	8.54E-04	1.90E-03	4.01E-03
3. Particulates						
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	1.63E-05	2.62E-05	1.47E-05	3.11E-05	8.84E-05
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	1.78E-05	7.53E-05	2.57E-05	6.61E-05	1.85E-04
Co-58	Ci	5.73E-06	2.66E-05	3.03E-05	1.02E-04	1.65E-04
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	8.32E-05	2.43E-04	1.26E-04	3.69E-04	8.21E-04
Zn-65	Ci	5.12E-05	1.52E-04	1.13E-04	2.23E-04	5.39E-04
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	7.15E-06	7.15E-06
Sn-113	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sn-117m	Ci	9.93E-07	<LLD	<LLD	2.98E-06	3.97E-06
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	3.73E-06	<LLD	3.73E-06
Ba-140	Ci	2.19E-05	5.83E-05	7.05E-05	7.84E-05	2.29E-04
Ce-141	Ci	<LLD	2.53E-06	5.64E-07	<LLD	3.09E-06
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	1.97E-04	5.84E-04	3.84E-04	8.80E-04	2.04E-03
4. Tritium						
Total for period	Ci	1.65E+00	3.97E+00	1.50E+00	3.15E+00	1.03E+01
5. Gross Alpha						
Total for period	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
6. Carbon-14						
Total for period	Ci	3.69E+00	2.90E+00	3.74E+00	3.77E+00	1.41E+01

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 2 MAIN CHIMNEY

ELEVATED RELEASES

BATCH MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*
5. Gross Alpha						
Total for period	Ci	None*	None*	None*	None*	None*
6. Carbon-14						
Total for period	Ci	None*	None*	None*	None*	None*

* No batch releases via this effluent pat

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 3 MAIN CHIMNEY

ELEVATED RELEASES

CONTINUOUS MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci	8.51E-02	1.05E+00	1.04E-01	5.72E-01	1.81E+00
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85m	Ci	1.51E-01	1.68E+00	1.06E-01	1.96E-01	2.13E+00
Kr-87	Ci	1.07E+01	2.05E-01	2.32E-01	1.45E-01	1.13E+01
Kr-88	Ci	1.33E-01	4.44E-01	1.39E-01	1.33E-01	8.49E-01
Xe-133	Ci	5.40E-01	6.23E+00	3.01E-01	3.59E+00	1.07E+01
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	1.01E+01	1.69E+00	8.39E-01	1.75E-01	1.28E+01
Xe-135m	Ci	4.06E+00	1.45E+00	3.53E+00	1.19E+00	1.02E+01
Xe-138	Ci	8.54E+00	5.68E+00	6.31E+00	5.80E+00	2.63E+01
Total for period	Ci	3.43E+01	1.84E+01	1.16E+01	1.18E+01	7.61E+01
2. Iodines						
I-131	Ci	1.01E-04	1.34E-04	2.76E-04	2.58E-04	7.69E-04
I-133	Ci	5.32E-04	7.36E-04	1.44E-03	1.18E-03	3.88E-03
I-135	Ci	<LLD	2.73E-04	4.81E-04	6.17E-04	1.37E-03
Total for period	Ci	6.33E-04	1.14E-03	2.19E-03	2.05E-03	6.02E-03
3. Particulates						
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	3.50E-05	2.57E-05	3.76E-05	2.95E-05	1.28E-04
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	3.16E-05	6.63E-05	6.49E-05	7.88E-05	2.42E-04
Co-58	Ci	1.42E-05	2.90E-05	7.74E-05	1.14E-04	2.34E-04
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	1.88E-04	2.22E-04	3.17E-04	4.12E-04	1.14E-03
Zn-65	Ci	1.13E-04	1.50E-04	2.86E-04	2.72E-04	8.21E-04
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	6.57E-06	6.57E-06
Sn-113	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sn-117m	Ci	2.53E-06	<LLD	<LLD	8.22E-06	1.08E-05
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	9.77E-06	<LLD	9.77E-06
Ba-140	Ci	5.30E-05	7.55E-05	1.83E-04	7.34E-05	3.85E-04
Ce-141	Ci	<LLD	4.81E-06	1.26E-06	<LLD	6.07E-06
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	4.37E-04	5.73E-04	9.77E-04	9.94E-04	2.98E-03
4. Tritium						
Total for period	Ci	3.93E+00	3.89E+00	3.77E+00	2.91E+00	1.45E+01
5. Gross Alpha						
Total for period	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
6. Carbon-14						
Total for period	Ci	3.69E+00	3.73E+00	3.75E+00	2.99E+00	1.42E+01

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT 2014
DOCKET NUMBERS: 50-010/50-237/50-249

GASEOUS EFFLUENTS

UNIT 3 MAIN CHIMNEY

ELEVATED RELEASES

BATCH MODE

Nuclides Released	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	TOTAL
1. Fission and Activation Gases						
Ar-41	Ci					
Kr-85	Ci					
Kr-85m	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-135m	Ci					
Xe-138	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
2. Iodines						
I-131	Ci					
I-133	Ci					
I-135	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
3. Particulates						
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Mo-99	Ci					
Ag-110m	Ci					
Cs-134	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Ce-144	Ci					
Total for period	Ci	None*	None*	None*	None*	None*
4. Tritium						
Total for period	Ci	None*	None*	None*	None*	None*
5. Gross Alpha						
Total for period	Ci	None*	None*	None*	None*	None*
6. Carbon-14						
Total for period	Ci	None*	None*	None*	None*	None*

* No batch releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

UNIT 1 LIQUID EFFLUENTS SUMMATION OF ALL RELEASES

Units	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Est. Total Error, %
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A. Fission and activation products

1. Total release (not including H-3, gases, alpha)	Ci	<LLD	<LLD	<LLD	<LLD	1.95E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of applicable dose limit	Organ	N/A	N/A	N/A	N/A	
	WB	N/A	N/A	N/A	N/A	

B. Tritium*

1. Total release	Ci	<LLD	1.35E-01	3.39E-01	5.20E-02	2.37E+00
2. Average diluted concentration during period	μCi/ml	0.00E+00	5.78E-11	1.43E-10	2.19E-11	
3. Percent of applicable dose limit	%	N/A	3.30E-05	8.33E-05	1.27E-05	

C. Dissolved and entrained gases

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.03E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of applicable dose limit	%	N/A	N/A	N/A	N/A	

D. Gross alpha activity

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.00E+01
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E. Volume of waste released (prior to dilution)	Liters	0.00e+00	2.45E+06	1.75E+07	1.75E+07
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F. Volume of dilution water used during period	Liters	0.00e+00	2.34E+12	2.37E+12	2.37E+12
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*The values in this table represent Sewage Treatment Plant effluent. The Sewage Treatment Plant is 100% allocated to Unit 1.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

UNIT 2 LIQUID EFFLUENTS SUMMATION OF ALL RELEASES

Units	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Est. Total Error, %
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A. Fission and activation products

1. Total release (not including H-3, gases, alpha)	Ci	<LLD	<LLD	<LLD	<LLD	1.95E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of applicable dose limit	Organ	N/A	N/A	N/A	N/A	
	WB	N/A	N/A	N/A	N/A	

B. Tritium*

1. Total release	Ci	<LLD	6.17E-02	1.19E-01	1.02E-01	2.37E+00
2. Average diluted concentration during period	μCi/ml	0.00E+00	1.56E-10	1.01E-10	8.61E-11	
3. Percent of applicable dose limit	%	N/A	1.45E-05	2.86E-05	2.48E-05	

C. Dissolved and entrained gases

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.03E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of applicable dose limit	%	N/A	N/A	N/A	N/A	

D. Gross alpha activity

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.00E+01
------------------	----	------	------	------	------	----------

E. Volume of waste released (prior to dilution)	Liters	0.00E+00	8.18E+05	2.51E+06	2.51E+06
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F. Volume of dilution water used during period	Liters	0.00E+00	3.95E+11	1.18E+12	1.18E+12
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*The values in this table represent Storm Sewer effluent. The Storm Sewer effluent is 50% allocated to Unit 2.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

UNIT 3 LIQUID EFFLUENTS SUMMATION OF ALL RELEASES

Units	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Est. Total Error, %
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A. Fission and activation products

1. Total release (not including H-3, gases, alpha)	Ci	<LLD	<LLD	<LLD	<LLD	1.95E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of applicable dose limit	Organ	N/A	N/A	N/A	N/A	
	WB	N/A	N/A	N/A	N/A	

B. Tritium*

1. Total release	Ci	<LLD	6.17E-02	1.19E-01	1.02E-01	2.37E+00
2. Average diluted concentration during period	μCi/ml	0.00E+00	1.56E-10	1.01E-10	8.61E-11	
3. Percent of applicable dose limit	%	N/A	1.45E-05	2.86E-05	2.48E-05	

C. Dissolved and entrained gases

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.03E+01
2. Average diluted concentration during period	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3. Percent of applicable dose limit	%	N/A	N/A	N/A	N/A	

D. Gross alpha activity

1. Total release	Ci	<LLD	<LLD	<LLD	<LLD	2.00E+01
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E. Volume of waste released (prior to dilution)	Liters	0.00e+00	8.18E+05	2.51E+06	2.51E+06
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F. Volume of dilution water used during period	Liters	0.00e+00	3.95E+11	1.18E+12	1.18E+12
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*The values in this table represent Storm Sewer effluent. The Storm Sewer effluent is 50% allocated to Unit 3.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014
EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

TABLE OF LOWER LIMITS OF DETECTABILITY
FOR LIQUID EFFLUENTS

1.	FISSION/ACTIVATION GASES	μCi/ml
	Kr-87	1.00E-05
	Kr-88	1.00E-05
	Xe-133	1.00E-05
	Xe-133m	1.00E-05
	Xe-135	1.00E-05
	Xe-138	1.00E-05
2.	IODINES	μCi/ml
	I-131	1.00E-06
3.	PARTICULATES	μCi/ml
	Fe-55	1.00E-06
	Sr-89	5.00E-08
	Sr-90	5.00E-08
	Mn-54	5.00E-07
	Co-58	5.00E-07
	Fe-59	5.00E-07
	Co-60	5.00E-07
	Zn-65	5.00E-07
	Mo-99	5.00E-07
	Cs-134	5.00E-07
	Cs-137	5.00E-07
	Ce-141	5.00E-07
	Ce-144	5.00E-06
4.	OTHER	μCi/ml
	H-3	1.00E-05
	Gross Alpha	1.00E-07

The above values are the ODCM-required LLDs.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 2 RADWASTE

CONTINUOUS MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
I-131	Ci					
I-133	Ci					
I-135	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Zr-95	Ci					
Mo-99	Ci					
Tc-99m	Ci					
Ru-103	Ci					
Ag-110m	Ci					
Sb-125	Ci					
Cs-134	Ci					
Cs-136	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Total	Ci	None*	None*	None*	None*	None*

H-3	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-138	Ci					
Total	Ci	None*	None*	None*	None*	None*

* No continuous releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 2 RADWASTE

BATCH MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
I-131	Ci					
I-133	Ci					
I-135	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Zr-95	Ci					
Mo-99	Ci					
Tc-99m	Ci					
Ru-103	Ci					
Ag-110m	Ci					
Sb-124	Ci					
Cs-134	Ci					
Cs-136	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Total	Ci	None*	None*	None*	None*	None*

H-3	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-138	Ci					
Total	Ci	None*	None*	None*	None*	None*

* No batch releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 3 RADWASTE

CONTINUOUS MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
I-131	Ci					
I-133	Ci					
I-135	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Zr-95	Ci					
Mo-99	Ci					
Tc-99m	Ci					
Ru-103	Ci					
Ag-110m	Ci					
Sb-125	Ci					
Cs-134	Ci					
Cs-136	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Total	Ci	None*	None*	None*	None*	None*

H-3	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-138	Ci					
Total	Ci	None*	None*	None*	None*	None*

* No continuous releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 3 RADWASTE

BATCH MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
I-131	Ci					
I-133	Ci					
I-135	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Zr-95	Ci					
Mo-99	Ci					
Tc-99m	Ci					
Ru-103	Ci					
Ag-110m	Ci					
Sb-124	Ci					
Cs-134	Ci					
Cs-136	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Total	Ci	None*	None*	None*	None*	None*

H-3	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-133m	Ci					
Xe-135	Ci					
Xe-138	Ci					
Total	Ci	None*	None*	None*	None*	None*

* No batch releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 2 CONTAINMENT COOLING SERVICE WATER

CONTINUOUS MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
I-131	Ci					
I-133	Ci					
I-135	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Zr-95	Ci					
Mo-99	Ci					
Tc-99m	Ci					
Ru-103	Ci					
Ag-110m	Ci					
Sb-124	Ci					
Cs-134	Ci					
Cs-136	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Total	Ci	None*	None*	None*	None*	None*

H-3	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-135	Ci					
Xe-138	Ci					
Total	Ci	None*	None*	None*	None*	None*

* No continuous releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 2 CONTAINMENT COOLING SERVICE WATER

BATCH MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ru-103	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-124	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-136	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total	Ci	<LLD	<LLD	<LLD	<LLD	<LLD

H-3	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total	Ci	<LLD	<LLD	<LLD	<LLD	<LLD

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 3 CONTAINMENT COOLING SERVICE WATER

CONTINUOUS MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci					
Sr-89	Ci					
Sr-90	Ci					
I-131	Ci					
I-133	Ci					
I-135	Ci					
Cr-51	Ci					
Mn-54	Ci					
Co-58	Ci					
Fe-59	Ci					
Co-60	Ci					
Zn-65	Ci					
Zr-95	Ci					
Mo-99	Ci					
Tc-99m	Ci					
Ru-103	Ci					
Ag-110m	Ci					
Sb-124	Ci					
Cs-134	Ci					
Cs-136	Ci					
Cs-137	Ci					
Ba-140	Ci					
Ce-141	Ci					
Total	Ci	None*	None*	None*	None*	None*

H-3	Ci					
Kr-87	Ci					
Kr-88	Ci					
Xe-133	Ci					
Xe-135	Ci					
Xe-138	Ci					
Total	Ci	None*	None*	None*	None*	None*

* No continuous releases via this effluent path

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

LIQUID EFFLUENTS

UNIT 3 CONTAINMENT COOLING SERVICE WATER

BATCH MODE

	Unit	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ru-103	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-124	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-136	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total	Ci	<LLD	<LLD	<LLD	<LLD	<LLD

H-3	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD
Total	Ci	<LLD	<LLD	<LLD	<LLD	<LLD

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (Not irradiated fuel)

1. Type of Waste	Unit	12-month Period	Est. Total Error, %
a. Spent resins, filter sludges / filters, evaporator bottoms, etc.	m ³	4.07E+01	+/- 2.50E+01
	Ci	1.56E+02	
b. Dry compressible waste, contaminated equipment, etc.	m ³	7.87E+02	+/- 2.50E+01
	Ci	3.97E+00	
c. Irradiated components, control rods, etc.	m ³	0.00E+00	N/A
	Ci	0.00E+00	
d. Other (describe) - None	m ³	0.00E+00	N/A
	Ci	0.00E+00	

Estimate of Major (i.e., ≥1%) Nuclide Composition (by type of waste)

a. Spent resins, filters / filter sludges, evaporator bottoms, etc.

