Commonwealth Edison Company
Dresden Generating Station
6500 North Dresden Road
Morris, IL 60450
Tel 815 942 2920

ComEd

February 24, 1997

JSPLTR: 97-0037

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

Subject: Dresden Nuclear Power Station
Radioactive Effluent Report
NRC Dockets 50-10, 50-237, 50-249

Enclosed is the Radioactive Effluent Report for January Through December, 1996 for Dresden Nuclear Power Station.

A copy of this report will be furnished to the NRC Resident Inspector.

Sincerely,

J. Stephen Perry
Site Vice President
Dresden Station

JSP/PM:ld

Enclosure

cc: See Attached Distribution

1/1

IE48

030092

Annual Report Distribution

Document Control Desk
U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington D.C. 20555
(Original plus two copies)

Illinois Department of Nuclear Safety
Office of Environmental Safety
1035 Outer Park Drive
Springfield, IL 62704

Nuclear Regulatory Commission, Region III
801 Warrenville Road
Lisle, IL 60532
Attn: Chief Reactor Support Programs Branch
(Two copies)

American Nuclear Insurers
29 South Main Street
Suite 300S
West Hartford, CT 06107-2445

U.S. Environmental Protection Agency
Air and Radiation Branch, Region V
Health Physicist (AT-18J)
77 West Jackson Blvd.
Chicago, IL 60604-3590

Murray & Trettel, Inc
Environmental Meteorologist
414 West Frontage Rd
Northfield, IL 60093

Annual Report Distribution

Teledyne Brown Engineering Environmental Services
Midwest Laboratory
General Manager
700 Landwehr Rd
Northbrook, IL 60062

Emergency Preparedness
Emergency Preparedness Director
Downers Grove - ETW III 5th floor

Mr. Lou DelGeorge
Vice President
37 FNE

Nuclear Licensing Operations
Licensing Operations Director
Downers Grove - ETW III 5th Floor

Nuclear Licensing Administration
Central Files Supervisor
Downers Grove - ETW III 5th Floor

ODCM Coordinator
Health Physics Support
Downers Grove - ETW III 8th Floor

REMP Coordinator
Health Physics Support
Downers Grove - ETW III 8th Floor

Frank Rescek
Health Physics Support
Downers Grove - ETW III 8th Floor

DRESDEN NUCLEAR POWER STATION DOCKET NOS. 50-010, 50-237, 50-249
REGULATORY LIMITS

Gaseous Effluents - Dose

This Specification is provided to ensure that the dose at the unrestricted area boundary from gaseous effluents from the units on site will be within the annual dose limits of 10 CFR Part 20 for unrestricted areas. The annual dose limits are the doses associated with the concentrations of 10 CFR Part 20, Appendix B, Table II. These limits provide reasonable assurance that radioactive material discharged in gaseous effluents will not result in the exposure of an individual in an unrestricted area to annual average concentrations exceeding the limits specified in Appendix B, Table II of 10 CFR Part 20 (10 CFR Part 20.106(b)). The specified release rate limits restrict, at all times, the corresponding gamma and beta dose rates above background to an individual at or beyond the unrestricted area boundary to less than or equal to 500 mrem/year to the total body or to less than or equal to 3000 mrem/year to the skin. These release rate limits also restrict, at all times, the corresponding thyroid dose rate above background to a child via the inhalation pathway to less than or equal to 1500 mrem/year. For purposes of calculating doses resulting from airborne releases, the main chimney is considered to be an elevated release point and the reactor building vent stack is considered to be a mixed mode release point.

Dose, Noble Gases

This Specification is provided to implement the requirements of Sections II.B, III.A and IV.A of Appendix I, 10 CFR Part 50. The Limiting Conditions For Operation implement the guides set forth in Section II.3 of Appendix I. The statements provide the required operating flexibility and at the same time implement the guides set forth in Section IV.A of Appendix I to assure that the releases of radioactive material in gaseous effluents will be kept "as low as is reasonably achievable." The Surveillance Requirements implement the requirements in Section III.A of Appendix I that conformance with the guides of Appendix I is to be shown by calculational procedures based on models and data such that the actual exposure of an individual through the appropriate pathways is unlikely to be substantially underestimated. The dose calculations established in the ODCM for calculating the doses due to the actual release rates of radioactive noble gases in gaseous effluents will be consistent with the methodology provided in Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," Revision 1, October 1977 and Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water Cooled Reactors," Revision 1, July 1977. The ODCM equations provide for determining the air doses at the unrestricted boundary based upon the historical average atmospheric conditions. NUREG-0133 provides methods for dose calculations consistent with Regulatory Guides 1.109 and 1.111.

Dose, Radioiodines, Radioactive Material in Particulate Form and Radionuclides Other than Noble Gases

This specification is provided to implement the requirements of Sections II.C, III.A and IV.A of Appendix I, 10 CFR Part 50. The Limiting Conditions for Operation are the guides set forth in Section II.C of Appendix I. The statements provide the required operating flexibility and at the same time implement the guides set forth in Section IV.A of Appendix I to assure that the releases of radioactive materials in gaseous effluents will be kept "as low as reasonably achievable." The ODCM calculational methods specified in the surveillance requirements implement the requirements in Section III.A of Appendix I that conformance with the guides of Appendix I be shown by calculational procedures based on models and data such that the actual exposure of an individual through appropriate pathways is unlikely to be substantially underestimated. The ODCM calculational methods approved by NRC for calculating the doses due to the actual release rates of the subject materials are required to be consistent with the methodology provided in Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I", Revision 1, October 1977 and Regulatory Guide 1.111, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors," Revision 1, July 1977. These equations also provide for determining the actual doses based upon the historical average atmospheric conditions. The release rate specifications for radioiodines, radioactive material in particulate form and radionuclides other than noble gases are dependent on the existing radionuclide pathways to man, in the unrestricted area. The pathways which were examined in the development of these specifications were: 1) individual inhalation of airborne radionuclides, 2) deposition of radionuclides onto green leafy vegetation with subsequent consumption by man and 3) deposition onto grassy areas where milk animals graze with consumption of the milk by man.

Gaseous Waste Treatment

The OPERABILITY of the gaseous waste treatment which reduces amounts or concentrations of radioactive materials ensures that the system will be available for use whenever gaseous effluents require treatment prior to release to the environment. The requirement that the appropriate portions of this system be operable when specified provides reasonable assurance that the releases of radioactive materials in gaseous effluents will be kept "as low as reasonably achievable". This specification implements the requirements of 10 CFR Part 50.36a, General Design Criterion 60 of Appendix A to 10 CFR Part 50, and design objective Section II.D of Appendix I to 10 CFR Part 50.

LIQUID EFFLUENTS

Concentration

This specification is provided to ensure the concentration of radioactive materials released in liquid waste effluents from the site to unrestricted areas will be less than the concentration levels specified in 10 CFR Part 20, Appendix B, Table II, Column 2. The concentration limit for noble gases, MPC in air (submersion), was converted to an equivalent concentration in water using the International Commission on Radiological Protection (ICRP) Publication 2.

Dose

This specification is provided to implement the requirements of Sections II.A, III.A and IV.A of Appendix I, 10 CFR Part 50. The Limiting Condition for Operation implements the guides set forth in Section II.A of Appendix I. The statements provide the required operating flexibility and at the same time implement the guides set forth in Section IV.A of Appendix I to assure that the releases of radioactive material in liquid effluents will be kept "as low as reasonably achievable". The dose calculations in the ODCM implement the requirements in Section III.A of Appendix I that conformance with the guides of Appendix I be shown by calculational procedures based on models and data such that the actual exposure of an individual through appropriate pathways is unlikely to be substantially underestimated. The equations specified in the ODCM for calculating the doses due to the actual release rates of radioactive materials in liquid effluents will be consistent with the methodology provided in Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I", Revision 1, October 1977 and Regulatory Guide 1.113, "Estimating Aquatic Dispersion of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I", April 1977. NUREG-0113 provides methods for dose calculations with Reg Guide 1.109 and 1.113.

Liquid Waste Treatment

The operability of the liquid radwaste treatment system ensures that this system will be available for use whenever liquid effluents require treatment prior to release to the environment. The requirement that the appropriate portions of this system be used when specified provides assurance that the releases of radioactive materials in liquid effluents will be kept "as low as reasonably achievable". This specification implements the requirements of 10 CFR Part 50 and design objective Section II.D of Appendix I to 10 CFR Part 50.

DRESDEN NUCLEAR POWER STATION DOCKET NOS. 50-010, 50-237, 50-249
MAXIMUM PERMISSIBLE CONCENTRATIONS (MPC)

The concentration of radioactive materials released in gaseous and liquid effluents from the site to unrestricted areas will be less than the concentration levels specified in 10 CFR Part 20, Appendix B, Table II, Columns 1 and 2. The concentration limit for noble gases, MPC in air (submersion), was converted to an equivalent concentration in water using the International Commission on Radiological Protection (ICRP) Publication 2.

MAXIMUM PERMISSIBLE CONCENTRATION OF DISSOLVED OR ENTRAINED NOBLE GASES RELEASED FROM THE SITE TO UNRESTRICTED AREAS IN LIQUID WASTE

NUCLIDE	MPC(uCi/ml)*
Kr-85m	2.0E-04
Kr-85	5.0E-04
Kr-87	4.0E-05
Kr-88	9.0E-05
Ar-41	7.0E-05
Xe-131m	7.0E-04
Xe-133m	5.0E-04
Xe-133	6.0E-04
Xe-135m	2.0E-04
Xe-135	2.0E-04

* Computed from Equation 20 of ICRP Publication 2 (1959), adjusted for infinite cloud submersion in water, and R = 0.01 rem/week, density = 1.0 g/cc and Pw/Pt = 1.0.

AVERAGE ENERGY

The average energy of fission and activation gases was calculated for the gaseous effluents released from the site. The average energy is based on the percentage of each fission gas nuclide present and its average energy per disintegration (E in MeV/dis) for gamma and beta emissions separately.

E_{GAMMA} = 4.46E-01 MeV/dis

E_{BETA} = 2.94E-01 MeV/dis

EQUIPMENT OUT-OF SERVICE

The Unit 2 Service Water Monitor was out of service from 8 November 1995 to 27 April 1996 and 31 May 1996 to 2 September 1996 due to insufficient Service Water flow at the sampling location. Once sufficient flow existed, the monitor was returned to service. During this time the service water was monitored by Technical Specification requirements of grab samples once every 12 hours.

The sample pump for the Chemical Cleaning Building Vent Stack was broken between 1 March 1996 and 19 June 1996. This sample location is not required per Technical Specifications or the Offsite Dose Calculation Manual.

MEASUREMENTS AND APPROXIMATIONS

A. Fission and activation gases: The D-1 Chimney, D2/3 Chimney, and D2/3 Reactor Building Vent are sampled weekly via a grab sample. The samples are analyzed for specific isotopes present in the release using a Hyper-Pure Germanium (HP Ge) Spectrometry System. Tritium is sampled monthly via a grab sample on the D-1 Chimney, D2/3 Chimney, and D2/3 Reactor Building Vent and analyzed using a Liquid Scintillation Counter.

B. Iodine and Particulate: Iodine and particulate samples from the D-1 Chimney, D2/3 Chimney and the D2/3 Reactor Building Vent are collected for a maximum seven day period. These samples are analyzed for specific nuclides present in the release using a HP Ge spectrometry system. When iodine or particulate samples are not used for reporting the release rate due to management decision that the sample may not be representative, an average of the preceding sample and the following sample is used to calculate the release. A composite of the particulate samples is sent to a vendor to be analyzed for Fe-55, Sr-89, Sr-90, and Gross Alpha activity.

C. Liquid Effluents: Analyzed for specific isotopes present in the release using a HP Ge spectrometry system. A composite of all batches for the month is sent to a vendor to be analyzed for Sr-89, Sr-90, Fe-55, H-3, and Gross Alpha activity. A sample of Containment Cooling Service Water (CCSW) system is analyzed each month for specific isotopes present in the release using a HP Ge spectrometry system. A sample of CCSW system is sent to a vendor to be analyzed for Sr-89, Sr-90, Fe-55, H-3, and Gross Alpha activity.

D. Estimation of Overall Errors: The methods used for estimating overall errors associated with radioactivity measurements vary with discharge path and form of isotopes. Factors that contribute to the error include such items as calibration of counting equipment, counting statistics, sampling error, discharge volume, and flow rate monitors.

E. Estimation of Data:

The results for the Fe-55, Sr-89, Sr-90 and gross alpha samples for the majority of December were not yet available from the offsite vendor when this report was prepared. A corrected Effluent Report will be submitted after the data is available and compiled.

In January 1996 while the U2/3 Reactor Building Vent SPING was being calibrated, it was discovered that there was inleakage into the SPING. It was assumed that the inleakge started immediately following the previous calibration (September 1994). In the worst case scenario almost 50% of the air going through the SPING would be from the Turbine Building and not from the Reactor Vent (this case assumes always operating at the low flow alarm level which is very conservative). In order to compensate for the dilution which could be caused by inleakge, the amount of curies for each isotope was conservatively doubled for the U2/3 Reactor Building Vent for the affected period.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

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

SUMMATION OF ALL GASEOUS RELEASES

TYPE OF RELEASE

		UNITS	1st Quarter	2nd Quarter	EST. TOTAL ERROR, %
A.	FISSION AND ACTIVATION GASES				
1.	Total Release	Ci	1.30E+01	4.64E+01	7.31E+00
2.	Average Release Rate for Period	µCi/sec	1.65E+00	5.90E+00	
3.	Percent of Technical Specification Limit	%	*	*	
B.	IODINES				
1.	Total Iodine-131	Ci	5.64E-04	4.18E-04	2.16E+01
2.	Average Release Rate of I-131 for Period	µCi/sec	7.17E-05	5.31E-05	
3.	Percent of Technical Specification Limit	%	*	*	
4.	Total Iodine-131, Iodine-133 and Iodine-135	Ci	3.81E-03	3.88E-03	
C.	PARTICULATES				
1.	Particulates with half-lives > 8 days	Ci	7.77E-04	9.75E-04	3.41E+01
2.	Average Release Rate for Period	µCi/sec	9.88E-05	1.24E-04	
3.	Percent of Technical Specification Limit	%	*	*	
4.	Gross Alpha Radioactivity	Ci	<LLD	<LLD	
D.	TRITIUM				
1.	Total Release	Ci	1.11E+00	6.02E-01	7.89E+00
2.	Average Release Rate for Period	µCi/sec	1.41E-01	7.65E-02	
3.	Percent of Technical Specification Limit	%	*	*	

*The information is contained in the Radiological Impact on the Public section of the report. Total airborne release data is provided which includes fission and activation gases, iodines, particulates, and tritium.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

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

SUMMATION OF ALL GASEOUS RELEASES

TYPE OF RELEASE

		UNITS	3rd Quarter	4th Quarter	EST. TOTAL ERROR, %
A.	FISSION AND ACTIVATION GASES				
1.	Total Release	Ci	5.50E-01	5.89E+00	7.31E+00
2.	Average Release Rate for Period	µCi/sec	7.00E-02	7.41E-01	
3.	Percent of Technical Specification Limit	%	*	*	
B.	IODINES				
1.	Total Iodine-131	Ci	2.94E-05	2.87E-04	2.16E+01
2.	Average Release Rate of I-131 for Period	µCi/sec	3.74E-06	3.61E-05	
3.	Percent of Technical Specification Limit	%	*	*	
4.	Total Iodine-131, Iodine-133 and Iodine-135	Ci	3.88E-03	2.98E-03	
C.	PARTICULATES				
1.	Particulates with half-lives > 8 days	Ci	2.74E-04	1.21E-04	3.41E+01
2.	Average Release Rate for Period	µCi/sec	3.48E-05	1.52E-05	
3.	Percent of Technical Specification Limit	%	*	*	
4.	Gross Alpha Radioactivity	Ci	<LLD	<LLD	
D.	TRITIUM				
1.	Total Release	Ci	1.88E-01	7.32E-01	7.89E+00
2.	Average Release Rate for Period	µCi/sec	2.38E-02	9.21E-02	
3.	Percent of Technical Specification Limit	%	*	*	

*The information is contained in the Radiological Impact on the Public section of the report. Total airborne release data is provided which includes fission and activation gases, iodines, particulates, and tritium.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
January Through December 1996

Docket Numbers: 50-010/50-237/50-249
TABLE OF LOWER LIMITS OF DETECTABILITY
FOR AIRBORNE EFFLUENTS

1. FISSION GASES	(uCi/cc)
Xe-138	1.22E-07
Xe-135m	6.43E-08
Kr-87	3.64E-08
Kr-88	3.90E-08
Kr-85m	1.11E-08
Kr-85	2.99E-06
Xe-135	9.36E-09
Xe-133	3.10E-08
Ar-41	3.21E-08
Xe133m	8.44E-08

2. IODINES	(uCi/cc)
I-131	4.80E-13
I-133	7.86E-13
I-135	6.03E-12

3. PARTICULATES	(uCi/cc)
Sr-89	2.56E-14
Sr-90	1.09E-14
Cr-51	3.67E-12
Mn-54	8.08E-13
Co-58	5.94E-13
Fe-55	1.55E-14
Fe-59	1.23E-12
Co-60	1.25E-12
Zr-95	8.70E-13
Nb-95	4.94E-13
Mo-99	4.16E-13
Ru-103	3.63E-13
Ag-110m	1.59E-12
Sb-124	4.03E-13
I-131	5.19E-13
Cs-134	4.94E-13
Cs-136	5.63E-13
Cs-137	5.32E-12
Ba-140	1.95E-12
La-140	2.32E-12
Ce-141	4.85E-13
Ce-144	2.24E-12
Zn-65	1.49E-12
Ba-133	4.81E-13
Sb-125	9.32E-13
Others:	
H-3	8.47E-07
Gross Alpha	2.42E-15

DRESDEN NUCLEAR POWER STATION
UNIT 1 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

