



**Commonwealth Edison**  
Dresden Nuclear Power Station  
RR #1  
Morris, Illinois 60450  
Telephone 815/842-2920

*1/10*

February 11, 1980

BRS LTR: RD-110

Mr. James G. Keppler  
Regional Director  
Office of Inspection and Enforcement  
Region III  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Subject: Dresden Station Operating Report, NRC Docket 50-10, 50-237,  
and 50-249

Dear Mr. Keppler:

Enclosed is Part 2 of the Dresden Station Operating Report reporting radioactive effluents and occupational radiation exposures. Part 1 of the Operating Report reporting on operating experience of this facility is being submitted under separate cover. Part 3 of the Operating Report reporting environmental radiological monitoring data will be submitted in March.

One copy of this report is provided for your use and 39 copies are being submitted directly to Mr. Edson G. Cane, Deputy Director of the Office of Nuclear Reactor Regulation.

Sincerely,

W. H. Stephenson  
Station Superintendent  
Dresden Nuclear Power Station

BRS:GWA:mt

Enclosure

cc: G. Bergan  
NRC/File

R 80032 80349

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: Dresden Nuclear Power Station-Units 2/3

PERMIT NOS.: 50-217, 50-249

YEAR: 1979

<u>1. Gaseous Effluents</u>	<u>UNITS</u>	<u>JULY</u>	<u>AUGUST</u>	<u>SEPTEMBER</u>	<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>	<u>6 MO. TOTAL</u>	<u>TECH. CONC. LMT.</u>
<u>1. Gross Radioactivity Releases</u>									
a) Total Release 2/3 chimney	curies	3652.1	3400.0	3103.6	4825.4	2070.2	1625.0	18776.7	6.60-1.7. (1)
b) Maximum Release Rate (daily grab sample)	uCi/sec	3.8E+01	1.8E+01	2.3E+01	2.7E+01	2.8E+01	1.7E+01	1.8E+01	6.60-1.7. (7)
c) Isotopes Released									6.60-1.7. (4)
Kr-85m	curies	66.9	71.7	45.3	77.8	67.8	51.8	372.3	
Kr-87	curies	86.7	137.1	105.5	98.9	96.0	47.8	579.0	
Kr-88	curies	186.9	122.5	105.5	211.8	211.5	150.2	990.5	
Xe-133	curies	77.9	91.2	54.6	166.6	75.7	54.3	518.3	
Xe-135	curies	503.2	435.7	261.9	617.2	546.6	470.2	2935.6	
Xe-135m	curies	636.1	561.2	374.9	428.0	217.2	140.9	1950.3	
Xe-133	curies	2301.5	2260.6	2055.9	3229.3	872.2	709.0	11428.7	
d) Percent of Chimney Limit	%	0.15	0.15	0.13	0.22	0.09	0.07	0.13	6.60-1.7. (3)
e) Average Release Rate	uCi/sec	1.4E+01	1.3E+01	1.2E+01	1.8E+01	8.0E+00	6.1E+00	1.2E+01	
<u>2. Chimney Iodine Releases</u>									6.60-1.7. (1)
a) Isotopes Released									
I-131	curies	1.6E-01	1.6E-01	1.4E-01	1.1E-01	1.5E-01	1.2E-01	8.4E-01	
I-132	curies	1.3E-01	1.2E-01	1.2E-01	7.9E-01	1.8E-01	1.2E-01	6.4E-01	
I-135	curies	2.7E-01	2.1E-01	2.1E-01	5.4E-01	1.1E-01	1.4E-01	1.5E+01	
b) Percent of Chimney Limit	%	1.79	1.33	1.23	1.06	1.41	1.09	1.23	6.60-1.7. (3)
c) Average Release Rate	uCi/sec	2.9E-02	2.8E-02	1.2E-02	4.3E-02	4.0E-02	4.5E-02	5.3E-02	

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# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: Dresden Nuclear Power Station - Unit 2/3

