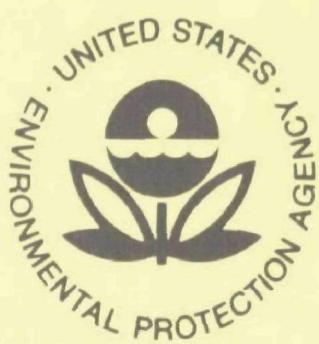


SUMMARY OF RADIOACTIVITY RELEASED IN EFFLUENTS FROM NUCLEAR POWER PLANTS FROM 1972 THRU 1975

JUNE 1977



**U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF RADIATION PROGRAMS
WASHINGTON, D.C. 20460**

SUMMARY OF RADIOACTIVITY RELEASED IN EFFLUENTS
FROM NUCLEAR POWER PLANTS FROM 1972 THRU 1975

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MAY 1977

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF RADIATION PROGRAMS
TECHNOLOGY ASSESSMENT DIVISION

FOREWORD

The Office of Radiation Programs carries out a national program designed to evaluate the exposure of man to ionizing and nonionizing radiation, and to promote development of controls necessary to protect the public health and safety and assure environmental quality.

Within the Office of Radiation Programs, the Technology Assessment Division is conducting a review program to evaluate data on radioactive effluents from light-water-cooled nuclear power plants. The data consolidated in this report will be used in the technology assessment of current radioactive waste management processes, to identify sources with inadequate controls and to assess public and private compliance with Agency radiation standards, guides and criteria. It is the intent of this report to provide a summary of the effluent data from light-water-cooled nuclear power plants which will be used in all EPA technology assessment reports. Subsequent reports for future years of operation will be published on a more timely basis prior to the publication of such evaluations.

I encourage users of this report to inform the Office of Radiation Programs of any omissions or errors. Your comments or requests for further information are also solicited.



W. D. Rowe, Ph.D.
Deputy Assistant Administrator
for Radiation Programs

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AVAILABLE
DIGITALLY**

Introduction

Purpose

This report is the first in a series of annual summaries of radioactive waste being released from, or shipped off-site by, nuclear power plants in the United States. The report will provide a consolidated source of data for an annual report on radiation in the environment published by the Environmental Analysis Division of the Environmental Protection Agency's (EPA) Office of Radiation Programs (ORP).

The data consolidated in this report will be used by ORPs Technology Assessment Division (TAD) to assess the status of current radioactive waste management processes, to project future trends in process performance, to identify sources with inadequate controls and to assess compliance with Agency radiation guidance and criteria. Future reports will be used by TAD to develop the technical bases for possible environmental standards to be written by the Criteria and Standards Division of ORP.

This report is not to be construed as a compliance report for the EPA Uranium Fuel Cycle Standard (40 CFR 190). Responsibility for assuring compliance with this standard is vested in the U.S. Nuclear Regulatory Commission under the Presidents Reorganization Plan No. 3 of 1970.

This report will cover only those long lived isotopes which are generally released in sufficient quantities to be environmentally significant over extended periods of time in the biosphere.

Scope

EPA is maintaining records of the releases of radioactive effluents and wastes from all operating nuclear power plants. This particular report

includes those plants which reached commercial operation, or had measurable releases prior to commercial operation, as of December 1975, and includes only those isotopes of environmental and radiological significance.

Source of Data

All of the information in this report was taken from the individual plant semi-annual or annual operating reports filed by the responsible utility with the Nuclear Regulatory Commission unless otherwise noted. Copies of these reports are forwarded to the EPA Headquarters, in Washington D.C., and to the EPA Regional Office for the region in which the plant is located. Reports which were missing from EPA files were provided by the NRC libraries.

It is our hope that anyone having access to data which we are missing, have marked as NR, not reported, or NA, not available, would provide us with documental reports of such data so that it may be included in subsequent reports. Blanks in the data sheets indicate missing data.

With respect to solid waste our values are for process wastes only, i.e., spent resins, evaporator bottoms, filter sludge, dry compressible wastes, tools (when not reported separately), etc., while the NRC data sometimes includes other items such as samples sent to labs, isotopes for medical uses, and other non-process waste. Neither our report nor the annual reports published by the NRC include spent fuel shipments.

Definitions

All releases are via the main stack and the discharge canal unless otherwise noted; vent releases are included when given. Terms used in the

report are as follows:

Noble Gas - All noble gases at the point of discharge as reported by the licensee.

Halogens - All halogens at the point of discharge as reported by the licensee.

Particulates - Only those particulates with half-lives greater than eight days when reported as such, otherwise all particulates as measured at the point of discharge.

Airborne Tritium - All tritium reported released in gaseous form.

Total MF & Act. Products - Mixed fission and activation products released via the liquid waste processing system, untreated turbine building drains and secondary system blowdown.

Liquid Tritium - All tritium reported released in liquid form.

Dissolved Gases - All noble gases reported as being released dissolved in liquid effluents.

Liquid Waste Volume - The volume of liquid effluents from all sources.

Liquid Dilution Volume - The volume of liquid into which the liquid effluents are discharged prior to release to the environment.

Solid Waste Volume - The volume of solid process wastes such as filter sludge, evaporator bottoms, spent resin, etc., shipped off-site. Does not include tools, medical isotopes, spent fuel and other non-process wastes shipped off-site.

Solid Waste Activity - The total radioactivity associated with the solid waste defined above as being shipped off-site.

Solid Waste Shipments - The number of shipments required to transport to the burial site the volume of solid process wastes defined above.

Power Production - The gross thermal power produced by the plant during the year.

NA - not available

ND - not detectable

NR - not reported

1.26E+3 = 1.26×10^3

1.26E-3 = 1.26×10^{-3}

Discussion

Data reported by the utilities on the radioactive material released from the plants was reviewed in order to identify obvious mistakes such as typographical errors. When obvious mistakes were found they were corrected. Other more obscure errors or inconsistencies were handled by contacting either the utility or the plant for assistance. In all cases our inquiries were greeted with a courteous and prompt response.