	<u>Percent %</u>	<u>Curies</u>
Fe-55	49.5	7.70E+01
Co-60	26.7	4.15E+01
Cs-137	12.5	1.94E+01
Zn-65	6.3	9.80E+00
Mn-54	3.4	5.28E+00
Ni-63	1.1	1.75E+00

Shipment type: LSA, Type A, Type B
Solidification agent or absorbent: None

b. Dry compressible waste, contaminated equipment, etc.

	<u>Percent %</u>	<u>Curies</u>
Co-60	48.5	1.93E+00
Fe-55	26.4	1.05E+00
Mn-54	11.8	4.07E-01
Zn-65	4.5	1.78E-01
Ni-63	1.7	6.61E-02
Cs-137	1.5	6.00E-02
Fe-59	1.2	4.73E-02

Shipment type: LSA
Solidification agent or absorbent: None

c. Irradiated components, control rods, etc.

	<u>Percent %</u>	<u>Curies</u>
NONE	0.00E+00	0.00E+00

d. Other - Contaminated Oil, Combined Packages, Pump Impeller

	<u>Percent %</u>	<u>Curies</u>
NONE	0.00E+00	0.00E+00

Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
23	Motor freight (exclusive use only)	Energy Solutions - Bear Creek Road, Oak Ridge, TN
13	Motor freight (exclusive use only)	Energy Solutions - Clive, UT
3	Motor freight (exclusive use only)	Energy Solutions - Clive, UT

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

IRRADIATED FUEL SHIPMENTS (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None	(NA)	(NA)

CHANGES TO THE PROCESS CONTROL PROGRAM (PCP)

No changes were made to the DNPS radioactive liquid, gaseous, or solid waste treatment systems in 2014.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

RADIOLOGICAL IMPACT ON MAN

1. Liquid Dose to a Member of the Public for 2014
Total Body: $3.97\text{E-}06$ mrem
Organ: $3.97\text{E-}06$ mrem
The above dose values are site totals. Liquid dose limits are assigned per unit (3 mrem/year/unit for total body, and 10 mrem/year/unit for any organ – from page 1 of this report). Because the site values are significantly lower than the per unit limits, it can be concluded the effluent dose attributed to each unit is below the ODCM limits shown on page 1.
2. Airborne Effluent Dose to a Member of the Public for 2014
Gamma air (noble gases): $3.36\text{E-}03$ mrad
Beta air (noble gases): $2.12\text{E-}04$ mrad
Total Body (noble gases): $2.24\text{E-}03$ mrem
Skin (noble gases): $3.86\text{E-}03$ mrem
Organ - thyroid (particulate/iodine): $9.22\text{E-}02$ mrem
The above dose values are site totals. Airborne dose limits are assigned per unit (gamma air dose is 10 mrad/year/unit, beta air dose is 20 mrad/year/unit, organ dose limit is 15 mrem/year/unit - from page 1 of this report) Because the site values are significantly lower than the per unit limits, it can be concluded the effluent dose attributed to each unit is below the ODCM limits shown on page 1. Total body and skin doses due to noble gases are addressed as part of the 40CFR190 / 10CFR72 Compliance evaluation below.
3. Direct Radiation Dose to a Member of the Public for 2014
Total Body (excluding skyshine): $1.80\text{E+}00$ mrem
Total Body (skyshine): $8.60\text{E+}00$ mrem
4. Total Body Doses to the Population and Average Doses to Individuals in the Population from All Receiving-Water-Related-Pathways: Not applicable for DNPS. No downstream drinking water pathway exist within the specified distance of 10 kilometers (6.2miles).
5. Total Body Doses to the Population and Average Doses to Individuals in the Population from Gaseous Effluents to a Distance of 50 Miles: Not applicable for DNPS.
6. Doses From Liquid and Gaseous Effluent to Members of the Public Due to Their Activities Inside the Site Boundary for the Report Period: Not applicable for DNPS. Any member of the public that is onsite for a significant period will be issued a Optical Stimulated Luminescent Dosimeter (OSLD).
7. Liquid and Gaseous Effluent Radiation Monitors and Instrumentation Unavailability for the Period Beyond the Requirements of the ODCM, Including Sampling Deviation: None
8. 40CFR190 / 10CFR72 Compliance
The General Electric Hitachi Nuclear Energy Morris Operation (GE-Hitachi Morris Operation) facility is physically located near Dresden Station and, in addition to evolutions performed at Dresden station, is considered in the evaluation of the uranium fuel cycle on members of the public in the general environment for 40CFR190 compliance.

Dresden decommissioning activities (Unit 1) and operations (Units 2 and 3) resulted in a maximum $9.61\text{E-}02$ mrem organ dose and $1.04\text{E+}01$ mrem total body dose. Radiological Environmental Monitoring Program (REMP) direct radiation monitoring at or near the site boundary ($1.80\text{E+}00$ mrem) demonstrates that total body dose calculations to account for skyshine are conservative.

No effluents were released from the Dresden Independent Spent Fuel Storage Installations (ISFSIs) during 2014. REMP direct radiation monitoring at or near the site boundary demonstrates that the ISFSIs do not result in

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
January through December 2014

EFFLUENT AND WASTE DISPOSAL SUMMARY ANNUAL REPORT
DOCKET NUMBERS: 50-010/50-237/50-249

measurable dose to the public.

According to the 2014 GE-Hitachi Morris Operation 10CFR72.44(d)(3) report, dated 2/24/2015, for the 2014 calendar year, the maximum dose at their site boundary from direct radiation exposure was 6.85E-01 mrem. The maximum organ dose from site activities was 1.34E-02 mrem for 2014.

Maximum combined total body dose from Dresden and GE-Hitachi Morris Operation activities was 1.11E+01 mrem during 2014, which was 44.4 % of the 40CFR190 limit of 25 mrem.

Maximum combined organ dose from Dresden and GE-Hitachi Morris Operation activities was 1.10E-01 mrem during 2014. This was 0.44 % of the 40CFR190 limit of 25 mrem to any organ. The combined thyroid dose was 1.06E-01 mrem. This was 0.14 % of the 40CFR190 limit of 75 mrem.

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

All Stabilities

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	6	3	7	10	12	14	18	15	3	0	88
NNE	0	6	11	2	8	3	8	15	8	1	0	62
NE	0	7	4	8	17	19	13	9	16	0	0	93
ENE	0	2	3	2	21	19	4	1	1	0	0	53
E	0	11	2	5	7	26	5	0	0	0	0	56
ESE	0	7	8	6	14	21	15	5	7	0	0	83
SE	0	5	4	6	10	14	4	7	9	0	0	59
SSE	0	6	4	9	34	25	21	18	18	16	1	152
S	0	6	11	8	18	29	17	24	50	28	6	197
SSW	0	7	10	18	20	19	17	15	15	9	4	134
SW	0	6	10	15	18	16	20	20	26	14	3	148
WSW	0	2	10	11	30	21	5	8	10	13	6	116
W	0	5	13	12	36	46	63	40	29	7	0	251
WNW	0	6	10	20	49	53	36	39	51	7	0	271
NW	0	8	13	13	40	38	43	26	20	13	1	215
NNW	0	2	6	8	23	31	21	35	20	3	0	149
Tot	0	92	122	150	355	392	306	280	295	114	21	2127

Hours of Calm 4
Hours of Variable Direction 3
Hours of Valid Data 2134
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	1	0	1	2	3	1	0	0	9
NNE	0	0	0	0	1	1	0	0	0	0	0	2
NE	0	0	0	0	0	0	0	1	4	0	0	5
ENE	0	0	0	0	2	0	0	1	1	0	0	4
E	0	0	0	1	1	0	0	0	0	0	0	2
ESE	0	0	0	0	0	1	2	2	0	0	0	5
SE	0	0	0	0	2	2	0	1	6	0	0	11
SSE	0	0	0	0	0	2	0	1	1	2	0	6
S	0	1	0	0	0	5	2	4	1	1	0	14
SSW	0	3	1	0	0	2	1	1	1	0	0	9
SW	0	0	0	2	0	0	1	3	3	0	0	9
WSW	0	0	0	1	0	2	0	3	1	0	0	7
W	0	0	0	0	2	0	5	7	0	0	0	14
WNW	0	0	0	0	2	6	4	2	4	1	0	19
NW	0	1	0	1	4	3	4	2	7	1	0	23
NNW	0	0	0	0	0	2	4	4	1	0	0	11
Tot	0	6	1	6	14	27	25	35	31	5	0	150

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 150
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	0	0	0	0	0	1
NNE	0	0	0	0	0	0	1	2	0	0	0	3
NE	0	0	0	0	0	0	0	0	1	0	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	2	0	0	0	0	2
SE	0	0	0	0	1	0	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0	3	0	0	0	3
S	0	0	0	0	1	0	0	1	2	1	0	5
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	1	0	0	0	3	3	0	0	7
WSW	0	0	1	0	1	1	0	0	0	1	0	4
W	0	0	0	1	0	2	8	3	0	0	0	14
WNW	0	0	0	0	2	2	2	2	2	0	0	10
NW	0	0	0	1	1	1	2	2	2	1	0	10
NNW	0	0	0	1	1	2	1	3	1	0	0	9
Tot	0	0	1	4	8	8	16	19	11	3	0	70

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 70
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	1	0	2	0	0	0	3
NNE	0	0	0	0	1	0	1	1	0	0	0	3
NE	0	0	0	0	0	0	1	1	0	0	0	2
ENE	0	0	0	0	1	1	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	1	1	0	0	0	0	2
SE	0	0	1	0	0	0	0	0	0	0	0	1
SSE	0	0	0	0	0	0	1	0	5	0	0	6
S	0	0	1	0	0	0	1	3	3	0	0	8
SSW	0	0	0	0	1	1	0	0	0	0	0	2
SW	0	0	2	0	0	1	3	1	3	1	0	11
WSW	0	0	0	0	0	0	0	0	1	1	1	3
W	0	0	0	0	1	2	3	3	0	0	0	9
WNW	0	0	0	0	3	2	1	1	2	0	0	9
NW	0	1	0	0	1	4	5	2	0	0	0	13
NNW	0	0	0	0	1	2	3	1	3	0	0	10
Tot	0	1	4	0	9	15	20	15	17	2	1	84

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 84
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	3	8	9	10	12	12	3	0	57
NNE	0	1	2	1	3	2	6	11	3	0	0	29
NE	0	0	1	4	12	17	10	7	9	0	0	60
ENE	0	1	0	2	14	15	4	0	0	0	0	36
E	0	1	0	1	6	15	3	0	0	0	0	26
ESE	0	0	0	1	0	9	7	1	6	0	0	24
SE	0	0	0	1	1	4	1	5	2	0	0	14
SSE	0	0	1	3	22	12	6	9	7	5	1	66
S	0	0	1	2	9	15	5	12	15	8	1	68
SSW	0	2	0	1	2	3	3	7	9	7	3	37
SW	0	0	0	1	1	6	8	9	11	10	2	48
WSW	0	1	1	0	8	6	0	0	4	6	3	29
W	0	1	1	1	8	19	31	21	26	7	0	115
WNW	0	0	0	7	22	19	11	22	39	6	0	126
NW	0	0	2	2	12	18	23	14	10	11	1	93
NNW	0	0	0	1	8	18	8	22	15	3	0	75
Tot	0	7	9	31	136	187	136	152	168	66	11	903

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 903
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	4	3	3	1	1	2	1	2	0	0	17
NNE	0	2	5	1	3	0	0	1	5	1	0	18
NE	0	5	2	4	5	2	2	0	2	0	0	22
ENE	0	0	3	0	4	3	0	0	0	0	0	10
E	0	4	2	3	0	10	2	0	0	0	0	21
ESE	0	4	1	3	7	8	3	2	1	0	0	29
SE	0	1	1	2	5	8	3	1	1	0	0	22
SSE	0	2	1	3	10	11	14	5	5	9	0	60
S	0	3	0	4	6	8	9	4	29	18	5	86
SSW	0	1	3	6	11	12	13	7	5	2	1	61
SW	0	3	3	3	3	7	8	4	6	3	1	41
WSW	0	0	2	8	15	10	5	5	4	5	2	56
W	0	2	7	6	24	22	16	6	3	0	0	86
WNW	0	0	3	7	16	24	18	12	4	0	0	84
NW	0	1	2	7	18	12	9	6	1	0	0	56
NNW	0	2	4	6	12	7	5	5	0	0	0	41
Tot	0	34	42	66	140	145	109	59	68	38	9	710

Hours of Calm 3
Hours of Variable Direction 0
Hours of Valid Data 713
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	0	0	0	0	0	0	0	0	1
NNE	0	1	3	0	0	0	0	0	0	0	0	4
NE	0	2	1	0	0	0	0	0	0	0	0	3
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	3	0	0	0	0	0	0	0	0	0	3
ESE	0	2	7	2	5	0	0	0	0	0	0	16
SE	0	4	2	3	0	0	0	0	0	0	0	9
SSE	0	0	2	2	1	0	0	0	0	0	0	5
S	0	1	5	1	1	1	0	0	0	0	0	9
SSW	0	1	2	9	6	1	0	0	0	0	0	19
SW	0	2	1	7	12	2	0	0	0	0	0	24
WSW	0	0	5	1	5	1	0	0	0	0	0	12
W	0	0	4	4	1	1	0	0	0	0	0	10
WNW	0	5	3	6	4	0	0	0	0	0	0	18
NW	0	2	2	1	4	0	0	0	0	0	0	9
NNW	0	0	1	0	1	0	0	0	0	0	0	2
Tot	0	24	38	36	40	6	0	0	0	0	0	144

Hours of Calm 1
Hours of Variable Direction 1
Hours of Valid Data 146
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	2	1	0	0	0	0	0	0	0	0	3
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	0	0	0	0	0	1
E	0	3	0	0	0	1	0	0	0	0	0	4
ESE	0	1	0	0	2	2	0	0	0	0	0	5
SE	0	0	0	0	1	0	0	0	0	0	0	1
SSE	0	4	0	1	1	0	0	0	0	0	0	6
S	0	1	4	1	1	0	0	0	0	0	0	7
SSW	0	0	4	2	0	0	0	0	0	0	0	6
SW	0	1	4	1	2	0	0	0	0	0	0	8
WSW	0	1	1	1	1	1	0	0	0	0	0	5
W	0	2	1	0	0	0	0	0	0	0	0	3
WNW	0	1	4	0	0	0	0	0	0	0	0	5
NW	0	3	7	1	0	0	0	0	0	0	0	11
NNW	0	0	1	0	0	0	0	0	0	0	0	1
Tot	0	20	27	7	8	4	0	0	0	0	0	66

Hours of Calm 0
Hours of Variable Direction 2
Hours of Valid Data 68
Hours of Missing Data 26
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

All Stabilities

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	5	19	8	18	15	27	12	3	108
NNE	0	1	3	5	9	2	5	10	19	7	0	61
NE	0	1	2	3	9	16	16	8	15	14	2	86
ENE	0	1	6	6	12	13	15	7	3	1	0	64
E	0	2	2	2	9	4	16	10	2	0	0	47
ESE	0	1	3	1	6	4	15	18	7	6	0	61
SE	0	1	6	3	13	9	14	11	8	6	0	71
SSE	0	1	2	3	17	23	15	22	30	8	12	133
S	0	2	4	2	9	20	33	13	42	38	41	204
SSW	0	1	0	2	8	17	13	15	27	20	11	114
SW	0	0	4	4	11	13	22	22	38	16	25	155
WSW	0	2	6	5	12	20	23	14	13	12	23	130
W	0	1	1	6	19	17	38	44	58	17	9	210
WNW	0	1	2	4	22	32	48	47	78	60	13	307
NW	0	0	7	6	13	31	29	33	44	19	15	197
NNW	0	0	2	3	19	12	19	17	49	7	2	130
Tot	0	16	50	60	207	241	339	306	460	243	156	2078