DOCKET NOS.: 50-237, 50-239

YEAR: 1979

I. Gaseous Effluents (continued)	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REF.
J. Chimney Particulate Release	microcuries								
a) Gross Radioactivity (A-y)		722.16	631.28	589.48	568.29	602.64	651.29	3571.14	6.60.1.C.(1)
b) Gross Alpha Radioactivity	mCi								
c) Isotopes Released									6.60.1.C.(1)
Cr-51	mCi	---	---	---	---	---	2.93	2.93	
Co-57	mCi	3.11	1.52	0.59	0.91	0.61	1.84	8.60	
Co-58	mCi	---	---	---	---	---	0.81	0.81	
Co-60	mCi	30.69	2.76	6.95	3.28	14.24	4.06	64.44	
Co-60	mCi	387.22	389.94	216.10	154.29	209.07	157.50	1512.12	
Sr-90	mCi	1.37	0.88	0.94	0.68	0.91	0.68	5.46	
I-131	mCi	51.92	32.39	38.36	30.96	32.70	27.20	252.31	
Co-134/Co-136	mCi	1.23/---	---/1.07	---/---	---/---	---/---	---/---	1.23/1.07	
Co-117	mCi	2.24	3.85	2.71	6.59	11.75	3.16	30.30	
As-140	mCi	240.84	191.64	287.60	221.72	309.63	243.43	1679.68	
Co-141	mCi	3.56	2.08	22.28	---	6.93	1.43	36.26	
Zr-95/Nb-95	mCi	---/---	---/---	---/---	---/---	---/---	4.92/4.42	4.92/4.42	
Ru-101	mCi	---	0.63	1.07	---	---	1.81	3.51	
d) Percent of Chimney Limit	%	6.31	5.51	5.37	5.22	5.48	3.99	5.22	6.60.1.C.(1)
e) Average Release Rate	mCi/sec	2.7E-01	2.4E-01	2.3E-01	2.1E-01	2.3E-01	1.7E-01	2.2E-01	
K. Vent Stack Iodine Release									6.60.1.C.(1)
a) Isotopes Released									
I-131	curies	1.8E-02	1.3E-02	2.3E-02	1.2E-02	1.2E-02	2.0E-02	1.0E-01	
I-133	curies	5.2E-02	5.4E-02	3.5E-02	5.5E-02	8.0E-02	1.1E-01	3.8E-01	
I-135	curies	1.4E-01	1.0E-01	4.1E-02	7.2E-02	1.6E-01	2.8E-01	7.9E-01	
b) Percent of Vent Stack Limit	%	5.56	4.04	6.24	3.72	5.49	6.18	5.26	6.60.1.C.(1)
c) Average Release Rate	mCi/sec	4.7E-01	4.9E-01	8.3E-01	4.5E-01	4.6E-01	7.4E-01	6.3E-01	

POOR ORIENTATION

# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: Dresden Nuclear Power Station - Unit 2/3