We have attempted to incorporate all changes and corrections to the data which have been published in subsequent reports by the utility. We would appreciate being notified of any such corrections which we have missed for inclusion in latter reports. Please direct this information to:

Chief, Energy Systems Analysis Branch (AW-459)
Office of Radiation Programs
U.S. Environmental Protection Agency
401 M. St. S.W.
Washington D.C. 20460

SECTION I
INDIVIDUAL PLANT DATA SHEETS

DATES OF INITIAL CRITICALITY AND COMMERCIAL OPERATION
FOR BWRs THROUGH 1975

<u>Plant</u>	<u>Initial Criticality</u>	<u>Commercial Operation</u>
Big Rock Point	9-27-62	3-29-63
Browns Ferry - Unit 1	8-17-73	8-1-74
Unit 2	7-20-74	3-1-75
Brunswick 2	3-20-75	11-3-75
Cooper	2-21-74	7-1-74
Dresden 1	10-15-59	7-4-60
Dresden - Unit 2	1-7-70	6-9-72
Unit 3	1-31-71	11-16-71
Duane Arnold 1	3-23-74	2-1-75
FitzPatrick 2	11-17-74	7-28-75
Hatch 1	9-12-74	12-31-75
Humboldt Bay 3	2-16-63	8-63
La Crosse	7-11-67	9-13-69
Millstone Point 1	10-26-70	3-71
Monticello	12-10-70	6-30-71
Nine Mile Point 1	9-6-69	12-69
Oyster Creek 1	5-3-69	12-69
Peach Bottom - Unit 2	9-16-73	7-5-74
Unit 3	8-7-74	12-23-74
Pilgrim 1	6-16-72	12-72
Quad Cities - Unit 1	10-18-71	2-18-73
Unit 2	4-26-72	3-10-73
Vermont Yankee	3-24-72	11-29-72

**DATES OF INITIAL CRITICALITY AND COMMERCIAL OPERATION
FOR PWRs THROUGH 1975**

<u>Plant</u>	<u>Initial Criticality</u>	<u>Commercial Operation</u>
Arkansas One 1	8-6-74	12-19-74
Calvert Cliffs 1	10-7-74	5-8-75
Cook, Donald C. 1	1-18-75	8-27-75
Fort Calhoun 1	8-6-73	6-20-74
Ginna R. E.	11-8-69	3-70
Haddam Neck	7-24-67	1-1-68
Indian Point - Unit 1	8-2-62	10-62
Unit 2	5-22-73	8-73
Kewaunee	3-7-74	6-74
Maine Yankee	10-23-72	12-28-72
Millstone Point 2	10-17-75	12-26-75
Oconee - Unit 1	4-19-73	7-15-73
Unit 2	11-11-73	9-9-74
Unit 3	9-5-74	12-16-74
Palisades	5-24-71	12-31-71
Point Beach - Unit 1	11-2-70	12-21-70
Unit 2	5-30-72	4-20-73
Prairie Island - Unit 1	12-1-73	12-16-73
Unit 2	12-17-74	12-21-74
Rancho Seco 1	9-16-74	4-17-75
Robinson, H. B.	9-20-70	3-7-71
San Onofre 1	6-14-67	1-1-68
Surry - Unit 1	7-1-72	12-22-72
Unit 2	3-7-73	5-1-73
Three Mile Island 1	6-5-74	9-2-74

DATES OF INITIAL CRITICALITY AND COMMERCIAL OPERATION
FOR PWRs THROUGH 1975

<u>Plant</u>	<u>Initial Criticality</u>	<u>Commercial Operation</u>
Turkey Point - Unit 3	10-20-72	12-14-72
Unit 4	6-11-73	9-7-73
Yankee (Rowe)	8-19-60	7-61
Zion - Unit 1	6-19-73	12-31-73
Unit 2	12-24-73	9-17-74

Facility Big Rock Point Utility Consumers Power Company
 Type BWR EPA Region V Rated Power Level 75 MWe 240 Mwt
 Location Big Rock Point, Michigan

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	2.58E+5	2.25E+5	1.88E+5	5.06E+4
Krypton-85.....	4.40E+2	1.20E+3	4.48E+2	1.60E+2
Xenon-133.....	2.10E+4	2.56E+4	1.65E+4	5.79E+3
Total Halogens.....	1.31E-1	4.68E+0	3.55E-1	2.67E-1
Iodine-131.....	1.22E-1	4.60E+0	9.01E-2	2.19E-2
Particulates.....	2.60E-2	3.70E-1	9.07E-2	9.80E-2
Tritium.....	7.71E+1	7.71E+1	3.87E+1	7.39E+0

<u>LIQUID RELEASES (curies)</u>	1972	1973	1974	1975
Total MF & Act. Products....	1.09E+0	2.65E+0	1.07E+0	2.02E+0
Cobalt-58.....	1.10E-2	2.90E-2	NR	8.51E-4
Cobalt-60.....	8.50E-2	2.10E-1	9.89E-2	3.44E-1
Strontium-90.....	3.10E-3	1.10E-4	NR	1.77E-3
Iodine-131.....	5.16E-2	6.30E-2	5.23E-3	8.03E-3
Cesium-134.....	2.90E-1	2.40E-1	7.52E-2	1.67E-1
Cesium-137.....	3.00E-1	5.10E-1	1.84E-1	5.16E-1
Tritium.....	1.04E+1	1.97E+1	5.07E+0	5.73E+0
Dissolved Gases.....	ND	1.73E-2	NR	7.24E-3
Liquid Waste Volume (l)....	4.64E+5	8.17E+5	4.33E+5	4.58E+5
Liquid Dilution Volume (l)...	1.03E+11	1.03E+11	1.03E+11	1.02E+11

