



Commonwealth Edison

Dresden Nuclear Power Station

R.R. #1

Morris, Illinois 60450

Telephone 815/942-2920

DMB

PRIORITY ROUTING	
First	Second
RA	RC
DRA	ETC
DRP	SEA
DRS	HL
DRSS	PA
DRFA	PAU

orig + 2

FILED

EDE LTR: #88-218

Mr. A. Bert Davis
Regional Administrator
Directorate of Inspection and Enforcement
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

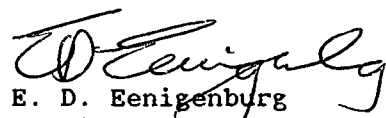
Subject: Dresden Station Operating Report, NRC Dockets 50-10, 50-237,
50-249

Dear Mr. Davis:

Enclosed is the corrected radioactive effluent report for July through December 1987 for Dresden Nuclear Power Station as outlined in the November 1986 Federal Register. The final data for Sr89, Sr90, Fe55, Tritium and gross alpha have been included in the report.

One copy of each report is provided for your use and eight copies are being distributed per the rules and regulations outlined in the November 1986 Federal Register.

Sincerely Yours,


E. D. Eenigenburg
Station Manager
Dresden Nuclear Power Station

EDE:JW:rg

Enclosure

cc: J. Wallace
J.C. Golden
File/NRC
File/Numerical

8804270052 880412
PDR ADCK 05000010
R PDR

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MEASUREMENTS AND APPROXIMATIONS

- A. Fission and activation gases: The D-1 chimney and D2/3 chimney are sampled daily via a grab sample. The D-2 and D-3 Reactor Vents are sampled weekly via a grab sample. The samples are analyzed for specific isotopes present in the release using a Ge(Li) spectrometry system. Tritium is collected via a continuous sample on the D-2/3 chimney and via a grab sample on the D2/3 Reactor Vent and analyzed using a Liquid Scintillation Counter. Kr-85 is estimated in the D2/3 chimney using a recoil or non-recoil calculation using fission/sec. plot and the sum of Xe-138, Kr-87, Kr-88, Kr-85m, Xe-133 and Xe-135 activities.
- B. Iodine and Particulate: Iodine and particulate samples from the D-1 and D2/3 Chimney and the D-2 and D-3 Reactor Vents are collected for a seven day period. These samples are analyzed for specific nuclides present in the release using a Ge(Li) spectrometry system. When 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 monthly composite is sent to a vendor to be analyzed for Sr-89, Sr-90, and Gross Alpha activity.
- C. Liquid Effluents: Prior to a release duplicate grab samples are collected from each batch and analyzed for gross activity using a gas flow proportional counter. Rad-waste batch discharges are also analyzed for specific isotopes present in the release using a Ge(Li) 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, and Gross Alpha. One of the LPCI samples for each month is analyzed for specific isotopes present in the releases using a Ge(Li) spectrometry system. This sample is sent to a vendor to be analyzed for Sr-89, Sr-90, Fe-55, and Gross Alpha activity.

IE48
11

DRESDEN NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

GASEOUS EFFLUENTS
SUMMATION OF ALL RELEASES

Docket Numbers: 50-10
50-237
50-249

	UNIT	3rd QUARTER	4th QUARTER
A. FISSION AND ACTIVATION GASES			
1. Total Release	Ci	3.33 E00	4.90 E00
2. Average Release Rate for Period	uCi/sec	4.19 E-01	6.17 E-01
3. Percent of Technical Specification Limit	%	*	*
B. IODINES			
1. Total Iodine-131	Ci	2.30 E-02	6.74 E-02
2. Average Release Rate for Period	uCi/sec	2.89 E-03	8.48 E-03
3. Percent of Technical Specification Limit	%	*	*
C. PARTICULATES			
1. Particulates with half-lives > 8 days	Ci	9.02 E-03	1.63 E-02
2. Average Release Rate for Period	uCi/sec	1.13 E-03	2.06 E-03
3. Percent of Technical Specification Limit	%	*	*
4. Gross Alpha Radioactivity	Ci	9.93 E-06	3.31 E-06
D. TRITIUM			
1. Total Release	Ci	5.38 E00	6.60 E00
2. Average Release Rate for Period	uCi/sec	6.77 E-01	8.30 E-01
3. Percent of Technical Specification Limit	%	*	*