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 2079
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	2	2	3	1	0	8
NNE	0	0	0	1	2	0	1	0	0	0	0	4
NE	0	0	0	0	0	0	0	0	3	2	0	5
ENE	0	0	0	0	1	0	0	0	1	1	0	3
E	0	0	0	0	1	0	0	0	0	0	0	1
ESE	0	0	0	1	0	0	2	1	2	0	0	6
SE	0	0	0	0	2	2	0	0	3	3	0	10
SSE	0	0	0	0	0	0	2	0	2	1	2	7
S	0	1	0	0	0	3	3	3	3	1	0	14
SSW	0	0	0	0	0	1	1	1	1	1	0	5
SW	0	0	2	0	0	0	0	1	5	1	0	9
WSW	0	0	0	2	0	0	2	1	1	2	0	8
W	0	1	0	1	3	0	0	3	3	0	0	11
WNW	0	0	1	0	1	4	5	6	6	4	0	27
NW	0	0	1	0	0	2	4	2	3	7	2	21
NNW	0	0	0	0	0	0	2	1	5	1	0	9
Tot	0	2	4	5	10	12	24	21	41	25	4	148

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 148
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	1	0	0	0	0	2
NNE	0	0	0	0	0	0	0	1	2	0	0	3
NE	0	0	0	0	0	0	0	0	0	1	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	2	0	0	0	2
SE	0	0	0	0	1	0	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0	0	3	0	0	3
S	0	0	0	0	0	1	0	0	2	2	0	5
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	2	3	0	5
WSW	0	0	1	0	0	1	1	0	1	0	1	5
W	0	0	0	0	1	0	2	6	2	0	0	11
WNW	0	0	0	0	2	1	2	2	5	2	0	14
NW	0	0	0	1	2	0	1	2	1	2	1	10
NNW	0	0	0	1	0	1	0	0	5	0	0	7
Tot	0	0	1	2	7	4	7	13	23	10	2	69

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 69
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	1	2	0	0	3
NNE	0	0	0	0	0	1	0	1	1	0	0	3
NE	0	0	0	0	0	0	0	1	1	0	0	2
ENE	0	0	0	0	0	2	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	2	0	0	0	0	2
SE	0	0	1	0	0	0	0	0	0	0	0	1
SSE	0	0	0	0	0	0	1	0	2	2	0	5
S	0	0	1	0	0	0	0	0	4	3	0	8
SSW	0	0	0	0	0	2	1	0	0	0	0	3
SW	0	0	0	1	0	0	2	2	0	1	3	9
WSW	0	0	0	1	0	0	0	0	1	1	2	5
W	0	0	0	0	0	0	1	2	3	0	0	6
WNW	0	1	0	0	4	1	1	0	2	3	0	12
NW	0	0	0	0	0	3	3	5	1	0	0	12
NNW	0	0	0	0	1	0	3	2	4	1	0	11
Tot	0	1	2	2	5	9	14	14	21	11	5	84

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 84
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	9	5	11	9	20	11	3	68
NNE	0	0	0	2	0	0	1	7	14	3	0	27
NE	0	1	1	1	3	9	13	5	11	8	2	54
ENE	0	0	0	2	6	9	13	6	2	0	0	38
E	0	1	1	0	4	2	10	6	1	0	0	25
ESE	0	0	0	0	2	1	5	9	1	4	0	22
SE	0	0	0	0	1	0	3	2	3	3	0	12
SSE	0	0	0	1	9	14	7	9	14	1	4	59
S	0	0	2	0	5	12	15	1	15	10	12	72
SSW	0	0	0	0	4	4	2	4	7	11	6	38
SW	0	0	1	0	0	1	6	9	13	5	18	53
WSW	0	1	1	0	5	4	4	0	1	3	11	30
W	0	0	1	0	1	10	8	14	36	15	8	93
WNW	0	0	1	0	9	15	18	10	31	42	13	139
NW	0	0	0	2	5	11	9	15	26	8	12	88
NNW	0	0	0	0	5	4	6	5	29	5	2	56
Tot	0	3	8	8	68	101	131	111	224	129	91	874

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 874
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	3	7	3	3	3	2	0	0	21
NNE	0	0	0	2	5	1	3	1	2	4	0	18
NE	0	0	1	2	5	6	3	2	0	3	0	22
ENE	0	1	6	4	4	2	2	1	0	0	0	20
E	0	0	0	1	3	1	6	4	1	0	0	16
ESE	0	1	1	0	2	1	3	6	4	2	0	20
SE	0	1	3	0	5	3	9	7	2	0	0	30
SSE	0	1	0	0	1	3	4	11	9	4	6	39
S	0	1	0	1	3	4	14	7	18	22	29	99
SSW	0	1	0	2	2	5	9	9	19	8	5	60
SW	0	0	0	3	5	7	3	7	16	6	4	51
WSW	0	0	1	0	2	3	5	7	8	6	9	41
W	0	0	0	3	7	7	25	18	13	2	1	76
WNW	0	0	0	1	3	7	19	29	34	9	0	102
NW	0	0	3	0	3	10	8	9	13	2	0	48
NNW	0	0	2	2	9	4	7	8	6	0	0	38
Tot	0	6	17	24	66	67	123	129	147	68	54	701

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 702
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	1	0	1	0	0	0	0	3
NNE	0	0	1	0	2	0	0	0	0	0	0	3
NE	0	0	0	0	1	1	0	0	0	0	0	2
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	1	1	1	1	1	0	0	0	0	0	5
ESE	0	0	1	0	1	1	1	0	0	0	0	4
SE	0	0	2	0	1	4	2	2	0	0	0	11
SSE	0	0	2	2	6	5	1	0	0	0	0	16
S	0	0	1	0	1	0	1	2	0	0	0	5
SSW	0	0	0	0	1	3	0	0	0	0	0	4
SW	0	0	0	0	3	5	11	1	2	0	0	22
WSW	0	0	2	2	2	8	9	5	0	0	0	28
W	0	0	0	2	3	0	2	1	1	0	0	9
WNW	0	0	0	2	2	4	3	0	0	0	0	11
NW	0	0	0	0	2	5	4	0	0	0	0	11
NNW	0	0	0	0	3	3	1	1	0	0	0	8
Tot	0	1	10	10	31	40	36	12	3	0	0	143

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 143
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	1	1	0	0	0	0	0	0	3
NNE	0	1	2	0	0	0	0	0	0	0	0	3
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	1	0	1	1	2	0	0	0	0	5
SE	0	0	0	3	3	0	0	0	0	0	0	6
SSE	0	0	0	0	1	1	0	2	0	0	0	4
S	0	0	0	1	0	0	0	0	0	0	0	1
SSW	0	0	0	0	1	2	0	1	0	0	0	4
SW	0	0	1	0	3	0	0	2	0	0	0	6
WSW	0	1	1	0	3	4	2	1	1	0	0	13
W	0	0	0	0	4	0	0	0	0	0	0	4
WNW	0	0	0	1	1	0	0	0	0	0	0	2
NW	0	0	3	3	1	0	0	0	0	0	0	7
NNW	0	0	0	0	1	0	0	0	0	0	0	1
Tot	0	3	8	9	20	8	4	6	1	0	0	59

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 59
Hours of Missing Data 81
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

All Stabilities

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	2	10	10	13	24	40	12	12	125
NNE	0	0	2	0	8	7	5	11	24	14	1	72
NE	0	0	1	3	4	7	12	18	18	9	13	85
ENE	0	0	3	4	15	17	14	15	7	3	1	79
E	0	0	3	2	10	9	4	16	10	0	0	54
ESE	0	2	1	0	2	2	7	11	16	7	5	53
SE	0	0	1	3	7	5	6	3	19	4	5	53
SSE	0	0	4	1	10	12	21	17	42	13	7	127
S	0	0	0	5	9	16	22	31	39	29	74	225
SSW	0	0	2	4	4	8	7	12	27	30	33	127
SW	0	3	0	0	3	6	9	17	31	24	33	126
WSW	0	2	5	1	10	5	17	13	31	17	35	136
W	0	0	2	4	7	13	20	36	66	28	14	190
WNW	0	0	4	1	15	14	20	26	95	69	63	307
NW	0	2	2	5	12	17	28	41	72	36	24	239
NNW	0	3	2	2	10	13	23	29	44	27	4	157
Tot	0	12	34	37	136	161	228	320	581	322	324	2155

Hours of Calm 3
Hours of Variable Direction 0
Hours of Valid Data 2158
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	1	1	0	0	0	2
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0	3	0	3
ENE	0	0	0	0	0	0	0	0	1	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	1	0	0	1
SE	0	0	0	0	0	0	0	0	0	2	0	2
SSE	0	0	0	0	0	0	1	0	0	1	0	2
S	0	0	0	0	0	1	0	0	0	0	2	3
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	2	0	2
W	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	3	2	0	0	5
Tot	0	0	0	0	0	1	2	4	4	8	2	21

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 21
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	3	1	2	0	0	6
NNE	0	0	0	0	0	1	0	1	0	0	0	2
NE	0	0	0	0	0	0	0	0	1	0	0	1
ENE	0	0	0	0	0	0	0	0	0	2	0	2
E	0	0	0	0	2	0	0	0	0	0	0	2
ESE	0	0	0	0	1	0	2	1	1	0	0	5
SE	0	0	0	0	0	3	0	0	0	0	1	4
SSE	0	0	0	0	0	0	1	0	4	1	0	6
S	0	0	0	0	0	0	3	2	2	2	1	10
SSW	0	0	0	0	0	1	0	1	1	0	0	3
SW	0	0	0	0	0	0	0	0	2	0	0	2
WSW	0	0	0	0	0	0	0	0	2	0	1	3
W	0	0	0	1	0	0	0	0	0	0	0	1
WNW	0	0	1	0	1	1	0	0	4	0	0	7
NW	0	0	0	0	0	0	1	1	1	3	0	6
NNW	0	0	0	0	0	0	1	0	0	1	0	2
Tot	0	0	1	1	4	6	11	7	20	9	3	62

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 62
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	0	2	0	0	0	3
NNE	0	0	1	0	2	0	1	1	3	0	0	8
NE	0	0	0	0	0	0	0	0	1	0	1	2
ENE	0	0	1	1	1	0	0	0	0	0	0	3
E	0	0	0	0	0	0	0	1	0	0	0	1
ESE	0	0	0	0	0	0	1	2	0	0	0	3
SE	0	0	0	0	3	0	0	0	0	0	0	3
SSE	0	0	1	0	0	0	0	1	3	2	0	7
S	0	0	0	0	0	2	1	0	2	0	1	6
SSW	0	0	0	0	0	1	0	0	3	1	0	5
SW	0	0	0	0	0	0	0	4	4	2	1	11
WSW	0	0	1	0	0	0	2	0	3	0	3	9
W	0	0	1	1	1	0	2	4	6	0	0	15
WNW	0	0	0	0	1	2	3	5	8	6	1	26
NW	0	0	0	1	1	3	3	3	1	3	2	17
NNW	0	0	1	0	0	0	1	2	5	1	0	10
Tot	0	0	6	3	10	8	14	25	39	15	9	129

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 129
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	2	7	4	5	12	27	11	12	81
NNE	0	0	0	0	2	2	2	4	14	12	1	37
NE	0	0	0	1	1	4	8	14	16	6	12	62
ENE	0	0	2	0	9	14	12	14	5	1	1	58
E	0	0	2	1	5	5	3	13	6	0	0	35
ESE	0	1	0	0	0	1	4	6	8	3	4	27
SE	0	0	0	1	1	2	1	2	11	1	4	23
SSE	0	0	1	0	5	5	7	5	20	8	5	56
S	0	0	0	1	5	8	13	17	18	12	47	121
SSW	0	0	1	1	2	5	5	5	8	11	16	54
SW	0	1	0	0	1	2	3	6	10	8	27	58
WSW	0	1	3	1	6	4	9	6	3	4	28	65
W	0	0	0	1	5	7	8	13	29	20	12	95
WNW	0	0	2	0	9	7	13	18	57	50	62	218
NW	0	0	0	3	7	11	18	25	45	25	22	156
NNW	0	0	0	1	6	8	14	13	28	23	4	97
Tot	0	3	12	13	71	89	125	173	305	195	257	1243

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 1244
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction	Wind Speed Range (m/s)											Total
Sector	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	4	2	2	8	1	0	18
NNE	0	0	1	0	2	1	2	2	7	2	0	17
NE	0	0	1	1	1	2	3	3	0	0	0	11
ENE	0	0	0	2	5	2	2	1	1	0	0	13
E	0	0	1	1	2	3	1	0	4	0	0	12
ESE	0	0	1	0	1	1	0	2	6	4	1	16
SE	0	0	1	1	3	0	4	0	7	1	0	17
SSE	0	0	0	0	3	4	4	5	12	1	2	31
S	0	0	0	4	2	4	2	9	14	15	23	73
SSW	0	0	0	3	2	1	2	6	12	18	17	61
SW	0	1	0	0	0	4	4	5	11	14	5	44
WSW	0	0	1	0	3	1	6	6	13	7	3	40
W	0	0	0	1	1	3	7	10	25	7	2	56
WNW	0	0	1	1	3	2	2	2	24	13	0	48
NW	0	1	0	1	3	3	5	8	12	4	0	37
NNW	0	1	0	0	2	2	5	4	5	2	0	21
Tot	0	3	7	15	34	37	51	65	161	89	53	515

Hours of Calm 2
Hours of Variable Direction 0
Hours of Valid Data 517
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction	Wind Speed Range (m/s)											Total
Sector	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	0	1	1	1	3	1	0	0	8
NNE	0	0	0	0	1	0	0	1	0	0	0	2
NE	0	0	0	1	2	1	1	1	0	0	0	6
ENE	0	0	0	1	0	1	0	0	0	0	0	2
E	0	0	0	0	1	1	0	2	0	0	0	4
ESE	0	1	0	0	0	0	0	0	0	0	0	1
SE	0	0	0	0	0	0	1	1	1	0	0	3
SSE	0	0	2	1	2	3	7	6	3	0	0	24
S	0	0	0	0	2	1	3	3	2	0	0	11
SSW	0	0	1	0	0	0	0	0	2	0	0	3
SW	0	1	0	0	2	0	2	2	4	0	0	11
WSW	0	1	0	0	1	0	0	1	10	2	0	15
W	0	0	1	0	0	3	3	9	6	1	0	23
WNW	0	0	0	0	1	2	2	1	2	0	0	8
NW	0	1	2	0	1	0	1	4	13	1	0	23
NNW	0	2	1	1	2	2	2	5	1	0	0	16
Tot	0	6	8	4	16	15	23	39	45	4	0	160

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 160
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jan - Mar for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	1	1	3	2	0	0	7
NNE	0	0	0	0	1	3	0	2	0	0	0	6
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	1	0	0	0	0	0	0	0	1
SSE	0	0	0	0	0	0	1	0	0	0	0	1
S	0	0	0	0	0	0	0	0	1	0	0	1
SSW	0	0	0	0	0	0	0	0	1	0	0	1
SW	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	2	0	2
W	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	1	0	2	3	0	0	6
Tot	0	0	0	1	1	5	2	7	7	2	0	25