<u>SOLID WASTES</u>	1972	1973	1974	1975
Volume (m ³).....	6.03E+1	4.78E+0	3.94E+1	NR
Activity (curies).....	1.13E+3	5.59E+1	9.45E+1	1.23E+3
Shipments.....	19	2	4	16

<u>POWER PRODUCTION</u>	1972	1973	1974	1975
Gross Thermal (MWD).....	4.96E+4	5.89E+4	4.69E+4	4.07E+4

Facility	<u>Browns Ferry Unit 1 & 2</u>	Utility	<u>Tennessee Valley Authority</u>		
Type	<u>BWR</u>	EPA Region	<u>IV</u>	each	
Location	<u>Decatur, Alabama</u>			<u>1065 MWe</u>	<u>3293 MWt</u>

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....		<u>2.00E+3</u>	<u>2.52E+4</u>
Krypton-85.....		<u>7.28E+2</u>	<u>6.89E+3</u>
Xenon-133.....		<u>1.67E+2</u>	<u>1.61E+3</u>
Total Halogens.....		<u>2.11E+1</u>	<u>5.97E-1</u>
Iodine-131.....		<u>6.27E-3</u>	<u>1.89E-1</u>
Particulates.....		<u>2.18E-2</u>	<u>5.89E-2</u>
Tritium.....		<u>1.78E+1</u>	<u>5.08E+0</u>

<u>LIQUID RELEASES (curies)</u>		1974	1975
Total MF & Act. Products....		<u>7.21E-1</u>	<u>2.79E+0</u>
Cobalt-58.....		<u>6.29E-3</u>	<u>3.57E-2</u>
Cobalt-60.....		<u>7.75E-3</u>	<u>3.84E-2</u>
Strontium-90.....		<u>2.59E-3</u>	<u>3.24E-3</u>
Iodine-131.....		<u>5.19E-3</u>	<u>5.10E-2</u>
Cesium-134.....		<u>4.14E-3</u>	<u>3.79E-2</u>
Cesium-137.....		<u>5.33E-3</u>	<u>9.38E-2</u>
Tritium.....		<u>4.44E+0</u>	<u>1.04E+1</u>
Dissolved Gases.....		<u>1.96E-2</u>	<u>1.43E-1</u>
Liquid Waste Volume (l)....		<u>1.78E+7</u>	<u>6.06E+7</u>
Liquid Dilution Volume (l)..		<u>1.57E+11</u>	<u>3.03E+11</u>

SOLID WASTES

Volume (m^3).....		<u>2.61E+2</u>	<u>1.27E+3</u>
Activity (curies).....		<u>7.09E+1</u>	<u>1.25E+3</u>
Shipments.....		<u>60</u>	<u>121</u>

POWER PRODUCTION

Gross Thermal (MWD).....		<u>6.08E+5</u>	<u>3.65E+5¹</u>
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¹ both units shutdown March 22 through end of year due to a fire

Facility Brunswick Unit 2 Utility Carolina Power & Light Company
 Type BWR EPA Region IV Rated Power Level 821 MWe 2436 MWt
 Location South Port, North Carolina

<u>AIRBORNE RELEASES (curies)</u>				1975
Total Noble Gases.....	_____	_____	_____	<u>1.85E+2</u>
Krypton-85.....	_____	_____	_____	<u>ND</u>
Xenon-133.....	_____	_____	_____	<u>ND</u>
Total Halogens.....	_____	_____	_____	<u>2.70E-3</u>
Iodine-131.....	_____	_____	_____	<u>6.08E-4</u>
Particulates.....	_____	_____	_____	<u>3.83E-3</u>
Tritium.....	_____	_____	_____	<u>2.02E+0</u>
<u>LIQUID RELEASES (curies)</u>				
Total MF & Act. Products....	_____	_____	_____	<u>1.92E+0</u>
Cobalt-58.....	_____	_____	_____	<u>3.45E-1</u>
Cobalt-60.....	_____	_____	_____	<u>2.68E-2</u>
Strontium-90.....	_____	_____	_____	<u>4.49E-3</u>
Iodine-131.....	_____	_____	_____	<u>6.31E-4</u>
Cesium-134.....	_____	_____	_____	<u>2.47E-5</u>
Cesium-137.....	_____	_____	_____	<u>4.26E-5</u>
Tritium.....	_____	_____	_____	<u>3.20E+0</u>
Dissolved Gases.....	_____	_____	_____	<u>1.07E-3</u>
Liquid Waste Volume (l)....	_____	_____	_____	<u>2.73E+7</u>
Liquid Dilution Volume (l)..	_____	_____	_____	<u>1.84E+11</u>
<u>SOLID WASTES</u>				•
Volume (m^3).....	_____	_____	_____	<u>4.11E+2</u>
Activity (curies).....	_____	_____	_____	<u>6.96E+0</u>
Shipments.....	_____	_____	_____	<u>27</u>
<u>POWER PRODUCTION</u>				
Gross Thermal (MWD).....	_____	_____	_____	<u>2.33E+5</u>

Facility	<u>Cooper Nuclear Station</u>	Utility	<u>Nebraska Public Power</u>			
Type	<u>BWR</u>	EPA Region	<u>VII</u>	Rated Power Level	<u>778 MWe</u>	<u>2831 MWt</u>
Location	<u>Brownville, Nebraska</u>					