* Will be included in the Annual Report on Environmental Radioactivity Data

IE58
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DRESDEN NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT
July Through December 1987

D1 Chimney GASEOUS EFFLUENTS

GROUND LEVEL RELEASES

SEMI-ELEVATED RELEASES

xx ELEVATED RELEASES

Docket Number 50-10

NUCLIDES RELEASED	UNIT	CONTINUOUS MODE		BATCH MODE	
		3rd QUARTER	4th QUARTER	3rd QUARTER	4th QUARTER
FISSION GASES	Ci				
Xe-138	Ci	*	*		
Xe-135m	Ci	*	*		
Kr-87	Ci	*	*		
Kr-88	Ci	*	*		
Kr-85m	Ci	*	*		
Kr-85	Ci	*	*		
Xe-135	Ci	*	*		
Xe-133	Ci	*	*		
Others: Xe-133m	Ci	*	*		
	Ci				
TOTAL	Ci	*	*	None	None
IODINES					
I-131	Ci	*	*		
I-133	Ci	*	*		
I-135	Ci	*	*		
TOTAL	Ci	*	*	None	None
PARTICULATES					
Sr-89	Ci	1.21 E-06	*		
Sr-90	Ci	1.26 E-07	1.10 E-07		
Cr-51	Ci	*	*		
Mn-54	Ci	1.68 E-06	*		
Co-58	Ci	*	*		
Fe-59	Ci	*	*		
Co-60	Ci	3.85 E-06	4.96 E-06		
Zr-95	Ci	*	*		
Nb-95	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	*		
Sb-124	Ci	*	*		
I-131	Ci	*	*		
Cs-134	Ci	*	2.74 E-07		
Cs-136	Ci	*	*		
Cs-137	Ci	2.28 E-06	2.82 E-05		
Ba-140	Ci	*	*		
Ce-141	Ci	*	*		
Ce-144	Ci	*	*		
Zn-65	Ci	*	*		
Ba-133	Ci	*	*		
Sb-125	Ci	*	*		
Others: Mo-99	Ci	*	*		
La-140	Ci	*	*		
	Ci				
	Ci				
	Ci				
TOTAL	Ci	9.15 E-06	3.35 E-05	None	None

* See Table for MDL of Each Nuclide

DRESDEN NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
Jul Through December 1987

Docket Number
50-10

TABLE OF MINIMUM DETECTABLE LEVELS
FOR GASEOUS EFFLUENTS

D1 Chimney GASEOUS EFFLUENTS AVERAGE FLOW 50,000 cfm

	<u>MDL (uCi/cc)</u>	<u>% OF TIME < MDL</u>
1. FISSION GASES		
Xe-138	4.63 E-08	100
Xe-135m	1.98 E-08	100
Kr-87	3.31 E-08	100
Kr-88	5.50 E-08	100
Kr-85m	1.67 E-08	100
Kr-85	4.08 E-06	100
Xe-135	1.69 E-08	100
Xe-133	4.18 E-08	100
Others: Xe-133m	1.49 E-07	100
2. IODINES		
I-131	3.26 E-14	100
I-133	2.89 E-14	100
I-135	5.73 E-14	100
3. PARTICULATES		
Sr-89	2 E-15	66.9
Sr-90	1 E-15	50.0
Cr-51	2.21 E-13	100
Mn-54	2.54 E-14	94.6
Co-58	2.53 E-14	100
Fe-59	3.89 E-14	100
Co-60	6.21 E-14	27.2
Zr-95	4.49 E-14	100
Nb-95	2.48 E-14	100
Ru-103	2.59 E-14	100
Ag-110m	2.72 E-14	100
Sb-124	1.85 E-14	100
I-131	2.76 E-14	100
Cs-134	3.02 E-14	97.8
Cs-136	2.95 E-14	100
Cs-137	3.05 E-14	15.8
Ba-140	1.02 E-13	100
Ce-141	3.59 E-14	100
Ce-144	1.50 E-13	100
Zn-65	4.39 E-14	100
Ba-133	3.56 E-14	100
Sb-125	7.57 E-14	100
Others: Mo-99	2.03 E-13	100
La-140	9.36 E-15	100