D1 MAIN CHIMNEY

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

DOCKET NUMBERS: 50-010

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci		*	*	*	*	*
Kr-85m	Ci		*	*	*	*	*
Kr-87	Ci		*	*	*	*	*
Kr-88	Ci		*	*	*	*	*
Xe-133	Ci		*	*	*	*	*
Xe-135	Ci		*	*	*	*	*
Xe135m	Ci		*	*	*	*	*
Xe-138	Ci		*	*	*	*	*
TOTAL	Ci		*	*	*	*	*
IODINES							
I-131	Ci		*	*	*	*	*
I-133	Ci		*	*	*	*	*
I-135	Ci		*	*	*	*	*
TOTAL	Ci		*	*	*	*	*
PARTICULATES							
Fe-55	Ci		*	4.19E-06	1.82E-06	*	6.01E-06
Sr-89	Ci		*	*	*	*	*
Sr-90	Ci		*	*	*	*	*
Cr-51	Ci		*	*	*	*	*
Mn-54	Ci		*	1.81E-06	*	6.27E-07	2.44E-06
Co-58	Ci		*	*	*	*	*
Fe-59	Ci		*	*	*	*	*
Co-60	Ci		6.71E-05	9.56E-06	2.20E-05	1.22E-05	1.11E-04
Zr-95	Ci		*	*	*	*	*
Mo-99	Ci		*	*	*	*	*
Ru-103	Ci		*	*	*	*	*
Ag-110m	Ci		*	*	*	*	*
Sb-124	Ci		*	*	*	*	*
I-131	Ci		*	*	*	*	*
Cs-134	Ci		*	*	*	*	*
Cs-136	Ci		*	*	*	*	*
Cs-137	Ci		2.23E-06	4.77E-06	1.07E-06	*	8.07E-06
Ba-140	Ci		*	*	*	*	*
La-140	Ci		*	*	*	*	*
Ce-141	Ci		*	*	*	*	*
Ce-144	Ci		*	*	*	*	*
Zn-65	Ci		*	*	*	*	*
Ba-133	Ci		*	*	*	*	*
Sb-125	Ci		*	*	*	*	*
Sn-113	Ci		*	*	*	5.18E-07	5.18E-07
TOTAL	Ci		6.93E-05	2.03E-05	2.49E-05	1.33E-05	1.28E-04

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNIT 1 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

D1 MAIN CHIMNEY

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

DOCKET NUMBERS: 50-010

BATCH MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci						
Kr-85m	Ci						
Kr-87	Ci						
Kr-88	Ci						
Xe-133	Ci						
Xe-135	Ci						
Xe135m	Ci						
Xe-138	Ci						
TOTAL	Ci		None	None	None	None	None
IODINES							
I-131	Ci						
I-133	Ci						
I-135	Ci						
TOTAL	Ci		None	None	None	None	None
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						
Zr-95	Ci						
Mo-99	Ci						
Ru-103	Ci						
Ag-110m	Ci						
Sb-124	Ci						
I-131	Ci						
Cs-134	Ci						
Cs-136	Ci						
Cs-137	Ci						
Ba-140	Ci						
La-140	Ci						
Ce-141	Ci						
Ce-144	Ci						
Zn-65	Ci						
Ba-133	Ci						
Sb-125	Ci						
Sn-113	Ci						
TOTAL	Ci		None	None	None	None	None

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNIT 1 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

D1 MAIN CHIMNEY

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

DOCKET NUMBERS: 50-010

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JANUARY	FEBRUARY	MARCH	1st QTR		APRIL	MAY	JUNE	2nd QTR
FISSION GASES										
Kr-85	Ci	*	*	*	*		*	*	*	*
Kr-85m	Ci	*	*	*	*		*	*	*	*
Kr-87	Ci	*	*	*	*		*	*	*	*
Kr-88	Ci	*	*	*	*		*	*	*	*
Xe-133	Ci	*	*	*	*		*	*	*	*
Xe-135	Ci	*	*	*	*		*	*	*	*
Xe135m	Ci	*	*	*	*		*	*	*	*
Xe-138	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	*	*	*	*		*	*	*	*
IODINES										
I-131	Ci	*	*	*	*		*	*	*	*
I-133	Ci	*	*	*	*		*	*	*	*
I-135	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	*	*	*	*		*	*	*	*
PARTICULATES										
Fe-55	Ci	*	*	*	*		*	2.70E-06	1.49E-06	4.19E-06
Sr-89	Ci	*	*	*	*		*	*	*	*
Sr-90	Ci	*	*	*	*		*	*	*	*
Cr-51	Ci	*	*	*	*		*	*	*	*
Mn-54	Ci	*	*	*	*		8.35E-07	9.73E-07	*	1.81E-06
Co-58	Ci	*	*	*	*		*	*	*	*
Fe-59	Ci	*	*	*	*		*	*	*	*
Co-60	Ci	*	1.10E-05	5.61E-05	6.71E-05		3.86E-06	2.01E-06	3.69E-06	9.56E-06
Zr-95	Ci	*	*	*	*		*	*	*	*
Mo-99	Ci	*	*	*	*		*	*	*	*
Ru-103	Ci	*	*	*	*		*	*	*	*
Ag-110m	Ci	*	*	*	*		*	*	*	*
Sb-124	Ci	*	*	*	*		*	*	*	*
I-131	Ci	*	*	*	*		*	*	*	*
Cs-134	Ci	*	*	*	*		*	*	*	*
Cs-136	Ci	*	*	*	*		*	*	*	*
Cs-137	Ci	2.23E-06	*	*	2.23E-06		*	2.81E-06	1.96E-06	4.77E-06
Ba-140	Ci	*	*	*	*		*	*	*	*
La-140	Ci	*	*	*	*		*	*	*	*
Ce-141	Ci	*	*	*	*		*	*	*	*
Ce-144	Ci	*	*	*	*		*	*	*	*
Zn-65	Ci	*	*	*	*		*	*	*	*
Ba-133	Ci	*	*	*	*		*	*	*	*
Sb-125	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	2.23E-06	1.10E-05	5.61E-05	6.93E-05		4.70E-06	8.49E-06	7.14E-06	2.03E-05

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNIT 1 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

D1 MAIN CHIMNEY

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

DOCKET NUMBERS: 50-010

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JULY	AUGUST	SEPT.	3rd QTR		OCT.	NOV.	DEC.	4th QTR
FISSION GASES										
Kr-85	Ci	*	*	*	*		*	*	*	*
Kr-85m	Ci	*	*	*	*		*	*	*	*
Kr-87	Ci	*	*	*	*		*	*	*	*
Kr-88	Ci	*	*	*	*		*	*	*	*
Xe-133	Ci	*	*	*	*		*	*	*	*
Xe-135	Ci	*	*	*	*		*	*	*	*
Xe135m	Ci	*	*	*	*		*	*	*	*
Xe-138	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	*	*	*	*		*	*	*	*
IODINES										
I-131	Ci	*	*	*	*		*	*	*	*
I-133	Ci	*	*	*	*		*	*	*	*
I-135	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	*	*	*	*		*	*	*	*
PARTICULATES										
Fe-55	Ci	1.08E-06	7.39E-07	*	1.82E-06		*	*	*	*
Sr-89	Ci	*	*	*	*		*	*	*	*
Sr-90	Ci	*	*	*	*		*	*	*	*
Cr-51	Ci	*	*	*	*		*	*	*	*
Mn-54	Ci	*	*	*	*		*	*	6.27E-07	6.27E-07
Co-58	Ci	*	*	*	*		*	*	*	*
Fe-59	Ci	*	*	*	*		*	*	*	*
Co-60	Ci	6.14E-06	1.15E-05	4.34E-06	2.20E-05		7.19E-06	1.14E-06	3.84E-06	1.22E-05
Zr-95	Ci	*	*	*	*		*	*	*	*
Mo-99	Ci	*	*	*	*		*	*	*	*
Ru-103	Ci	*	*	*	*		*	*	*	*
Ag-110m	Ci	*	*	*	*		*	*	*	*
Sb-124	Ci	*	*	*	*		*	*	*	*
I-131	Ci	*	*	*	*		*	*	*	*
Cs-134	Ci	*	*	*	*		*	*	*	*
Cs-136	Ci	*	*	*	*		*	*	*	*
Cs-137	Ci	1.07E-06	*	*	1.07E-06		*	*	*	*
Ba-140	Ci	*	*	*	*		*	*	*	*
La-140	Ci	*	*	*	*		*	*	*	*
Ce-141	Ci	*	*	*	*		*	*	*	*
Ce-144	Ci	*	*	*	*		*	*	*	*
Zn-65	Ci	*	*	*	*		*	*	*	*
Ba-133	Ci	*	*	*	*		*	*	*	*
Sb-125	Ci	*	*	*	*		*	*	*	*
Sn-113	Ci	*	*	*	*		*	5.18E-07	*	5.18E-07
TOTAL	Ci	8.29E-06	1.22E-05	4.34E-06	2.49E-05		7.19E-06	1.66E-06	4.47E-06	1.33E-05

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

D2/3 REACTOR BUILDING VENT

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

DOCKET NUMBERS: 50-237/50-249

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci		*	*	*	*	*
Kr-85m	Ci		*	*	*	*	*
Kr-87	Ci		*	*	*	*	*
Kr-88	Ci		*	*	*	*	*
Xe-133	Ci		*	*	*	*	*
Xe-135	Ci		*	*	*	*	*
Xe135m	Ci		*	*	*	*	*
Xe-138	Ci		*	*	*	*	*
TOTAL	Ci		*	*	*	*	*
IODINES							
I-131	Ci		3.01E-05	7.18E-05	*	1.66E-05	1.19E-04
I-133	Ci		3.13E-04	4.08E-04	2.15E-05	1.42E-04	8.84E-04
I-135	Ci		*	2.64E-04	*	*	2.64E-04
TOTAL	Ci		3.43E-04	7.43E-04	2.15E-05	1.59E-04	1.27E-03
PARTICULATES							
Fe-55	Ci		1.74E-04	1.54E-04	2.94E-05	1.67E-05	3.74E-04
Sr-89	Ci		*	*	*	*	*
Sr-90	Ci		*	*	*	*	*
Cr-51	Ci		*	*	*	*	*
Mn-54	Ci		3.71E-05	8.69E-06	*	*	4.58E-05
Co-58	Ci		*	*	*	*	*
Fe-59	Ci		*	*	*	*	*
Co-60	Ci		1.03E-04	1.25E-04	4.99E-05	5.05E-05	3.28E-04
Zr-95	Ci		*	*	*	*	*
Mo-99	Ci		*	*	*	*	*
Ru-103	Ci		*	*	*	*	*
Ag-110m	Ci		*	*	*	*	*
Sb-124	Ci		*	*	*	*	*
I-131	Ci		*	*	*	*	*
Cs-134	Ci		*	*	*	*	*
Cs-136	Ci		*	*	*	*	*
Cs-137	Ci		4.08E-06	1.15E-05	3.80E-06	*	1.94E-05
Ba-140	Ci		*	*	*	*	*
La-140	Ci		*	*	*	*	*
Ce-141	Ci		*	*	*	*	*
Ce-144	Ci		*	*	*	*	*
Zn-65	Ci		*	*	*	*	*
Ba-133	Ci		*	*	*	*	*
Sb-125	Ci		*	*	*	*	*
TOTAL	Ci		3.18E-04	2.99E-04	8.31E-05	6.72E-05	7.67E-04

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

D2/3 REACTOR BUILDING VENT

	GROUND LEVEL RELEASES
XX	SEMI-ELEVATED RELEASES
	ELEVATED RELEASES

GASEOUS EFFLUENTS

DOCKET NUMBERS: 50-237/50-249

BATCH MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci						
Kr-85m	Ci						
Kr-87	Ci						
Kr-88	Ci						
Xe-133	Ci						
Xe-135	Ci						
Xe135m	Ci						
Xe-138	Ci						
TOTAL	Ci		None	None	None	None	None
IODINES							
I-131	Ci						
I-133	Ci						
I-135	Ci						
TOTAL	Ci		None	None	None	None	None
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						
Zr-95	Ci						
Mo-99	Ci						
Ru-103	Ci						
Ag-110m	Ci						
Sb-124	Ci						
I-131	Ci						
Cs-134	Ci						
Cs-136	Ci						
Cs-137	Ci						
Ba-140	Ci						
La-140	Ci						
Ce-141	Ci						
Ce-144	Ci						
Zn-65	Ci						
Ba-133	Ci						
Sb-125	Ci						
Sn-113	Ci						
TOTAL	Ci		None	None	None	None	None

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

D2/3 REACTOR BUILDING VENT

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

DOCKET NUMBERS: 50-237/50-249

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JANUARY	FEBRUARY	MARCH	1st QTR	APRIL	MAY	JUNE	2nd QTR
FISSION GASES									
Kr-85	Ci	*	*	*		*	*	*	
Kr-85m	Ci	*	*	*		*	*	*	
Kr-87	Ci	*	*	*		*	*	*	
Kr-88	Ci	*	*	*		*	*	*	
Xe-133	Ci	*	*	*		*	*	*	
Xe-135	Ci	*	*	*		*	*	*	
Xe135m	Ci	*	*	*		*	*	*	
Xe-138	Ci	*	*	*		*	*	*	
TOTAL	Ci	*	*	*		*	*	*	
IODINES									
I-131	Ci	1.70E-06	8.33E-06	2.01E-05	3.01E-05	4.39E-05	2.79E-05	*	7.18E-05
I-133	Ci	8.09E-05	8.19E-05	1.50E-04	3.13E-04	2.44E-04	1.54E-04	9.60E-06	4.08E-04
I-135	Ci	*	*	*	*	1.43E-04	1.21E-04	*	2.64E-04
TOTAL	Ci	8.26E-05	9.02E-05	1.70E-04	3.43E-04	4.31E-04	3.03E-04	9.60E-06	7.43E-04
PARTICULATES									
Fe-55	Ci	2.09E-05	1.03E-04	4.98E-05	1.74E-04	2.45E-05	7.83E-05	5.10E-05	1.54E-04
Sr-89	Ci	*	*	*	*	*	*	*	*
Sr-90	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	*	3.46E-05	2.53E-06	3.71E-05	3.75E-06	*	4.94E-06	8.69E-06
Co-58	Ci	*	*	*	*	*	*	*	*
Fe-59	Ci	*	2.24E-05	*	*	*	*	*	*
Co-60	Ci	5.49E-06	5.63E-05	4.13E-05	1.03E-04	4.98E-05	5.50E-05	1.99E-05	1.25E-04
Zr-95	Ci	*	*	*	*	*	*	*	*
Mo-99	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Cs-136	Ci	*	*	*	*	*	*	*	*
Cs-137	Ci	*	*	4.08E-06	4.08E-06	2.23E-06	4.80E-06	4.48E-06	1.15E-05
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Ce-144	Ci	*	*	*	*	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ba-133	Ci	*	*	*	*	*	*	*	*
Sb-125	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	2.64E-05	2.16E-04	9.77E-05	3.18E-04	8.03E-05	1.38E-04	8.03E-05	2.99E-04

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

D2/3 REACTOR BUILDING VENT

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

DOCKET NUMBERS: 50-237/50-249

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JULY	AUGUST	SEPT.	3rd QTR	OCT.	NOV.	DEC.	4th QTR
FISSION GASES									
Kr-85	Ci	*	*	*	*	*	*	*	*
Kr-85m	Ci	*	*	*	*	*	*	*	*
Kr-87	Ci	*	*	*	*	*	*	*	*
Kr-88	Ci	*	*	*	*	*	*	*	*
Xe-133	Ci	*	*	*	*	*	*	*	*
Xe-135	Ci	*	*	*	*	*	*	*	*
Xe135m	Ci	*	*	*	*	*	*	*	*
Xe-138	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	*	*	*	*	*	*	*	*
IODINES									
I-131	Ci	*	*	*	*	1.66E-05	*	*	1.66E-05
I-133	Ci	*	*	2.15E-05	2.15E-05	1.42E-04	*	*	1.42E-04
I-135	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	*	*	2.15E-05	2.15E-05	1.59E-04	*	*	1.59E-04
PARTICULATES									
Fe-55	Ci	1.30E-05	9.64E-06	6.78E-06	2.94E-05	2.65E-06	9.58E-06	4.46E-06	1.67E-05
Sr-89	Ci	*	*	*	*	*	*	*	*
Sr-90	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	*	*	*	*	*	*	*	*
Co-58	Ci	*	*	*	*	*	*	*	*
Fe-59	Ci	*	*	*	*	*	*	*	*
Co-60	Ci	4.40E-06	9.29E-06	3.62E-05	4.99E-05	3.19E-05	*	1.86E-05	5.05E-05
Zr-95	Ci	*	*	*	*	*	*	*	*
Mo-99	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Cs-136	Ci	*	*	*	*	*	*	*	*
Cs-137	Ci	3.80E-06	*	*	3.80E-06	*	*	*	*
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Ce-144	Ci	*	*	*	*	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ba-133	Ci	*	*	*	*	*	*	*	*
Sb-125	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	2.12E-05	1.89E-05	4.30E-05	8.31E-05	3.46E-05	9.58E-06	2.31E-05	6.72E-05

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

D2/3 MAIN CHIMNEY

GASEOUS EFFLUENTS

DOCKET NUMBERS: 50-237/50-249

_____ GROUND LEVEL RELEASES

_____ SEMI-ELEVATED RELEASES

XX ELEVATED RELEASES

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci		1.13E-03	1.74E-03	*	*	2.87E-03
Kr-85m	Ci		1.10E+00	6.09E+00	*	4.70E-02	7.23E+00
Kr-87	Ci		*	9.30E+00	*	*	9.30E+00
Kr-88	Ci		*	7.73E+00	*	*	7.73E+00
Xe-133	Ci		*	3.59E+00	*	3.52E-01	3.94E+00
Xe-135	Ci		1.19E+01	1.92E+01	5.50E-01	5.47E+00	3.71E+01
Xe135m	Ci		*	4.30E-01	*	*	4.30E-01
Xe-138	Ci		*	*	*	*	*
TOTAL	Ci		1.30E+01	4.63E+01	5.50E-01	5.89E+00	6.58E+01
IODINES							
I-131	Ci		5.34E-04	3.46E-04	2.94E-05	2.70E-04	1.18E-03
I-133	Ci		2.44E-03	2.25E-03	3.41E-04	1.99E-03	7.02E-03
I-135	Ci		4.92E-04	5.46E-04	*	5.56E-04	1.59E-03
TOTAL	Ci		3.47E-03	3.14E-03	3.70E-04	2.82E-03	9.79E-03
PARTICULATES							
Fe-55	Ci		7.99E-05	1.83E-04	1.02E-04	9.93E-06	3.75E-04
Sr-89	Ci		3.96E-04	2.71E-04	6.44E-05	2.22E-04	9.55E-04
Sr-90	Ci		*	*	*	*	*
Cr-51	Ci		*	*	*	*	*
Mn-54	Ci		*	2.00E-05	*	7.30E-06	2.73E-05
Co-58	Ci		*	*	*	*	*
Fe-59	Ci		*	*	*	*	*
Co-60	Ci		1.40E-04	1.55E-04	1.16E-04	1.49E-04	5.60E-04
Zr-95	Ci		*	*	*	*	*
Mo-99	Ci		*	*	*	*	*
Ru-103	Ci		*	*	*	*	*
Ag-110m	Ci		*	*	*	*	*
Sb-124	Ci		*	*	*	*	*
I-131	Ci		*	*	*	*	*
Cs-134	Ci		*	*	*	*	*
Cs-136	Ci		*	*	*	*	*
Cs-137	Ci		9.72E-05	4.63E-05	1.65E-05	1.53E-05	1.75E-04
Ba-140	Ci		*	*	*	*	*
La-140	Ci		*	*	*	*	*
Ce-141	Ci		*	*	*	*	*
Ce-144	Ci		*	*	*	*	*
Zn-65	Ci		*	*	*	*	*
Ba-133	Ci		*	*	*	*	*
Sb-125	Ci		*	*	*	*	*
TOTAL	Ci		7.13E-04	6.76E-04	3.00E-04	4.04E-04	2.09E-03