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....	_____	<u>1.57E+3</u>	<u>1.97E+4</u>
Krypton-85.....	_____	<u>3.21E-4</u>	<u>3.76E+1</u>
Xenon-133.....	_____	<u>1.44E+1</u>	<u>4.90E+3</u>
Total Halogens.....		<u>3.54E+0</u>	<u>4.19E-1</u>
Iodine-131.....	_____	<u>1.27E-2</u>	<u>2.28E-2</u>
Particulates.....	_____	<u>1.76E-1</u>	<u>3.12E-2</u>
Tritium.....	_____	<u>1.59E-2</u>	<u>4.30E+1</u>
<u>LIQUID RELEASES (curies)</u>			
Total MF & Act. Products....	_____	<u>1.42E+0</u>	<u>1.73E+0</u>
Cobalt-58.....	_____	<u>5.65E-1</u>	<u>1.14E-1</u>
Cobalt-60.....	_____	<u>7.66E-2</u>	<u>2.36E-1</u>
Strontium-90.....	_____	<u>8.50E-4</u>	<u>8.77E-4</u>
Iodine-131.....	_____	<u>2.79E-3</u>	<u>7.17E-3</u>
Cesium-134.....	_____	<u>2.20E-3</u>	<u>5.06E-3</u>
Cesium-137.....	_____	<u>1.93E-3</u>	<u>3.21E-3</u>
Tritium.....	_____	<u>1.70E+0</u>	<u>8.25E+0</u>
Dissolved Gases.....	_____	<u>2.87E-2</u>	<u>5.50E-3</u>
Liquid Waste Volume (l)....	_____	<u>1.32E+7</u>	<u>1.09E+7</u>
Liquid Dilution Volume (l)...	_____	<u>6.71E+10</u>	<u>7.89E+10</u>
<u>SOLID WASTES</u>			
Volume (m ³).....	_____	<u>3.79E+2</u>	<u>2.90E+2</u>
Activity (curies).....	_____	<u>1.72E+1</u>	<u>2.66E+2</u>
Shipments.....	_____	<u>26</u>	<u>36</u>
<u>POWER PRODUCTION</u>			
Gross Thermal (MWD).....	_____	<u>2.87E+5</u>	<u>2.31E+5</u>

Facility Dresden Unit 1 Utility Commonwealth Edison

Type BWR EPA Region V Rated Power Level 200 MWe 700 MWT

Location Morris, Illinois

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>8.77E+5</u>	<u>8.36E+5</u>	<u>9.94E+4</u>	<u>5.20E+5</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>NR</u>	<u>2.40E+4</u> ¹	<u>2.10E+3</u>	<u>2.49E+4</u>
Total Halogens.....	<u>2.46E+0</u>	<u>4.65E-1</u>	<u>1.35E+1</u>	<u>5.70E+0</u>
Iodine-131.....	<u>NR</u>	<u>4.65E-1</u>	<u>4.27E-1</u>	<u>6.00E-1</u>
Particulates.....	<u>2.98E-1</u>	<u>3.18E-1</u>	<u>3.35E-1</u>	<u>3.59E-1</u>
Tritium.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>3.42E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>6.76E+0</u>	<u>9.24E+0</u>	<u>6.89E+0</u>	<u>8.40E-1</u>
Cobalt-58.....	<u>NR</u>	<u>NR</u>	<u>6.03E-3</u> ²	<u>9.30E-2</u>
Cobalt-60.....	<u>NR</u>	<u>NR</u>	<u>7.24E-1</u> ²	<u>4.30E-1</u>
Strontium-90.....	<u>NR</u>	<u>NR</u>	<u>1.92E-3</u> ²	<u>7.50E-2</u>
Iodine-131.....		<u>NR</u>	<u>3.41E-2</u> ²	<u>9.60E-4</u>
Cesium-134.....	<u>NR</u>	<u>NR</u>	<u>6.72E-1</u> ²	<u>5.30E-2</u>
Cesium-137.....	<u>NR</u>	<u>NR</u>	<u>1.37E+0</u> ²	<u>7.80E-2</u>
Tritium.....	<u>4.32E+1</u>	<u>1.85E+1</u>	<u>1.88E+1</u>	<u>5.30E-1</u>
Dissolved Gases.....	<u>NR</u>	<u>NR</u>	<u>ND</u>	<u>NR</u>
Liquid Waste Volume (l)....	<u>1.22E+7</u>	<u>3.10E+6</u>	<u>6.77E+6</u>	<u>5.60E+6</u>
Liquid Dilution Volume (l)..	<u>2.92E+11</u>	<u>2.96E+11</u>	<u>2.62E+11</u>	<u>2.70E+11</u>

SOLID WASTES

Volume (m ³).....	<u>5.88E+2</u>			
Activity (curies).....	<u>4.20E+0</u>	<u>Included with Units 2 & 3</u>		
Shipments.....	<u>22</u>			

POWER PRODUCTION

Gross Thermal (MWD).....	<u>1.57E+5</u>	<u>1.01E+5</u>	<u>5.56E+4</u>	<u>1.06E+5</u>
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¹ Data for July - Dec only, gamma ray spectrometer not functioning during first half of the year

² Data for July-Dec only, isotopic analysis of the first half of the year not required

Facility	Dresden Units 2 & 3	Utility	Commonwealth Edison
Type	BWR	EPA Region	V
Location	Morris, Illinois	Rated Power Level	each 809 MWe 2527 MWT