DRESDEN NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

D2/3 Chimney GASEOUS EFFLUENTS

GROUND LEVEL RELEASES

SEMI-ELEVATED RELEASES

xx ELEVATED RELEASES

Docket Numbers: 50-237

50-249

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNIT	3rd QUARTER	4th QUARTER	3rd QUARTER	4th QUARTER
FISSION GASES	Ci				
Xe-138	Ci	1.38 E-02	1.30 E-02		
Xe-135m	Ci	4.50 E-03	7.42 E-02		
Kr-87	Ci	1.12 E-03	*		
Kr-88	Ci	2.33 E-03	*		
Kr-85m	Ci	1.03 E-03	*		
Kr-85	Ci	4.77 E-03	*		
Xe-135	Ci	3.30 E-02	6.61 E-02		
Xe-133	Ci	4.32 E-03	9.50 E-04		
Others: Xe-133m	Ci	*	*		
	Ci				
TOTAL	Ci	6.48 E-02	1.54 E-01	None	None
IODINES					
I-131	Ci	9.87 E-04	2.60 E-03		
I-133	Ci	6.17 E-03	1.58 E-02		
I-135	Ci	7.05 E-03	2.45 E-02		
TOTAL	Ci	1.42 E-02	4.29 E-02	None	None
PARTICULATES					
Sr-89	Ci	3.66 E-05	5.08 E-07		
Sr-90	Ci	1.54 E-06	5.06 E-09		
Cr-51	Ci	*	*		
Mn-54	Ci	3.52 E-05	1.24 E-05		
Co-58	Ci	*	*		
Fe-59	Ci	*	*		
Co-60	Ci	4.71 E-04	1.64 E-04		
Zr-95	Ci	*	*		
Nb-95	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	*		
Sb-124	Ci	*	*		
I-131	Ci	8.24 E-05	8.06 E-04		
Cs-134	Ci	*	*		
Cs-136	Ci	*	*		
Cs-137	Ci	1.83 E-06	3.72 E-05		
Ba-140	Ci	1.04 E-03	2.52 E-03		
Ce-141	Ci	9.93 E-05	7.13 E-04		
Ce-144	Ci	*	*		
Zn-65	Ci	*	*		
Ba-133	Ci	*	*		
Sb-125	Ci	*	*		
Others: Mo-99	Ci	*	*		
La-140	Ci	*	*		
	Ci				
	Ci				
	Ci				
TOTAL	Ci	1.77 E-03	4.25 E-03	None	None

* See Table for MDL of Each Nuclide

RESDEN NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT
July Through December 1987