DATE: AUG. 1 50-37, 50-38

YEAR: 1979

7. Gaseous Effluents (Continued)	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REF.
5. Vent Stack Particulate Release	micrograms	60.11	13.08	15.79	15.57	61.65	52.17	279.07	
(a) Gross Radioactivity (B-7)	μCi								6.60, 1.5, (1)
(b) Gross Alpha Radioactivity	μCi								
(c) Isotopes Released									
Co-51	mCi	2.55	1.06	2.51	2.01	1.60	2.02	16.75	6.60, 1.5, (1)
Co-54	mCi	2.70	0.95	0.75	2.02	1.61	1.36	9.66	
Co-58	mCi	0.52	0.23	0.50	0.68	0.78	0.69	3.65	
Fe-59	mCi	0.23	---	0.23	0.58	0.22	0.57	2.23	
Co-60	mCi	16.22	5.55	5.86	9.56	7.81	11.86	58.26	
Co-60	mCi	---	---	0.12	0.18	0.22	0.22	0.74	
Si-30	mCi	1.32	4.21	1.41	1.68	2.16	6.21	17.23	
Si-30	mCi	0.06	0.22	0.29	0.12	0.26	0.57	1.29	
Co-57	mCi	0.54	---	0.25	1.20	1.25	0.68	4.23	
Co-57	mCi	0.29	1.69	0.45	1.28	2.32	0.59	6.13	
Co-57	mCi	0.44	---	0.37	1.16	1.67	0.16	3.80	
(Continued on next page)									
(d) Percent Vent Stack Limit	%	18.70	10.20	11.35	11.07	20.66	16.22	16.97	6.60, 1.5, (1)
(e) Average Release Rate	μCi/sec	2.22-02	1.22-02	1.42-02	1.12-02	2.52-02	1.32-02	1.92-02	
6. Sum of Iodine and Particulate									
a) Percent of Chlorine Limit	%	7.70	6.86	6.63	6.31	6.89	5.07	6.43	6.60, 1.5, (1)
b) Percent of Vent Stack Limit	%	26.26	16.36	18.28	16.29	23.95	22.60	19.97	
7. Gaseous Effluents									
a) Release	μCi/sec	9.18+00	6.42+00	1.12+01	2.22+01	5.12+01	3.02+01	1.42+02	
b) Average Release Rate	μCi/sec	2.42+00	2.42+00	4.12+00	1.02+01	2.02+01	1.42+01	9.12+01	
c) Percent Tech Spec Limit	%	NA	NA	NA	NA	NA	NA	NA	

POOR ORIGINAL

### REPORT OF RADIOACTIVE EFFLUENTS

**EXHIBIT: DREXEL BURNHAM POSTER STATION-IMPOS 2/1**

DOCKET NOS.: 40-917, 40-949

**YEAR: 1979**

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**POOR ORIGINAL**

## REPORT OF NAUJOUCTIVE. 1 FILED OCT 19 1964

**LOCITY:** Dresden Nuclear Power Station-Units 2/3

DECLASS. BY: 50-237, 50-247

**YEAR: 1979**

1. Gaseous Effluents (continued)	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. 2.2.
2. Gross Radioactivity Release (mls. 2/3 Vent Stack)									1
a) Total Release	curies	371.93	289.70	224.84	179.26	290.15	163.11	1509.59	5.60.1.F. (1)
b) Maximum Release Rate (daily grab sample)	uCi/sec	1.8E+02	1.2E+02	1.2E+02	9.1E+01	1.7E+02	1.7E+02	1.8E+02	5.60.1.F. (2)
c) Isotopes Released									5.60.1.F. (4)
Kr-85m	curies	1.88	1.23	2.05	1.92	---	---	9.12	
Kr-87	curies	---	---	---	---	11.74	---	11.74	
Kr-88	curies	---	---	---	---	---	---	---	
Xe-133	curies	12.70	6.45	17.72	6.37	11.29	6.11	60.64	
Xe-135	curies	213.70	136.10	78.69	64.58	144.68	98.79	734.54	
Xe-135m	curies	142.75	143.42	124.78	104.34	112.43	60.21	692.54	
Xe-138	curies	---	---	---	---	---	---	---	
d) Percent of Vent Stack Limit	%	0.15	0.12	0.10	0.07	0.12	0.07	0.11	5.60.1.F. (3)
e) Average Release Rate	uCi/sec	1.4E+02	1.1E+02	8.7E+01	6.7E+01	1.1E+02	6.7E+01	9.5E+01	

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: INTEGRAL NUCLEAR POWER STATION - UNIT 2/3

DISCRET NOS.: 50-277, 50-282

YEAR: 1979

11. Liquid Effluents	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REF.
1. Gross Radioactivity ( $\beta/\gamma$ )									
a) Total Release ( $\frac{1}{2}$ Radwaste)	Curies	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	
b) Average Concentration Released	uci/ml								
c) Maximum Concentration Released	uci/ml								
d) Percent of Tech Spec Limit based on average conc. release	%								
2. Tritium									
a) Total Release	Curies								
b) Average Concentration Released	uci/ml								
c) Percent of Tech Spec Limit	%								
3. Dissolved Noble Gases									
a) Total Release	Curies								
b) Average Concentration Released	uci/ml								
c) Percent of Tech Spec Limit	%								
4. Gross Alpha Radioactivity									
a) Total Release	Curies								
b) Average Concentration Released	uci/ml								
5. Volume of Liquid Waste to Discharge Canal	Liters								
6. Volume of Dilution Water	Liters								