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>4.29E+5</u>	<u>8.81E+5</u>	<u>6.28E+5</u>	<u>3.69E+5</u>
Krypton-85.....	<u>1</u>	NR	NR	NR
Xenon-133.....	<u>1</u>	<u>6.40E+4</u> ³	<u>8.38E+4</u>	<u>7.35E+4</u>
Total Halogens.....	<u>2</u>	<u>2.65E+1</u> ³	<u>3.77E+1</u>	<u>1.17E+1</u>
Iodine-131.....	<u>5.08E+0</u>	<u>4.90E+0</u> ³	<u>3.87E+0</u>	<u>8.12E-1</u>
Particulates.....	<u>8.25E-1</u>	<u>2.62E+0</u>	<u>2.83E+0</u>	<u>4.16E+0</u>
Tritium.....	<u>3.12E+1</u>	<u>1.00E+1</u>	<u>1.14E+2</u>	<u>2.21E+2</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>2.20E+1</u>	<u>2.59E+1</u>	<u>3.32E+1</u>	<u>8.10E-1</u>
Cobalt-58.....	<u>1</u>	<u>1.44E-1</u> ³	<u>2.27E-1</u>	<u>1.40E-2</u>
Cobalt-60.....	<u>1</u>	<u>2.09E+0</u> ³	<u>1.23E+1</u>	<u>3.20E-1</u>
Strontium-90.....	<u>1</u>	<u>1.00E-2</u> ³	<u>5.78E-2</u>	<u>8.40E-3</u>
Iodine-131.....	<u>1</u>	<u>1.41E+0</u> ³	<u>5.54E-1</u>	<u>1.50E-2</u>
Cesium-134.....	<u>1</u>	<u>1.17E+0</u> ³	<u>2.77E+0</u>	<u>3.90E-3</u>
Cesium-137.....	<u>1</u>	<u>4.24E+0</u> ³	<u>6.79E+0</u>	<u>3.60E-2</u>
Tritium.....	<u>2.59E+1</u>	<u>2.58E+1</u>	<u>2.26E+1</u>	<u>5.40E+1</u>
Dissolved Gases.....	NR	NR	NR	NR
Liquid Waste Volume (l)....	<u>2.67E+7</u>	<u>2.56E+7</u>	<u>1.49E+7</u>	<u>1.56E+7</u>
Liquid Dilution Volume (l)..	<u>1.43E+12</u>	<u>1.51E+12</u>	<u>1.25E+12</u>	<u>3.10E+11</u>

SOLID WASTES

Volume (m ³).....	<u>1.00E+3</u>	<u>2.20E+3</u> ⁴⁵	<u>2.19E+3</u> ⁵⁶	<u>5.85E+3</u> ⁵
Activity (curies).....	<u>1.19E+2</u>	<u>1.34E+2</u> ⁴⁵	<u>5.05E+3</u> ⁵⁶	<u>7.34E+3</u> ⁵
Shipments.....	<u>82</u>	<u>196</u> ⁴⁵	<u>627</u> ⁵⁶	<u>823</u> ⁵

POWER PRODUCTION

Gross Thermal (MWD).....	<u>1.05E+6</u>	<u>1.18E+6</u>	<u>9.09E+5</u>	<u>5.34E+5</u>
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¹ detailed isotopic analysis not given

² No information on halogens other than I-131

³ Second half of the year only, monitors inoperative during Jan-July

⁴ does not include 34 shipments of high level waste containing 2.80E+4 curies

⁵ for units 1, 2 & 3

⁶ from NUREG 0077

Facility Duane Arnold Unit 1 Utility Iowa Electric & Power Company
 Type BWR EPA Region VII Rated Power Level 569 MWe 1658 MWt
 Location Cedar Rapids, Iowa

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....	_____	<u>9.36E+2</u>	<u>1.54E+3</u>
Krypton-85.....	_____	<u>NR</u>	<u>NR</u>
Xenon-133.....	_____	<u>7.70E+0</u>	<u>3.36E+2</u>
Total Halogens.....	_____	<u>2.73E-3</u>	<u>4.06E-1</u>
Iodine-131.....	_____	<u>2.73E-3</u>	<u>2.06E-2</u>
Particulates.....	_____	<u>1.52E-3</u>	<u>8.88E-3</u>
Tritium.....	_____	<u>1.50E+0</u>	<u>1.85E+1</u>
<u>LIQUID RELEASES (curies)</u>			
Total MF & Act. Products....	_____	<u>6.00E-4</u>	<u>2.07E-3</u>
Cobalt-58.....	_____	<u>1.20E-4</u>	<u>5.35E-4</u>
Cobalt-60.....	_____	<u>3.40E-5</u>	<u>4.19E-4</u>
Strontium-90.....	_____	<u>NR</u>	<u>NR</u>
Iodine-131.....	_____	<u>NR</u>	<u>NR</u>
Cesium-134.....	_____	<u>1.50E-6</u>	<u>4.45E-5</u>
Cesium-137.....	_____	<u>2.60E-6</u>	<u>6.71E-5</u>
Tritium.....	_____	<u>1.70E-1</u>	<u>3.26E-1</u>
Dissolved Gases.....	_____	<u>5.50E-5</u>	<u>NR</u>
Liquid Waste Volume (l)....	_____	<u>8.00E+5</u>	<u>3.81E+5</u>
Liquid Dilution Volume (l)..	_____	<u>1.68E+8</u>	<u>7.65E+7</u>
<u>SOLID WASTES</u>			
Volume (m ³).....	_____	<u>3.21E+2</u>	<u>2.62E+2</u>
Activity (curies).....	_____	<u>6.14E+1</u>	<u>7.90E+1</u>
Shipments.....	_____	<u>26</u>	<u>22</u>
<u>POWER PRODUCTION</u>			
Gross Thermal (MWD).....	_____	<u>1.87E+5</u>	<u>3.09E+5</u>

Facility James A. FitzPatrick Unit 2 Utility Niagara Mohawk Power Corporation

Type BWR EPA Region II Rated Power Level 821 MWe 2436 Mwt

Location Oswego, New York

AIRBORNE RELEASES (curies)

		1974	1975
Total Noble Gases.....	_____	ND	<u>4.08E+3</u> ¹
Krypton-85.....	_____	ND	<u>NR</u>
Xenon-133.....	_____	ND	<u>6.10E+0</u> ²
Total Halogens.....	_____	ND	<u><1.82E-2</u>
Iodine-131.....	_____	ND	<u>NR</u>
Particulates.....	_____	ND	<u>3</u>
Tritium.....	_____	ND	<u>3.30E-1</u> ⁴