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 25
Hours of Missing Data 2
Hours in Period 2160

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

All Stabilities

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	4	10	9	7	4	9	7	4	0	0	54
NNE	0	6	10	12	22	9	12	8	3	0	0	82
NE	0	2	9	14	52	44	29	15	0	0	0	165
ENE	0	2	11	22	73	61	13	3	0	0	0	185
E	0	10	6	13	50	48	10	17	24	2	0	180
ESE	0	4	8	12	13	20	13	10	8	5	0	93
SE	0	4	9	9	23	29	28	6	11	3	0	122
SSE	0	2	12	16	47	29	46	24	16	9	1	202
S	0	3	12	12	32	47	29	33	35	12	0	215
SSW	0	1	13	13	26	28	30	16	27	9	3	166
SW	0	2	10	15	33	15	17	16	14	3	2	127
WSW	0	8	8	14	19	25	29	18	20	3	0	144
W	0	3	12	5	20	27	24	9	14	8	1	123
WNW	0	4	6	10	28	26	12	10	5	0	0	101
NW	0	2	10	5	38	22	16	7	4	0	0	104
NNW	0	7	8	3	17	25	16	20	20	0	0	116
Tot	0	64	154	184	500	459	333	219	205	54	7	2179

Hours of Calm 3
Hours of Variable Direction 2
Hours of Valid Data 2184
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	1	3	1	3	1	0	0	0	11
NNE	0	0	1	4	4	1	2	2	0	0	0	14
NE	0	0	0	2	11	7	5	3	0	0	0	28
ENE	0	0	0	1	17	12	6	2	0	0	0	38
E	0	0	0	3	7	7	1	4	8	0	0	30
ESE	0	0	0	4	1	3	1	0	0	2	0	11
SE	0	0	0	0	3	3	4	0	0	2	0	12
SSE	0	0	0	1	4	4	6	3	3	5	0	26
S	0	0	0	0	0	1	1	3	4	3	0	12
SSW	0	0	1	0	2	4	4	2	0	0	0	13
SW	0	0	1	2	3	1	3	2	1	0	0	13
WSW	0	0	0	1	3	4	7	6	7	1	0	29
W	0	0	0	0	0	5	1	1	3	0	0	10
WNW	0	0	0	1	1	3	1	3	3	0	0	12
NW	0	0	0	1	0	0	3	4	3	0	0	11
NNW	0	0	0	0	0	1	4	7	0	0	0	12
Tot	0	0	5	21	59	57	52	43	32	13	0	282

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 282
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	1	0	1	0	0	3
NNE	0	0	0	2	0	0	0	0	0	0	0	2
NE	0	0	0	0	0	1	0	0	0	0	0	1
ENE	0	0	0	1	1	2	0	0	0	0	0	4
E	0	0	1	0	1	2	0	0	0	0	0	4
ESE	0	0	1	1	1	0	1	0	0	0	0	4
SE	0	0	0	0	0	0	3	0	0	0	0	3
SSE	0	0	0	0	1	0	2	0	1	0	0	4
S	0	0	1	0	0	2	1	3	0	0	0	7
SSW	0	0	0	1	1	2	5	0	0	0	0	9
SW	0	0	0	0	0	1	2	0	0	0	0	3
WSW	0	0	0	1	1	2	4	2	4	0	0	14
W	0	0	1	1	1	2	0	1	1	1	0	8
WNW	0	0	0	1	2	4	0	0	0	0	0	7
NW	0	0	0	0	2	1	2	0	0	0	0	5
NNW	0	0	1	0	1	3	2	0	1	0	0	8
Tot	0	0	5	8	13	22	23	6	8	1	0	86

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 86
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION 2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	0	0	1	1	1	0	0	0	4
NNE	0	0	1	0	1	0	2	0	0	0	0	4
NE	0	0	0	0	1	2	2	0	0	0	0	5
ENE	0	0	1	1	3	0	0	0	0	0	0	5
E	0	0	0	0	2	5	1	1	0	0	0	9
ESE	0	0	1	0	1	2	0	0	0	1	0	5
SE	0	0	0	1	3	0	1	0	2	0	0	7
SSE	0	0	0	0	0	2	3	1	1	2	0	9
S	0	0	0	2	1	1	2	2	1	1	0	10
SSW	0	0	0	0	2	1	1	0	1	0	0	5
SW	0	0	0	0	1	0	0	2	0	0	0	3
WSW	0	0	1	1	4	4	3	2	0	0	0	15
W	0	0	0	0	1	2	1	0	0	0	0	4
WNW	0	0	1	0	1	2	1	0	0	0	0	5
NW	0	0	0	0	1	0	1	0	0	0	0	2
NNW	0	0	0	0	2	1	1	0	0	0	0	4
Tot	0	0	6	5	24	23	20	9	5	4	0	96

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 96
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	3	2	4	3	2	0	0	15
NNE	0	1	2	1	1	7	6	3	1	0	0	22
NE	0	1	0	0	9	16	12	6	0	0	0	44
ENE	0	0	2	5	17	40	5	0	0	0	0	69
E	0	2	1	2	10	24	4	3	13	2	0	61
ESE	0	1	0	2	2	5	4	3	5	2	0	24
SE	0	2	3	2	2	6	3	0	3	1	0	22
SSE	0	0	1	1	4	5	10	8	6	2	1	38
S	0	0	3	2	9	13	9	6	7	2	0	51
SSW	0	0	0	2	4	7	9	7	14	4	3	50
SW	0	0	1	0	9	6	7	7	10	2	0	42
WSW	0	0	1	2	6	11	9	6	9	2	0	46
W	0	0	3	0	5	8	15	7	7	7	1	53
WNW	0	0	0	0	7	7	7	7	2	0	0	30
NW	0	1	0	1	10	9	3	3	1	0	0	28
NNW	0	0	0	0	5	6	4	6	18	0	0	39
Tot	0	8	17	21	103	172	111	75	98	24	5	634

Hours of Calm 0
Hours of Variable Direction 1
Hours of Valid Data 635
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	2	4	5	0	0	0	2	1	0	0	14
NNE	0	2	6	5	15	1	2	3	2	0	0	36
NE	0	0	7	10	31	18	10	6	0	0	0	82
ENE	0	1	6	13	35	7	2	1	0	0	0	65
E	0	5	3	7	29	10	4	9	3	0	0	70
ESE	0	2	3	3	3	8	7	7	3	0	0	36
SE	0	0	4	5	11	15	15	6	6	0	0	62
SSE	0	0	7	7	27	17	25	12	5	0	0	100
S	0	1	5	4	16	28	16	19	23	6	0	118
SSW	0	0	4	6	12	13	11	7	12	5	0	70
SW	0	0	2	5	5	4	5	5	3	1	2	32
WSW	0	4	1	2	4	3	6	2	0	0	0	22
W	0	0	4	3	12	10	7	0	3	0	0	39
WNW	0	1	3	8	16	10	3	0	0	0	0	41
NW	0	0	5	2	24	12	7	0	0	0	0	50
NNW	0	3	1	3	6	13	5	7	1	0	0	39
Tot	0	21	65	88	246	169	125	86	62	12	2	876

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 876
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	2	0	0	0	0	0	0	0	3
NNE	0	1	0	0	1	0	0	0	0	0	0	2
NE	0	1	2	2	0	0	0	0	0	0	0	5
ENE	0	1	2	1	0	0	0	0	0	0	0	4
E	0	3	1	1	1	0	0	0	0	0	0	6
ESE	0	1	2	2	5	2	0	0	0	0	0	12
SE	0	1	2	1	4	5	2	0	0	0	0	15
SSE	0	2	3	7	11	1	0	0	0	0	0	24
S	0	1	3	4	6	2	0	0	0	0	0	16
SSW	0	1	7	3	5	1	0	0	0	0	0	17
SW	0	2	4	7	8	3	0	0	0	0	0	24
WSW	0	2	4	6	1	1	0	0	0	0	0	14
W	0	3	4	1	1	0	0	0	0	0	0	9
WNW	0	2	2	0	1	0	0	0	0	0	0	5
NW	0	1	5	0	1	0	0	0	0	0	0	7
NNW	0	4	3	0	3	1	0	0	0	0	0	11
Tot	0	27	44	37	48	16	2	0	0	0	0	174

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 175
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	3	0	0	0	0	0	0	0	0	4
NNE	0	2	0	0	0	0	0	0	0	0	0	2
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	0	0	0	0	0	1
SE	0	1	0	0	0	0	0	0	0	0	0	1
SSE	0	0	1	0	0	0	0	0	0	0	0	1
S	0	1	0	0	0	0	0	0	0	0	0	1
SSW	0	0	1	1	0	0	0	0	0	0	0	2
SW	0	0	2	1	7	0	0	0	0	0	0	10
WSW	0	2	1	1	0	0	0	0	0	0	0	4
W	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	1	0	0	0	0	0	0	0	0	0	1
NW	0	0	0	1	0	0	0	0	0	0	0	1
NNW	0	0	3	0	0	0	0	0	0	0	0	3
Tot	0	8	12	4	7	0	0	0	0	0	0	31

Hours of Calm 2
Hours of Variable Direction 1
Hours of Valid Data 34
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

All Stabilities

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	2	2	2	14	5	8	9	5	3	0	50
NNE	0	0	4	8	17	13	11	10	17	2	0	82
NE	0	0	0	1	18	31	29	27	22	0	0	128
ENE	0	1	4	6	51	61	59	11	8	0	0	201
E	0	1	1	2	27	35	53	18	23	21	7	188
ESE	0	3	4	7	13	6	20	9	13	8	10	93
SE	0	0	2	6	11	17	27	27	17	11	3	121
SSE	0	1	1	3	17	25	42	33	46	16	6	190
S	0	1	1	3	18	22	26	32	60	34	15	212
SSW	0	0	3	9	12	21	34	36	31	26	14	186
SW	0	0	2	3	8	12	20	24	29	9	10	117
WSW	0	1	3	6	12	18	29	24	30	20	5	148
W	0	1	6	8	19	18	26	15	21	11	10	135
WNW	0	1	4	2	15	23	17	26	19	7	0	114
NW	0	0	3	5	6	24	29	18	16	4	0	105
NNW	0	1	3	3	11	13	14	21	37	11	0	114
Tot	0	13	43	74	269	344	444	340	394	183	80	2184

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 2184
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	5	1	2	1	0	0	0	9
NNE	0	0	0	3	3	1	1	3	4	0	0	15
NE	0	0	0	0	6	3	4	2	5	0	0	20
ENE	0	0	0	0	6	18	12	3	3	0	0	42
E	0	0	0	0	6	7	6	2	5	5	2	33
ESE	0	0	0	0	3	0	2	0	0	0	2	7
SE	0	0	0	0	2	5	3	3	0	0	2	15
SSE	0	0	0	0	5	3	3	4	3	5	3	26
S	0	0	0	0	0	0	1	0	7	3	2	13
SSW	0	0	2	0	0	2	3	3	2	0	0	12
SW	0	0	0	0	1	2	1	4	3	0	0	11
WSW	0	0	0	0	2	2	5	4	7	6	2	28
W	0	0	0	1	2	1	5	1	1	2	0	13
WNW	0	0	0	0	0	1	2	2	3	4	0	12
NW	0	0	0	1	0	0	0	2	3	3	0	9
NNW	0	0	1	1	1	0	0	3	11	0	0	17
Tot	0	0	3	6	42	46	50	37	57	28	13	282

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 282
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	1	1	0	0	0	3
NNE	0	0	0	1	1	0	0	0	1	0	0	3
NE	0	0	0	0	0	1	0	0	0	0	0	1
ENE	0	0	0	1	1	2	0	0	0	0	0	4
E	0	0	0	0	2	1	1	0	0	0	0	4
ESE	0	0	0	0	1	1	1	0	0	0	0	3
SE	0	0	0	1	0	0	2	1	0	0	0	4
SSE	0	0	0	0	0	1	0	0	1	1	0	3
S	0	0	0	0	0	1	1	1	4	0	0	7
SSW	0	0	0	1	1	1	0	6	0	0	0	9
SW	0	0	0	0	0	0	1	2	0	0	0	3
WSW	0	0	0	1	0	1	3	0	5	3	0	13
W	0	0	1	0	1	1	3	0	1	1	1	9
WNW	0	0	1	1	2	3	1	2	0	0	0	10
NW	0	0	0	0	1	0	0	2	1	0	0	4
NNW	0	0	0	0	1	1	1	2	1	0	0	6
Tot	0	0	2	6	12	14	15	17	14	5	1	86

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 86
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	1	0	1	1	1	0	0	5
NNE	0	0	0	2	0	0	0	2	0	0	0	4
NE	0	0	0	0	0	0	2	1	1	0	0	4
ENE	0	0	0	1	1	3	0	0	0	0	0	5
E	0	0	0	0	2	1	4	0	2	0	0	9
ESE	0	0	0	1	1	0	2	0	0	0	1	5
SE	0	0	0	0	3	1	0	1	0	2	0	7
SSE	0	0	0	0	0	1	2	2	1	1	2	9
S	0	0	0	0	1	1	1	2	1	2	0	8
SSW	0	0	0	0	1	1	1	2	0	1	0	6
SW	0	0	0	0	2	0	0	1	1	0	0	4
WSW	0	0	0	0	0	3	4	2	3	0	0	12
W	0	0	1	2	1	1	2	1	0	0	0	8
WNW	0	0	0	0	1	1	0	1	1	0	0	4
NW	0	0	0	0	0	1	0	1	0	0	0	2
NNW	0	0	0	0	2	1	0	1	0	0	0	4
Tot	0	0	1	7	16	15	19	18	11	6	3	96

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 96
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	1	0	0	3	2	4	4	1	0	16
NNE	0	0	2	1	1	1	6	4	7	0	0	22
NE	0	0	0	0	3	7	9	14	5	0	0	38
ENE	0	0	2	0	13	9	36	7	3	0	0	70
E	0	1	1	1	4	7	19	11	8	7	5	64
ESE	0	0	1	0	2	1	4	4	3	3	7	25
SE	0	0	1	0	1	1	6	3	1	3	1	17
SSE	0	1	1	2	6	3	6	7	8	4	1	39
S	0	1	1	2	4	6	8	5	14	5	5	51
SSW	0	0	0	2	2	2	6	10	9	12	7	50
SW	0	0	0	1	2	7	4	6	13	7	4	44
WSW	0	0	1	2	4	5	7	10	9	9	3	50
W	0	0	1	0	3	4	6	5	12	7	7	45
WNW	0	0	0	0	2	3	5	8	12	3	0	33
NW	0	0	1	0	0	9	10	3	5	1	0	29
NNW	0	0	1	1	3	3	7	4	13	10	0	42
Tot	0	4	14	12	50	71	141	105	126	72	40	635

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 635
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	6	0	2	2	0	2	0	12
NNE	0	0	0	1	11	11	3	1	5	2	0	34
NE	0	0	0	1	9	19	14	10	11	0	0	64
ENE	0	0	2	4	27	29	11	1	2	0	0	76
E	0	0	0	1	10	16	23	5	8	9	0	72
ESE	0	1	1	4	5	0	9	4	10	5	0	39
SE	0	0	1	2	4	4	10	17	14	6	0	58
SSE	0	0	0	1	4	12	21	16	33	5	0	92
S	0	0	0	0	10	12	14	18	34	24	8	120
SSW	0	0	1	2	8	6	14	10	19	13	7	80
SW	0	0	0	2	2	2	7	3	10	2	6	34
WSW	0	0	2	0	4	4	2	7	3	2	0	24
W	0	0	2	3	4	5	10	8	7	1	2	42
WNW	0	0	2	0	5	11	8	12	3	0	0	41
NW	0	0	1	2	4	10	18	10	7	0	0	52
NNW	0	0	0	1	4	4	4	10	12	1	0	36
Tot	0	1	12	24	117	145	170	134	178	72	23	876