POOR ORIGINAL

## REPORT OF RADIOACTIVE EFFLUENTS

**USCIB/IS: Dresden Nuclear Power Station - Unit 2/3**

DOCUMENT NOS.: 50-217, 50-212

**YEAR: 1979**

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# POOR ORIGINAL



# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: Dresden Nuclear Power Station - Unit 2/3

DOCKET NOS.: 72-37, 72-75

YEAR: 1979

II. Liquid Effluents (continued)	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REF.
8. Gross Radioactivity (Bq)									
LPEL Service H <sub>2</sub> O Heat Exchanger									
a) Total Release	MBq	9.31	2.89	11.17	21.78	8.42	19.40	72.96	
b) Average Concentration Released	uCi/ml	3.5E-11	1.7E-11	6.6E-11	1.4E-10	6.5E-11	1.4E-10	7.9E-11	
c) Maximum Concentration Released	uCi/ml	8.6E-07	4.5E-07	1.0E-06	1.6E-06	1.5E-06	1.8E-06	1.8E-06	
d) Percent of Tech Spec Limit	%	0.06	0.02	0.07	0.16	0.07	0.14	0.09	
Based on average conc. released									
9. Tritium									
a) Total Release	Curies	2.3E-01	4.0E-02	7.0E-02	1.0E-01	3.8E-02	4.9E-02	5.5E-01	
b) Average Concentration Released	uCi/ml	1.8E-09	2.3E-10	4.1E-10	7.1E-10	4.6E-10	1.5E-10	5.9E-10	
c) Percent of Tech Spec Limit	%	NA	NA	NA	NA	NA	NA	NA	
10. Dissolved Noble Gases									
a) Total Release	Curies	NONE	NONE	NONE	NONE	NONE	NONE	NONE	
b) Average Concentration Released	uCi/ml	---	---	---	---	---	---	---	
c) Percent of Tech Spec Limit	%	---	---	---	---	---	---	---	
11. Gross Alpha Radioactivity									
a) Total Release	Curies	3.0E-06	1.5E-06	2.6E-06	6.1E-06	4.0E-06	1.4E-05	3.1E-05	
b) Average Concentration Released	uCi/ml	1.8E-16	2.6E-17	1.5E-16	4.6E-16	3.1E-16	1.0E-15	2.4E-15	
12. Volume of Liquid Waste to Discharge Canal	Liters	2.0E+03	2.2E+03	1.6E+03	2.8E+03	3.9E+03	2.3E+03	1.6E+04	
13. Volume of Dilution Water	Liters	1.7E+11	1.7E+11	1.7E+11	1.4E+11	1.3E+11	1.4E+11	9.2E+11	

\*Prior to dilution by 1275 acre cooling lake and subsequent discharge to Illinois River.