LIQUID RELEASES (curies)

Total MF & Act. Products....	_____	<u>1.46E-3</u>	<u>9.39E+0</u>
Cobalt-58.....	_____	NR	<u>1.63E+0</u>
Cobalt-60.....	_____	NR	<u>4.03E-1</u>
Strontium-90.....	_____	NR	<u>2.99E-3</u>
Iodine-131.....	_____	NR	<u>3.99E-3</u>
Cesium-134.....	_____	NR	<u>1.99E-2</u>
Cesium-137.....	_____	NR	<u>1.44E-3</u>
Tritium.....	_____	NR	<u>3.42E-1</u> ⁵
Dissolved Gases.....	_____	NR	<u>ND</u>
Liquid Waste Volume (l)....	_____	<u>1.46E+7</u>	<u>2.21E+7</u> ⁵
Liquid Dilution Volume (l)..	_____	<u>9.41E+10</u>	<u>2.62E+11</u> ⁵

SOLID WASTES

Volume (m ³).....	_____	0	<u>5.10E+2</u>
Activity (curies).....	_____	0	<u>1.32E+2</u>
Shipments.....	_____	0	<u>NR</u>

POWER PRODUCTION

Gross Thermal (MWD).....	_____	0	<u>2.84E+5</u>
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¹ Stack and building vents

² Stack only

³ Included in total halogen

⁴ July to December only

⁵ January to June only

Facility	<u>Edwin I. Hatch Unit 1</u>	Utility	<u>Georgia Power Company</u>			
Type	<u>BWR</u>	EPA Region	<u>IV</u>	Rated Power Level	<u>786 MWe</u>	<u>2436 MWT</u>
Location	<u>Baxley, Georgia</u>					

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....	_____	<u>3.20E+3</u>	<u>1.55E+3</u>
Krypton-85.....	_____	<u>1.51E-5</u>	<u>7.91E-4</u>
Xenon-133.....	_____	<u>1.11E+0</u>	<u>2.46E+0</u>
Total Halogens.....	_____	<u>1.71E-3</u>	<u>6.42E-3</u>
Iodine-131.....	_____	<u>3.40E-5</u>	<u>1.16E-4</u>
Particulates.....	_____	<u>7.50E-5</u>	<u>2.81E-4</u>
Tritium.....	_____	<u>2.60E-1</u>	<u>1.77E+0</u>

<u>LIQUID RELEASES (curies)</u>		1974	1975
Total MF & Act. Products....	_____	<u>2.55E-3</u>	<u>5.79E-2</u>
Cobalt-58.....	_____	<u>2.71E-4</u>	<u>7.01E-3</u>
Cobalt-60.....	_____	<u>1.70E-6</u>	<u>2.39E-3</u>
Strontium-90.....	_____	<u>1.68E-8</u>	<u>4.88E-6</u>
Iodine-131.....	_____	<u>1.36E-4</u>	<u>7.26E-5</u>
Cesium-134.....	_____	<u>1.24E-4</u>	<u>2.03E-4</u>
Cesium-137.....	_____	<u>4.55E-6</u>	<u>1.69E-5</u>
Tritium.....	_____	<u>7.81E-2</u>	<u>6.12E+0</u>
Dissolved Gases.....	_____	<u>1.77E-2</u>	<u>2.34E-1</u>
Liquid Waste Volume (l).....	_____	<u>2.97E+6</u>	<u>1.46E+7</u>
Liquid Dilution Volume (l)..	_____	<u>1.91E+8</u>	<u>2.44E+9</u>

SOLID WASTES

Volume (m^3).....	_____	<u>1.28E+2</u>	<u>5.83E+2</u>
Activity (curies).....	_____	<u>8.33E+0</u>	<u>2.71E+2</u>
Shipments.....	_____	<u>7</u>	<u>31</u>

POWER PRODUCTION

Gross Thermal (MWD).....	_____	<u>1.01E+4</u>	<u>4.07E+5</u>
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Facility	Humboldt Bay Unit 3	Utility	Pacific Gas & Electric Co.
Type	BWR	EPA Region	IX
		Rated Power Level	65 MWe
Location	Eureka, California		

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>4.30E+5</u>	<u>3.51E+5</u>	<u>5.72E+5</u>	<u>2.96E+5</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>1.70E+4</u>	<u>2.38E+4</u>	<u>3.62E+4</u>	<u>7.16E+3</u>
Total Halogens.....	<u>2.10E+0</u>	<u>8.67E-1</u>	<u>1.70E+0</u>	<u>1.07E+0</u>
Iodine-131.....	<u>4.00E-1</u>	<u>1.74E-1</u>	<u>5.03E-1</u>	<u>2.07E-1</u>
Particulates.....	<u>8.20E-2</u>	<u>1.22E-1</u>	<u>3.34E-1</u>	<u>8.39E-1</u>
Tritium.....	<u>NR</u>	<u>1.93E+0</u>	<u>1.73E+0</u>	<u>2.49E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>1.40E+0</u>	<u>2.37E+0</u>	<u>4.40E+0</u>	<u>3.47E+0</u>
Cobalt-58.....	<u>1.10E-2</u>	<u>1.07E-2</u>	<u>3.06E-3</u>	<u>3.24E-3</u>
Cobalt-60.....	<u>8.40E-2</u>	<u>1.58E-1</u>	<u>2.80E-1</u>	<u>1.14E-1</u>
Strontium-90.....	<u>3.30E-3</u>	<u>1.16E-2</u>	<u>1.77E-2</u>	<u>6.28E-3</u>
Iodine-131.....	<u>6.00E-2</u>	<u>7.36E-2</u>	<u>3.36E-2</u>	<u>3.14E-1</u>
Cesium-134.....	<u>2.37E-1</u>	<u>6.45E-1</u>	<u>1.37E+0</u>	<u>9.63E-1</u>
Cesium-137.....	<u>5.76E-1</u>	<u>9.33E-1</u>	<u>2.10E+0</u>	<u>2.08E+0</u>
Tritium.....	<u>2.55E+0</u> ¹	<u>5.13E+1</u>	<u>3.17E+1</u>	<u>2.01E+1</u>
Dissolved Gases.....	<u>NR</u>	<u>NR</u>	<u>2.70E-2</u>	<u>8.00E-3</u>
Liquid Waste Volume (l)....	<u>1.30E+6</u>	<u>1.92E+6</u>	<u>2.06E+6</u>	<u>1.70E+6</u>
Liquid Dilution Volume (l)..	<u>1.80E+11</u>	<u>1.66E+11</u>	<u>1.58E+11</u>	<u>1.65E+11</u>