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

D2/3 MAIN CHIMNEY

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

DOCKET NUMBERS: 50-237/50-249

BATCH MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci						
Kr-85m	Ci						
Kr-87	Ci						
Kr-88	Ci						
Xe-133	Ci						
Xe-135	Ci						
Xe135m	Ci						
Xe-138	Ci						
TOTAL	Ci		None	None	None	None	None
IODINES							
I-131	Ci						
I-133	Ci						
I-135	Ci						
TOTAL	Ci		None	None	None	None	None
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						
Zr-95	Ci						
Mo-99	Ci						
Ru-103	Ci						
Ag-110m	Ci						
Sb-124	Ci						
I-131	Ci						
Cs-134	Ci						
Cs-136	Ci						
Cs-137	Ci						
Ba-140	Ci						
La-140	Ci						
Ce-141	Ci						
Ce-144	Ci						
Zn-65	Ci						
Ba-133	Ci						
Sb-125	Ci						
Sn-113	Ci						
TOTAL	Ci		None	None	None	None	None

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

D2/3 MAIN CHIMNEY

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

DOCKET NUMBERS: 50-237/50-249

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JANUARY	FEBRUARY	MARCH	1st QTR	APRIL	MAY	JUNE	2nd QTR
FISSION GASES									
Kr-85	Ci	*	9.83E-04	1.43E-04	1.13E-03	1.05E-03	4.06E-04	2.84E-04	1.74E-03
Kr-85m	Ci	*	*	1.10E+00	1.10E+00	2.51E+00	7.65E-01	2.81E+00	6.09E+00
Kr-87	Ci	*	*	*	*	*	*	9.30E+00	9.30E+00
Kr-88	Ci	*	*	*	*	*	*	7.73E+00	7.73E+00
Xe-133	Ci	*	*	*	*	3.46E+00	1.30E-01	*	3.59E+00
Xe-135	Ci	2.64E+00	4.07E+00	5.20E+00	1.19E+01	6.12E+00	3.08E+00	1.00E+01	1.92E+01
Xe135m	Ci	*	*	*	*	*	*	4.30E-01	4.30E-01
Xe-138	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	2.64E+00	4.07E+00	6.30E+00	1.30E+01	1.21E+01	3.98E+00	3.03E+01	4.63E+01
IODINES									
I-131	Ci	1.17E-04	1.71E-04	2.46E-04	5.34E-04	1.89E-04	1.12E-04	4.48E-05	3.46E-04
I-133	Ci	6.34E-04	8.78E-04	9.28E-04	2.44E-03	1.14E-03	8.40E-04	2.68E-04	2.25E-03
I-135	Ci	6.01E-05	2.51E-04	1.81E-04	4.92E-04	1.43E-04	1.21E-04	2.82E-04	5.46E-04
TOTAL	Ci	8.11E-04	1.30E-03	1.36E-03	3.47E-03	1.47E-03	1.07E-03	5.95E-04	3.14E-03
PARTICULATES									
Fe-55	Ci	6.21E-05	1.58E-06	1.62E-05	7.99E-05	1.82E-05	3.04E-05	1.34E-04	1.83E-04
Sr-89	Ci	9.38E-06	1.63E-04	2.24E-04	3.96E-04	1.66E-04	7.14E-05	3.40E-05	2.71E-04
Sr-90	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	*	*	*	*	5.85E-06	1.41E-05	*	2.00E-05
Co-58	Ci	*	*	*	*	*	*	*	*
Fe-59	Ci	*	*	*	*	*	*	*	*
Co-60	Ci	1.06E-05	5.55E-05	7.36E-05	1.40E-04	4.46E-05	5.15E-05	5.93E-05	1.55E-04
Zr-95	Ci	*	*	*	*	*	*	*	*
Mo-99	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Cs-136	Ci	*	*	*	*	*	*	*	*
Cs-137	Ci	9.30E-05	4.17E-06	*	9.72E-05	7.19E-06	3.52E-05	3.95E-06	4.63E-05
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Ce-144	Ci	*	*	*	*	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ba-133	Ci	*	*	*	*	*	*	*	*
Sb-125	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	1.75E-04	2.24E-04	3.14E-04	7.13E-04	2.42E-04	2.03E-04	2.31E-04	6.76E-04

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

D2/3 MAIN CHIMNEY

_____ GROUND LEVEL RELEASES
_____ SEMI-ELEVATED RELEASES
XX ELEVATED RELEASES

GASEOUS EFFLUENTS

DOCKET NUMBERS: 50-237/50-249

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JULY	AUGUST	SEPT.	3rd QTR	OCT.	NOV.	DEC.	4th QTR
FISSION GASES									
Kr-85	Ci	*	*	*	*	*	*	*	*
Kr-85m	Ci	*	*	*	*	4.00E-02	1.67E-03	5.30E-03	4.70E-02
Kr-87	Ci	*	*	*	*	*	*	*	*
Kr-88	Ci	*	*	*	*	*	*	*	*
Xe-133	Ci	*	*	*	*	3.20E-01	1.51E-02	1.72E-02	3.52E-01
Xe-135	Ci	*	3.50E-05	5.50E-01	5.50E-01	5.46E+00	5.70E-03	6.79E-03	5.47E+00
Xe135m	Ci	*	*	*	*	*	*	*	*
Xe-138	Ci	*	*	*	*	*	*	*	*
Ar-41	Ci	*	*	*	*	*	1.16E-02	5.30E-03	1.69E-02
TOTAL	Ci	*	3.50E-05	5.50E-01	5.50E-01	5.82E+00	3.41E-02	3.46E-02	5.89E+00
IODINES									
I-131	Ci	*	*	2.94E-05	2.94E-05	2.69E-04	1.42E-06	*	2.70E-04
I-133	Ci	*	*	3.41E-04	3.41E-04	1.99E-03	*	*	1.99E-03
I-135	Ci	*	*	*	*	5.56E-04	*	*	5.56E-04
TOTAL	Ci	*	*	3.70E-04	3.70E-04	2.82E-03	1.42E-06	*	2.82E-03
PARTICULATES									
Fe-55	Ci	1.23E-05	2.29E-05	6.72E-05	1.02E-04	7.30E-06	2.63E-06	*	9.93E-06
Sr-89	Ci		2.34E-06	6.21E-05	6.44E-05	1.68E-04	5.40E-05	2.86E-07	2.22E-04
Sr-90	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	*	*	*	*	7.30E-06		*	7.30E-06
Co-58	Ci	*	*	*	*	*	*	*	*
Fe-59	Ci	*	*	*		*	*	*	*
Co-60	Ci	1.90E-05	1.19E-05	8.53E-05	1.16E-04	1.06E-04	2.99E-06	4.00E-05	1.49E-04
Zr-95	Ci	*	*	*	*	*	*	*	*
Mo-99	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Cs-136	Ci	*	*	*	*	*	*	*	*
Cs-137	Ci	5.16E-06	3.93E-06	7.38E-06	1.65E-05	1.08E-05		4.46E-06	1.53E-05
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Ce-144	Ci	*	*	*	*	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ba-133	Ci	*	*	*	*	*	*	*	*
Sb-125	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	3.65E-05	4.11E-05	2.22E-04	3.00E-04	2.99E-04	5.96E-05	4.47E-05	4.04E-04

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

CHEMICAL CLEANING BUILDING

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

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

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
IODINES							
I-131	Ci		*	*	*	*	*
I-133	Ci		*	*	*	*	*
I-135	Ci		*	*	*	*	*
TOTAL	Ci		*	*	*	*	*
PARTICULATES							
Fe-55	Ci		*	*	*	*	*
Sr-89	Ci		*	*	*	*	*
Sr-90	Ci		*	*	*	*	*
Cr-51	Ci		*	*	*	*	*
Mn-54	Ci		7.93E-07	*	*	*	7.93E-07
Co-58	Ci		*	*	*	*	*
Fe-59	Ci		*	*	*	*	*
Co-60	Ci		1.44E-06	*	2.36E-06	4.36E-06	8.16E-06
Zr-95	Ci		*	*	*	*	*
Mo-99	Ci		*	*	*	*	*
Ru-103	Ci		*	*	*	*	*
Ag-110m	Ci		*	*	*	*	*
Sb-124	Ci		*	*	*	*	*
I-131	Ci		*	*	*	*	*
Cs-134	Ci		*	*	*	*	*
Cs-136	Ci		*	*	*	*	*
Cs-137	Ci		*	*	*	*	*
Ba-140	Ci		*	*	*	*	*
La-140	Ci		*	*	*	*	*
Ce-141	Ci		*	*	*	*	*
Ce-144	Ci		*	*	*	*	*
Zn-65	Ci		*	*	*	*	*
Ba-133	Ci		*	*	*	*	*
Sb-125	Ci		*	*	*	*	*
TOTAL	Ci		2.23E-06	*	2.36E-06	4.36E-06	8.96E-06

*The activity of this nuclide is less than the LLD listed on the appropriate table . NB: No sample taken between 1 March 1996 and 19 June 1996 due to broken sample pump.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

CHEMICAL CLEANING BUILDING

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

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

BATCH MODE

NUCLIDES RELEASED	UNIT		1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
FISSION GASES							
Kr-85	Ci						
Kr-85m	Ci						
Kr-87	Ci						
Kr-88	Ci						
Xe-133	Ci						
Xe-135	Ci						
Xe135m	Ci						
Xe-138	Ci						
TOTAL	Ci		None	None	None	None	None
IODINES							
I-131	Ci						
I-133	Ci						
I-135	Ci						
TOTAL	Ci		None	None	None	None	None
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						
Zr-95	Ci						
Mo-99	Ci						
Ru-103	Ci						
Ag-110m	Ci						
Sb-124	Ci						
I-131	Ci						
Cs-134	Ci						
Cs-136	Ci						
Cs-137	Ci						
Ba-140	Ci						
La-140	Ci						
Ce-141	Ci						
Ce-144	Ci						
Zn-65	Ci						
Ba-133	Ci						
Sb-125	Ci						
Sn-113	Ci						
TOTAL	Ci		None	None	None	None	None

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

CHEMICAL CLEANING BUILDING

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

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

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JANUARY	FEBRUARY	MARCH	1st QTR		APRIL	MAY	JUNE	2nd QTR
FISSION GASES										
IODINES										
I-131	Ci	*	*	*	*		*	*	*	*
I-133	Ci	*	*	*	*		*	*	*	*
I-135	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	*	*	*	*		*	*	*	*
PARTICULATES										
Fe-55	Ci	*	*	*	*		*	*	*	*
Sr-89	Ci	*	*	*	*		*	*	*	*
Sr-90	Ci	*	*	*	*		*	*	*	*
Cr-51	Ci	*	*	*	*		*	*	*	*
Mn-54	Ci	7.93E-07	*	*	7.93E-07		*	*	*	*
Co-58	Ci	*	*	*	*		*	*	*	*
Fe-59	Ci	*	*	*	*		*	*	*	*
Co-60	Ci	5.30E-07	9.09E-07	*	1.44E-06		*	*	*	*
Zr-95	Ci	*	*	*	*		*	*	*	*
Mo-99	Ci	*	*	*	*		*	*	*	*
Ru-103	Ci	*	*	*	*		*	*	*	*
Ag-110m	Ci	*	*	*	*		*	*	*	*
Sb-124	Ci	*	*	*	*		*	*	*	*
I-131	Ci	*	*	*	*		*	*	*	*
Cs-134	Ci	*	*	*	*		*	*	*	*
Cs-136	Ci	*	*	*	*		*	*	*	*
Cs-137	Ci	*	*	*	*		*	*	*	*
Ba-140	Ci	*	*	*	*		*	*	*	*
La-140	Ci	*	*	*	*		*	*	*	*
Ce-141	Ci	*	*	*	*		*	*	*	*
Ce-144	Ci	*	*	*	*		*	*	*	*
Zn-65	Ci	*	*	*	*		*	*	*	*
Ba-133	Ci	*	*	*	*		*	*	*	*
Sb-125	Ci	*	*	*	*		*	*	*	*
TOTAL	Ci	1.32E-06	9.09E-07	*	2.23E-06		*	*	*	*

*The activity of this nuclide is less than the LLD listed on the appropriate table . NB: No sample taken between 1 March 1996 and 19 June 1996 due to broken sample pump.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through December 1996

CHEMICAL CLEANING BUILDING

XX

GASEOUS EFFLUENTS
GROUND LEVEL RELEASES
SEMI-ELEVATED RELEASES
ELEVATED RELEASES

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

CONTINUOUS MODE

NUCLIDES RELEASED	UNIT	JULY	AUGUST	SEPT.	3rd QTR	OCT.	NOV.	DEC.	4th QTR
IODINES									
I-131	Ci	*	*	*	*	*	*	*	*
I-133	Ci	*	*	*	*	*	*	*	*
I-135	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	*	*	*	*	*	*	*	*
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	*	1.73E-07	2.19E-06	2.36E-06	1.03E-06	1.96E-06	1.37E-06	4.36E-06
Zr-95	Ci	*	*	*	*	*	*	*	*
Mo-99	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Cs-136	Ci	*	*	*	*	*	*	*	*
Cs-137	Ci	*	*	*	*	*	*	*	*
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Ce-144	Ci	*	*	*	*	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ba-133	Ci	*	*	*	*	*	*	*	*
Sb-125	Ci	*	*	*	*	*	*	*	*
TOTAL	Ci	*	1.73E-07	2.19E-06	2.36E-06	1.03E-06	1.96E-06	1.37E-06	4.36E-06

*The activity of this nuclide is less than the LLD listed on the appropriate table

UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
January Through December 1996

Docket Numbers: 50-010/50-237/50-249

TABLE OF LOWER LIMITS OF DETECTABILITY FOR LIQUID EFFLUENTS

NUCLIDE	(uCi/ml)
Sr-89	7.62E-08
Sr-90	2.38E-07
Mn-54	1.03E-07
Co-58	9.24E-08
Fe-59	2.04E-07
Co-60	1.22E-07
Zn-65	2.28E-07
Sb-124	7.61E-08
I-131	9.38E-08
Cs-134	7.63E-08
Cs-137	9.15E-08
Ba-140	2.85E-07
La-140	1.73E-07
Ce-141	1.43E-07
Xe-133	2.95E-07
Xe-135	1.03E-07
Cr-51	6.98E-07
Fe-55	5.05E-07
Cs-138	4.91E-04
H-3	5.85E-07
Gross Alpha	4.16E-08
Zr-95	1.59E-07
Kr-87	4.53E-06
Kr-88	1.16E-06
I-135	8.37E-07
I-132	6.93E-07
Ag-110m	8.37E-08
Ba-133	1.18E-07
Ce-144	4.39E-07
Cs-136	9.34E-08
I-133	1.12E-07
I-134	1.26E-05
Kr-85	2.37E-05
Mo-99	9.55E-08
Nb-95	1.02E-07
Np-239	2.77E-07
Ru-103	7.18E-08
Sb-125	2.10E-07
Xe-131m	3.20E-06
Xe-133m	6.81E-07
Xe-138	1.10E-05

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

RADWASTE LIQUID EFFLUENTS

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

		UNITS	1st Quarter	2nd Quarter	EST. TOTAL ERROR, %
A.	FISSION AND ACTIVATION PRODUCTS				
1.	Total Release (not including H-3, gases, alpha)	Ci	6.84E-03	7.90E-03	1.06E+01
2.	Average Diluted Conc. During Period	µCi/ml	1.07E-08	1.08E-08	
3.	Percent of Technical Specification Limit	%	*	*	
B.	TRITIUM				
1.	Total Release	Ci	2.70E+00	4.05E+00	1.14E+01
2.	Average Diluted Conc. During Release	µCi/ml	4.23E-06	5.54E-06	
3.	Percent of Technical Specification Limit	%	*	*	
C.	DISSOLVED AND ENTRAINED GASES				
1.	Total Release	Ci	8.05E-05	7.26E-05	5.58E+00
2.	Average Diluted Conc. During Period	µCi/ml	1.26E-10	9.94E-11	
3.	Percent of Technical Specification Limit	%	*	*	
D.	GROSS ALPHA ACTIVITY				
1.	Total Release	Ci	<LLD	<LLD	1.51E+01
E.	VOLUME OF WASTE RELEASED (prior to dilution)	Liters	2.96E+06	3.77E+06	5.00E+00
D.	VOLUME OF DILUTION WATER USED DURING PERIOD	Liters	6.36E+08	7.27E+08	5.00E+00

*The information is contained in the Radiological Impact on the Public section of the report.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

RADWASTE LIQUID EFFLUENTS

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

	UNITS	3rd Quarter	4th Quarter	EST. TOTAL ERROR, %
FISSION AND ACTIVATION PRODUCTS				
1. Total Release (not including H-3, gases, alpha)	Ci	7.28E-03	4.37E-03	1.06E+01
2. Average Diluted Conc. During Period	µCi/ml	1.59E-09	1.60E-08	
3. Percent of Technical Specification Limit	%	*	*	
TRITIUM				
1. Total Release	Ci	2.84E+00	1.90E+00	1.14E+01
2. Average Diluted Conc. During Release	µCi/ml	6.20E-07	6.98E-06	
3. Percent of Technical Specification Limit	%	*	*	
DISSOLVED AND ENTRAINED GASES				
1. Total Release	Ci	<LLD	<LLD	5.58E+00
2. Average Diluted Conc. During Period	µCi/ml	<LLD	<LLD	
3. Percent of Technical Specification Limit	%	*	*	
GROSS ALPHA ACTIVITY				
1. Total Release	Ci	<LLD	<LLD	1.51E+01
VOLUME OF WASTE RELEASED (prior to dilution)	Liters	3.94E+06	1.70E+06	5.00E+00
VOLUME OF DILUTION WATER USED DURING PERIOD	Liters	4.58E+09	2.71E+08	5.00E+00

*The information is contained in the Radiological Impact on the Public section of the report.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