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 876
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	1	0	1	0	0	0	0	0	3
NNE	0	0	2	0	1	0	1	0	0	0	0	4
NE	0	0	0	0	0	1	0	0	0	0	0	1
ENE	0	0	0	0	3	0	0	0	0	0	0	3
E	0	0	0	0	2	3	0	0	0	0	0	5
ESE	0	1	1	1	1	4	2	1	0	0	0	11
SE	0	0	0	3	1	6	6	2	2	0	0	20
SSE	0	0	0	0	1	5	10	4	0	0	0	20
S	0	0	0	1	3	2	1	6	0	0	0	13
SSW	0	0	0	3	0	9	9	5	1	0	0	27
SW	0	0	2	0	0	1	5	3	2	0	0	13
WSW	0	1	0	2	2	2	6	1	3	0	0	17
W	0	1	0	1	8	5	0	0	0	0	0	15
WNW	0	1	1	0	4	3	1	1	0	0	0	11
NW	0	0	0	0	1	2	1	0	0	0	0	4
NNW	0	1	0	0	0	4	2	1	0	0	0	8
Tot	0	6	6	12	27	48	44	24	8	0	0	175

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 175
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	0	1	0	0	0	0	0	0	2
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	0	0	0	0	0	1
E	0	0	0	0	1	0	0	0	0	0	0	1
ESE	0	1	1	1	0	0	0	0	0	0	0	3
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	1	0	0	0	0	0	0	1
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	1	0	0	1	0	0	0	0	2
SW	0	0	0	0	1	0	2	5	0	0	0	8
WSW	0	0	0	1	0	1	2	0	0	0	0	4
W	0	0	1	1	0	1	0	0	0	0	0	3
WNW	0	0	0	1	1	1	0	0	0	0	0	3
NW	0	0	1	2	0	2	0	0	0	0	0	5
NNW	0	0	1	0	0	0	0	0	0	0	0	1
Tot	0	2	5	7	5	5	5	5	0	0	0	34

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 34
Hours of Missing Data 0
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

All Stabilities

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	4	9	7	7	10	13	7	0	59
NNE	0	1	3	3	8	6	10	10	18	8	1	68
NE	0	0	4	5	10	16	20	28	29	12	0	124
ENE	0	1	3	6	25	54	51	34	20	3	0	197
E	0	0	0	4	21	31	33	35	32	19	21	196
ESE	0	0	0	1	13	8	8	16	18	13	21	98
SE	0	1	2	3	11	12	11	18	27	13	8	106
SSE	0	0	2	2	13	14	17	34	46	34	17	179
S	0	1	2	3	8	9	14	30	72	42	38	219
SSW	0	0	4	4	9	9	11	41	35	40	38	191
SW	0	2	3	2	6	13	7	21	42	18	15	129
WSW	0	0	1	4	14	13	20	23	49	16	15	155
W	0	1	3	3	12	9	17	19	23	12	19	118
WNW	0	1	1	3	8	13	23	14	38	14	4	119
NW	0	0	1	1	8	11	13	23	34	8	2	101
NNW	0	0	1	5	5	4	14	22	39	23	6	119
Tot	0	8	32	53	180	229	276	378	535	282	205	2178

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 2178
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	0	0	0	0	0	1
NNE	0	0	0	0	0	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	6	6	1	3	0	0	16
E	0	0	0	0	2	2	5	3	0	6	1	19
ESE	0	0	0	0	3	0	1	0	0	0	1	5
SE	0	0	0	0	3	2	3	1	0	0	0	9
SSE	0	0	0	0	3	0	0	1	1	0	5	10
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	4	4
W	0	0	0	0	0	0	0	1	0	0	1	2
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	1	0	0	1
Tot	0	0	0	0	12	11	15	7	5	6	12	68

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 68
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	2	0	0	1	0	0	0	4
NNE	0	0	0	1	1	0	0	1	2	0	0	5
NE	0	0	0	1	2	0	0	0	2	0	0	5
ENE	0	0	0	0	6	9	5	0	3	0	0	23
E	0	0	0	1	2	3	2	0	1	2	1	12
ESE	0	0	0	0	0	0	1	1	0	0	2	4
SE	0	0	0	0	0	1	2	3	1	0	1	8
SSE	0	0	0	1	3	4	2	3	1	2	2	18
S	0	0	0	0	0	0	0	0	4	3	2	9
SSW	0	0	0	1	0	2	1	0	2	0	0	6
SW	0	0	0	0	0	1	1	5	1	1	0	9
WSW	0	0	0	1	3	1	0	4	2	1	2	14
W	0	0	1	0	1	0	0	2	0	1	0	5
WNW	0	0	0	0	0	0	0	1	1	2	1	5
NW	0	0	0	0	1	0	0	1	1	2	1	6
NNW	0	0	0	0	0	0	0	1	5	0	0	6
Tot	0	0	1	7	21	21	14	23	26	14	12	139

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 139
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	2	0	3	1	1	0	0	7
NNE	0	0	1	1	3	2	1	1	2	1	0	12
NE	0	0	0	0	1	2	1	4	1	0	0	9
ENE	0	0	0	0	1	6	2	0	1	0	0	10
E	0	0	0	0	2	3	2	3	2	0	0	12
ESE	0	0	0	1	0	0	1	1	0	0	0	3
SE	0	0	0	1	1	3	0	1	1	1	1	9
SSE	0	0	0	0	0	1	2	4	1	2	3	13
S	0	0	0	0	2	2	2	1	8	0	3	18
SSW	0	0	1	0	1	1	1	9	2	0	1	16
SW	0	0	0	0	1	1	1	1	2	1	0	7
WSW	0	0	0	0	0	1	5	1	8	4	1	20
W	0	0	0	0	1	0	4	2	1	1	3	12
WNW	0	0	1	1	1	1	6	0	1	2	0	13
NW	0	0	0	0	1	0	0	2	3	0	0	6
NNW	0	0	0	1	3	0	3	1	8	2	0	18
Tot	0	0	3	5	20	23	34	32	42	14	12	185

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 185
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	2	2	4	3	4	6	3	0	26
NNE	0	0	1	0	3	1	6	5	9	7	0	32
NE	0	0	2	1	4	5	10	15	22	12	0	71
ENE	0	0	2	3	11	26	28	30	9	1	0	110
E	0	0	0	2	10	11	19	17	21	10	15	105
ESE	0	0	0	0	3	2	0	5	7	7	17	41
SE	0	0	1	0	2	1	4	4	5	5	4	26
SSE	0	0	1	1	3	3	7	8	15	12	7	57
S	0	1	0	2	5	4	5	15	22	12	15	81
SSW	0	0	1	3	5	4	4	15	12	16	22	82
SW	0	0	1	1	3	6	2	6	14	11	11	55
WSW	0	0	1	2	6	9	9	8	27	7	7	76
W	0	0	1	2	2	4	8	9	15	9	15	65
WNW	0	0	0	1	2	5	9	10	23	10	3	63
NW	0	0	0	1	3	10	7	11	6	1	1	40
NNW	0	0	0	0	0	2	7	13	5	16	5	48
Tot	0	1	13	21	64	97	128	175	218	139	122	978

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 978
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	2	2	1	2	4	4	0	15
NNE	0	1	1	1	1	2	3	2	3	0	1	15
NE	0	0	1	2	2	9	9	9	4	0	0	36
ENE	0	0	1	3	7	7	9	3	4	2	0	36
E	0	0	0	1	5	11	5	11	7	1	4	45
ESE	0	0	0	0	4	2	4	5	8	6	1	30
SE	0	1	1	1	1	4	2	7	17	7	2	43
SSE	0	0	0	0	4	4	3	15	24	18	0	68
S	0	0	1	1	1	2	7	10	28	25	18	93
SSW	0	0	0	0	3	1	4	15	17	20	15	75
SW	0	1	0	1	2	5	3	8	12	3	4	39
WSW	0	0	0	1	3	2	5	8	4	1	1	25
W	0	1	0	1	7	3	4	5	6	1	0	28
WNW	0	0	0	1	3	5	7	2	13	0	0	31
NW	0	0	1	0	3	1	4	8	22	5	0	44
NNW	0	0	0	1	2	0	4	7	16	5	1	36
Tot	0	4	6	14	50	60	74	117	189	98	47	659

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 659
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	0	1	0	2	2	0	0	6
NNE	0	0	0	0	0	0	0	0	1	0	0	1
NE	0	0	0	1	1	0	0	0	0	0	0	2
ENE	0	1	0	0	0	0	1	0	0	0	0	2
E	0	0	0	0	0	1	0	1	1	0	0	3
ESE	0	0	0	0	3	4	1	4	3	0	0	15
SE	0	0	0	1	4	1	0	2	3	0	0	11
SSE	0	0	1	0	0	2	3	3	4	0	0	13
S	0	0	1	0	0	1	0	4	10	2	0	18
SSW	0	0	2	0	0	1	1	2	2	2	0	10
SW	0	1	2	0	0	0	0	1	12	1	0	17
WSW	0	0	0	0	2	0	1	2	8	3	0	16
W	0	0	1	0	1	2	1	0	1	0	0	6
WNW	0	1	0	0	2	2	1	1	0	0	0	7
NW	0	0	0	0	0	0	2	1	1	0	0	4
NNW	0	0	1	3	0	2	0	0	4	0	0	10
Tot	0	3	8	6	13	17	11	23	52	8	0	141

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 141
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Apr - Jun for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	1	1	0	0	2
NE	0	0	1	0	0	0	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0	2	0	2
SW	0	0	0	0	0	0	0	0	1	1	0	2
WSW	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	1	0	0	1
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	0	1	0	0	0	0	1	3	3	0	8

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 8
Hours of Missing Data 6
Hours in Period 2184

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

All Stabilities

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	10	12	11	24	25	6	3	0	0	0	91
NNE	0	14	8	14	17	7	9	8	3	0	0	80
NE	1	13	16	22	38	37	15	3	3	0	0	148
ENE	0	26	11	20	56	9	2	0	0	0	0	124
E	1	16	15	13	52	26	4	1	0	0	0	128
ESE	0	24	16	16	40	8	6	4	0	0	0	114
SE	0	27	23	14	46	17	9	1	0	1	0	138
SSE	0	14	25	19	49	29	14	7	2	0	0	159
S	1	11	18	32	43	40	33	8	7	0	0	193
SSW	0	13	23	25	37	34	26	22	5	1	0	186
SW	0	13	23	41	39	18	11	10	11	1	0	167
WSW	0	3	18	17	42	20	11	9	4	0	0	124
W	0	6	18	20	36	19	15	9	3	0	0	126
WNW	0	8	15	17	40	36	20	16	3	0	0	155
NW	0	9	14	20	28	21	17	8	6	0	0	123
NNW	0	10	11	14	38	27	24	11	2	0	0	137
Tot	3	217	266	315	625	373	222	120	49	3	0	2193

Hours of Calm 12
Hours of Variable Direction 1
Hours of Valid Data 2206
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	2	2	7	0	1	0	0	0	13
NNE	0	0	1	2	6	0	2	2	2	0	0	15
NE	0	0	3	5	4	13	1	2	2	0	0	30
ENE	0	0	0	3	9	4	0	0	0	0	0	16
E	0	0	2	0	10	6	2	0	0	0	0	20
ESE	0	0	1	1	7	0	2	3	0	0	0	14
SE	0	0	2	2	1	2	1	0	0	0	0	8
SSE	0	0	2	1	2	5	3	2	0	0	0	15
S	0	0	0	1	3	9	4	1	0	0	0	18
SSW	0	0	0	3	9	5	0	6	1	0	0	24
SW	0	0	0	4	9	4	3	1	2	0	0	23
WSW	0	0	1	3	15	8	2	3	0	0	0	32
W	0	0	0	3	6	5	2	0	0	0	0	16
WNW	0	0	2	0	3	4	1	4	0	0	0	14
NW	0	0	0	1	0	0	0	1	0	0	0	2
NNW	0	1	1	2	1	0	2	1	0	0	0	8
Tot	0	1	16	33	87	72	25	27	7	0	0	268

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 268
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	1	0	0	0	0	2
NNE	0	0	1	2	0	0	0	0	0	0	0	3
NE	0	0	2	4	2	0	2	0	1	0	0	11
ENE	0	0	0	1	3	1	0	0	0	0	0	5
E	0	0	0	1	4	0	1	1	0	0	0	7
ESE	0	0	1	0	0	0	2	0	0	0	0	3
SE	0	0	1	1	2	0	0	0	0	0	0	4
SSE	0	0	0	0	1	4	0	1	0	0	0	6
S	0	0	1	1	2	1	0	0	0	0	0	5
SSW	0	0	1	1	2	3	3	3	1	0	0	14
SW	0	0	0	2	2	0	0	2	0	0	0	6
WSW	0	0	1	1	2	1	3	0	1	0	0	9
W	0	0	0	1	1	3	1	0	0	0	0	6
WNW	0	0	1	0	2	1	1	2	0	0	0	7
NW	0	0	0	1	2	2	4	0	0	0	0	9
NNW	0	1	0	1	0	0	1	1	0	0	0	4
Tot	0	1	9	17	26	16	19	10	3	0	0	101

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 101
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction	Wind Speed Range (m/s)											Total
Sector	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	2	0	2	1	1	0	0	0	7
NNE	0	0	0	1	0	0	0	1	0	0	0	2
NE	0	0	0	0	1	2	0	0	0	0	0	3
ENE	0	0	0	1	3	0	0	0	0	0	0	4
E	0	0	1	1	2	0	0	0	0	0	0	4
ESE	0	0	0	0	2	0	0	1	0	0	0	3
SE	0	0	3	0	1	1	0	0	0	0	0	5
SSE	0	0	0	1	1	1	1	2	0	0	0	6
S	0	1	0	1	1	1	5	0	0	0	0	9
SSW	0	0	0	1	2	3	3	3	1	0	0	13
SW	0	0	0	2	1	3	0	1	2	0	0	9
WSW	0	0	1	1	8	2	1	1	0	0	0	14
W	0	0	0	1	1	1	2	1	2	0	0	8
WNW	0	0	0	0	5	2	1	2	0	0	0	10
NW	0	0	0	1	4	0	0	1	0	0	0	6
NNW	0	0	0	1	1	2	2	1	0	0	0	7
Tot	0	1	6	14	33	20	16	15	5	0	0	110

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 110
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	6	2	3	10	2	1	0	0	0	24
NNE	0	0	3	3	4	6	3	4	0	0	0	23
NE	0	1	2	1	11	8	8	1	0	0	0	32
ENE	0	2	0	3	10	1	1	0	0	0	0	17
E	0	1	1	1	2	8	0	0	0	0	0	13
ESE	0	1	3	3	4	2	1	0	0	0	0	14
SE	0	3	5	4	4	4	1	0	0	0	0	21
SSE	0	1	3	1	6	6	2	1	0	0	0	20
S	0	1	3	8	13	9	5	4	5	0	0	48
SSW	0	3	1	4	6	9	11	7	1	0	0	42
SW	0	2	2	7	7	3	4	5	5	1	0	36
WSW	0	1	3	5	9	5	4	5	1	0	0	33
W	0	1	3	3	15	5	7	6	1	0	0	41
WNW	0	2	4	1	15	16	12	4	3	0	0	57
NW	0	1	2	4	6	10	7	6	5	0	0	41
NNW	0	1	4	3	7	17	16	7	1	0	0	56
Tot	0	21	45	53	122	119	84	51	22	1	0	518