POOR ORIGINAL

# REPORT OF RADIOACTIVE EFFLUENTS

Facility: Dresden Nuclear Power Station - Unit 2/3

DOCKET NOS. 1 71-237, 72-236

Year: 1979

II. Liquid Effluents (continued)	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REF.
8. Gross Radioactivity (Bq)									
(PCI Service W/D Heat Exchanger)									
a) Total Release	Milli-Curies	9.31	2.89	11.17	21.78	9.42	19.40	72.96	
b) Average Concentration Released	uci/ml	3.3E-11	1.7E-11	6.6E-11	1.6E-10	6.3E-11	1.4E-10	7.9E-11	
c) Maximum Concentration Released	uci/ml	8.6E-07	4.5E-07	1.0E-06	1.6E-06	1.3E-06	1.8E-06	1.8E-06	
d) Percent of Tech Spec Limit	%	0.06	0.02	0.07	0.16	0.07	0.16	0.09	
based on average conc. released									
9. Tritium									
a) Total Release	Curies	2.3E-01	4.0E-02	7.0E-02	1.0E-01	3.8E-02	4.3E-02	5.3E-01	
b) Average Concentration Released	uci/ml	1.4E-09	2.3E-10	4.1E-10	7.1E-10	4.4E-10	3.3E-10	3.9E-10	
c) Percent of Tech Spec Limit	%	NA	NA	NA	NA	NA	NA	NA	
10. Dissolved Noble Gases									
a) Total Release	Curies	NONE	NONE	NONE	NONE	NONE	NONE	NONE	
b) Average Concentration Released	uci/ml	---	---	---	---	---	---	---	
c) Percent of Tech Spec Limit	%	---	---	---	---	---	---	---	
11. Gross Alpha Radioactivity									
a) Total Release	Curies	2.0E-06	1.7E-06	2.4E-06	6.1E-06	6.0E-06	1.6E-05	7.1E-05	
b) Average Concentration Released	uci/ml	1.8E-14	2.5E-15	1.7E-14	4.3E-14	3.1E-14	1.0E-13	2.6E-14	
12. Volume of Liquid Waste in Discharge Canal	Liters	2.0E+05	2.8E+05	1.6E+05	2.8E+05	3.9E+05	2.1E+05	1.6E+06	
13. Volume of Dilution Water	Liters	1.7E+11	1.7E+11	1.7E+11	1.4E+11	1.3E+11	1.4E+11	9.7E+11	

\*Prior to dilution by 1275 acre cooling lake and subsequent discharge to Illinois River.

POOR ORIGINAL

## REPORT OF RADIOACTIVE EFFLUENTS

**EXHIBIT: Dresden Nuclear Power Station - Unit 2/3**

~~SECRET~~ ~~NOV 1 1954~~ ~~50-211, 50-212~~

**YEAR: 1979**

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POOR ORIGINAL

# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: Dresden Nuclear Power Station

DOCKET NOS.: 50-20, 50-337, 50-349

YEAR: 1979

## I. Solid Waste Shipped Offsite For Burial or Disposal

	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	G NO. TOTAL	TECH. SPEC. REF.
1. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.		48.6	38.8	26.3	3.4	1.5	2.4	130.0	
a) Quantity Shipped	cubic meters	12.1	321.6	60.1	9.9	1.5	7.3	412.5	6.5.D.R.(1)
b) Radioactivity	curies								6.5.D.R.(2)
2. Dry compressible waste, contaminated equipment, etc.									
a) Quantity Shipped	cubic meters	10.9	189.2	11.5	1.4	0	1.5	224.5	6.5.D.R.(1)
b) Radioactivity	curies	1.2	6.5	3.1	1.0	0	3.1	10.9	6.5.D.R.(2)
II. Solid Waste Shipped Offsite For Burial or Disposal (Processed by contractor)									
1. Spent Resins, Filter Sludges, evaporator bottoms, etc.									
a) Quantity Shipped	cubic meters	0	0	0	0	0	0	0	6.5.D.R.(1)
b) Radioactivity	curies	0	0	0	0	0	0	0	6.5.D.R.(2)
2. Dry Compressible Waste, contaminated equipment, etc.									
a) Quantity	cubic meters	0	0	0	0	0	0	0	6.5.D.R.(1)
b) Radioactivity	curies	0	0	0	0	0	0	0	6.5.D.R.(2)