RADWASTE LIQUID EFFLUENTS — DOCKET NUMBERS: 50-010/50-237/50-249

1. Number of Batch Releases: 2.60E+01
2. Total Time for Batch Releases: 8.11E+03 minutes
3. Maximum Time Period for a Batch Release: 3.60E+02 minutes
4. Average Time Period for a Batch Release: 3.12E+02 minutes
5. Minimum Time Period for a Batch Release: 1.60E+01 minutes
6. Average Stream Flow During Periods of Release of Effluent into a Flowing Stream: 1.70E+05

	Unit	BATCH MODE 1st QTR	BATCH MODE 2nd QTR	CONTINUOUS MODE 1st QTR	CONTINUOUS MODE 2nd QTR
Fe-55	Ci	1.33E-03	1.84E-03		
Sr-89	Ci	*	*		
Sr-90	Ci	*	*		
I-131	Ci	*	*		
I-132	Ci	*	*		
I-133	Ci	*	*		
I-134	Ci	*	*		
I-135	Ci	*	*		
Cr-51	Ci	*	1.07E-04		
Mn-54	Ci	1.42E-03	1.54E-03		
Fe-59	Ci	*	2.97E-04		
Co-58	Ci	*	6.20E-05		
Co-60	Ci	3.68E-03	3.47E-03		
Cs-137	Ci	4.08E-04	5.90E-04		
Zn-65	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	*		
Sb-124	Ci	*	*		
Cs-134	Ci	*	*		
Ba-140	Ci	*	*		
La-140	Ci	*	*		
Ce-141	Ci	*	*		
Cs-138	Ci	*	*		
Zr-95	Ci	*	*		
(above) Total		6.84E-03	7.90E-03	None	None
H-3	Ci	2.70E+00	4.05E+00		
Xe-133	Ci	8.05E-05	7.26E-05		
Xe-135	Ci	*	*		

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

RADWASTE LIQUID EFFLUENTS

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

BATCH MODE

	Unit	January	February	March	1st QTR	April	May	June	2nd QTR
Fe-55	Ci	4.90E-05	5.07E-04	7.76E-04	**1.33E-03**	*	1.31E-03	5.26E-04	**1.84E-03**
Sr-89	Ci	*	*	*	*	*	*	*	*
Sr-90	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
I-132	Ci	*	*	*	*	*	*	*	*
I-133	Ci	*	*	*	*	*	*	*	*
I-134	Ci	*	*	*	*	*	*	*	*
I-135	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	1.07E-04	*	1.07E-04
Mn-54	Ci	3.99E-05	6.91E-04	6.90E-04	**1.42E-03**	*	1.31E-03	2.25E-04	**1.54E-03**
Fe-59	Ci	*	*	*	*	*	2.97E-04	*	**2.97E-04**
Co-58	Ci	*	*	*	*	*	6.20E-05	*	**6.20E-05**
Co-60	Ci	8.85E-05	1.86E-03	1.73E-03	**3.68E-03**	*	2.80E-03	6.68E-04	**3.47E-03**
Cs-137	Ci	2.27E-05	2.37E-04	1.48E-04	**4.08E-04**	*	3.89E-04	2.01E-04	**5.90E-04**
Zn-65	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Cs-138	Ci	*	*	*	*	*	*	*	*
Zr-95	Ci	*	*	*	*	*	*	*	*
(above) Total		2.00E-04	3.30E-03	3.34E-03	6.84E-03	*	6.28E-03	1.62E-03	7.90E-03
H-3	Ci	4.91E-01	1.37E+00	8.39E-01	**2.70E+00**	*	2.47E+00	1.58E+00	**4.05E+00**
Xe-133	Ci	9.93E-07	7.95E-05	*	**8.05E-05**	*	7.26E-05	*	**7.26E-05**
Xe-135	Ci	*	*	*	*	*	*	*	*

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

RADWASTE LIQUID EFFLUENTS — DOCKET NUMBERS: 50-010/50-237/50-249

1. Number of Batch Releases: 2.20E+01
2. Total Time for Batch Releases: 7.47E+03 minutes
3. Maximum Time Period for a Batch Release: 4.52E+02 minutes
4. Average Time Period for a Batch Release: 3.40E+02 minutes
5. Minimum Time Period for a Batch Release: 1.15E+02 minutes
6. Average Stream Flow During Periods of Release of Effluent into a Flowing Stream: 5.34E+05 l/min

		BATCH MODE		CONTINUOUS MODE	
	Unit	3rd QTR	4th QTR	3rd QTR	4th QTR
Fe-55	Ci	1.03E-03	6.46E-04		
Sr-89	Ci	*	*		
Sr-90	Ci	*	*		
I-131	Ci	*	*		
I-132	Ci	*	*		
I-133	Ci	*	*		
I-134	Ci	*	*		
I-135	Ci	*	*		
Cr-51	Ci	*	*		
Mn-54	Ci	1.48E-03	6.87E-04		
Fe-59	Ci	3.03E-04	*		
Co-58	Ci	3.05E-05	*		
Co-60	Ci	3.31E-03	2.34E-03		
Cs-137	Ci	1.12E-03	6.95E-04		
Zn-65	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	*		
Sb-124	Ci	*	*		
Cs-134	Ci	*	*		
Ba-140	Ci	*	*		
La-140	Ci	*	*		
Ce-141	Ci	*	*		
Cs-138	Ci	*	*		
Zr-95	Ci	*	*		
(above) Total		7.28E-03	4.37E-03	None	None
H-3	Ci	2.84E+00	1.90E+00		
Xe-133	Ci	*	*		
Xe-135	Ci	*	*		

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

RADWASTE LIQUID EFFLUENTS

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

BATCH MODE

	Unit	July	August	September	3rd QTR	October	November	December	4th QTR
Fe-55	Ci	3.79E-04	5.16E-05	6.02E-04	**1.03E-03**	*	5.21E-04	1.25E-04	**6.46E-04**
Sr-89	Ci	*	*	*	*	*	*	*	*
Sr-90	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
I-132	Ci	*	*	*	*	*	*	*	*
I-133	Ci	*	*	*	*	*	*	*	*
I-134	Ci	*	*	*	*	*	*	*	*
I-135	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	8.06E-04	1.83E-05	6.60E-04	**1.48E-03**	4.10E-05	2.75E-04	3.71E-04	**6.87E-04**
Fe-59	Ci	3.03E-04	*	*	**3.03E-04**	*	*	*	*
Co-58	Ci	3.05E-05	*	*	**3.05E-05**	*	*	*	*
Co-60	Ci	1.15E-03	4.31E-05	2.12E-03	**3.31E-03**	8.72E-05	9.34E-04	1.32E-03	**2.34E-03**
Cs-137	Ci	1.05E-04	1.48E-05	1.00E-03	**1.12E-03**	4.29E-05	3.45E-04	3.07E-04	**6.95E-04**
Zn-65	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Cs-138	Ci	*	*	*	*	*	*	*	*
Zr-95	Ci	*	*	*	*	*	*	*	*
(above) Total		2.77E-03	1.28E-04	4.38E-03	7.28E-03	1.71E-04	2.08E-03	2.12E-03	4.37E-03
H-3	Ci	9.70E-01	7.62E-02	1.79E+00	**2.84E+00**	2.45E-01	1.34E+00	3.18E-01	**1.90E+00**
Xe-133	Ci	*	*	*	*	*	*	*	*
Xe-135	Ci	*	*	*	*	*	*	*	*

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

CCSW LIQUID EFFLUENTS DOCKET NUMBERS: 50-010/50-237/50-249

1. Number of Batch Releases: No detectable activity for discharges
2. Total Time for Batch Releases: N/A
3. Maximum Time Period for a Batch Release: N/A
4. Average Time Period for a Batch Release: N/A
5. Minimum Time Period for a Batch Release: N/A
6. Average Stream Flow During Periods of Release of Effluent into a Flowing Stream: N/A

		BATCH MODE		CONTINUOUS MODE	
	Unit	1st QTR	2nd QTR	1st QTR	2nd QTR
Fe-55	Ci	*	*		
Sr-89	Ci	*	*		
Sr-90	Ci	*	*		
I-131	Ci	*	*		
I-132	Ci	*	*		
I-133	Ci	*	*		
I-134	Ci	*	*		
I-135	Ci	*	*		
Cr-51	Ci	*	*		
Mn-54	Ci	*	*		
Fe-59	Ci	*	*		
Co-58	Ci	*	*		
Co-60	Ci	*	*		
Cs-137	Ci	*	*		
Zn-65	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	*		
Sb-124	Ci	*	*		
Cs-134	Ci	*	*		
Ba-140	Ci	*	*		
La-140	Ci	*	*		
Ce-141	Ci	*	*		
Cs-138	Ci	*	*		
Zr-95	Ci	*	*		
(above) Total		*	*	None	None
H-3	Ci	*	*		
Xe-133	Ci	*	*		
Xe-135	Ci	*	*		

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
January Through June 1996

CCSW LIQUID EFFLUENTS

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

BATCH MODE

	Unit	January	February	March	1st QTR	April	May	June	2nd QTR
Fe-55	Ci	*	*	*	*	*	*	*	*
Sr-89	Ci	*	*	*	*	*	*	*	*
Sr-90	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
I-132	Ci	*	*	*	*	*	*	*	*
I-133	Ci	*	*	*	*	*	*	*	*
I-134	Ci	*	*	*	*	*	*	*	*
I-135	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	*	*	*	*	*	*	*	*
Fe-59	Ci	*	*	*	*	*	*	*	*
Co-58	Ci	*	*	*	*	*	*	*	*
Co-60	Ci	*	*	*	*	*	*	*	*
Cs-137	Ci	*	*	*	*	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Cs-138	Ci	*	*	*	*	*	*	*	*
Zr-95	Ci	*	*	*	*	*	*	*	*
(above) Total		*	*	*	*	*	*	*	*
H-3	Ci	*	*	*	*	*	*	*	*
Xe-133	Ci	*	*	*	*	*	*	*	*
Xe-135	Ci	*	*	*	*	*	*	*	*

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

CCSW LIQUID EFFLUENTS DOCKET NUMBERS: 50-010/50-237/50-249

1. Number of Batch Releases: 3.00E+00
2. Total Time for Batch Releases: 3.72E+00 min
3. Maximum Time Period for a Batch Release: 1.24E+00 min
4. Average Time Period for a Batch Release: 1.24E+00 min
5. Minimum Time Period for a Batch Release: 1.24E+00 min
6. Average Stream Flow During Periods of Release of Effluent into a Flowing Stream: 1.42E+06 l/min

		BATCH MODE		CONTINUOUS MODE	
	Unit	3rd QTR	4th QTR	3rd QTR	4th QTR
Fe-55	Ci	*	*		
Sr-89	Ci	*	*		
Sr-90	Ci	*	*		
I-131	Ci	*	*		
I-132	Ci	*	*		
I-133	Ci	*	*		
I-134	Ci	*	*		
I-135	Ci	*	*		
Cr-51	Ci	*	*		
Mn-54	Ci	*	*		
Fe-59	Ci	*	*		
Co-58	Ci	*	*		
Co-60	Ci	**4.09E-06**	*		
Cs-137	Ci	**7.82E-06**	*		
Zn-65	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	*		
Sb-124	Ci	*	*		
Cs-134	Ci	*	*		
Ba-140	Ci	*	*		
La-140	Ci	*	*		
Ce-141	Ci	*	*		
Cs-138	Ci	*	*		
Zr-95	Ci	*	*		
(above) Total		**1.19E-05**	*	None	None
H-3	Ci	*	*		
Xe-133	Ci	*	*		
Xe-135	Ci	*	*		

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT
July Through December 1996

CCSW LIQUID EFFLUENTS

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

BATCH MODE

	Unit	July	August	September	3rd QTR	October	November	December	4th QTR
Fe-55	Ci	*	*	*	*	*	*	*	*
Sr-89	Ci	*	*	*	*	*	*	*	*
Sr-90	Ci	*	*	*	*	*	*	*	*
I-131	Ci	*	*	*	*	*	*	*	*
I-132	Ci	*	*	*	*	*	*	*	*
I-133	Ci	*	*	*	*	*	*	*	*
I-134	Ci	*	*	*	*	*	*	*	*
I-135	Ci	*	*	*	*	*	*	*	*
Cr-51	Ci	*	*	*	*	*	*	*	*
Mn-54	Ci	*	*	*	*	*	*	*	*
Fe-59	Ci	*	*	*	*	*	*	*	*
Co-58	Ci	*	*	*	*	*	*	*	*
Co-60	Ci	*	2.62E-06	1.47E-06	**4.09E-06**	*	*	*	*
Cs-137	Ci	*	7.82E-06	*	**7.82E-06**	*	*	*	*
Zn-65	Ci	*	*	*	*	*	*	*	*
Ru-103	Ci	*	*	*	*	*	*	*	*
Ag-110m	Ci	*	*	*	*	*	*	*	*
Sb-124	Ci	*	*	*	*	*	*	*	*
Cs-134	Ci	*	*	*	*	*	*	*	*
Ba-140	Ci	*	*	*	*	*	*	*	*
La-140	Ci	*	*	*	*	*	*	*	*
Ce-141	Ci	*	*	*	*	*	*	*	*
Cs-138	Ci	*	*	*	*	*	*	*	*
Zr-95	Ci	*	*	*	*	*	*	*	*
(above) Total		*	1.04E-05	1.47E-06	1.19E-05	*	*	*	*
H-3	Ci	*	*	*	*	*	*	*	*
Xe-133	Ci	*	*	*	*	*	*	*	*
Xe-135	Ci	*	*	*	*	*	*	*	*

*The activity of this nuclide is less than the LLD listed on the appropriate table.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
January hrough June 1996

Docket Numbers: 50-010/50-237/50-249

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (NOT IRRADIATED FUEL)

1. Type of Waste		Unit	6-month period	Est. Total Error, %
a.	Spent resins, filter sludges, evaporator bottoms, etc.	m^3	6.64E+01	12.4
		Ci	2.19E+02	
b.	Dry compressible waste, contaminated equipment, etc.	m^3	9.91E+02	16.6
		Ci	1.80E-01	
c.	Irradiated components, control rods, etc.	m^3	1.64E+00	20
		Ci	2.14E+02	
d.	Other (describe)	m^3	None	
		Ci	None	

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

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

	Percent %	Curies
Co-60	5.80E+01	1.30E+02
Fe-55	8.66E+00	1.94E+01
Mn-54	1.17E+01	2.63E+01
Cs-137	1.92E+01	4.31E+01

b. Dry compressible waste, contaminated equipment, etc.

Co-60	2.62E+01	4.71E-02
Fe-55	5.29E+01	9.52E-02
Mn-54	8.25E+00	1.49E-00
Ni-63	6.52E+00	1.17E-02
H-3	2.62E+00	4.72E-03
Cs-137	1.70E+00	3.06E-03

c. Irradiated components, control rods, etc.

Co-60	8.42E+01	1.80E+02
Fe-55	1.14E+01	2.43E+01
Ni-63	4.20E+00	8.97E+00

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS (Cont.)

3.Solid Waste Disposition

NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
22	Motor Freight (exclusive use only)	CNSI, Barnwell, SC
10	Motor Freight (exclusive use only)	AERC, Oak Ridge, TN
3	Motor Freight (exclusive use only)	Hake, Memphis, TN
2	Motor Freight (exclusive use only)	Manufacturing Sciences Corp., TN
1	Motor Freight (exclusive use only)	SEG, Oak Ridge, TN

B. IRRADIATED FUEL SHIPMENTS (Disposition)

NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
None		

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
July Through December 1996

Docket Numbers: 50-010/50-237/50-249

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (NOT IRRADIATED FUEL)

1. Type of Waste		Unit	6-month period	Est. Total Er
a.	Spent resins, filter sludges, evaporator bottoms, etc.	m^3	4.51E+01	12.4
		Ci	4.33E+02	
b.	Dry compressible waste, contaminated equipment, etc.	m^3	9.91E+02	16.6
		Ci	1.80E-01	
c.	Irradiated components, control rods, etc.	m^3	None	
		Ci	None	
d.	Other: Soil	m^3	6.54E+03	20
		Ci	8.04E-01	

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

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

	Percent %	Curies
Co-60	5.80E+01	1.30E+02
Fe-55	8.66E+00	1.94E+01
Mn-54	1.17E+01	2.63E+01
Cs-137	1.92E+01	4.31E+01

b. Dry compressible waste, contaminated equipment, etc.

Co-60	2.42E+01	7.54E-01
Fe-55	5.47E+01	1.70E+00
Mn-54	1.27E+01	3.95E-01
Ni-63	1.40E+00	6.73E-01

d. Other: Soil

Fe-55	8.37E+01	6.73E-01
H-3	5.88E+00	4.73E-02
Pu-241	4.19E+00	3.37E-01
C-14	2.09E+00	2.60E-01
Ni-63	1.71E+00	2.13E-01
Co-60	1.46E+00	1.18E-02

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS (Cont.)

3.Solid Waste Disposition

NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
27	Motor Freight (exclusive use only)	CNSI, Barnwell, SC
8	Motor Freight (exclusive use only)	AERC, Oak Ridge, TN
8	Motor Freight (exclusive use only)	Hake, Memphis, TN
1	Motor Freight (exclusive use only)	SEG, Oak Ridge, TN
256	Rail Shipment	Envirocare, Clive, UT

B. IRRADIATED FUEL SHIPMENTS (Disposition)

NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
None		

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

January Through June 1996

ABNORMAL RELEASES *

A. LIQUID		
1.	Number of Releases:	3
2.	Total Activity Releases:	3.56E+01 Ci
	TOTAL	3
B. GASEOUS		
1.	Number of Releases:	4
2.	Total Activity Releases:	5.78E-04 Ci
	TOTAL	4

A.1 In June, 1994, elevated tritium levels were discovered in the on-site storm sewers. The highest storm drain concentration, 9.04E+02 pCi/l, from the 4th quarter was used for both the 1st and 2nd of 1996. The total activity released is based on an estimated typical discharge flow of 10 gallons per minute. No other isotopes were found in the samples. Various storm sewer locations on-site are now periodically analyzed for tritium. The total release for the 3rd and 4th quarter of the year is 1.49E-04 Ci.

A.2 The May 1996 U3 Service Water grab sample had a concentration of 3.51E-07 uCi/ml for Fe-55. In order to calculate the total activity released for the month, it is assumed that the concentration existed for the entire month and the Service Water had a flow of 60,000 gpm. Based on the two aforementioned assumptions, the total activity released would be 3.56 Ci of Fe-55.