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 518
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	1	4	17	6	2	0	0	0	0	31
NNE	0	1	1	4	7	1	4	1	1	0	0	20
NE	0	2	2	11	20	13	4	0	0	0	0	52
ENE	0	7	7	11	31	3	1	0	0	0	0	60
E	0	3	5	4	32	12	1	0	0	0	0	57
ESE	0	3	2	4	19	5	1	0	0	0	0	34
SE	0	4	7	4	30	8	6	1	0	1	0	61
SSE	0	0	13	12	32	12	8	1	2	0	0	80
S	0	2	5	9	16	20	18	3	2	0	0	75
SSW	0	1	6	10	14	14	9	3	1	1	0	59
SW	0	3	6	6	11	7	4	1	2	0	0	40
WSW	0	0	3	2	6	4	1	0	2	0	0	18
W	0	0	6	6	13	5	3	2	0	0	0	35
WNW	0	1	3	14	13	13	4	4	0	0	0	52
NW	0	1	2	8	10	9	6	0	1	0	0	37
NNW	0	2	2	4	23	8	3	1	1	0	0	44
Tot	0	31	71	113	294	140	75	17	12	2	0	755

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 755
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	6	2	1	1	0	0	0	0	0	0	10
NNE	0	7	1	2	0	0	0	0	0	0	0	10
NE	0	5	4	1	0	1	0	0	0	0	0	11
ENE	0	10	4	1	0	0	0	0	0	0	0	15
E	0	9	3	5	2	0	0	0	0	0	0	19
ESE	0	15	4	8	7	1	0	0	0	0	0	35
SE	0	15	4	3	8	2	1	0	0	0	0	33
SSE	0	10	7	4	7	1	0	0	0	0	0	29
S	0	4	6	11	8	0	1	0	0	0	0	30
SSW	0	5	12	5	4	0	0	0	0	0	0	26
SW	0	6	7	12	7	1	0	0	0	0	0	33
WSW	0	1	5	4	2	0	0	0	0	0	0	12
W	0	1	7	6	0	0	0	0	0	0	0	14
WNW	0	3	4	2	2	0	1	0	0	0	0	12
NW	0	3	6	5	6	0	0	0	0	0	0	20
NNW	0	3	1	1	6	0	0	0	0	0	0	11
Tot	0	103	77	71	60	6	3	0	0	0	0	320

Hours of Calm 5
Hours of Variable Direction 1
Hours of Valid Data 326
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	3	1	0	0	0	0	0	0	0	0	4
NNE	0	6	1	0	0	0	0	0	0	0	0	7
NE	1	5	3	0	0	0	0	0	0	0	0	9
ENE	0	7	0	0	0	0	0	0	0	0	0	7
E	1	3	3	1	0	0	0	0	0	0	0	8
ESE	0	5	5	0	1	0	0	0	0	0	0	11
SE	0	5	1	0	0	0	0	0	0	0	0	6
SSE	0	3	0	0	0	0	0	0	0	0	0	3
S	1	3	3	1	0	0	0	0	0	0	0	8
SSW	0	4	3	1	0	0	0	0	0	0	0	8
SW	0	2	8	8	2	0	0	0	0	0	0	20
WSW	0	1	4	1	0	0	0	0	0	0	0	6
W	0	4	2	0	0	0	0	0	0	0	0	6
WNW	0	2	1	0	0	0	0	0	0	0	0	3
NW	0	4	4	0	0	0	0	0	0	0	0	8
NNW	0	2	3	2	0	0	0	0	0	0	0	7
Tot	3	59	42	14	3	0	0	0	0	0	0	121

Hours of Calm 7
Hours of Variable Direction 0
Hours of Valid Data 128
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

All Stabilities

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	1	3	6	7	16	22	29	6	6	0	0	96
NNE	0	2	5	5	13	11	11	7	11	3	0	68
NE	0	1	3	6	25	36	22	17	10	0	0	120
ENE	0	4	9	8	39	35	8	1	2	0	0	106
E	0	6	6	10	22	25	37	22	2	0	0	130
ESE	0	8	6	9	22	17	23	16	6	0	0	107
SE	0	8	8	11	38	24	26	5	5	0	1	126
SSE	0	5	4	9	40	37	46	11	12	1	0	165
S	0	3	10	13	45	33	46	25	27	7	0	209
SSW	0	6	8	9	33	37	31	30	31	2	2	189
SW	0	3	11	8	34	33	26	14	19	10	2	160
WSW	0	4	6	17	47	38	20	12	13	6	1	164
W	0	3	15	16	32	33	18	16	15	1	0	149
WNW	0	3	4	5	28	37	31	24	26	3	2	163
NW	0	6	4	8	16	22	24	21	21	9	0	131
NNW	0	1	2	10	17	18	27	24	20	2	0	121
Tot	1	66	107	151	467	458	425	251	226	44	8	2204

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 2205
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	3	1	5	3	4	0	1	0	0	17
NNE	0	0	0	1	3	3	0	1	3	2	0	13
NE	0	0	1	1	7	9	7	2	3	0	0	30
ENE	0	0	1	2	4	7	3	0	0	0	0	17
E	0	0	0	2	5	4	4	2	1	0	0	18
ESE	0	0	0	1	4	2	0	2	3	0	0	12
SE	0	0	2	2	2	3	1	0	0	0	0	10
SSE	0	0	1	0	0	2	6	0	1	0	0	10
S	0	0	0	1	4	4	8	2	2	0	0	21
SSW	0	0	0	2	5	4	5	0	7	0	0	23
SW	0	0	0	1	9	7	2	2	2	1	0	24
WSW	0	0	0	3	9	11	7	1	3	0	0	34
W	0	0	0	3	4	4	2	1	1	0	0	15
WNW	0	0	0	1	1	5	3	0	4	0	0	14
NW	0	1	0	0	1	0	0	1	1	0	0	4
NNW	0	0	0	1	2	0	0	2	1	0	0	6
Tot	0	1	8	22	65	68	52	16	33	3	0	268

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 268
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	2	0	1	0	1	0	0	0	4
NNE	0	0	1	1	0	0	0	0	0	0	0	2
NE	0	0	1	2	2	1	0	2	1	0	0	9
ENE	0	0	0	0	2	1	1	0	0	0	0	4
E	0	0	0	1	2	3	0	1	0	0	0	7
ESE	0	0	0	1	0	0	0	2	1	0	0	4
SE	0	0	1	0	3	0	0	0	0	0	0	4
SSE	0	0	0	0	1	1	3	0	1	0	0	6
S	0	0	0	0	1	1	0	0	0	0	0	2
SSW	0	0	1	2	2	3	3	2	4	0	0	17
SW	0	0	0	0	2	0	0	0	2	0	0	4
WSW	0	0	0	0	3	2	2	2	0	1	0	10
W	0	0	2	1	0	2	1	1	0	0	0	7
WNW	0	0	1	0	1	1	2	0	3	0	0	8
NW	0	0	1	0	0	2	2	4	0	0	0	9
NNW	0	0	0	0	2	0	0	1	1	0	0	4
Tot	0	0	8	10	21	18	14	16	13	1	0	101

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 101
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	2	0	2	0	1	2	0	0	7
NNE	0	0	0	0	0	0	0	0	1	0	0	1
NE	0	0	0	0	1	1	1	0	0	0	0	3
ENE	0	0	0	1	3	2	0	0	0	0	0	6
E	0	0	1	1	0	1	0	0	0	0	0	3
ESE	0	0	0	1	1	1	0	0	1	0	0	4
SE	0	0	1	0	1	1	0	0	0	0	0	3
SSE	0	0	1	0	3	0	1	1	2	0	0	8
S	0	0	0	1	1	0	4	2	0	0	0	8
SSW	0	0	0	0	3	2	0	3	3	1	0	12
SW	0	0	1	0	2	0	4	0	0	2	0	9
WSW	0	0	0	3	5	4	0	2	1	1	0	16
W	0	0	0	0	0	1	1	1	2	0	0	5
WNW	0	0	0	0	2	3	0	2	2	1	1	11
NW	0	0	0	0	3	1	1	0	1	0	0	6
NNW	0	0	1	1	1	1	2	2	0	0	0	8
Tot	0	0	5	10	26	20	14	14	15	5	1	110

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 110
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	3	1	4	5	8	1	2	0	0	24
NNE	0	0	0	2	4	3	6	3	4	0	0	22
NE	0	1	0	1	3	11	5	7	3	0	0	31
ENE	0	1	1	0	7	6	1	0	1	0	0	17
E	0	1	0	1	1	1	3	5	0	0	0	12
ESE	0	1	0	2	3	1	3	1	0	0	0	11
SE	0	1	3	5	5	5	3	1	0	0	0	23
SSE	0	0	1	3	3	4	5	2	1	0	0	19
S	0	0	2	3	9	10	6	4	4	4	0	42
SSW	0	1	4	1	5	7	6	11	7	1	0	43
SW	0	2	1	1	9	8	1	3	8	4	2	39
WSW	0	2	3	2	9	5	4	1	8	3	0	37
W	0	2	2	3	6	11	2	7	7	1	0	41
WNW	0	1	1	2	3	9	13	15	9	1	1	55
NW	0	2	2	6	4	4	9	4	10	7	0	48
NNW	0	0	0	6	6	2	12	12	15	0	0	53
Tot	0	15	23	39	81	92	87	77	79	21	3	517

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 517
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION 2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	4	9	14	2	1	0	0	30
NNE	0	0	2	0	4	4	5	2	3	1	0	21
NE	0	0	1	1	12	13	9	6	2	0	0	44
ENE	0	0	1	3	20	18	3	1	1	0	0	47
E	0	1	0	2	7	13	30	14	1	0	0	68
ESE	0	3	3	1	9	10	12	5	1	0	0	44
SE	0	2	0	1	7	9	17	2	4	0	1	43
SSE	0	0	1	3	9	20	24	8	7	1	0	73
S	0	1	1	5	17	15	20	14	19	3	0	95
SSW	0	1	1	0	7	13	12	13	10	0	2	59
SW	0	0	2	3	5	3	10	6	7	3	0	39
WSW	0	1	0	1	2	4	6	5	1	1	1	22
W	0	1	1	1	6	4	10	6	5	0	0	34
WNW	0	0	0	0	11	13	10	7	8	1	0	50
NW	0	1	0	2	5	11	8	9	9	2	0	47
NNW	0	0	0	2	6	9	11	6	3	2	0	39
Tot	0	11	13	25	131	168	201	106	82	14	4	755

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 755
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	1	2	1	3	1	0	0	0	9
NNE	0	1	0	1	2	1	0	1	0	0	0	6
NE	0	0	0	1	0	1	0	0	1	0	0	3
ENE	0	2	5	2	1	1	0	0	0	0	0	11
E	0	3	3	3	5	3	0	0	0	0	0	17
ESE	0	3	2	3	5	3	7	6	0	0	0	29
SE	0	4	0	3	19	5	4	2	1	0	0	38
SSE	0	1	0	3	15	9	7	0	0	0	0	35
S	0	1	4	3	11	3	8	3	2	0	0	35
SSW	0	3	1	2	9	6	4	1	0	0	0	26
SW	0	1	2	2	4	11	9	3	0	0	0	32
WSW	0	1	2	4	7	7	0	1	0	0	0	22
W	0	0	4	3	5	9	2	0	0	0	0	23
WNW	0	1	1	1	7	5	3	0	0	0	0	18
NW	0	2	1	0	1	4	4	3	0	0	0	15
NNW	0	1	1	0	0	3	1	1	0	0	0	7
Tot	0	25	26	32	93	72	52	22	4	0	0	326

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 326
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION 2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	1	2	0	0	1	1	0	0	0	0	0	5
NNE	0	1	2	0	0	0	0	0	0	0	0	3
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	1	1	0	2	0	0	0	0	0	0	4
E	0	1	2	0	2	0	0	0	0	0	0	5
ESE	0	1	1	0	0	0	1	0	0	0	0	3
SE	0	1	1	0	1	1	1	0	0	0	0	5
SSE	0	4	0	0	9	1	0	0	0	0	0	14
S	0	1	3	0	2	0	0	0	0	0	0	6
SSW	0	1	1	2	2	2	1	0	0	0	0	9
SW	0	0	5	1	3	4	0	0	0	0	0	13
WSW	0	0	1	4	12	5	1	0	0	0	0	23
W	0	0	6	5	11	2	0	0	0	0	0	24
WNW	0	1	1	1	3	1	0	0	0	0	0	7
NW	0	0	0	0	2	0	0	0	0	0	0	2
NNW	0	0	0	0	0	3	1	0	0	0	0	4
Tot	1	14	24	13	50	20	5	0	0	0	0	127

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 128
Hours of Missing Data 3
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

All Stabilities

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	7	5	15	15	19	16	24	3	0	105
NNE	0	1	4	5	9	11	14	12	23	3	0	82
NE	0	2	1	4	12	20	17	20	22	5	1	104
ENE	0	3	3	5	29	43	15	6	2	2	0	108
E	0	2	3	4	21	19	26	21	32	2	0	130
ESE	0	1	1	8	14	21	13	15	21	6	0	100
SE	0	2	6	10	20	17	17	12	19	4	0	107
SSE	0	1	3	11	25	19	39	32	30	3	2	165
S	0	3	6	11	21	36	39	37	42	19	7	221
SSW	0	5	7	8	23	27	34	30	53	12	3	202
SW	0	7	4	3	26	24	17	12	39	13	10	155
WSW	0	2	3	5	34	26	29	27	21	11	2	160
W	0	3	3	3	28	26	23	17	15	6	1	125
WNW	0	2	7	6	11	29	39	28	47	11	5	185
NW	0	2	5	12	10	19	16	25	40	13	4	146
NNW	0	2	4	7	12	10	14	22	30	9	0	110
Tot	0	39	67	107	310	362	371	332	460	122	35	2205

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 2206
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	1	0	1	0	0	0	0	2
ENE	0	0	0	0	0	3	2	0	0	0	0	5
E	0	0	0	0	1	0	2	0	2	0	0	5
ESE	0	0	0	0	1	1	0	0	2	0	0	4
SE	0	0	0	0	1	1	0	0	0	0	0	2
SSE	0	0	0	0	0	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	1	0	0	0	0	0	0	1
SW	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	0	0	0	5	6	5	0	4	0	0	20

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 20
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	0	3	1	2	0	0	7
NNE	0	0	0	0	0	5	0	1	1	1	0	8
NE	0	0	0	1	4	4	5	2	1	2	1	20
ENE	0	0	1	1	3	1	1	0	0	0	0	7
E	0	0	0	1	6	3	0	0	0	0	0	10
ESE	0	0	0	1	3	2	0	0	1	0	0	7
SE	0	0	1	1	0	0	1	1	0	0	0	4
SSE	0	0	0	0	0	0	4	1	1	0	0	6
S	0	0	0	0	1	0	0	1	0	0	0	2
SSW	0	0	0	0	1	1	4	0	5	0	0	11
SW	0	1	0	0	1	3	1	0	0	1	0	7
WSW	0	0	0	0	2	2	0	0	2	0	0	6
W	0	0	0	0	0	1	0	1	1	0	0	3
WNW	0	0	0	1	0	0	0	0	0	0	0	1
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	1	2	6	22	22	19	8	14	4	1	99