SOLID WASTES

Volume (m ³).....	<u>5.69E+1</u> ²³	<u>8.83E+1</u>	<u>3.93E+1</u> ⁴	<u>1.27E+2</u>
Activity (curies).....	<u>5.54E+0</u>	<u>1.76E+1</u>	<u>3.24E+1</u>	<u>4.31E+1</u>
Shipments.....	<u>5</u>	<u>34</u>	<u>3</u>	<u>7</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>5.21E+4</u>	<u>6.01E+4</u>	<u>5.30E+4</u>	<u>5.51E+4</u>
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¹ January to June only, July to December not available

² plus 288 - 4.5 ft³ boxes with <0.1 curies, and 500 gallons of liquid with <0.9 curies

³ does not include shipments to Lawrence Radiation Laboratory or General Electric

⁴ plus 90 boxes of unspecified size

Facility La Crosse Utility Dairyland Power Coop.
 Type BWR EPA Region V Rated Power Level 53 MWe 165 Mwt
 Location Genoa, Wisconsin

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>3.06E+4</u>	<u>9.12E+4</u>	<u>4.91E+4</u>	<u>5.71E+4</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>1.34E+3</u>	<u>4.09E+3</u>	<u>1.56E+3</u>	<u>2.29E+3</u>
Total Halogens.....	<u>1.17E+0</u>	<u>2.35E-1</u>	<u>6.33E-2</u>	<u>1.33E-1</u>
Iodine-131.....	<u>6.93E-1</u>	<u>1.77E-1</u>	<u>3.27E-2</u>	<u>8.73E-2</u>
Particulates.....	<u>1.87E-2</u>	<u>1.26E+2</u>	<u>6.50E+1</u>	<u>7.92E+1</u>
Tritium.....	<u>NR</u>	<u>5.06E+1</u>	<u>1.83E+1</u>	<u>1.67E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>4.85E+1</u>	<u>3.59E+1</u>	<u>1.31E+1</u>	<u>1.41E+1</u>
Cobalt-58.....	<u>2.71E+1</u>	<u>1.18E+1</u>	<u>6.81E+0</u>	<u>9.12E+0</u>
Cobalt-60.....	<u>1.82E+0</u>	<u>1.26E+0</u>	<u>5.28E-1</u>	<u>6.49E-1</u>
Strontium-90.....	<u>1.33E-10</u>	<u>2.10E-2</u>	<u>1.20E-2</u>	<u>2.30E-2</u>
Iodine-131.....	<u>6.08E+0</u>	<u>3.13E+0</u>	<u>4.74E-1</u>	<u>9.95E-1</u>
Cesium-134.....	<u>2.86E+0</u>	<u>5.66E+0</u>	<u>1.51E+0</u>	<u>7.81E-1</u>
Cesium-137.....	<u>5.33E+0</u>	<u>1.01E+1</u>	<u>2.72E+0</u>	<u>1.41E+0</u>
Tritium.....	<u>1.20E+2</u>	<u>1.03E+2</u>	<u>1.15E+2</u>	<u>1.27E+2</u>
Dissolved Gases.....	<u>NR</u>	<u>6.10E-1</u>	<u>8.30E-2</u>	<u>4.07E-1</u>
Liquid Waste Volume (l)....	<u>3.30E+6</u>	<u>2.46E+6</u>	<u>1.83E+6</u>	<u>2.19E+6</u>
Liquid Dilution Volume (l)..	<u>3.32E+11</u>	<u>2.46E+11</u>	<u>2.43E+11</u>	<u>2.36E+11</u>

SOLID WASTES

Volume (m ³).....	<u>0</u>	<u>2.53E+2</u>	<u>4.19E+1</u>	
Activity (curies).....	<u>0</u>	<u>3.45E+11</u>	<u>4.71E+2</u>	
Shipments.....	<u>0</u>	<u>2</u>	<u>2</u>	<u>5</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>3.65E+4</u>	<u>1.19E+3</u>	<u>4.52E+4</u>	<u>3.84E+4</u>
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¹ Curie content of shipments for March and July were not reported in monthly reports.

² Number of shipments in February and March were not reported in monthly reports.