A.3 During D2R14, samples of the debris from the U2 main condenser tube-cleaning evolution were found to be isotopically contaminated. The highest results form the istopics were:

Mn-54	7.40E-02	pCi/g wet
Co-60	1.77E+00	pCi/g wet
Cs-137	3.01E-01	pCi/g wet

It was estimated that approximately 7,000 to 10,000 pounds of debris were in the U2 main condenser. When circulating was first utilized following the cleaning , it is assumed that all of the debris was removed from the condenser in the circulating water. An estimate of the activity released through the circulating water is:

Mn-54	3.36E-01 uCi
Co-60	8.05E+00 uCi
Cs-137	1.37E+00 uCi
TOTAL	9.76E+00 uCi

*These releases are not included in the Effluents Summation of all Releases Tables.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

January Through June 1996

ABNORMAL RELEASES (Continued)*

B.1 On 15 May 1996 the U3 isolation condenser was utilized. Due to residual amounts of anthropogenic radioactivity present in the system, an estimated 447 uCi of Co-60 was released into the environment.

B.2 During the demolition of tanks in the U1 Radwaste yard in the second quarter of 1996 an estimated 3.61E+00 uCi of Cs-137 and 6.78E-01 uCi of Co-60 to have been released into the atmosphere.

B.3 The East Turbine Building Ventilation System was found to have a contaminated fan blade. This system is designed to pull air in from outdoors and ventilate non-Radiologically Posted Areas and then exhaust the air back into the environment. It is unknown when the fan blade become contaminated. Smears of the ductwork indicate the presence of Co-60 and Cs-137. An estimated 2.5E+00 uCi of Co-60 and Cs-137 may have been exhausted into the environment.

B.4 The heating steam system has low level contamination present. During operation of the system, some steam is vented directly into the environment. Based on a steam concentration of 2.20E-08 uCi/gm, there would have been an estimated release of 1.25E-04 Ci of anthropogenic radionuclides (mainly Co-60 and Cs-137) into the environment for the first half of 1996.

*These releases are not included in the Effluents Summation of all Releases Tables.

DRESDEN NUCLEAR POWER STATION
UNITS 1, 2 AND 3 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT

July Through December 1996

ABNORMAL RELEASES *

A. LIQUID		
1.	Number of Releases:	6
2.	Total Activity Releases:	1.25E+02 Ci
	TOTAL	6
B. GASEOUS		
1.	Number of Releases:	2
2.	Total Activity Releases:	3.21E-05 Ci
	TOTAL	2

A.1 In June, 1994, elevated tritium levels were discovered in the on-site storm sewers. The highest storm drain concentration, 9.04E+02 pCi/l, was used for both the third and fourth quarters of 1996 (no data from the 3rd quarter). The total activity released is based on an estimated typical discharge flow of 10 gallons per minute and the highest tritium level for the fourth quarter. No other isotopes were found in the samples. Various storm sewer locations on-site are now periodically analyzed for tritium. The total release for the 3rd and 4th quarter of the year is 1.51E-04 Ci.

A.2 The July 1996 U2 Service Water grab sample had a concentration of 1.58E-07 uCi/ml for Fe-55. In order to calculate the total activity released for the month, it is assumed that the concentration existed for the entire month and the Service Water had a flow of 60,000 gpm. Based on the two aforementioned assumptions, the total activity released would be 1.60E+00 Ci of Fe-55.

A.3 The October 1996 U2 Service Water grab sample had a concentration of 9.01E-07 μCi/ml for Fe-55 and 6.63E-07 μCi/ml for H-3. In order to calculate the total activity released for the month, it is assumed that the concentration existed for the entire month and the Service Water had a flow of 60,000 gpm. Based on the two aforementioned assumptions, the total activity released would be 9.13E+00 Ci of Fe-55 and 6.72E+00 Ci of H-3.

A.4 The October 1996 U3 Service Water grab sample had a concentration of 2.19E-07 μCi/ml for Fe-55 and 8.85E-07 μCi/ml for H-3. In order to calculate the total activity released for the month, it is assumed that the concentration existed for the entire month and the Service Water had a flow of 60,000 gpm. Based on the two aforementioned assumptions, the total activity released would be 2.22E+00 Ci of Fe-55 and 8.97E+00 Ci of H-3.

A.5 The November 1996 U2 Service Water grab sample had a concentration of 1.42E-06 μCi/ml for H-3. In order to calculate the total activity released for the month, it is assumed that the concentration existed for the entire month and the Service Water had a flow of 60,000 gpm. Based on the two aforementioned assumptions, the total activity released would be 1.39E+01 Ci of H-3.

A.6 The November 1996 U3 Service Water grab sample had a concentration of 6.90E-06 μCi/ml for Fe-55 and 1.48E-06 μCi/ml for H-3. In order to calculate the total activity released for the month, it is assumed that the concentration existed for the entire month and the Service Water had a flow of 60,000 gpm. Based on the two aforementioned assumptions, the total activity released would be 6.77E+01 Ci of Fe-55 and 1.45E+01 Ci of H-3.

*These releases are not included in the Effluents Summation of all Releases Tables.

ABNORMAL RELEASES (Continued) *

B.1 The East Turbine Building Ventilation System was found to have a contaminated fan blade. This system is designed to pull air in from outdoors and ventilate non-Radiologically Posted Areas and then exhaust the air back into the environment. It is unknown when the fan blade become contaminated. Smears of the ductwork indicate the presence of Co-60 and Cs-137. An estimated 2.5E+00 μCi of Co-60 and Cs-137 may have been exhausted into the environment.

B.2 The heating steam system has low level contamination present. During operation of the system, some steam is vented directly into the environment. Based on a steam concentration of 2.20E-08 uCi/gm, there would have been an estimated release of 2.96E-05 Ci of anthropogenic radionuclides (mainly Co-60 and Cs-137) into the environment for the second half of 1996.

*These releases are not included in the Effluents Summation of all Releases Tables.

DRESDEN NUCLEAR POWER STATION DOCKET NOS. 50-10, 50-237, 50-249

RADIOLOGICAL IMPACT ON THE PUBLIC

DRESDEN STATION UNIT ONE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
BETA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
TOT. BODY (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
SKIN (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
ORGAN (MREM)	7.03E-05 (SSE)	1.98E-05 (SSE)	2.78E-05 (SSE)	4.94E-05 (SSE)	1.67E-04 (SSE)
	LIVER	LIVER	LIVER	LUNG	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
INFANT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
		LIVER	LIVER	LIVER	LUNG		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT ONE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
BETA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
TOT. BODY (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
SKIN (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
ORGAN (MREM)	6.90E-05 (SSE)	3.64E-05 (SSE)	4.89E-05 (SSE)	6.10E-05 (SSE)	2.15E-04 (SSE)
	LUNG	LIVER	LIVER	GI_LLI	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
CHILD RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
		LUNG	LIVER	LIVER	GI_LLI		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT ONE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
BETA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
TOT. BODY (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
SKIN (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
ORGAN (MREM)	6.78E-05 (SSE)	2.88E-05 (SSE)	4.19E-05 (SSE)	5.54E-05 (SSE)	1.92E-04 (SSE)
	LUNG	LIVER	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
TEENAGER RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
		LUNG	LIVER	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT ONE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
BETA AIR (MRAD)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
TOT. BODY (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
SKIN (MREM)	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )	0.00E+00 ( )
ORGAN (MREM)	6.77E-05 (SSE)	2.66E-05 (SSE)	4.02E-05 (SSE)	5.42E-05 (SSE)	1.88E-04 (SSE)
	GI_LLI	LIVER	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
ADULT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
		GI_LLI	LIVER	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	0.00E+00 ( )	1.25E-07 (N)	2.19E-10 (N)	3.33E-06 (N)	3.45E-06 (N)
BETA AIR (MRAD)	0.00E+00 ( )	2.35E-08 (E)	4.10E-11 (E)	1.84E-07 (E)	2.08E-07 (E)
TOT. BODY (MREM)	0.00E+00 ( )	9.42E-08 (N)	1.65E-10 (N)	2.50E-06 (N)	2.60E-06 (N)
SKIN (MREM)	0.00E+00 ( )	1.15E-07 (N)	2.00E-10 (N)	2.72E-06 (N)	2.83E-06 (N)
ORGAN (MREM)	6.08E-04 (N)	3.33E-04 (N)	5.20E-04 (N)	4.43E-04 (N)	1.83E-03 (N)
	LUNG	THYROID	THYROID	BONE	BONE

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
INFANT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.00	0.01	0.01	15.0	0.01
		LUNG	THYROID	THYROID	BONE		BONE

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	0.00E+00	1.25E-07	2.19E-10	3.33E-06	3.45E-06
(MRAD)	( )	(N)	(N)	(N)	(N)
BETA AIR	0.00E+00	2.35E-08	4.10E-11	1.84E-07	2.08E-07
(MRAD)	( )	(E)	(E)	(E)	(E)
TOT. BODY	0.00E+00	9.42E-08	1.65E-10	2.50E-06	2.60E-06
(MREM)	( )	(N)	(N)	(N)	(N)
SKIN	0.00E+00	1.15E-07	2.00E-10	2.72E-06	2.83E-06
(MREM)	( )	(N)	(N)	(N)	(N)
ORGAN	6.14E-04	3.47E-04	1.17E-03	2.77E-03	4.76E-03
(MREM)	(N)	(N)	(N)	(NW)	(N)
	LUNG	THYROID	BONE	BONE	BONE

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
CHILD RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.00	0.02	0.04	15.0	0.03
		LUNG	THYROID	BONE	BONE		BONE

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	0.00E+00	1.25E-07	2.19E-10	3.33E-06	3.45E-06
(MRAD)	( )	(N)	(N)	(N)	(N)
BETA AIR	0.00E+00	2.35E-08	4.10E-11	1.84E-07	2.08E-07
(MRAD)	( )	(E)	(E)	(E)	(E)
TOT. BODY	0.00E+00	9.42E-08	1.65E-10	2.50E-06	2.60E-06
(MREM)	( )	(N)	(N)	(N)	(N)
SKIN	0.00E+00	1.15E-07	2.00E-10	2.72E-06	2.83E-06
(MREM)	( )	(N)	(N)	(N)	(N)
ORGAN	6.17E-04	3.55E-04	8.45E-04	1.51E-03	3.19E-03
(MREM)	(N)	(N)	(N)	(N)	(N)
	LUNG	GI_LLI	LIVER	BONE	BONE

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
TEENAGER RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.00	0.01	0.02	15.0	0.02
		LUNG	GI_LLI	LIVER	BONE		BONE

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	0.00E+00 ( )	1.25E-07 (N)	2.19E-10 (N)	3.33E-06 (N)	3.45E-06 (N)
BETA AIR (MRAD)	0.00E+00 ( )	2.35E-08 (E)	4.10E-11 (E)	1.84E-07 (E)	2.08E-07 (E)
TOT. BODY (MREM)	0.00E+00 ( )	9.42E-08 (N)	1.65E-10 (N)	2.50E-06 (N)	2.60E-06 (N)
SKIN (MREM)	0.00E+00 ( )	1.15E-07 (N)	2.00E-10 (N)	2.72E-06 (N)	2.83E-06 (N)
ORGAN (MREM)	6.12E-04 (N)	3.56E-04 (N)	7.63E-04 (N)	1.80E-03 (NW)	3.35E-03 (N)
	LUNG	GI_LLI	GI_LLI	BONE	BONE

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
ADULT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.00	0.01	0.02	15.0	0.02
		LUNG	GI_LLI	GI_LLI	BONE		BONE

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	7.95E-05	7.94E-04	3.45E-06	3.46E-05	9.11E-04
(MRAD)	(N)	(N)	(N)	(N)	(N)
BETA AIR	1.49E-05	8.31E-05	6.44E-07	6.59E-06	1.05E-04
(MRAD)	(E)	(E)	(E)	(E)	(E)
TOT. BODY	5.97E-05	1.41E-03	2.59E-06	2.60E-05	1.45E-03
(MREM)	(N)	(WNW)	(N)	(N)	(WNW)
SKIN	7.27E-05	6.85E-04	3.15E-06	3.16E-05	7.92E-04
(MREM)	(N)	(N)	(N)	(N)	(N)
ORGAN	9.18E-04	1.37E-03	4.45E-04	1.01E-03	3.74E-03
(MREM)	(N)	(SSW)	(N)	(N)	(N)
	THYROID	THYROID	THYROID	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
INFANT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.02	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.06	0.00	0.00	5.0	0.03
SKIN (MREM)	7.5	0.00	0.01	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.01	0.02	0.01	0.01	15.0	0.02
		THYROID	THYROID	THYROID	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	7.95E-05	7.94E-04	3.45E-06	3.46E-05	9.11E-04
(MRAD)	(N)	(N)	(N)	(N)	(N)
BETA AIR	1.49E-05	8.31E-05	6.44E-07	6.59E-06	1.05E-04
(MRAD)	(E)	(E)	(E)	(E)	(E)
TOT. BODY	5.97E-05	1.41E-03	2.59E-06	2.60E-05	1.45E-03
(MREM)	(N)	(WNW)	(N)	(N)	(WNW)
SKIN	7.27E-05	6.85E-04	3.15E-06	3.16E-05	7.92E-04
(MREM)	(N)	(N)	(N)	(N)	(N)
ORGAN	9.15E-04	1.82E-03	5.30E-04	1.70E-03	4.49E-03
(MREM)	(N)	(N)	(N)	(N)	(N)
	THYROID	THYROID	GI_LLI	BONE	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
TEENAGER RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.02	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.06	0.00	0.00	5.0	0.03
SKIN (MREM)	7.5	0.00	0.01	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.01	0.02	0.01	0.02	15.0	0.03
		THYROID	THYROID	GI_LLI	BONE		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	7.95E-05	7.94E-04	3.45E-06	3.46E-05	9.11E-04
(MRAD)	(N)	(N)	(N)	(N)	(N)
BETA AIR	1.49E-05	8.31E-05	6.44E-07	6.59E-06	1.05E-04
(MRAD)	(E)	(E)	(E)	(E)	(E)
TOT. BODY	5.97E-05	1.41E-03	2.59E-06	2.60E-05	1.45E-03
(MREM)	(N)	(WNW)	(N)	(N)	(WNW)
SKIN	7.27E-05	6.85E-04	3.15E-06	3.16E-05	7.92E-04
(MREM)	(N)	(N)	(N)	(N)	(N)
ORGAN	9.29E-04	1.85E-03	5.27E-04	1.92E-03	4.54E-03
(MREM)	(N)	(N)	(N)	(N)	(N)
	THYROID	THYROID	GI_LLI	BONE	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
ADULT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.02	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.06	0.00	0.00	5.0	0.03
SKIN (MREM)	7.5	0.00	0.01	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.01	0.02	0.01	0.03	15.0	0.03
		THYROID	THYROID	GI_LLI	BONE		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	7.95E-05	7.94E-04	3.45E-06	3.46E-05	9.11E-04
(MRAD)	(N)	(N)	(N)	(N)	(N)
BETA AIR	1.49E-05	8.31E-05	6.44E-07	6.59E-06	1.05E-04
(MRAD)	(E)	(E)	(E)	(E)	(E)
TOT. BODY	5.97E-05	1.41E-03	2.59E-06	2.60E-05	1.45E-03
(MREM)	(N)	(WNW)	(N)	(N)	(WNW)
SKIN	7.27E-05	6.85E-04	3.15E-06	3.16E-05	7.92E-04
(MREM)	(N)	(N)	(N)	(N)	(N)
ORGAN	9.50E-04	2.37E-03	5.24E-04	2.95E-03	5.61E-03
(MREM)	(N)	(N)	(N)	(NW)	(N)
	THYROID	THYROID	GI_LLI	BONE	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10CFR 50 APP. I
CHILD RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.02	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.06	0.00	0.00	5.0	0.03
SKIN (MREM)	7.5	0.00	0.01	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.01	0.03	0.01	0.04	15.0	0.04
		THYROID	THYROID	GI_LLI	BONE		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	9.43E-06	1.44E-05	1.01E-05	6.73E-06	4.06E-05
INTERNAL ORGAN	1.15E-05	1.72E-05	1.63E-05	1.05E-05	5.55E-05
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
IT. ORGAN(MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	9.43E-06	1.44E-05	1.01E-05	6.73E-06	4.06E-05
INTERNAL ORGAN	1.15E-05	1.72E-05	1.63E-05	1.05E-05	5.55E-05
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		LIVER

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	2.53E-05	3.75E-05	5.02E-05	3.16E-05	1.45E-04
INTERNAL ORGAN	1.08E-04	1.56E-04	2.75E-04	1.71E-04	7.09E-04
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
IT. ORGAN(MREM)	5.0	0.00	0.00	0.01	0.00	10.0	0.01
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	9.53E-06	1.45E-05	1.04E-05	6.92E-06	4.14E-05
INTERNAL ORGAN	1.09E-05	1.63E-05	1.47E-05	9.49E-06	5.13E-05
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		LIVER

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	4.22E-05	6.17E-05	1.05E-04	6.52E-05	2.74E-04
INTERNAL ORGAN	1.11E-04	1.60E-04	2.90E-04	1.80E-04	7.41E-04
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.01	0.00	3.0	0.01
IT. ORGAN(MREM)	5.0	0.00	0.00	0.01	0.00	10.0	0.01
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.03E-06	7.63E-06	5.79E-06	3.83E-06	2.23E-05
INTERNAL ORGAN	6.65E-06	1.04E-05	7.43E-06	4.80E-06	2.84E-05
	GI_LLI	GI_LLI	LIVER	LIVER	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	7.39E-05	1.08E-04	1.88E-04	1.17E-04	4.87E-04
INTERNAL ORGAN	1.10E-04	1.60E-04	2.85E-04	1.77E-04	7.32E-04
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.00	0.01	0.01	0.01	3.0	0.02
IT. ORGAN(MREM)	5.0	0.00	0.00	0.01	0.00	10.0	0.01
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT TWO

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	7.17E-06	1.08E-05	8.56E-06	5.65E-06	3.22E-05
INTERNAL ORGAN	9.80E-06	1.54E-05	1.00E-05	6.60E-06	4.19E-05
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	9.43E-06	1.37E-05	1.01E-05	6.73E-06	3.99E-05
INTERNAL ORGAN	1.15E-05	1.69E-05	1.64E-05	1.04E-05	5.53E-05
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
IT. ORGAN(MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	9.43E-06	1.37E-05	1.01E-05	6.73E-06	3.99E-05
INTERNAL ORGAN	1.15E-05	1.69E-05	1.64E-05	1.04E-05	5.53E-05
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		LIVER

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	2.53E-05	3.60E-05	5.08E-05	3.15E-05	1.44E-04
INTERNAL ORGAN	1.08E-04	1.55E-04	2.78E-04	1.70E-04	7.11E-04
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
IT. ORGAN(MREM)	5.0	0.00	0.00	0.01	0.00	10.0	0.01
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	9.53E-06	1.38E-05	1.04E-05	6.92E-06	4.07E-05
INTERNAL ORGAN	1.09E-05	1.60E-05	1.48E-05	9.48E-06	5.11E-05
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		LIVER