D2/3 Vent GASEOUS EFFLUENTS

 GROUND LEVEL RELEASES

xx SEMI-ELEVATED RELEASES

 ELEVATED RELEASES

Docket Numbers: 50-237
50-249

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNIT	3rd QUARTER	4th QUARTER	3rd QUARTER	4th QUARTER
FISSION GASES	Ci				
Xe-138	Ci	*	*		
Xe-135m	Ci	*	*		
Kr-87	Ci	*	*		
Kr-88	Ci	*	*		
Kr-85m	Ci	*	*		
Kr-85	Ci	*	*		
Xe-135	Ci	3.27 E00	4.75 E00		
Xe-133	Ci	*	*		
Others: Xe-133m	Ci	*	*		
	Ci				
TOTAL	Ci	3.27 E00	4.75 E00	None	None
IODINES					
I-131	Ci	3.59 E-04	1.05 E-03		
I-133	Ci	2.70 E-03	7.94 E-03		
I-135	Ci	5.69 E-03	1.55 E-02		
TOTAL	Ci	8.75 E-03	2.45 E-02	None	None
PARTICULATES					
Sr-89	Ci	5.08 E-06	5.49 E-05		
Sr-90	Ci	1.87 E-06	2.17 E-06		
Cr-51	Ci	2.42 E-04	7.85 E-04		
Mn-54	Ci	4.54 E-04	4.53 E-04		
Co-58	Ci	2.05 E-04	3.61 E-04		
Fe-59	Ci	7.74 E-06	8.63 E-05		
Co-60	Ci	3.63 E-03	4.19 E-03		
Zr-95	Ci	*	1.48 E-06		
Nb-95	Ci	*	*		
Ru-103	Ci	*	*		
Ag-110m	Ci	*	5.63 E-06		
Sb-124	Ci	*	2.86 E-06		
I-131	Ci	1.69 E-03	8.69 E-04		
Cs-134	Ci	*	*		
Cs-136	Ci	4.36 E-07	4.77 E-06		
Cs-137	Ci	5.04 E-05	2.69 E-05		
Ba-140	Ci	1.07 E-04	4.94 E-04		
Ce-141	Ci	*	*		
Ce-144	Ci	*	*		
Zn-65	Ci	8.50 E-05	1.85 E-04		
Ba-133	Ci	*	1.39 E-04		
Sb-125	Ci	*	*		
Others: Mo-99	Ci	7.47 E-04	4.25 E-03		
La-140	Ci	*	*		
	Ci				
TOTAL	Ci	7.24 E-03	1.19 E-02	None	None

* See Table for MDL of Each Nuclide

Iodine and Particulate for November 3, 1987 - November 17, 1987 estimated from data from previous and following weeks.

DRENN NUCLEAR POWER STATION
July Through December 1987

Docket Numbers:

50-237

50-240

TABLE OF MINIMUM DETECTABLE LEVELS
 FOR GASEOUS EFFLUENTS

<u>D2/3 Vent</u> GASEOUS EFFLUENTS		AVERAGE FLOW	D2: <u>110</u> Kcfm	D3: <u>110</u> Kcfm
	<u>MDL (uCi/cc)</u>		<u>% OF TIME < MDL</u>	
1. FISSION GASES				
Xe-138	4.63 E-08		100	
Xe-135m	1.19 E-08		100	
Kr-87	3.31 E-08		100	
Kr-88	5.50 E-08		100	
Kr-85m	1.67 E-08		100	
Kr-85	4.08 E-06		100	
Xe-135	1.69 E-08		44.0	
Xe-133	4.18 E-08		100	
Others: Xe-133m	1.49 E-07		100	
2. IODINES				
I-131	3.26 E-14		16.3	
I-133	2.89 E-14		18.5	
I-135	5.73 E-14		32.1	
3. PARTICULATES				
Sr-89	2 E-15		0	
Sr-90	1 E-15		0	
Cr-51	2.21 E-13		0	
Mn-54	2.54 E-14		0	
Co-58	2.53 E-14		48.9	
Fe-59	3.89 E-14		70.1	
Co-60	6.21 E-14		0	
Zr-95	4.49 E-14		96.2	
Nb-95	2.48 E-14		100	
Ru-103	2.59 E-14		100	
Ag-110m	2.72 E-14		91.9	
Sb-124	1.85 E-14		89.1	
I-131	2.76 E-14		15.2	
Cs-134	3.02 E-14		100	
Cs-136	2.95 E-14		55.4	
Cs-137	3.05 E-14		8.7	
Ba-140	1.02 E-13		15.2	
Ce-141	3.59 E-14		100	
Ce-144	1.50 E-13		100	
Zn-65	4.39 E-14		27.1	
Ba-133	3.56 E-14		96.2	
Sb-125	7.57 E-14		100	
Others: Mo-99	2.03 E-13		26.1	
La-140	9.36 E-15		Detected but not reported	