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 99
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	3	1	4	3	2	1	2	0	0	16
NNE	0	0	1	2	1	0	0	0	0	0	0	4
NE	0	0	1	2	2	0	2	1	3	2	0	13
ENE	0	0	1	0	4	6	1	0	0	0	0	12
E	0	0	0	1	4	2	5	0	2	0	0	14
ESE	0	0	0	0	0	0	0	0	4	0	0	4
SE	0	0	1	1	2	2	0	0	0	0	0	6
SSE	0	0	0	0	2	0	7	1	1	0	0	11
S	0	0	0	2	2	2	5	4	2	0	0	17
SSW	0	1	2	1	2	4	3	2	2	0	0	17
SW	0	0	0	1	3	5	2	3	7	1	0	22
WSW	0	0	0	0	7	10	6	3	3	1	0	30
W	0	0	0	0	6	3	0	0	1	0	0	10
WNW	0	0	1	0	0	2	3	2	5	0	0	13
NW	0	0	0	2	0	2	1	0	3	0	0	8
NNW	0	0	0	1	4	0	0	1	0	0	0	6
Tot	0	1	10	14	43	41	37	18	35	4	0	203

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 203
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	2	4	5	9	9	6	7	1	0	44
NNE	0	0	1	2	5	4	8	5	8	2	0	35
NE	0	2	0	0	3	11	7	12	15	0	0	50
ENE	0	0	1	2	14	22	2	3	0	1	0	45
E	0	1	1	1	5	4	8	5	9	0	0	34
ESE	0	1	0	5	3	7	4	4	3	0	0	27
SE	0	1	4	1	4	4	1	2	2	0	0	19
SSE	0	0	1	5	4	2	5	6	7	1	1	32
S	0	0	1	3	9	9	14	9	11	3	4	63
SSW	0	1	2	3	10	4	11	10	22	2	3	68
SW	0	2	2	0	11	9	7	3	15	4	7	60
WSW	0	1	2	5	16	8	6	10	6	8	1	63
W	0	2	2	2	9	9	6	5	8	4	0	47
WNW	0	2	2	3	3	16	16	15	25	9	4	95
NW	0	1	1	5	6	9	5	11	18	9	4	69
NNW	0	2	3	5	7	4	10	18	22	5	0	76
Tot	0	17	25	46	114	131	119	124	178	49	24	827

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 827
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION 2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	4	2	4	5	6	2	0	23
NNE	0	1	0	1	3	1	2	5	10	0	0	23
NE	0	0	0	1	2	4	2	5	3	1	0	18
ENE	0	1	0	2	5	10	9	3	2	1	0	33
E	0	0	1	1	3	8	10	13	19	2	0	57
ESE	0	0	0	1	3	7	9	9	6	1	0	36
SE	0	1	0	3	7	6	8	5	6	4	0	40
SSE	0	1	1	3	8	8	9	19	20	2	1	72
S	0	1	1	1	4	11	13	20	25	15	3	94
SSW	0	1	1	1	3	11	11	9	17	9	0	63
SW	0	0	0	0	7	3	5	3	13	6	3	40
WSW	0	0	1	0	3	1	7	8	7	2	1	30
W	0	1	1	0	3	3	5	7	5	2	1	28
WNW	0	0	4	0	3	4	14	5	14	2	1	47
NW	0	0	0	0	1	7	10	10	13	4	0	45
NNW	0	0	0	0	1	4	2	1	5	2	0	15
Tot	0	7	10	14	60	90	120	127	171	55	10	664

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 664
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	0	1	0	1	3	7	0	0	14
NNE	0	0	2	0	0	1	4	1	4	0	0	12
NE	0	0	0	0	0	1	0	0	0	0	0	1
ENE	0	2	0	0	3	1	0	0	0	0	0	6
E	0	1	1	0	2	2	1	3	0	0	0	10
ESE	0	0	1	1	4	4	0	2	5	3	0	20
SE	0	0	0	3	6	3	7	4	11	0	0	34
SSE	0	0	1	3	11	8	14	4	1	0	0	42
S	0	2	2	5	4	12	7	3	4	1	0	40
SSW	0	1	2	2	5	5	5	9	7	1	0	37
SW	0	3	1	1	3	4	2	3	4	1	0	22
WSW	0	0	0	0	4	4	7	4	3	0	0	22
W	0	0	0	0	8	8	8	4	0	0	0	28
WNW	0	0	0	1	5	6	5	4	3	0	0	24
NW	0	1	4	4	3	0	0	4	6	0	0	22
NNW	0	0	1	1	0	2	2	2	3	1	0	12
Tot	0	10	17	21	59	61	63	50	58	7	0	346

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 346
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Jul - Sep for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	1	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	2	0	2
SE	0	0	0	1	0	1	0	0	0	0	0	2
SSE	0	0	0	0	0	0	0	1	0	0	0	1
S	0	0	2	0	1	2	0	0	0	0	0	5
SSW	0	1	0	1	1	2	0	0	0	0	0	5
SW	0	1	1	1	1	0	0	0	0	0	0	4
WSW	0	1	0	0	2	1	3	2	0	0	0	9
W	0	0	0	1	2	2	4	0	0	0	0	9
WNW	0	0	0	1	0	1	1	2	0	0	0	5
NW	0	0	0	1	0	1	0	0	0	0	0	2
NNW	0	0	0	0	0	0	0	0	0	1	0	1
Tot	0	3	3	6	7	11	8	5	0	3	0	46

Hours of Calm 1
Hours of Variable Direction 0
Hours of Valid Data 47
Hours of Missing Data 2
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

All Stabilities

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	8	5	8	14	16	16	10	7	3	3	90
NNE	0	3	7	11	10	25	10	6	0	0	0	72
NE	0	5	4	7	9	6	7	1	0	0	0	39
ENE	0	2	3	8	6	0	0	0	0	0	0	19
E	1	0	7	13	24	7	0	0	0	0	0	52
ESE	0	3	7	12	35	54	29	7	0	0	0	147
SE	0	4	3	6	11	8	11	11	3	0	0	57
SSE	0	5	10	16	43	42	36	25	15	2	0	194
S	0	5	15	16	47	50	48	30	20	1	0	232
SSW	0	5	8	20	31	38	30	23	35	5	0	195
SW	0	4	14	13	55	28	13	15	17	0	0	159
WSW	0	4	6	8	24	17	13	9	1	8	0	90
W	0	2	11	12	52	42	58	47	69	3	0	296
WNW	0	4	12	17	40	61	58	42	28	2	0	264
NW	0	3	10	7	19	29	34	14	10	0	0	126
NNW	0	5	14	16	24	40	28	23	10	8	3	171
Tot	1	62	136	190	444	463	391	263	215	32	6	2203

Hours of Calm 0
Hours of Variable Direction 1
Hours of Valid Data 2204
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	0	0	0	0	0	0	0	1
NNE	0	0	1	0	1	0	0	2	0	0	0	4
NE	0	0	0	2	0	2	2	0	0	0	0	6
ENE	0	0	0	0	2	0	0	0	0	0	0	2
E	0	0	0	2	4	0	0	0	0	0	0	6
ESE	0	0	0	2	0	5	4	0	0	0	0	11
SE	0	0	0	1	0	0	1	0	0	0	0	2
SSE	0	0	0	1	1	0	2	1	0	0	0	5
S	0	0	1	0	1	0	0	2	1	0	0	5
SSW	0	0	0	1	0	0	2	2	0	1	0	6
SW	0	0	0	1	1	2	1	2	1	0	0	8
WSW	0	0	0	1	2	0	1	3	1	0	0	8
W	0	0	0	0	1	0	1	1	13	2	0	18
WNW	0	0	0	0	0	0	6	2	3	1	0	12
NW	0	0	0	0	0	1	6	1	0	0	0	8
NNW	0	0	0	1	0	0	2	1	0	0	0	4
Tot	0	0	2	13	13	10	28	17	19	4	0	106

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 106
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	0	0	0	1	0	1	0	0	1	4
NNE	0	0	0	0	0	2	3	1	0	0	0	6
NE	0	0	0	0	1	0	0	0	0	0	0	1
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	1	0	1	0	0	0	0	0	0	2
ESE	0	0	0	1	0	1	4	0	0	0	0	6
SE	0	0	0	0	0	1	0	0	0	0	0	1
SSE	0	0	0	0	1	0	0	1	3	0	0	5
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	1	1	1	1	1	0	5
SW	0	0	1	0	1	0	0	0	2	0	0	4
WSW	0	0	0	0	0	0	2	1	0	0	0	3
W	0	0	0	0	1	2	2	3	3	0	0	11
WNW	0	0	0	0	0	1	2	1	0	0	0	4
NW	0	0	0	0	0	1	1	0	0	0	0	2
NNW	0	0	0	0	0	0	1	0	0	0	2	3
Tot	0	1	2	1	6	10	16	9	9	1	3	58

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 58
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	1	0	0	0	1	2
NNE	0	0	1	0	0	2	0	0	0	0	0	3
NE	0	0	0	0	0	0	0	1	0	0	0	1
ENE	0	0	0	1	0	0	0	0	0	0	0	1
E	0	0	1	0	0	0	0	0	0	0	0	1
ESE	0	0	0	0	0	1	0	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	1	0	0	1	0	0	1	0	3
S	0	0	0	0	0	0	2	0	2	0	0	4
SSW	0	0	0	0	0	1	0	0	6	1	0	8
SW	0	0	0	0	0	0	1	2	2	0	0	5
WSW	0	0	0	0	1	0	1	0	0	0	0	2
W	0	0	0	0	4	2	1	1	3	0	0	11
WNW	0	0	0	0	2	2	3	1	1	0	0	9
NW	0	0	0	0	0	0	2	1	0	0	0	3
NNW	0	0	0	0	0	0	1	3	0	0	0	4
Tot	0	0	2	2	7	8	13	9	14	2	1	58

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 58
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction	Wind Speed Range (m/s)											Total
Sector	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	7	6	15	9	5	3	1	47
NNE	0	0	0	0	0	9	6	2	0	0	0	17
NE	0	0	1	3	4	0	5	0	0	0	0	13
ENE	0	0	2	1	2	0	0	0	0	0	0	5
E	0	0	3	6	6	4	0	0	0	0	0	19
ESE	0	0	2	2	10	26	13	4	0	0	0	57
SE	0	0	0	2	0	3	2	7	0	0	0	14
SSE	0	0	2	5	12	15	15	14	3	1	0	67
S	0	0	0	0	13	14	19	10	1	1	0	58
SSW	0	0	1	3	9	23	18	10	12	1	0	77
SW	0	0	0	1	13	9	7	4	6	0	0	40
WSW	0	1	0	6	6	7	4	4	0	7	0	35
W	0	0	4	4	10	23	37	29	48	1	0	156
WNW	0	0	1	2	19	36	33	32	23	1	0	147
NW	0	0	0	0	10	17	24	11	10	0	0	72
NNW	0	0	2	2	9	30	22	18	10	8	1	102
Tot	0	1	18	38	130	222	220	154	118	23	2	926

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 926
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	3	1	5	7	9	0	0	2	0	0	27
NNE	0	0	2	4	8	12	1	1	0	0	0	28
NE	0	3	3	1	4	4	0	0	0	0	0	15
ENE	0	1	1	6	1	0	0	0	0	0	0	9
E	0	0	0	3	11	3	0	0	0	0	0	17
ESE	0	3	5	5	15	16	8	3	0	0	0	55
SE	0	2	3	3	11	4	8	4	3	0	0	38
SSE	0	4	7	7	25	27	18	9	9	0	0	106
S	0	3	11	11	26	35	27	18	16	0	0	147
SSW	0	1	5	11	12	13	9	10	16	1	0	78
SW	0	2	5	6	16	11	3	7	6	0	0	56
WSW	0	2	4	1	8	9	5	1	0	1	0	31
W	0	0	4	7	30	15	17	13	2	0	0	88
WNW	0	1	8	12	18	22	14	6	1	0	0	82
NW	0	3	4	6	6	8	1	1	0	0	0	29
NNW	0	4	5	11	12	10	2	1	0	0	0	45
Tot	0	32	68	99	210	198	113	74	55	2	0	851

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 851
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	3	2	1	0	0	0	0	0	0	0	6
NNE	0	3	2	7	1	0	0	0	0	0	0	13
NE	0	2	0	1	0	0	0	0	0	0	0	3
ENE	0	1	0	0	0	0	0	0	0	0	0	1
E	1	0	2	1	2	0	0	0	0	0	0	6
ESE	0	0	0	2	10	5	0	0	0	0	0	17
SE	0	1	0	0	0	0	0	0	0	0	0	1
SSE	0	1	0	2	4	0	0	0	0	0	0	7
S	0	0	2	4	7	1	0	0	0	0	0	14
SSW	0	3	2	4	8	0	0	0	0	0	0	17
SW	0	0	6	5	17	6	1	0	0	0	0	35
WSW	0	1	2	0	7	1	0	0	0	0	0	11
W	0	2	2	1	6	0	0	0	0	0	0	11
WNW	0	2	3	2	1	0	0	0	0	0	0	8
NW	0	0	6	1	3	2	0	0	0	0	0	12
NNW	0	1	5	2	3	0	0	0	0	0	0	11
Tot	1	20	34	33	69	15	1	0	0	0	0	173

Hours of Calm 0
Hours of Variable Direction 1
Hours of Valid Data 174
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 35ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	1	2	0	0	0	0	0	0	0	0	3
NNE	0	0	1	0	0	0	0	0	0	0	0	1
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	1	0	0	0	0	0	0	0	1
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	1	0	0	0	0	0	0	0	0	0	1
SSE	0	0	1	0	0	0	0	0	0	0	0	1
S	0	2	1	1	0	0	0	0	0	0	0	4
SSW	0	1	0	1	2	0	0	0	0	0	0	4
SW	0	2	2	0	7	0	0	0	0	0	0	11
WSW	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	1	0	0	0	0	0	0	0	0	1
WNW	0	1	0	1	0	0	0	0	0	0	0	2
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	2	0	0	0	0	0	0	0	0	2
Tot	0	8	10	4	9	0	0	0	0	0	0	31

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 31
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

All Stabilities

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	4	19	10	16	17	14	8	8	98
NNE	0	2	1	2	10	20	27	11	8	0	0	81
NE	0	0	0	5	12	7	7	6	2	0	0	39
ENE	0	2	3	7	13	3	0	0	0	0	0	28
E	0	1	2	9	10	11	11	0	0	0	0	44
ESE	0	1	1	3	10	14	41	30	16	1	0	117
SE	0	0	3	3	6	7	16	13	28	1	0	77
SSE	0	1	2	5	11	21	27	27	37	10	2	143
S	0	1	4	0	20	29	55	56	54	13	3	235
SSW	0	1	3	3	22	33	41	33	47	29	5	217
SW	0	1	3	4	27	31	29	31	21	18	2	167
WSW	0	0	3	10	19	5	18	23	22	4	8	112
W	0	3	4	5	19	25	44	47	78	51	15	291
WNW	0	0	5	4	20	26	39	67	77	31	5	274
NW	1	1	2	4	13	16	21	31	33	9	1	132
NNW	0	1	2	5	10	19	36	25	34	5	12	149
Tot	1	15	40	73	241	277	428	417	471	180	61	2204