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	4.22E-05	6.07E-05	1.06E-04	6.51E-05	2.74E-04
INTERNAL ORGAN	1.11E-04	1.60E-04	2.94E-04	1.79E-04	7.44E-04
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.00	0.00	0.01	0.00	3.0	0.01
IT. ORGAN(MREM)	5.0	0.00	0.00	0.01	0.00	10.0	0.01
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.03E-06	7.36E-06	5.80E-06	3.83E-06	2.20E-05
INTERNAL ORGAN	6.65E-06	8.89E-06	7.47E-06	4.80E-06	2.69E-05
	GI_LLI	GI_LLI	LIVER	LIVER	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

ACTUAL 1996
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	7.39E-05	1.07E-04	1.91E-04	1.17E-04	4.89E-04
INTERNAL ORGAN	1.10E-04	1.59E-04	2.89E-04	1.77E-04	7.35E-04
	LIVER	LIVER	LIVER	LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
TOTAL BODY (MREM)	1.5	0.00	0.01	0.01	0.01	3.0	0.02
IT. ORGAN(MREM)	5.0	0.00	0.00	0.01	0.00	10.0	0.01
		LIVER	LIVER	LIVER	LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN STATION UNIT THREE

1996 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/96 TO 12/31/96 CALCULATED 02/20/97
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	7.17E-06	1.05E-05	8.59E-06	5.65E-06	3.20E-05
INTERNAL ORGAN	9.80E-06	1.30E-05	1.01E-05	6.60E-06	3.94E-05
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1996

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.001
INTERNAL ORGAN	4.0 MREM	0.001
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

DRESDEN NUCLEAR POWER STATION DOCKET NOS. 50-10, 50-237, 50-249

METEOROLOGICAL DATA

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

January-March 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2150
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
- N	.28	.05	.19	.05	.00	.00	.14	.00	.09	.05	.05	.09	.09	.05	.09	.00	1.21				1.21				
3 SS	.09	.14	.33	.14	.14	.19	.14	.19	.00	.33	.05	.05	.19	.28	.23	.19	2.65					2.65			
MS	.09	.00	.00	.00	.05	.05	.00	.28	.28	.23	.05	.05	.14	.19	.09	.14	1.63						1.63		
ES	.05	.05	.09	.05	.00	.14	.00	.05	.00	.00	.00	.00	.14	.05	.09	.05	.74							.74	
																									6.23
EU	.14	.09	.28	.23	.09	.00	.05	.00	.00	.00	.05	.05	.00	.09	.05	.14	1.26	1.26							
MU	.14	.05	.00	.09	.00	.00	.00	.00	.00	.00	.00	.09	.05	.00	.05	.05	.51		.51						
4 SU	.14	.00	.05	.05	.00	.09	.05	.05	.00	.00	.00	.00	.05	.09	.05	.05	.65			.65					
- N	.60	.74	1.02	1.30	.47	.28	.33	.42	.37	.19	.14	.14	.88	.65	.84	.74	9.12				9.12				
7 SS	.88	.84	.88	.93	1.44	.84	.14	1.63	1.07	1.07	.28	.09	1.16	.60	1.44	2.14	15.44					15.44			
MS	.09	.09	.09	.00	.00	.33	.19	.19	.47	.56	.51	.23	.23	.47	.60	.19	4.23						4.23		
ES	.00	.00	.00	.00	.00	.05	.00	.00	.00	.09	.51	.05	.05	.00	.00	.09	.84							.84	
																									32.05
EU	.05	.09	.14	.00	.47	.47	.14	.09	.28	.05	.00	.33	.42	.93	.70	.74	4.88	4.88							
MU	.09	.00	.00	.00	.05	.00	.05	.00	.23	.05	.05	.05	.05	.05	.14	.19	.98		.98						
8 SU	.00	.09	.05	.00	.00	.09	.09	.05	.28	.14	.00	.09	.28	.09	.14	.28	1.67			1.67					
- N	1.26	1.21	1.53	.00	.42	.51	.84	.79	1.07	.56	.47	.42	.98	1.72	1.91	2.00	15.67				15.67				
1 SS	.88	.51	.19	.00	.19	.79	.60	1.40	1.53	1.21	1.12	.47	.88	.79	1.07	1.26	12.88					12.88			
2 MS	.00	.00	.00	.00	.00	.05	.09	.00	.05	.00	.23	.09	.00	.00	.00	.00	.51						.51		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									36.60
EU	.23	.00	.00	.00	.00	.00	.14	.09	.37	.05	.00	.09	.65	.56	.51	.56	3.26	3.26							
1 MU	.00	.00	.00	.00	.00	.00	.05	.00	.19	.09	.05	.05	.09	.19	.00	.09	.79		.79						
3 SU	.00	.00	.00	.00	.00	.00	.09	.05	.05	.19	.00	.05	.14	.05	.00	.05	.65			.65					
- N	.88	.42	.65	.00	.00	.28	.84	.56	.60	.93	.51	.28	1.26	2.00	.42	.70	10.33				10.33				
1 SS	.23	.00	.00	.00	.00	.37	.28	.47	.60	.47	.14	.05	.60	.09	.00	.23	3.53					3.53			
8 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									18.56

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

January-March 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

SPEED	WIND DIRECTION CLASSES																STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.05	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.00	.28	.19	.00	.00	.65	.65							
1 MU	.00	.00	.00	.00	.00	.00	.09	.00	.05	.09	.05	.00	.00	.05	.00	.00	.33		.33						
9 SU	.00	.00	.05	.00	.00	.00	.00	.00	.00	.09	.00	.00	.14	.05	.00	.00	.33			.33					
- N	.09	.00	.05	.00	.00	.00	.05	.05	.33	.05	.05	.19	1.30	.42	.00	.14	2.70				2.70				
2 SS	.00	.00	.00	.00	.00	.00	.05	.47	.37	.14	.00	.00	.05	.00	.00	.00	1.07					1.07			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									5.07
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05		.05						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.09			.09					
N	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.28	.23	.05	.00	.00	.00	.65				.65				
2 SS	.00	.00	.00	.00	.00	.00	.00	.42	.14	.00	.14	.00	.00	.00	.00	.00	.70					.70			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									1.49
TOT	6.28	4.37	5.58	2.84	3.30	4.51	4.42	7.30	8.42	6.70	4.74	3.30	10.19	9.63	8.42	10.00	100.00	10.05	2.65	3.40	39.67	36.28	6.37	1.58	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.47	.19	.42	.23	.56	.47	.33	.19	.65	.19	.09	.47	1.35	1.77	1.26	1.44	10.05	Extremely Unstable
.23	.05	.00	.09	.05	.00	.19	.00	.47	.23	.14	.23	.19	.28	.19	.33	2.65	Moderately Unstable
.14	.09	.14	.05	.00	.19	.23	.14	.33	.42	.00	.19	.65	.28	.19	.37	3.40	Slightly Unstable
3.12	2.42	3.44	1.35	.88	1.07	2.19	1.91	2.47	1.77	1.49	1.35	4.56	4.84	3.26	3.58	39.67	Neutral
2.09	1.49	1.40	1.07	1.77	2.19	1.21	4.56	3.72	3.21	1.72	.65	2.88	1.77	2.74	3.81	36.28	Slightly Stable
.19	.09	.09	.00	.05	.42	.28	.47	.79	.79	.79	.37	.37	.65	.70	.33	6.37	Moderately Stable
.05	.05	.09	.05	.00	.19	.00	.05	.00	.09	.51	.05	.19	.05	.09	.14	1.58	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.51	.23	.60	.23	.19	.37	.28	.51	.37	.60	.14	.19	.56	.56	.51	.37	6.23	1.0 - 3.5 mph
2.00	1.81	2.33	2.60	2.00	1.58	.74	2.28	1.91	1.91	1.49	.65	2.42	1.91	3.02	3.40	32.05	3.6 - 7.5 mph
2.28	1.91	1.91	.00	1.12	1.91	1.81	2.33	3.44	2.00	1.86	1.44	2.60	3.58	3.95	4.47	36.60	7.6 - 12.5 mph
1.35	.42	.65	.00	.00	.65	1.40	1.16	1.81	1.72	.70	.51	2.74	2.88	.93	1.63	18.56	12.6 - 18.5 mph
.14	.00	.09	.00	.00	.00	.19	.51	.74	.47	.14	.19	1.77	.70	.00	.14	5.07	18.6 - 24.5 mph
.00	.00	.00	.00	.00	.00	.00	.51	.14	.00	.42	.33	.09	.00	.00	.00	1.49	> 24.5 mph

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

January-March 1996
300-35 Ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2125
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
	EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
	MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C	SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A	N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L	SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M	MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
	ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
	EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
	MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
1	SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
-	N	.00	.00	.05	.00	.00	.05	.09	.05	.05	.05	.00	.05	.09	.05	.05	.05	.61			.61				
3	SS	.00	.00	.05	.05	.00	.00	.00	.09	.00	.05	.00	.00	.00	.00	.00	.00	.24				.24			
	MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05					.05		
	ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00	
																									.89
	EU	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05						
	MU	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.09	.24		.24					
4	SU	.00	.00	.09	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05	.05	.00	.05	.28			.28				
-	N	.24	.24	.75	.66	.00	.09	.38	.09	.05	.19	.00	.19	.28	.14	.28	.28	3.86				3.86			
7	SS	.00	.00	.42	.42	.09	.09	.19	.14	.09	.28	.09	.00	.05	.09	.24	.00	2.21					2.21		
	MS	.09	.00	.05	.05	.19	.05	.00	.00	.00	.00	.05	.00	.00	.00	.00	.09	.56						.56	
	ES	.00	.05	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14							.14
																									7.34
	EU	.00	.00	.09	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.19						
	MU	.05	.00	.09	.05	.14	.09	.19	.00	.05	.05	.00	.05	.00	.19	.14	.05	1.13		1.13					
8	SU	.09	.05	.09	.09	.14	.14	.09	.00	.38	.09	.09	.05	.33	.19	.05	.14	2.02			2.02				
-	N	.56	.38	.66	1.13	.66	.38	.52	.66	.99	.42	.14	.38	1.04	1.22	1.27	.99	11.39				11.39			
1	SS	.19	.71	.66	.61	.56	.00	.09	.24	.42	.80	.24	.19	.19	.19	.71	.33	6.12					6.12		
2	MS	.24	.09	.05	.09	.00	.05	.00	.00	.00	.00	.14	.28	.19	.14	.09	.28	1.65						1.65	
	ES	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.19	.00	.05	.05	.33							.33
																									22.82
	EU	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.14	.09	.19	.52	.52						
1	MU	.05	.00	.00	.00	.05	.09	.09	.00	.33	.00	.00	.19	.19	.38	.28	.19	1.84		1.84					
3	SU	.05	.05	.00	.00	.00	.00	.09	.09	.33	.14	.00	.14	.05	.05	.19	.33	1.51			1.51				
-	N	1.04	.94	.75	.00	.38	.52	.56	1.04	1.04	1.04	.89	.47	1.18	1.51	1.98	2.07	15.39				15.39			
1	SS	1.04	.71	.24	.05	.56	.85	.38	1.13	2.31	1.55	.85	.71	.42	.80	.71	.99	13.27					13.27		
8	MS	.47	.24	.00	.00	.00	.09	.09	.28	.28	.19	.56	.42	.05	.19	.24	.24	3.34						3.34	
	ES	.00	.00	.00	.00	.00	.00	.00	.00	.05	.09	.14	.05	.00	.09	.19	.00	.61							.61
																									36.47

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

January-March 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

SPEED	WIND DIRECTION CLASSES																STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.19	.00	.38	.38							
1 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.14	.05	.14	.47		.47						
9 SU	.09	.00	.00	.00	.00	.00	.05	.00	.00	.14	.00	.00	.24	.38	.05	.19	1.13			1.13					
- N	1.13	.61	1.18	.00	.00	.00	1.04	.42	.56	.80	.66	.28	1.22	1.22	.61	.89	10.64				10.64				
2 SS	.89	.52	.05	.00	.05	.52	.47	.14	.99	.66	.56	.09	.28	.33	.09	.56	6.21					6.21			
4 MS	.19	.00	.00	.00	.00	.09	.00	.00	.09	.14	.28	.00	.05	.00	.00	.05	.89						.89		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.09							.09	
																									19.81
EU	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.19	.19							
G MU	.14	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.00	.24	.00	.00	.00	.52		.52						
T SU	.05	.00	.00	.00	.00	.00	.09	.00	.05	.09	.00	.05	.28	.28	.00	.00	.89			.89					
N	.75	.47	.47	.00	.00	.00	.09	.38	.56	.28	.56	.42	1.88	1.88	.28	.47	8.52				8.52				
2 SS	.14	.09	.00	.00	.00	.00	.09	.80	.75	.14	.00	.05	.28	.00	.00	.19	2.54					2.54			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									12.66
TOT	7.62	5.13	5.74	3.29	3.01	3.15	4.66	5.60	9.36	7.34	5.32	4.14	8.89	9.93	7.86	8.94	100.00	1.32	4.19	5.84	50.40	30.59	6.49	1.18	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.14	.00	.09	.05	.14	.05	.00	.00	.00	.00	.00	.00	.00	.38	.28	.19	1.32	Extremely Unstable
.24	.00	.09	.09	.19	.19	.28	.00	.38	.14	.05	.28	.56	.75	.47	.47	4.19	Moderately Unstable
.28	.09	.19	.09	.14	.14	.38	.09	.75	.47	.09	.24	.94	.94	.28	.71	5.84	Slightly Unstable
3.72	2.64	3.86	1.79	1.04	1.04	2.68	2.64	3.25	2.78	2.26	1.79	5.69	6.02	4.47	4.75	50.40	Neutral
2.26	2.02	1.41	1.13	1.27	1.46	1.22	2.54	4.56	3.48	1.74	1.04	1.22	1.41	1.74	2.07	30.59	Slightly Stable
.99	.33	.09	.14	.19	.28	.09	.28	.38	.33	1.04	.71	.28	.33	.38	.66	6.49	Moderately Stable
.00	.05	.00	.00	.05	.00	.00	.05	.05	.14	.14	.09	.19	.09	.24	.09	1.18	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.00	.00	.09	.05	.00	.05	.09	.14	.05	.09	.00	.05	.09	.05	.09	.05	.89	1.0 - 3.5 mph
.33	.28	1.32	1.22	.33	.24	.61	.24	.14	.47	.14	.24	.38	.33	.52	.56	7.34	3.6 - 7.5 mph
1.13	1.22	1.65	1.98	1.55	.71	.89	.94	1.84	1.36	.61	.94	1.93	1.93	2.31	1.84	22.82	7.6 - 12.5 mph
2.64	1.93	.99	.05	1.08	1.55	1.22	2.54	4.33	3.01	2.45	1.98	1.88	3.15	3.67	4.00	36.47	12.6 - 18.5 mph
2.31	1.13	1.22	.00	.05	.61	1.55	.56	1.65	1.79	1.51	.42	1.93	2.26	.99	1.84	19.81	18.6 - 24.5 mph
1.22	.56	.47	.00	.00	.00	.28	1.18	1.36	.61	.61	.52	2.68	2.21	.28	.66	12.66	> 24.5 mph

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

April-June 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2182
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.05	.00	.05	.05	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.23							
MU	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.00	.05	.00	.00	.14		.14						
1 SU	.00	.00	.00	.00	.00	.00	.05	.00	.09	.00	.00	.00	.00	.00	.00	.05	.18			.18					
- N	.21	.49	.12	.31	.12	.07	.02	.02	.07	.07	.12	.07	.02	.12	.12	.16	2.11				2.11				
3 SS	.50	.46	.46	.50	.27	.27	.37	.09	.09	.23	.05	.23	.18	.14	.46	.18	4.49					4.49			
MS	.05	.05	.05	.18	.32	.14	.18	.23	.32	.41	.23	.23	.55	.14	.14	.23	3.44						3.44		
ES	.05	.18	.00	.05	.14	.14	.14	.18	.14	.27	.37	.14	.05	.05	.18	.05	2.11							2.11	
																									12.69
EU	.46	.64	.96	.82	.41	.23	.14	.05	.05	.14	.18	.05	.09	.14	.41	.09	4.86	4.86							
MU	.18	.14	.09	.05	.18	.05	.05	.05	.05	.00	.05	.05	.05	.09	.09	.14	1.28		1.28						
4 SU	.09	.18	.27	.14	.09	.09	.18	.09	.00	.05	.09	.09	.05	.09	.18	.09	1.79			1.79					
- N	.32	.46	1.37	2.02	1.56	.60	.50	.18	.09	.18	.46	.73	.87	.73	.55	.37	11.00				11.00				
7 SS	.50	1.60	1.74	2.06	2.61	1.97	.78	.82	.60	.41	.73	.55	1.42	.55	.32	.32	17.00					17.00			
MS	.00	.14	.00	.05	.50	.78	.37	.18	.32	.73	.69	.27	.09	.37	.09	.27	4.86						4.86		
ES	.00	.00	.00	.00	.00	.27	.09	.00	.05	.14	.55	.05	.00	.00	.05	.00	1.19							1.19	
																									41.98
EU	.87	.37	.46	.14	.50	.27	.14	.14	.27	.18	.05	.09	.32	.55	.46	.73	5.55	5.55							
MU	.18	.05	.05	.00	.05	.00	.05	.09	.09	.00	.09	.18	.27	.14	.14	.05	1.42		1.42						
8 SU	.14	.00	.14	.09	.00	.00	.05	.09	.00	.14	.00	.27	.14	.09	.00	.09	1.24			1.24					
- N	.60	.92	.60	1.37	1.42	.41	.46	.37	.41	.69	.46	.82	1.10	1.28	.46	.46	11.82				11.82				
1 SS	.37	.37	1.01	.92	.37	.50	.37	.60	.92	.78	.87	.64	.50	.46	.14	.32	9.12					9.12			
2 MS	.00	.00	.00	.00	.05	.00	.00	.00	.14	.14	.46	.23	.00	.00	.00	.00	1.01						1.01		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05							.05	
																									30.20
EU	.00	.00	.00	.00	.09	.09	.00	.23	.14	.23	.37	.05	.18	.23	.27	.14	2.02	2.02							
1 MU	.00	.00	.00	.00	.00	.00	.00	.14	.05	.05	.05	.09	.05	.05	.05	.05	.55		.55						
3 SU	.00	.00	.00	.00	.05	.00	.00	.09	.14	.09	.09	.14	.05	.00	.23	.00	.87			.87					
- N	.23	.00	.00	.00	.14	.05	.37	.37	.37	.27	.27	.32	.64	.46	.32	.23	4.03				4.03				
1 SS	.00	.00	.00	.05	.00	.00	.32	.69	.87	1.19	.64	.50	.09	.14	.00	.00	4.49					4.49			
8 MS	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.00	.00	.00	.00	.09						.09		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									12.05