DRESDEN NUCLEAR POWER STATION

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

LIQUID EFFLUENTS

SUMMATION OF ALL RELEASES

Docket Numbers: 50-10
50-237
50-249

	UNIT	3rd QUARTER	4th QUARTER
A. FISSION AND ACTIVATION GASES			
1. Total Release (not incl. tritium,gases,alpha)	Ci	5.08 E-02	4.65 E-02
2. Average Diluted Conc. During Period	uCi/mL	2.07 E-07	1.17 E-07
3. Percent of Applicable Limit	%	*	*
B. TRITIUM			
1. Total Release	Ci	3.61 E00	5.63 E00
2. Average Diluted Conc. During Period	uCi/mL	1.47 E-05	1.42 E-05
3. Percent of Applicable Limit	%	*	*
C. DISSOLVED AND ENTRAINED GASES			
1. Total Release	Ci	3.53 E-05	1.11 E-05
2. Average Diluted Conc. During Period	uCi/mL	1.44 E-10	2.80 E-11
3. Percent of Applicable Limit	%	*	*
D. GROSS ALPHA RADIOACTIVITY			
1. Total Release	Ci	2.45 E-05	3.95 E-04
E. VOLUME OF WASTE RELEASED (prior to dilution)			
	liters	1.70 E06	1.78 E06
F. VOLUME OF DILUTION WATER USED DURING PERIOD			
	liters	2.45 E08	3.97 E08

* Will be included in the Annual Report on Environmental Radioactivity Data

DRESDEN NUCLEAR POWER STATION

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

Radwaste LIQUID EFFLUENTS

Docket Numbers: 50-10
50-237
50-249

1. Number of Batch Releases: 134
2. Total Time Period for Batch Releases: 34,195 min
3. Maximum Time Period for a Batch Release: 298 min
4. Average Time Period for Batch Releases: 255 min
5. Minimum Time Period for a Batch Release: 198 min
6. Average Stream Flow During Periods of
Release of Effluent into a Flowing Stream: 1.58 E06 L/min

NUCLIDES RELEASED	UNIT	CONTINUOUS MODE		BATCH MODE	
		3rd QUARTER	4th QUARTER	3rd QUARTER	4th QUARTER
Sr-89	Ci			4.69 E-07	*
Sr-90	Ci			5.27 E-05	6.17 E-05
Ar-41	Ci			*	*
Mn-54	Ci			5.15 E-03	4.03 E-03
Co-58	Ci			3.30 E-11	*
Fe-59	Ci			8.10 E-13	*
Co-60	Ci			1.93 E-02	3.44 E-02
Zn-65	Ci			*	*
Ru-103	Ci			*	*
Sb-122	Ci			*	*
Sb-124	Ci			*	*
I-131	Ci			*	*
I-133	Ci			*	*
I-135	Ci			*	*
Cs-134	Ci			*	*
Cs-137	Ci			5.55 E-03	5.87 E-03
Ba-140	Ci			*	*
La-140	Ci			*	*
Ce-141	Ci			*	*
Others: Cr-51	Ci			*	*
Fe-55	Ci			4.07 E-03	6.42 E-04
Kr-88	Ci			1.5 E-13	*
	Ci				
(above)					
Total For Period	Ci	None	None	3.00 E-02	4.50 E-02
Xe-133	Ci			1.03 E-05	1.11 E-05
Xe-135	Ci			2.50 E-05	

* See Table for MDL of Each Nuclide

DRENN NUCLEAR POWER STATION

July Through December 1987TABLE OF MINIMUM DETECTABLE LEVELS
FOR LIQUID EFFLUENTS