POOR ORIGINAL

**DRESDEN NUCLEAR POWER STATION****SOLID WASTE DISPOSITION**YEAR 1979

MONTH	NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
JULY	12	Motor Freight (Exclusive Use Only)	Barnwell, S.C.
JULY	1	Motor Freight (Exclusive Use Only)	Richland, Wash.
AUGUST	26	Motor Freight (Exclusive Use Only)	Barnwell, S.C.
AUGUST	5	Motor Freight (Exclusive Use Only)	Beatty, NV
AUGUST	3	Motor Freight (Exclusive Use Only)	Richland, Wash.
SEPTEMBER	11	Motor Freight (Exclusive Use Only)	Barnwell, S.C.
SEPTEMBER	1	Motor Freight (Exclusive Use Only)	Richland, Wash.
OCTOBER	3	Motor Freight (Exclusive Use Only)	Barnwell, S.C.
NOVEMBER	1	Motor Freight (Exclusive Use Only)	Barnwell, S.C.
DECEMBER	4	Motor Freight (Exclusive Use Only)	Barnwell, S.C.

# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: DESSON NUCLEAR POWER STATION - UNIT 1

DOCKET NOS.: 50 - 10

YEAR: 1979

I. Gaseous Effluents	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REP.
1. Gross Radioactivity Releases									
a) Total Release	curies	22.1	21.0	21.0	26.4	12.8	6.2	177.5	
b) Maximum Release Rate (daily max. sample)	uCi/sec	4.2E+02	---	---	1.0E+01	1.2E+02	2.2E+01	4.2E+02	
c) Isotopes Released									
Kr-85m	curies	---	---	---	---	---	---	---	
Kr-87	curies	---	---	---	---	---	---	---	
Kr-88	curies	---	---	---	---	---	---	---	
Xe-133	curies	22.1	---	---	26.4	12.8	6.2	177.5	
Xe-135	curies	---	---	---	---	---	---	---	
Xe-135m	curies	---	---	---	---	---	---	---	
Xe-138	curies	---	---	---	---	---	---	---	
d) Percent of Chimney Limit	%	0.01	---	---	0.01	0.01	0.01	0.01	
e) Average Release Rate	uCi/sec	2.2E+01	---	---	3.2E-01	4.2E+00	2.2E+00	1.1E+01	
2. Iodine Releases									
a) Isotopes Released									
I-131	curies	2.2E-04	2.2E-04	2.4E-04	2.2E-04	2.4E-04	3.5E-04	1.8E-03	
I-133	curies	---	---	---	---	---	---	---	
I-135	curies	---	---	---	---	---	---	---	
b) Percent of Chimney Limit	%	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
c) Average Release Rate	uCi/sec	1.0E-04	1.0E-04	1.0E-04	1.1E-04	1.2E-04	1.2E-04	1.1E-04	

POOR ORIGINAL

# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: DRAGON NUCLEAR POWER STATION - UNIT 1

DOCKET NOS.: 50-10

YEAR: 1979

1. Gaseous Effluents (continued)	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	6 MO. TOTAL	TECH. SPEC. REF.
3. Particulate Releases	microcuries								
a) Gross Radioactivity (MPC)		4.49	1.32	0.91	0.92	2.22	1.49	11.45	
b) Gross Alpha Radioactivity	mCi								
c) Isotopes Released	mCi								
Fr-223	mCi	---	---	---	---	---	---	---	
Th-232	mCi	0.63	0.11	0.03	0.02	0.21	0.06	1.06	
Th-230	mCi	---	---	---	---	---	---	---	
Pa-231	mCi	1.90	0.94	0.38	0.33	0.33	0.24	4.24	
U-235	mCi	0.22	0.19	0.03	0.04	0.10	0.03	0.66	
U-238	mCi	0.18	0.04	0.01	0.01	0.03	0.01	0.28	
Th-232	mCi	---	---	---	---	---	---	---	
Ac-227	mCi	---	---	---	---	---	---	---	
Pa-231	mCi	---	---	---	---	---	---	---	
U-235	mCi	0.42	0.10	0.09	0.28	0.36	0.12	1.42	
U-238	mCi	1.04	0.24	0.09	0.22	1.12	0.39	3.28	
Am-241	mCi	---	---	---	---	---	---	---	
Am-243	mCi	---	---	---	---	---	---	---	
U-235	mCi	---	---	---	---	---	---	---	
U-238	mCi	---	---	---	---	---	---	---	
d) Percent of chimney limit	%	0.07	0.02	0.01	0.01	0.04	0.02	0.03	
e) Average release rate	uCi/sec	1.7E-03	5.7E-04	3.2E-04	1.4E-04	8.6E-04	3.1E-04	7.2E-04	
4. Sum of Iodines & Particulates									
a) Percent of Chimney Limit	%	0.07	0.03	0.02	0.02	0.04	0.03	0.03	
5. Gaseous Tritium									
a) Total Release	curies	210	210	210	210	210	210	210	
b) Average Release Rate	uCi/sec	---	---	---	---	---	---	---	