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

April-June 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

SPEED	WIND DIRECTION CLASSES																STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.05	.27	.23	.14	.00	.00	.23	.00	.00	.92	.92							
1 MU	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.05	.00	.00	.05	.00	.00	.18		.18						
9 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.00	.09	.00	.00	.00	.23			.23					
- N	.00	.00	.00	.00	.00	.00	.00	.00	.14	.32	.14	.09	.09	.00	.00	.00	.78				.78				
2 SS	.00	.00	.00	.00	.00	.00	.00	.09	.14	.18	.27	.00	.00	.00	.00	.00	.69					.69			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									2.80
EU	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05	.05							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05			.05					
N	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14	.27	.09	.00	.00	.00	.00	.55				.55				
2 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.64
TOT	4.79	6.04	7.36	8.78	8.92	6.03	4.61	4.88	6.03	7.45	7.77	6.03	6.90	6.12	4.65	4.01	100.37	13.61	3.57	4.35	30.29	35.79	9.40	3.35	100.37

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
1.37	1.01	1.47	1.01	1.05	.64	.27	.46	.78	.78	.73	.18	.60	1.15	1.15	.96	13.61	Extremely Unstable
.37	.18	.14	.05	.23	.09	.09	.32	.23	.09	.23	.32	.37	.37	.27	.23	3.57	Moderately Unstable
.23	.18	.41	.23	.14	.09	.27	.27	.23	.41	.23	.50	.32	.18	.41	.23	4.35	Slightly Unstable
1.36	1.87	2.09	3.70	3.23	1.12	1.35	.94	1.12	1.67	1.72	2.13	2.73	2.59	1.45	1.22	30.29	Neutral
1.37	2.43	3.21	3.53	3.25	2.75	1.83	2.29	2.61	2.80	2.57	1.92	2.20	1.28	.92	.82	35.79	Slightly Stable
.05	.18	.05	.23	.87	.92	.55	.41	.82	1.28	1.37	.78	.64	.50	.23	.50	9.40	Moderately Stable
.05	.18	.00	.05	.14	.41	.23	.18	.23	.41	.92	.18	.05	.05	.23	.05	3.35	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.85	1.18	.67	1.08	.90	.71	.76	.57	.71	.99	.76	.67	.80	.48	.90	.67	12.69	1.0 - 3.5 mph
1.56	3.16	4.45	5.13	5.36	3.99	2.11	1.37	1.15	1.65	2.75	1.79	2.57	1.97	1.70	1.28	41.98	3.6 - 7.5 mph
2.15	1.70	2.25	2.52	2.38	1.19	1.05	1.28	1.88	1.92	1.92	2.25	2.34	2.52	1.19	1.65	30.20	7.6 - 12.5 mph
.23	.00	.00	.05	.27	.14	.69	1.51	1.60	1.83	1.42	1.15	1.01	.87	.87	.41	12.05	12.6 - 18.5 mph
.00	.00	.00	.00	.00	.00	.00	.14	.60	.87	.64	.09	.18	.27	.00	.00	2.80	18.6 - 24.5 mph
.00	.00	.00	.00	.00	.00	.00	.00	.09	.18	.27	.09	.00	.00	.00	.00	.64	> 24.5 mph

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

April-June 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2119
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
- N	.00	.05	.05	.05	.00	.05	.00	.00	.05	.00	.00	.00	.09	.14	.05	.05	.57				.57				
3 SS	.00	.05	.00	.24	.05	.05	.00	.00	.00	.09	.14	.00	.05	.00	.00	.00	.66					.66			
MS	.05	.00	.00	.00	.00	.09	.00	.05	.00	.00	.09	.09	.09	.00	.05	.00	.52						.52		
ES	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09							.09	
																									1.84
EU	.00	.00	.00	.24	.28	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.61	.61							
MU	.05	.00	.00	.19	.19	.14	.00	.00	.00	.05	.09	.00	.00	.00	.00	.00	.71		.71						
4 SU	.24	.14	.24	.19	.14	.09	.24	.14	.00	.05	.14	.09	.09	.14	.14	.05	2.12			2.12					
- N	.33	.52	.47	.94	.71	.38	.38	.14	.14	.09	.24	.28	.24	.33	.19	.19	5.57				5.57				
7 SS	.05	.33	.42	1.13	.42	.24	.00	.09	.09	.09	.19	.19	.05	.33	.14	.00	3.78					3.78			
MS	.05	.00	.05	.09	.00	.09	.05	.05	.09	.09	.24	.00	.28	.09	.09	.00	1.27						1.27		
ES	.00	.00	.05	.00	.00	.00	.05	.00	.05	.00	.05	.05	.00	.00	.00	.00	.24							.24	
																									14.30
EU	.09	.52	.14	.00	.05	.05	.00	.00	.00	.05	.00	.00	.00	.00	.05	.05	.99	.99							
MU	.28	.19	.28	.19	.00	.09	.00	.14	.05	.14	.09	.00	.05	.14	.14	.19	1.98		1.98						
8 SU	.09	.19	.09	.28	.19	.00	.05	.19	.14	.14	.09	.14	.14	.28	.47	.05	2.55			2.55					
- N	.52	.47	.80	2.12	.94	.14	.38	.33	.38	.57	.47	1.23	1.04	.76	.61	.19	10.95				10.95				
1 SS	.38	.76	.99	1.56	1.18	.66	.90	.71	.52	.05	.57	.85	.47	.66	.24	.14	10.62					10.62			
2 MS	.09	.05	.05	.05	.09	.14	.14	.09	.00	.05	.38	.47	.52	.42	.09	.05	2.69						2.69		
ES	.00	.00	.00	.00	.05	.00	.00	.00	.05	.00	.09	.33	.00	.00	.00	.00	.52							.52	
																									30.30
EU	.33	.05	.14	.00	.24	.09	.00	.05	.00	.05	.00	.00	.00	.09	.14	.05	1.23	1.23							
1 MU	.38	.05	.14	.00	.14	.05	.05	.09	.09	.05	.00	.05	.09	.24	.19	.09	1.70		1.70						
3 SU	.19	.05	.09	.00	.00	.00	.05	.09	.14	.14	.09	.19	.42	.24	.14	.09	1.93			1.93					
- N	.61	.99	1.56	.85	1.27	.28	.38	.33	.38	.57	.66	.42	.66	1.37	.42	.61	11.37				11.37				
1 SS	.42	1.09	.80	.99	1.42	.57	1.13	.61	.61	1.32	.61	.99	.33	.94	.28	.09	12.22					12.22			
8 MS	.05	.00	.05	.00	.14	.42	.24	.42	.24	.14	.42	.14	.28	.28	.05	.14	3.02						3.02		
ES	.00	.00	.00	.00	.00	.00	.05	.14	.05	.00	.05	.05	.52	.05	.00	.00	.90							.90	
																									32.37

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

April-June 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.09	.00	.00	.00	.05	.05	.05	.00	.00	.00	.00	.05	.28	.28							
1 MU	.00	.00	.00	.00	.05	.05	.00	.09	.00	.19	.19	.05	.05	.00	.05	.05	.76		.76						
9 SU	.00	.00	.00	.00	.00	.05	.00	.05	.09	.00	.19	.09	.05	.05	.19	.09	.85			.85					
- N	.47	.76	.00	.05	.71	.14	.47	.42	.47	.33	.42	.33	.38	.57	.47	.28	6.28				6.28				
2 SS	.24	.14	.09	.05	.38	.00	.05	.52	.85	.76	1.04	.80	.28	.14	.05	.19	5.57					5.57			
4 MS	.19	.00	.00	.00	.00	.05	.00	.00	.00	.38	.24	.14	.00	.00	.00	.00	.99						.99		
ES	.00	.00	.00	.00	.00	.09	.00	.00	.00	.09	.14	.00	.00	.00	.00	.00	.33							.33	
																									15.05
EU	.00	.00	.00	.00	.00	.00	.00	.00	.14	.09	.00	.00	.05	.05	.00	.00	.33	.33							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.14	.09	.05	.00	.00	.24	.00	.00	.52		.52						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.09	.09	.14	.00	.00	.19	.00	.00	.52			.52					
N	.00	.00	.00	.00	.00	.00	.00	.09	.19	.71	.47	.19	.24	.19	.09	.05	2.22				2.22				
2 SS	.00	.05	.00	.00	.00	.00	.00	.19	.66	.71	.61	.28	.00	.05	.00	.00	2.55					2.55			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									6.13
TOT	5.10	6.47	6.56	9.20	8.73	4.01	4.67	5.05	5.76	7.22	8.26	7.46	6.47	7.98	4.34	2.74	100.00	3.45	5.66	7.98	36.95	35.39	8.49	2.08	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.42	.57	.28	.24	.66	.14	.09	.05	.19	.24	.05	.00	.05	.14	.19	.14	3.45	Extremely Unstable
.71	.24	.42	.38	.38	.33	.05	.33	.28	.52	.42	.09	.19	.61	.38	.33	5.66	Moderately Unstable
.52	.38	.42	.47	.33	.14	.33	.47	.47	.42	.66	.52	.71	.90	.94	.28	7.98	Slightly Unstable
1.93	2.78	2.88	4.01	3.63	.99	1.60	1.32	1.60	2.27	2.27	2.45	2.64	3.35	1.84	1.37	36.95	Neutral
1.09	2.41	2.31	3.96	3.45	1.51	2.08	2.12	2.74	3.02	3.16	3.11	1.18	2.12	.71	.42	35.39	Slightly Stable
.42	.05	.14	.14	.24	.80	.42	.61	.33	.66	1.37	.85	1.18	.80	.28	.19	8.49	Moderately Stable
.00	.05	.09	.00	.05	.09	.09	.14	.14	.09	.33	.42	.52	.05	.00	.00	2.08	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.05	.14	.09	.28	.05	.19	.00	.05	.05	.09	.24	.09	.24	.14	.09	.05	1.84	1.0 - 3.5 mph
.71	.99	1.23	2.78	1.75	.94	.80	.42	.38	.38	.94	.61	.66	.90	.57	.24	14.30	3.6 - 7.5 mph
1.46	2.17	2.36	4.20	2.50	1.09	1.46	1.46	1.13	.99	1.70	3.02	2.22	2.27	1.60	.66	30.30	7.6 - 12.5 mph
1.98	2.22	2.78	1.84	3.21	1.42	1.89	1.75	1.51	2.27	1.84	1.84	2.31	3.21	1.23	1.09	32.37	12.6 - 18.5 mph
.90	.90	.09	.09	1.23	.38	.52	1.09	1.46	1.79	2.27	1.42	.76	.76	.76	.66	15.05	18.6 - 24.5 mph
.00	.05	.00	.00	.00	.00	.00	.28	1.23	1.70	1.27	.47	.28	.71	.09	.05	6.13	> 24.5 mph

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

July-September 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2205
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
	EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
	MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C	SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A	N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L	SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M	MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
	ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
	EU	.09	.18	.27	.14	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05	.00	.77	.77						
	MU	.00	.00	.09	.00	.00	.00	.05	.00	.00	.05	.00	.05	.05	.09	.09	.09	.54		.54					
1	SU	.14	.05	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.05	.32			.32				
-	N	.27	.18	.23	.09	.18	.18	.05	.14	.32	.23	.27	.05	.23	.09	.36	.32	3.17				3.17			
3	SS	1.04	.73	.63	.63	.23	.63	.14	.77	.73	.32	.27	.18	.41	.54	.77	1.22	9.25					9.25		
	MS	1.07	.66	.52	.48	.84	.84	.61	.80	.39	.30	.71	.34	.71	.84	1.07	1.84	12.02						12.02	
	ES	.63	.32	.14	.18	.23	.32	.05	.14	.27	.41	.23	.23	.32	.32	1.18	.91	5.85							5.85
																									31.93
	EU	1.09	.68	.63	1.04	.63	.86	1.04	.36	.23	.23	.32	.54	.09	.23	.59	.59	9.16	9.16						
	MU	.00	.00	.09	.09	.05	.18	.14	.05	.05	.05	.09	.27	.36	.32	.18	.09	2.00		2.00					
4	SU	.14	.00	.00	.18	.05	.05	.05	.09	.05	.00	.09	.14	.14	.45	.27	.14	1.81			1.81				
-	N	.27	.09	.36	.68	.68	.32	.68	.68	.45	.50	.45	.32	1.04	.50	1.00	.54	8.57				8.57			
7	SS	.68	.54	1.36	1.27	1.45	2.40	1.22	.82	.82	.82	.73	.45	1.32	1.68	1.00	1.45	18.00					18.00		
	MS	.05	.05	.14	.00	.41	1.54	.32	.63	.36	.41	.54	.32	.14	1.09	.14	.14	6.26						6.26	
	ES	.00	.00	.00	.00	.09	.27	.00	.00	.05	.27	.73	.00	.00	.05	.00	.09	1.54							1.54
																									47.35
	EU	.05	.18	.91	.05	.18	.14	.23	.05	.27	.41	.41	.45	.36	.91	1.27	.73	6.58	6.58						
	MU	.00	.05	.00	.05	.05	.09	.00	.00	.27	.14	.05	.14	.14	.05	.05	.00	1.04		1.04					
8	SU	.00	.00	.05	.00	.00	.00	.05	.00	.27	.05	.05	.05	.36	.18	.14	.00	1.18			1.18				
-	N	.00	.05	.09	.00	.41	.23	.41	.68	.09	.27	.54	.50	.77	.54	.45	.27	5.31				5.31			
1	SS	.00	.00	.27	.05	.18	.45	.41	.50	.68	.45	.32	.41	.27	.05	.09	.05	4.17					4.17		
2	MS	.00	.00	.00	.05	.00	.05	.00	.18	.05	.00	.09	.00	.00	.00	.00	.00	.41						.41	
	ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00
																									18.68
	EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27	.18	.09	.05	.27	.00	.00	.86	.86						
1	MU	.00	.00	.00	.00	.00	.00	.00	.09	.05	.05	.00	.00	.00	.00	.05	.00	.23		.23					
3	SU	.00	.00	.00	.00	.00	.00	.00	.00	.14	.05	.05	.05	.05	.00	.00	.00	.32			.32				
-	N	.00	.00	.00	.00	.00	.00	.00	.00	.18	.09	.00	.00	.05	.00	.00	.00	.32				.32			
1	SS	.00	.00	.00	.00	.00	.18	.09	.14	.14	.05	.05	.05	.00	.00	.00	.00	.68					.68		
8	MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00	
	ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00
																									2.40

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

July-September 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

SPEED	WIND DIRECTION CLASSES																STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
1 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
9 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
- N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
2 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
2 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
TOT	5.51	3.74	5.78	4.97	5.65	8.73	5.51	6.10	5.83	5.42	6.19	4.65	6.83	8.19	8.73	8.51	100.36	17.37	3.81	3.63	17.37	32.11	18.68	7.39	100.36

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
1.22	1.04	1.81	1.22	.82	1.00	1.27	.41	.50	.91	.95	1.09	.50	1.41	1.90	1.32	17.37	Extremely Unstable
.00	.05	.18	.14	.09	.27	.18	.14	.36	.27	.14	.45	.54	.45	.36	.18	3.81	Moderately Unstable
.27	.05	.05	.18	.05	.05	.09	.09	.45	.14	.18	.27	.54	.63	.41	.18	3.63	Slightly Unstable
.54	.32	.68	.77	1.27	.73	1.13	1.50	1.04	1.09	1.27	.86	2.09	1.13	1.81	1.13	17.37	Neutral
1.72	1.27	2.27	1.95	1.86	3.67	1.86	2.22	2.36	1.63	1.36	1.09	2.00	2.27	1.86	2.72	32.11	Slightly Stable
1.12	.71	.66	.52	1.25	2.43	.93	1.61	.80	.70	1.34	.66	.84	1.93	1.21	1.98	18.68	Moderately Stable
.63	.32	.14	.18	.32	.59	.05	.14	.32	.68	.95	.23	.32	.36	1.18	1.00	7.39	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
3.25	2.11	1.88	1.52	1.48	1.98	.89	1.84	1.70	1.34	1.52	.89	1.70	1.89	3.52	4.43	31.93	1.0 - 3.5 mph
2.22	1.36	2.59	3.27	3.36	5.62	3.45	2.63	2.00	2.27	2.95	2.04	3.08	4.31	3.17	3.04	47.35	3.6 - 7.5 mph
.05	.27	1.32	.18	.82	.95	1.09	1.41	1.63	1.32	1.45	1.54	1.90	1.72	2.00	1.04	18.68	7.6 - 12.5 mph
.00	.00	.00	.00	.00	.18	.09	.23	.50	.50	.27	.18	.14	.27	.05	.00	2.40	12.6 - 18.5 mph
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	18.6 - 24.5 mph
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	> 24.5 mph