Docket Numbers:

50-10

50-237

50-249

Radwaste LIQUID EFFLUENTSTOTAL GALLONS RELEASED 2,830,920

	<u>MDL (uCi/mL)</u>	<u>% OF GALLONS < MDL</u>
Sr-89	2 E-08	83.2
Sr-90	7 E-09	33.7
Ar-41	3.07 E-08	0.7
Mn-54	6.16 E-08	97.8
Co-58	6.51 E-08	97.8
Fe-59	9.00 E-08	0
Co-60	1.70 E-07	100
Zn-65	1.17 E-07	100
Ru-103	5.39 E-08	100
Sb-122	7.01 E-08	100
Sb-124	4.06 E-08	100
I-131	6.42 E-08	100
I-133	5.34 E-08	100
I-135	9.15 E-08	100
Cs-134	7.12 E-08	100
Cs-137	2.75 E-07	0
Ba-140	2.09 E-07	100
La-140	2.30 E-08	100
Ce-141	9.02 E-08	100
Xe-133	1.83 E-07	97.8
Xe-135	6.09 E-08	95.5
Cr-51	5.77 E-07	100
Fe-55	5 E-08	50.0
Kr-88	Not Available	95.0

DRESDEN NUCLEAR POWER STATION

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

LPCI LIQUID EFFLUENTS

Docket Numbers: 50-237
50-249

1. Number of Batch Releases: 102
2. Total Time Period for Batch Releases: 126.48 min
3. Maximum Time Period for a Batch Release: 1.24 min
4. Average Time Period for Batch Releases: 1.24 min
5. Minimum Time Period for a Batch Release: 1.24 min
6. Average Stream Flow During Periods of
Release of Effluent into a Flowing Stream: 2.81 E06 L/min

NUCLIDES RELEASED	UNIT	CONTINUOUS MODE		BATCH MODE	
		3rd QUARTER	4th QUARTER	3rd QUARTER	4th QUARTER
Sr-89	Ci			*	*
Sr-90	Ci			*	1.94 E-04
Ar-41	Ci			*	*
Mn-54	Ci			3.93 E-06	9.00 E-07
Co-58	Ci			*	*
Fe-59	Ci			*	*
Co-60	Ci				
Zn-65	Ci			7.08 E-05	1.89 E-05
Ru-103	Ci			*	*
Sb-122	Ci			*	*
Sb-124	Ci			*	*
I-131	Ci			*	*
I-133	Ci			*	*
I-135	Ci			*	*
Cs-134	Ci			*	*
Cs-137	Ci			1.66 E-05	1.43 E-05
Ba-140	Ci			*	*
La-140	Ci			*	*
Ce-141	Ci			*	*
Others: Cr-51	Ci			*	*
Fe-55	Ci			2.07 E-07	3.70 E-06
	Ci			*	*
	Ci			*	*
(above)					
Total For Period	Ci	None	None	2.08 E-02	2.32 E-04
Xe-133	Ci			*	*
Xe-135	Ci			*	*

* See Table for MDL of Each Nuclide

DRENN NUCLEAR POWER STATION

July Through December 1987TABLE OF MINIMUM DETECTABLE LEVELS
FOR LIQUID EFFLUENTSDocket Numbers:
50-237
50-249

<u>LPCI</u>	<u>LIQUID EFFLUENTS</u>	<u>TOTAL GALLONS RELEASED</u>	<u>442,680</u>
	<u>MDL (uCi/mL)</u>	<u>% OF GALLONS < MDL</u>	
Sr-89	2 E-08	100	
Sr-90	7 E-08	83.2	
Ar-41	3.07 E-08	100	
Mn-54	6.16 E-08	32.6	
Co-58	6.51 E-08	100	
Fe-59	9.00 E-08	100	
Co-60	1.70 E-07	0	
Zn-65	1.17 E-07	100	
Ru-103	5.39 E-08	100	
Sb-122	7.01 E-08	100	
Sb-124	4.06 E-08	100	
I-131	6.42 E-08	100	
I-133	5.34 E-08	100	
I-135	9.15 E-08	100	
Cs-134	7.12 E-08	100	
Cs-137	2.75 E-07	0	
Ba-140	2.09 E-07	100	
La-140	2.30 E-08	100	
Ce-141	9.02 E-08	100	
Xe-133	1.83 E-07	100	
Xe-135	6.09 E-08	100	
Cr-51	5.77 E-07	100	
Fe-55	5 E-08	33.7	