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 2204
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	0	0	0	0	0	0	0	1
NNE	0	0	0	1	0	1	0	0	2	0	0	4
NE	0	0	0	2	0	0	2	2	0	0	0	6
ENE	0	0	0	0	1	1	0	0	0	0	0	2
E	0	0	0	2	3	1	0	0	0	0	0	6
ESE	0	0	0	0	1	0	5	2	0	0	0	8
SE	0	0	0	2	0	0	3	0	0	0	0	5
SSE	0	0	0	1	0	1	0	2	1	0	0	5
S	0	0	1	0	1	0	0	1	2	0	0	5
SSW	0	0	0	0	2	0	1	1	2	0	1	7
SW	0	0	0	0	0	2	0	1	2	1	0	6
WSW	0	0	0	1	2	0	0	1	4	0	0	8
W	0	0	0	1	0	1	0	1	2	11	3	19
WNW	0	0	0	0	0	0	0	4	4	3	1	12
NW	0	0	0	0	0	1	0	5	2	0	0	8
NNW	0	0	0	0	1	0	0	2	1	0	0	4
Tot	0	0	1	11	11	8	11	22	22	15	5	106

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 106
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	1	0	1	0	2	4
NNE	0	0	0	0	0	0	2	3	1	0	0	6
NE	0	0	0	0	1	0	0	0	0	0	0	1
ENE	0	0	0	0	2	0	0	0	0	0	0	2
E	0	0	0	1	0	0	0	0	0	0	0	1
ESE	0	0	0	1	0	0	1	2	1	0	0	5
SE	0	0	0	0	0	0	1	1	0	0	0	2
SSE	0	0	0	0	0	0	0	0	2	2	0	4
S	0	0	0	0	1	0	0	0	0	0	0	1
SSW	0	0	0	0	0	0	2	0	1	2	0	5
SW	0	0	0	0	0	1	0	1	1	1	0	4
WSW	0	0	0	0	0	0	0	0	2	0	0	2
W	0	0	1	0	1	2	0	2	2	3	0	11
WNW	0	0	0	0	0	0	1	1	3	0	0	5
NW	0	0	0	0	0	0	1	0	1	0	0	2
NNW	0	1	0	0	0	0	0	1	0	0	1	3
Tot	0	1	1	2	5	3	9	11	15	8	3	58

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 58
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	1	0	0	1	2
NNE	0	0	0	1	0	0	2	0	1	0	0	4
NE	0	0	0	1	0	0	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	1	0	0	0	0	0	0	0	0	1
ESE	0	0	0	0	0	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	1	0	0	0	1	2
S	0	0	0	0	1	0	1	1	1	0	0	4
SSW	0	0	0	0	0	1	0	0	2	6	0	9
SW	0	0	0	0	0	0	0	1	3	1	0	5
WSW	0	0	0	0	2	0	0	1	0	0	0	3
W	0	0	0	0	1	2	1	0	3	2	0	9
WNW	0	0	0	0	1	2	2	2	2	1	0	10
NW	0	0	0	0	0	0	0	1	2	0	0	3
NNW	0	0	0	0	0	0	0	1	3	0	0	4
Tot	0	0	1	2	5	5	8	8	17	10	2	58

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 58
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	1	4	4	6	11	13	6	5	51
NNE	0	1	0	0	0	4	6	5	3	0	0	19
NE	0	0	0	0	5	1	0	3	2	0	0	11
ENE	0	0	0	3	3	0	0	0	0	0	0	6
E	0	0	1	6	2	6	1	0	0	0	0	16
ESE	0	0	1	0	5	8	22	9	7	0	0	52
SE	0	0	1	1	3	0	3	3	11	0	0	22
SSE	0	0	1	3	4	9	10	9	18	1	1	56
S	0	0	1	0	6	10	16	16	15	0	1	65
SSW	0	0	0	1	4	10	19	15	19	5	1	74
SW	0	0	0	1	6	9	6	8	8	4	0	42
WSW	0	0	1	5	7	4	4	2	8	4	7	42
W	0	0	2	2	7	8	12	25	43	34	11	144
WNW	0	0	1	0	8	15	14	42	46	25	4	155
NW	0	0	0	0	2	7	13	16	24	9	1	72
NNW	0	0	0	1	1	10	27	16	28	5	11	99
Tot	0	1	10	24	67	105	159	180	245	93	42	926

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 926
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	2	11	4	8	5	0	2	0	32
NNE	0	0	0	0	6	10	14	3	1	0	0	34
NE	0	0	0	0	4	4	5	1	0	0	0	14
ENE	0	0	0	2	6	1	0	0	0	0	0	9
E	0	0	0	0	5	4	10	0	0	0	0	19
ESE	0	0	0	2	3	5	10	10	7	1	0	38
SE	0	0	1	0	3	6	4	8	14	1	0	37
SSE	0	1	1	1	6	11	16	16	16	7	0	75
S	0	0	0	0	10	18	33	34	36	13	2	146
SSW	0	0	1	2	11	17	13	16	23	16	3	102
SW	0	0	0	3	16	13	12	8	5	11	2	70
WSW	0	0	1	2	5	0	5	10	7	0	1	31
W	0	1	1	0	8	10	24	16	28	1	1	90
WNW	0	0	3	4	10	8	22	17	22	2	0	88
NW	1	1	2	3	11	6	4	7	2	0	0	37
NNW	0	0	0	3	5	7	7	5	2	0	0	29
Tot	1	3	10	24	120	124	187	156	163	54	9	851

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 851
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	4	2	1	0	0	0	0	7
NNE	0	0	1	0	4	4	3	0	0	0	0	12
NE	0	0	0	2	1	2	0	0	0	0	0	5
ENE	0	1	3	1	1	1	0	0	0	0	0	7
E	0	1	0	0	0	0	0	0	0	0	0	1
ESE	0	1	0	0	1	1	1	7	1	0	0	12
SE	0	0	1	0	0	1	5	1	3	0	0	11
SSE	0	0	0	0	1	0	0	0	0	0	0	1
S	0	1	1	0	1	0	5	4	0	0	0	12
SSW	0	1	1	0	5	5	5	1	0	0	0	18
SW	0	0	1	0	3	6	10	10	2	0	0	32
WSW	0	0	1	1	3	1	7	5	1	0	0	19
W	0	1	0	0	2	2	7	3	0	0	0	15
WNW	0	0	1	0	1	1	0	1	0	0	0	4
NW	0	0	0	1	0	2	2	2	2	0	0	9
NNW	0	0	1	1	3	2	2	0	0	0	0	9
Tot	0	6	11	6	30	30	48	34	9	0	0	174

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 174
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 150ft Stability 150ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	0	0	0	0	0	0	0	0	1
NNE	0	1	0	0	0	1	0	0	0	0	0	2
NE	0	0	0	0	1	0	0	0	0	0	0	1
ENE	0	1	0	1	0	0	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	1	0	0	1	0	0	0	0	0	2
SSW	0	0	1	0	0	0	1	0	0	0	0	2
SW	0	1	2	0	2	0	1	2	0	0	0	8
WSW	0	0	0	1	0	0	2	4	0	0	0	7
W	0	1	0	2	0	0	0	0	0	0	0	3
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	1	0	0	0	0	1
NNW	0	0	1	0	0	0	0	0	0	0	0	1
Tot	0	4	6	4	3	2	6	6	0	0	0	31

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 31
Hours of Missing Data 4
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

All Stabilities

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	2	1	5	14	13	15	30	6	13	99
NNE	0	1	0	3	6	5	20	20	19	0	0	74
NE	0	0	0	0	6	9	12	15	11	1	0	54
ENE	0	0	1	7	13	9	1	2	1	0	0	34
E	0	0	5	3	6	11	13	8	8	1	0	55
ESE	0	0	1	7	8	6	13	25	25	13	0	98
SE	0	0	3	4	6	6	13	6	28	30	1	97
SSE	0	0	1	1	6	8	19	24	66	25	19	169
S	0	0	2	2	11	8	20	29	80	35	11	198
SSW	0	0	1	3	12	15	23	36	64	32	20	206
SW	0	0	3	4	11	22	15	32	43	20	8	158
WSW	0	1	2	6	12	11	8	16	40	18	15	129
W	0	1	1	5	10	29	15	31	102	81	31	306
WNW	0	0	0	5	11	9	18	23	90	62	25	243
NW	0	1	2	3	7	20	16	26	56	20	6	157
NNW	0	0	2	0	6	6	13	29	42	14	14	126
Tot	0	4	26	54	136	188	232	337	705	358	163	2203

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 2203
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class A Extremely Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	1	0	0	0	0	0	1
ESE	0	0	0	0	0	0	0	1	0	0	0	1
SE	0	0	0	0	0	0	2	0	0	0	0	2
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	1	1
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	0	0	0	0	1	2	1	0	0	1	5

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 5
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class B Moderately Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	1	0	1	0	0	1	0	0	3
NE	0	0	0	0	0	0	2	1	0	0	0	3
ENE	0	0	0	0	1	1	0	0	0	0	0	2
E	0	0	0	0	2	1	0	0	0	0	0	3
ESE	0	0	0	0	2	0	1	1	0	0	0	4
SE	0	0	0	0	0	0	1	1	0	0	0	2
SSE	0	0	0	0	0	0	0	2	1	0	0	3
S	0	0	0	2	0	0	0	0	0	0	0	2
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	2	0	0	2
WSW	0	0	0	1	0	0	0	1	2	2	0	6
W	0	0	0	0	0	0	0	0	0	3	5	8
WNW	0	0	0	0	0	0	0	2	1	1	1	5
NW	0	0	0	0	0	0	0	0	1	0	0	1
NNW	0	0	0	0	1	0	0	0	1	0	0	2
Tot	0	0	0	4	6	3	4	8	9	6	6	46

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 46
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class C Slightly Unstable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	0	1	0	0	0	1	0	4	7
NNE	0	0	0	2	0	0	0	2	3	0	0	7
NE	0	0	0	0	0	0	0	1	0	0	0	1
ENE	0	0	0	0	2	1	0	0	0	0	0	3
E	0	0	0	0	0	1	0	0	0	0	0	1
ESE	0	0	0	4	1	0	0	3	1	0	0	9
SE	0	0	0	0	0	0	3	1	1	1	0	6
SSE	0	0	0	0	0	1	0	0	1	1	2	5
S	0	0	0	0	1	0	0	0	3	2	0	6
SSW	0	0	0	0	1	3	2	1	2	0	2	11
SW	0	0	0	0	0	0	0	2	2	3	0	7
WSW	0	0	0	0	2	0	0	0	3	0	0	5
W	0	0	0	0	0	1	1	2	4	7	3	18
WNW	0	0	0	1	0	0	0	1	4	0	2	8
NW	0	0	0	0	0	0	0	3	2	0	0	5
NNW	0	0	0	0	0	0	0	1	1	0	0	2
Tot	0	0	1	7	8	7	6	17	28	14	13	101

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 101
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class D Neutral based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	1	1	8	11	10	13	6	9	59
NNE	0	1	0	0	2	1	14	10	8	0	0	36
NE	0	0	0	0	2	6	5	6	6	0	0	25
ENE	0	0	0	6	3	2	1	1	0	0	0	13
E	0	0	2	2	1	5	10	6	1	0	0	27
ESE	0	0	1	1	2	3	10	11	12	6	0	46
SE	0	0	1	1	6	4	4	2	16	18	1	53
SSE	0	0	1	1	2	2	13	15	44	13	9	100
S	0	0	1	0	8	7	12	23	32	14	3	100
SSW	0	0	0	2	5	8	10	21	24	18	11	99
SW	0	0	1	1	5	12	6	11	11	12	5	64
WSW	0	0	1	2	7	5	4	6	10	6	12	53
W	0	0	1	4	7	18	11	22	63	64	22	212
WNW	0	0	0	2	11	4	14	17	63	51	22	184
NW	0	1	0	0	4	14	13	20	42	17	6	117
NNW	0	0	0	0	3	2	12	26	33	12	14	102
Tot	0	2	9	23	69	101	150	207	378	237	114	1290

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 1290
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class E Slightly Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	1	0	2	4	2	5	12	0	0	26
NNE	0	0	0	0	4	1	4	7	6	0	0	22
NE	0	0	0	0	1	1	1	3	1	1	0	8
ENE	0	0	0	0	4	5	0	0	0	0	0	9
E	0	0	2	0	2	2	3	2	7	1	0	19
ESE	0	0	0	0	2	3	1	9	11	5	0	31
SE	0	0	1	1	0	2	3	2	4	5	0	18
SSE	0	0	0	0	4	4	4	5	18	10	8	53
S	0	0	1	0	0	0	6	5	41	19	8	80
SSW	0	0	1	1	4	4	7	12	35	14	7	85
SW	0	0	1	2	5	10	8	18	23	5	3	75
WSW	0	0	1	2	3	5	1	4	13	7	3	39
W	0	0	0	1	3	6	3	6	25	7	0	51
WNW	0	0	0	2	0	5	3	3	22	5	0	40
NW	0	0	1	3	2	5	3	3	10	1	0	28
NNW	0	0	2	0	1	4	0	2	4	0	0	13
Tot	0	0	11	12	37	61	49	86	232	80	29	597

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 597
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class F Moderately Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	1	2	0	0	2	0	0	5
NNE	0	0	0	0	0	2	2	1	1	0	0	6
NE	0	0	0	0	3	2	4	1	3	0	0	13
ENE	0	0	1	1	2	0	0	1	1	0	0	6
E	0	0	1	1	1	1	0	0	0	0	0	4
ESE	0	0	0	2	0	0	1	0	1	2	0	6
SE	0	0	1	2	0	0	0	0	7	6	0	16
SSE	0	0	0	0	0	1	2	2	2	1	0	8
S	0	0	0	0	1	0	2	1	4	0	0	8
SSW	0	0	0	0	2	0	4	2	3	0	0	11
SW	0	0	1	1	1	0	1	1	3	0	0	8
WSW	0	1	0	1	0	1	3	5	11	0	0	22
W	0	1	0	0	0	4	0	1	10	0	0	16
WNW	0	0	0	0	0	0	1	0	0	5	0	6
NW	0	0	1	0	1	1	0	0	1	2	0	6
NNW	0	0	0	0	1	0	1	0	3	2	0	7
Tot	0	2	5	8	13	14	21	15	52	18	0	148

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 148
Hours of Missing Data 5
Hours in Period 2208

DRESDEN NUCLEAR POWER STATION
2014 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

METEOROLOGICAL DATA
DOCKET NUMBERS: 50-010/50-237/50-249

Joint Frequency Distribution

Site:: Dresden Generating Station

Period:: Months Oct - Dec for years 2014 - 2014

Stability Class G Extremely Stable based on Lapse Rate

Elevations:: Winds 300ft Stability 300ft

Wind Direction Sector	Wind Speed Range (m/s)											Total
	<0.50	0.5- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1- 6.0	6.1- 8.0	8.1- 10.0	>10.00	
N	0	0	0	0	0	0	0	0	2	0	0	2
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	3	1	0	0	4
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	1	0	0	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	1	1	0	0	0	0	0	2
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	2	0	0	2
WSW	0	0	0	0	0	0	0	0	1	3	0	4
W	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	0	0	0	3	1	0	3	6	3	0	16

Hours of Calm 0
Hours of Variable Direction 0
Hours of Valid Data 16
Hours of Missing Data 5
Hours in Period 2208