POOR ORIGINAL

# REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: DRESDEN NUCLEAR POWER STATION - UNIT 1

DOCKET NOS.: 70-10

YEAR: 1970

11. Liquid Effluents	UNITS	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	G NO. TOTAL	TECH. SPEC. REF.
1. Gross Radioactivity (BY)									
a) Total Release	Curies	2.5E-04	2.7E-03	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	7.0E-03	
b) Average Concentration Released	uCi/ml	1.2E-11	9.8E-11					8.0E-11	6.60.1.e.(1)
c) Maximum Concentration Released	uCi/ml	5.0E-09	2.2E-08					2.2E-08	6.60.1.e.(6)
d) Percent of Tech Spec Limit	%	0.01	0.10					0.06	6.60.1.e.(5)
Based on average conc. release									6.60.1.e.(6)
2. Tritium									
a) Total Release	Curies	2.8E-03	1.6E-04					2.0E-04	6.60.1.e.(8)
b) Average Concentration Released	uCi/ml	1.7E-12	5.8E-12					8.0E-12	
c) Percent of Tech Spec Limit	%								
3. Dissolved Noble Gases									
a) Total Release	Curies	NONE	NONE					NONE	
b) Average Concentration Released	uCi/ml	---	---					---	
c) Percent of Tech Spec Limit	%	---	---					---	
4. Gross Alpha Radioactivity									
a) Total Release	Curies	1.7E-07	2.4E-06					2.5E-06	
b) Average Concentration Released	uCi/ml	5.5E-15	9.7E-14					5.0E-14	
5. Volume of Liquid Waste to Discharge Canal	Liters	6.3E+03	2.7E+04					3.3E+04	6.60.1.e.(2)
6. Volume of Dilution Water	Liters	2.2E+10	2.8E+10					5.0E+10	6.60.1.e.(3)

POOR ORIGINAL





**DRESDEN Station**

**1979 Report of Occupational Personnel Radiation Doses\***  
Commonwealth Edison Company

**Station Employees**

**Work Function**

<b>Job Function</b>	<b>Reactor Operations &amp; Surveillance # of People/Man-Rem</b>	<b>Routine Maint. # of People/Man-Rem</b>	<b>Inservice Inspection # of People/Man-Rem</b>	<b>Waste Processing # of People/Man-Rem</b>	<b>Refueling # of People/Man-Rem</b>	<b>Total by Job Function # of People/Man-Rem</b>
Maintenance	17/25.1	189/765.8	1/0.5	1/2.0	7/10.4	215/803.8
Operating	127/106.9	12/17.7	5/7.1	19/28.4	30/63.3	193/223.4
Health Physics	4/6.5	14/23.3	4/6.5	23/37.3	12/19.6	57/93.2
Supervision	52/11.6	92/80.9	—	—	5/10.0	149/102.5
Engineering	134/64.9	39/7.2	51/9.5	7/1.3	23/11.3	253/87.3

**Company Employees other than Station Employees**

Special Maintenance	—	219/48.9	—	—	—	219/48.9
Engineering	270/10.1	—	—	—	—	270/10.1

**Contract Workers**

Routine Maintenance	—	2074/642.9	366/113.5	—	—	2440/756.4
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\*Reported in accordance with U.S. NRC Regulatory Guide 1.16 (Rev. 4), 1975.