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

July-September 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2208
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05	.05	.00	.14		.14						
1 SU	.00	.05	.00	.00	.05	.00	.00	.00	.09	.05	.05	.00	.00	.05	.00	.00	.32			.32					
- N	.14	.05	.05	.18	.09	.09	.05	.05	.09	.14	.14	.09	.14	.18	.14	.18	1.77				1.77				
3 SS	.05	.09	.09	.18	.05	.05	.05	.05	.14	.05	.00	.14	.09	.05	.05	.05	1.13					1.13			
MS	.00	.05	.05	.00	.00	.05	.00	.05	.05	.14	.23	.09	.09	.09	.09	.09	1.04						1.04		
ES	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.23							.23	
																									4.62
EU	.23	.23	.18	.05	.23	.27	.32	.00	.05	.05	.00	.05	.00	.05	.00	.00	1.68	1.68							
MU	.23	.27	.18	.23	.14	.18	.32	.14	.05	.05	.14	.32	.05	.00	.09	.05	2.40		2.40						
4 SU	.09	.18	.27	.14	.14	.14	.14	.09	.09	.18	.14	.45	.18	.18	.05	.09	2.54			2.54					
- N	.27	.23	.50	.86	.14	.36	.54	.77	.32	.27	.45	.45	.63	.41	.50	.36	7.07				7.07				
7 SS	.36	.27	.41	.72	.45	.27	.50	.32	.14	.23	.27	.09	.23	.32	.41	.27	5.25					5.25			
MS	.18	.27	.32	.23	.36	.18	.23	.09	.27	.23	.09	.23	.18	.23	.45	.18	3.71						3.71		
ES	.05	.05	.32	.14	.00	.00	.05	.00	.05	.00	.00	.00	.00	.00	.09	.00	.72							.72	
																									23.37
EU	.27	.23	.27	.18	.36	.09	.41	.14	.14	.05	.09	.18	.00	.05	.05	.05	2.54	2.54							
MU	.05	.05	.14	.05	.05	.14	.27	.00	.18	.09	.14	.09	.09	.09	.36	.14	1.90		1.90						
8 SU	.27	.05	.05	.14	.00	.00	.09	.05	.18	.23	.14	.23	.18	.86	.23	.14	2.81			2.81					
- N	.23	.09	.36	.77	.63	.27	.36	.54	.32	.50	.41	.45	.59	.86	.72	.72	7.84				7.84				
1 SS	.54	.59	.59	1.09	1.13	.59	.82	.77	.82	1.18	.54	.45	.77	.63	.86	.82	12.18					12.18			
2 MS	.91	.59	.45	.18	.23	.86	.45	.45	.41	.23	.36	.59	.41	.18	.45	.36	7.11						7.11		
ES	.36	.09	.05	.00	.00	.00	.05	.05	.00	.05	.09	.23	.05	.00	.00	.09	1.09							1.09	
																									35.46
EU	.00	.32	.14	.00	.09	.00	.00	.00	.00	.09	.05	.00	.14	.23	.32	.50	1.86	1.86							
1 MU	.14	.09	.05	.05	.00	.00	.00	.00	.05	.27	.14	.09	.18	.41	.32	.05	1.81		1.81						
3 SU	.23	.05	.05	.00	.09	.00	.00	.00	.32	.09	.27	.05	.14	.18	.32	.18	1.95			1.95					
- N	.27	.32	.36	.18	.18	.05	.00	.45	.18	.32	.50	.41	.91	.50	.63	.68	5.93				5.93				
1 SS	.45	.54	.27	.14	.77	1.09	.77	1.18	.82	.54	.82	.50	.82	.77	.86	.82	11.14					11.14			
8 MS	.23	.45	.14	.00	.09	.32	.86	.50	.32	.50	.54	.45	.14	.36	.63	.23	5.75						5.75		
ES	.18	.36	.05	.00	.00	.00	.14	.00	.00	.00	.00	.36	.09	.00	.14	.23	1.54							1.54	
																									29.98

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

July-September 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.18	.09	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.09	.05	.00	.45	.45							
1 MU	.00	.05	.05	.00	.00	.00	.00	.05	.00	.00	.09	.05	.00	.14	.00	.00	.41		.41						
9 SU	.00	.00	.00	.00	.00	.00	.00	.05	.05	.09	.05	.05	.00	.05	.05	.14	.50			.50					
- N	.00	.09	.05	.00	.09	.27	.05	.00	.23	.09	.14	.00	.14	.05	.18	.18	1.54				1.54				
2 SS	.36	.00	.00	.00	.05	.14	.14	.14	.45	.36	.23	.27	.14	.09	.05	.14	2.54					2.54			
4 MS	.09	.05	.00	.00	.00	.00	.00	.00	.23	.09	.00	.00	.00	.00	.00	.09	.54						.54		
ES	.05	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14							.14	
																									6.11
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.05							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
2 SS	.00	.00	.00	.00	.00	.14	.14	.05	.05	.00	.00	.00	.00	.00	.00	.00	.36					.36			
4 MS	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05						.05		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.45
TOT	6.20	5.89	5.48	5.62	5.39	5.53	6.79	6.02	6.02	6.16	6.07	6.34	6.34	7.20	8.15	6.79	100.00	6.57	6.66	8.11	24.14	32.61	18.21	3.71	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.50	.95	.68	.23	.68	.36	.72	.14	.18	.23	.14	.23	.14	.45	.41	.54	6.57	Extremely Unstable
.41	.45	.41	.32	.18	.32	.59	.23	.27	.41	.50	.54	.32	.68	.82	.23	6.66	Moderately Unstable
.59	.32	.36	.27	.27	.14	.23	.18	.72	.63	.63	.77	.50	1.31	.63	.54	8.11	Slightly Unstable
.91	.77	1.31	1.99	1.13	1.04	1.00	1.81	1.13	1.31	1.63	1.40	2.40	1.99	2.17	2.13	24.14	Neutral
1.77	1.49	1.36	2.13	2.45	2.26	2.40	2.49	2.40	2.36	1.86	1.45	2.04	1.86	2.22	2.08	32.61	Slightly Stable
1.40	1.40	.95	.41	.68	1.40	1.54	1.13	1.27	1.18	1.22	1.36	.82	.86	1.63	.95	18.21	Moderately Stable
.63	.50	.41	.27	.00	.00	.32	.05	.05	.05	.09	.59	.14	.05	.27	.32	3.71	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.18	.23	.18	.50	.18	.18	.09	.18	.36	.36	.41	.32	.32	.45	.36	.32	4.62	1.0 - 3.5 mph
1.40	1.49	2.17	2.36	1.45	1.40	2.08	1.40	.95	1.00	1.09	1.59	1.27	1.18	1.59	.95	23.37	3.6 - 7.5 mph
2.63	1.68	1.90	2.40	2.40	1.95	2.45	1.99	2.04	2.31	1.77	2.22	2.08	2.67	2.67	2.31	35.46	7.6 - 12.5 mph
1.49	2.13	1.04	.36	1.22	1.45	1.77	2.13	1.68	1.81	2.31	1.86	2.40	2.45	3.22	2.67	29.98	12.6 - 18.5 mph
.50	.36	.18	.00	.14	.41	.27	.23	.95	.68	.50	.36	.27	.41	.32	.54	6.11	18.6 - 24.5 mph
.00	.00	.00	.00	.00	.14	.14	.09	.05	.00	.00	.00	.00	.05	.00	.00	.45	> 24.5 mph

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

October-December 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2194
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05			.05					
- N	.41	.36	.18	.41	.09	.09	.14	.09	.09	.14	.05	.09	.23	.36	.41	.23	3.37				3.37				
3 SS	.14	.36	.23	.14	.05	.05	.09	.05	.27	.00	.00	.00	.32	.32	.32	.18	2.51					2.51			
MS	.05	.05	.18	.05	.18	.14	.14	.09	.14	.14	.41	.05	.09	.09	.14	.32	2.23						2.23		
ES	.09	.00	.00	.00	.05	.00	.09	.05	.00	.05	.14	.05	.09	.27	.27	.14	1.28							1.28	
																									9.43
EU	.05	.05	.14	.36	.14	.09	.00	.09	.00	.00	.00	.00	.00	.18	.05	.23	1.37	1.37							
MU	.00	.00	.00	.18	.00	.05	.00	.05	.05	.00	.00	.05	.00	.05	.00	.05	.46		.46						
4 SU	.09	.14	.00	.09	.00	.14	.00	.00	.00	.05	.00	.09	.09	.14	.05	.00	.87			.87					
- N	1.28	.73	.82	1.00	.73	1.00	.32	.55	.64	.50	.55	.64	.59	.96	.91	1.60	12.81				12.81				
7 SS	.73	.55	.55	.73	1.28	2.51	1.09	1.14	1.09	.82	.46	.50	1.69	1.64	2.01	.82	17.59					17.59			
MS	.23	.00	.00	.00	.23	.91	.36	.41	.36	.50	.68	.46	.18	.18	.05	.14	4.69						4.69		
ES	.00	.00	.00	.00	.14	.18	.00	.00	.05	.18	.41	.09	.00	.05	.00	.23	1.32							1.32	
																									39.11
EU	.18	.05	.05	.00	.05	.14	.23	.00	.00	.18	.32	.27	.00	.27	.73	.00	2.46	2.46							
MU	.09	.05	.00	.00	.00	.00	.00	.05	.14	.00	.09	.05	.09	.05	.18	.00	.77		.77						
8 SU	.05	.00	.00	.00	.00	.05	.05	.00	.05	.09	.09	.23	.32	.09	.09	.00	1.09			1.09					
- N	1.64	.55	.32	.00	.27	.64	.96	1.60	1.05	.18	.73	1.05	2.55	2.42	2.05	.59	16.59				16.59				
1 SS	.14	.00	.18	.00	.36	.96	.82	2.05	2.32	1.19	.77	.41	2.69	.82	1.32	.68	14.72					14.72			
2 MS	.00	.00	.00	.00	.00	.00	.00	.05	.14	.00	.00	.00	.00	.00	.00	.00	.18						.18		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									35.82
EU	.00	.00	.00	.00	.00	.00	.05	.05	.00	.32	.14	.23	.23	.36	.00	.00	1.37	1.37							
1 MU	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14	.05	.00	.00	.18	.00	.00	.41		.41						
3 SU	.00	.00	.00	.00	.00	.00	.14	.09	.05	.14	.09	.14	.14	.05	.05	.05	.91			.91					
- N	.00	.00	.00	.00	.00	.09	.77	1.05	.64	.27	.14	.27	1.64	1.14	.14	.05	6.20				6.20				
1 SS	.00	.00	.00	.00	.00	.14	.64	1.09	1.55	.64	.05	.05	.14	.09	.00	.00	4.38					4.38			
8 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									13.26

CECo DRESDEN STATION
35 ft. WIND SPEED and WIND DIRECTION

October-December 1996
150-35 ft. DIFFERENTIAL TEMPERATURE

SPEED	WIND DIRECTION CLASSES																STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.14	.14							
1 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05		.05						
9 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.00	.00	.00	.09			.09					
- N	.00	.00	.00	.00	.00	.00	.09	.00	.00	.18	.00	.00	.46	.05	.00	.00	.77				.77				
2 SS	.00	.00	.00	.00	.00	.00	.18	.41	.23	.14	.05	.00	.00	.00	.00	.00	1.00					1.00			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									2.05
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.09				.09				
2 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.09	.00	.00	.00	.23					.23			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.32
TOT	5.15	2.87	2.64	2.96	3.56	7.16	6.15	8.93	8.89	5.88	5.29	4.74	11.94	9.75	8.80	5.29	100.00	5.33	1.69	3.01	39.84	40.43	7.11	2.60	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.23	.09	.18	.36	.18	.23	.27	.14	.00	.50	.46	.50	.36	.82	.77	.23	5.33	Extremely Unstable
.09	.05	.00	.18	.00	.05	.00	.09	.23	.14	.14	.09	.14	.27	.18	.05	1.69	Moderately Unstable
.14	.14	.00	.09	.00	.18	.18	.09	.09	.32	.18	.46	.59	.27	.23	.05	3.01	Slightly Unstable
3.33	1.64	1.32	1.41	1.09	1.82	2.28	3.28	2.42	1.28	1.46	2.05	5.56	4.92	3.51	2.46	39.84	Neutral
1.00	.91	.96	.87	1.69	3.65	2.83	4.74	5.47	2.78	1.41	1.00	4.92	2.87	3.65	1.69	40.43	Slightly Stable
.27	.05	.18	.05	.41	1.05	.50	.55	.64	.64	1.09	.50	.27	.27	.18	.46	7.11	Moderately Stable
.09	.00	.00	.00	.18	.18	.09	.05	.05	.23	.55	.14	.09	.32	.27	.36	2.60	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.68	.77	.59	.59	.36	.27	.46	.27	.50	.32	.59	.18	.73	1.05	1.19	.87	9.43	1.0 - 3.5 mph
2.37	1.46	1.50	2.37	2.51	4.88	1.78	2.23	2.19	2.05	2.10	1.82	2.55	3.19	3.05	3.05	39.11	3.6 - 7.5 mph
2.10	.64	.55	.00	.68	1.78	2.05	3.74	3.69	1.64	2.01	2.01	5.65	3.65	4.38	1.28	35.82	7.6 - 12.5 mph
.00	.00	.00	.00	.00	.23	1.60	2.28	2.28	1.50	.46	.68	2.14	1.82	.18	.09	13.26	12.6 - 18.5 mph
.00	.00	.00	.00	.00	.00	.27	.41	.23	.36	.05	.00	.68	.05	.00	.00	2.05	18.6 - 24.5 mph
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.18	.00	.00	.00	.32	> 24.5 mph

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

October-December 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2146
VALUES ARE PERCENT OCCURRENCE

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00			
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									.00
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
I SU	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05			.05					
- N	.00	.00	.00	.19	.09	.00	.00	.05	.05	.09	.09	.05	.14	.23	.00	.09	1.07				1.07				
3 SS	.00	.00	.05	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.14					.14			
MS	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.14						.14		
ES	.00	.00	.00	.00	.00	.00	.00	.05	.09	.00	.00	.00	.00	.00	.00	.00	.14							.14	
																									1.54
EU	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.09							
MU	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.09	.23		.23						
4 SU	.00	.00	.09	.09	.05	.05	.00	.09	.05	.00	.00	.00	.00	.00	.00	.05	.47			.47					
- N	.79	.51	.42	.42	.28	.23	.14	.28	.28	.33	.56	.47	.47	.33	.61	.51	6.62				6.62				
7 SS	.19	.14	.37	.42	.09	.00	.19	.14	.05	.09	.09	.00	.09	.42	.23	.14	2.66					2.66			
MS	.00	.00	.00	.05	.00	.00	.00	.19	.14	.05	.00	.09	.09	.00	.00	.05	.65						.65		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00	.00	.00	.09							.09	
																									10.81
EU	.00	.00	.00	.09	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.19							
MU	.00	.00	.00	.14	.09	.05	.00	.09	.00	.05	.00	.00	.00	.14	.09	.05	.70		.70						
8 SU	.00	.00	.00	.09	.00	.09	.09	.09	.09	.00	.09	.05	.00	.14	.09	.05	.89			.89					
- N	.89	.61	.14	.75	.70	.51	.42	.84	.75	.33	.37	.61	1.21	1.12	.79	.79	10.81				10.81				
1 SS	.19	.47	.56	.93	.19	.42	.89	.89	.75	.19	.28	.51	.61	.65	.42	.37	8.29					8.29			
2 MS	.33	.00	.00	.00	.00	.14	.14	.61	.14	.09	.19	.00	.61	.19	.09	.00	2.52						2.52		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05	.05	.14							.14	
																									23.53
EU	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05	.00	.00	.00	.00	.00	.09	.09							
MU	.00	.00	.00	.00	.00	.00	.05	.00	.00	.28	.19	.19	.00	.05	.19	.00	.93		.93						
3 SU	.05	.05	.00	.00	.00	.00	.00	.00	.05	.37	.28	.33	.19	.14	.47	.09	2.00			2.00					
- N	1.35	.79	.05	.05	.28	.42	.75	2.00	1.26	.33	.65	1.26	2.84	2.89	2.47	.42	17.80				17.80				
1 SS	.79	.14	.33	.19	.51	.89	1.72	1.16	1.68	1.96	.84	.70	1.77	.93	1.54	1.63	16.78					16.78			
8 MS	.19	.23	.00	.00	.00	.14	.47	.33	.28	.28	.19	.19	.28	.19	.09	.05	2.89						2.89		
ES	.05	.14	.00	.00	.00	.00	.00	.05	.00	.00	.05	.00	.00	.00	.19	.14	.61							.61	
																									41.10

CECo DRESDEN STATION
300 ft. WIND SPEED and WIND DIRECTION

October-December 1996
300-35 ft. DIFFERENTIAL TEMPERATURE

SPEED	WIND DIRECTION CLASSES																STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05	.05							
1 MU	.14	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.09	.09	.23	.00	.00	.61		.61						
9 SU	.00	.00	.00	.00	.00	.00	.05	.09	.14	.14	.00	.00	.05	.05	.00	.00	.51			.51					
- N	.79	.28	.00	.00	.00	.19	.84	1.35	1.21	.51	.19	.33	1.86	1.58	.42	.28	9.83				9.83				
2 SS	.14	.33	.14	.00	.00	.42	.23	.65	2.14	1.07	.05	.09	.47	.23	.05	.00	6.01					6.01			
4 MS	.09	.00	.00	.00	.00	.05	.00	.09	.00	.42	.00	.00	.00	.14	.00	.00	.79						.79		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05							.05	
																									17.85
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
G MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.05	.00	.00	.23		.23						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.14	.00	.00	.28			.28					
N	.00	.00	.00	.00	.00	.00	.47	.33	.09	.28	.00	.05	.98	.37	.00	.00	2.56				2.56				
2 SS	.00	.00	.00	.00	.00	.05	.14	.47	.51	.42	.19	.05	.19	.05	.00	.00	2.05					2.05			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05						.05		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	
																									5.17
TOT	5.96	3.68	2.19	3.54	2.28	3.77	6.71	9.88	9.83	7.36	4.43	5.03	12.35	10.30	7.83	4.85	100.00	.42	2.70	4.19	48.70	35.93	7.04	1.03	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.00	.00	.00	.19	.00	.00	.14	.00	.00	.00	.05	.00	.00	.05	.00	.00	.42	Extremely Unstable
.14	.00	.05	.19	.09	.05	.05	.14	.00	.33	.19	.28	.28	.47	.33	.14	2.70	Moderately Unstable
.05	.05	.09	.19	.05	.19	.14	.28	.33	.51	.37	.37	.37	.47	.56	.19	4.19	Slightly Unstable
3.82	2.19	.61	1.40	1.35	1.35	2.61	4.85	3.63	1.86	1.86	2.75	7.50	6.52	4.29	2.10	48.70	Neutral
1.30	1.07	1.44	1.54	.79	1.82	3.17	3.31	5.13	3.73	1.44	1.35	3.17	2.28	2.24	2.14	35.93	Slightly Stable
.61	.23	.00	.05	.00	.37	.61	1.21	.56	.89	.42	.28	1.03	.51	.19	.09	7.04	Moderately Stable
.05	.14	.00	.00	.00	.00	.00	.09	.19	.05	.09	.00	.00	.00	.23	.19	1.03	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	C A L M
.00	.00	.05	.19	.09	.14	.00	.09	.14	.09	.14	.05	.23	.23	.00	.09	1.54	1.0 - 3.5 mph
.98	.65	.93	1.12	.42	.28	.33	.70	.56	.51	.65	.56	.65	.75	.89	.84	10.81	3.6 - 7.5 mph
1.40	1.07	.70	2.00	.98	1.21	1.63	2.52	1.77	.65	.93	1.16	2.42	2.24	1.54	1.30	23.53	7.6 - 12.5 mph
2.42	1.35	.37	.23	.79	1.44	3.03	3.54	3.26	3.22	2.24	2.66	5.08	4.19	4.94	2.33	41.10	12.6 - 18.5 mph
1.16	.61	.14	.00	.00	.65	1.12	2.24	3.49	2.14	.28	.51	2.47	2.28	.47	.28	17.85	18.6 - 24.5 mph
.00	.00	.00	.00	.00	.05	.61	.79	.61	.75	.19	.09	1.49	.61	.00	.00	5.17	> 24.5 mph