RESDEN NUCLEAR POWER STATION

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

Docket Numbers:
50-10
50-237
50-249

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

1. Type of Waste	Unit	6-month period
a. Spent resins, filter sludges, evaporator bottoms, etc.	m ³	3.796 E02
	Ci	2.46 E02
b. Dry compressible waste, contaminated equip., etc.	m ³	4.837 E02
	Ci	2.79 E01
c. Irradiated components, control rods, etc.	m ³	0
	Ci	0
d. Other (describe)	m ³	0
	Ci	0

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

	% Ci	
a. Co-60	84.4 %	2.08 E02
Fe-55	0 %	0
Mn-54	12.9 %	3.17 E01
Cs-137	0.7 %	1.72 E00
Other	2.0 %	4.92 E00
b. Co-60	88.9 %	2.48 E01
Fe-55	0 %	0
Mn-54	7.8 %	2.18 E00
Cs-137	3.3 %	9.20 E-01
Other	0 %	0
c.	%	
	%	
	%	
	%	
	%	
d.	%	

3. Solid Waste Disposition

<u>NUMBER OF SHIPMENTS</u>	<u>MODE OF TRANSPORTATION</u>	<u>DESTINATION</u>
54	Motor freight (exclusive use only)	Barnwell, SC
19	Motor freight (exclusive use only)	Richland, WA
20	Motor freight (exclusive use only)	Beatty, NV

B. IRRADIATED FUEL SHIPMENTS (Disposition)

<u>NUMBER OF SHIPMENTS</u>	<u>MODE OF TRANSPORTATION</u>	<u>DESTINATION</u>
1	Motor Freight/TransAtlantic Shipping	Goteborg, Sweden

In accordance with Specifications 6.6.C.1 and 6.9.C of the Technical Specifications, Dresden Station has changed from using the station liquid radwaste processing equipment to using CNSI's equipment as the normal means for dewatering and solidifying liquid radwaste as described in CNSI's Topical Report¹ which was approved by the NRC on April 11, 1983. Dresden Station has revised its Process Control Program to reflect the fact that vendor services have become the primary means of processing liquid rad waste rather than the permanently installed Station system (Stock System). This change was On-Site Reviewed in accordance with Station procedures. Use of CNSI's NRC approved process control program and equipment will continue to assure that waste processing at Dresden Station is performed in accordance with applicable criteria and requirements. This change was implemented as a more cost effective manner of processing waste as well as reducing radiation exposure to station personnel. Additionally, the revised PCP requires that the topical report for the vendor services must be submitted to the NRC and the solidification/stabilization media must be approved by the licensed burial sites prior to use at Dresden. The PCP (Revision 1, February, 1988) is attached.

¹CNSI-2 4313-01354-01P-A, "Mobile Cement Solidification System".

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

July Through December 1987

ABNORMAL RELEASES

Docket Numbers:

50-10

50-237

50-249

A. LIQUID

1. Number of Releases: 2
2. Total Activity Released: 3.48 E-04 Ci Co60

D3 Isolation Condenser blown on August 7, 1987. See DVR #12-3-87-48, -49 and -50 for further information.

D3 Isolation Condenser blown on September 28, 1987. See DVR #12-3-87-68, for further information. Curie content estimated from isotopic and August 7, 1987 release volume.

B. GASEOUS

1. Number of Releases: 0
2. Total Activity Released: 0