Facility	Millstone Point Unit 1	Utility	Millstone Point Company
Type	BWR	EPA Region	I
Location	Watford, Connecticut		

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>7.92E+5</u>	<u>7.89E+4</u>	<u>9.12E+5</u>	<u>2.97E+6</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>1.47E+5</u>	<u>7.22E+3</u>	<u>2.55E+5</u>	<u>8.20E+5</u>
Total Halogens.....	<u>1.23E+0</u>	<u>1.54E-1</u>	<u>3.18E+0</u>	<u>6.29E+1</u>
Iodine-131.....	<u>1.23E+0</u>	<u>1.54E-1</u>	<u>3.18E+0</u>	<u>9.73E+0</u>
Particulates.....	<u>5.57E-2</u>	<u>4.10E-2</u>	<u>8.77E-2</u>	<u>1.88E-1</u>
Tritium.....	<u>4.21E+0</u>	<u>1.69E+0</u>	<u>7.85E+0</u>	<u>1.72E+1</u>

<u>LIQUID RELEASES (curies)</u>	1972	1973	1974	1975
Total MF & Act. Products....	<u>5.16E+1</u>	<u>3.34E+1</u>	<u>1.98E+2</u>	<u>1.99E+2</u>
Cobalt-58.....	<u>1.35E+0</u>	<u>4.17E-1</u>	<u>4.97E-1</u>	<u>5.94E-1</u>
Cobalt-60.....	<u>2.82E+0</u>	<u>5.39E+0</u>	<u>9.67E+0</u>	<u>8.67E+0</u>
Strontium-90.....	<u>2.16E-1</u>	<u>2.02E-2</u>	<u>2.05E-1</u>	<u>2.89E-1</u>
Iodine-131.....	<u>1.14E+1</u>	<u>1.50E-1</u>	<u>1.34E+1</u>	<u>1.51E+1</u>
Cesium-134.....	<u>8.84E+0</u>	<u>8.63E+0</u>	<u>7.21E+1</u>	<u>6.18E+1</u>
Cesium-137.....	<u>1.64E+1</u>	<u>1.67E+1</u>	<u>9.52E+1</u>	<u>8.45E+1</u>
Tritium.....	<u>2.09E+1</u>	<u>3.67E+0</u>	<u>2.41E+1</u>	<u>8.03E+1</u>
Dissolved Gases.....	<u>2.52E+1</u>	<u>2.50E-1</u>	<u>1.85E-1</u>	<u>1.11E+0</u>
Liquid Waste Volume (l)....	<u>1.94E+7</u>	<u>9.80E+6</u>	<u>1.06E+7</u>	<u>2.18E+7</u>
Liquid Dilution Volume (l)..	<u>6.15E+11</u>	<u>7.05E+11</u>	<u>7.64E+11</u>	<u>8.19E+11</u>

SOLID WASTES

Volume (m ³).....	<u>2.61E+2</u> ¹	<u>3.51E+2</u> ²	<u>8.38E+2</u>	<u>1.78E+3</u>
Activity (curies).....	<u>4.32E+2</u>	<u>2.37E+3</u>	<u>2.57E+2</u>	<u>2.58E+3</u>
Shipments.....	<u>47</u>	<u>87</u>	<u>NR</u>	<u>NR</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>4.04E+5</u>	<u>2.48E+5</u>	<u>4.65E+5</u>	<u>5.02E+5</u>
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¹ plus 2 boxes of LSA material

² plus 17 boxes of LSA material

Facility Monticello Nuclear Gen. Sta. Utility Northern States Power Co.
Type BWR EPA Region V Rated Power Level 545 MWe 1670 MWt
Location Monticello, Minnesota

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>7.51E+5</u>	<u>8.70E+5</u>	<u>1.57E+6</u>	<u>1.55E+5</u>
Krypton-85.....	<u>5.79E+3</u>	<u>8.68E+3</u>	<u>9.74E+3</u>	<u>1.66E+4</u>
Xenon-133.....	<u>1.14E+5</u>	<u>9.86E+4</u>	<u>2.16E+5</u>	<u>1.10E+5</u>
Total Halogens.....	<u>4.00E+0</u>	<u>6.53E+0</u>	<u>4.76E+1</u>	<u>1.52E+1</u>
Iodine-131.....	<u>5.75E-1</u>	<u>1.20E+0</u>	<u>5.69E+0</u>	<u>3.54E+0</u>
Particulates.....	<u>1.25E-2</u>	<u>2.42E-2</u>	<u>4.12E-1</u>	<u>6.73E-1</u>
Tritium.....	<u>4.62E+01</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>

<u>LIQUID RELEASES (curies)</u>	1972	1973	1974	1975
Total MF & Act. Products....	<u>2.96E-6</u>	<u>0.0</u> ²	<u>0.0</u> ²	<u>0.0</u> ²
Cobalt-58.....	<u>7.90E-7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Cobalt-60.....	<u>3.80E-7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Strontium-90.....	<u>1.00E-8</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Iodine-131.....	<u>6.10E-7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Cesium-134.....	<u>ND</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Cesium-137.....	<u>8.30E-7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Tritium.....	<u>7.60E-5</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Dissolved Gases.....	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Liquid Waste Volume (1)....	<u>3.78E+3</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Liquid Dilution Volume (1)..	<u>1.04E+13</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>

SOLID WASTES

<u>Volume (m³)</u>	1972	1973	1974	1975
Activity (curies).....	<u>1.78E+2</u>	<u>2.11E+2</u>	<u>2.68E+2</u>	<u>3.80E+2</u>
Activity (curies).....	<u>8.82E+1</u>	<u>3.93E+2</u>	<u>2.48E+3</u>	<u>5.43E+3</u>
Shipments.....	<u>13</u>	<u>35</u>	<u>47</u>	<u>49</u>

POWER PRODUCTION

<u>Gross Thermal (MWD)</u>	1972	1973	1974	1975
<u>4.54E+5</u>	<u>4.12E+5</u>	<u>3.45E+5</u>	<u>3.70E+5</u>	

¹ January to June only, not reported thereafter.

² no liquid releases

Facility Nine Mile Point Unit 1 Utility Niagara Mohawk Power Corp.

Type BWR EPA Region II Rated Power Level 625 MWe 1850 MWt

Location Scriba, New York

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>5.17E+5</u>	<u>8.72E+5</u>	<u>6.18E+5</u>	<u>1.30E+6</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>6.50E+4</u>	<u>8.26E+4</u>	<u>5.93E+4</u>	<u>1.28E+5</u>
Total Halogens.....	<u>1.77E+0</u>	<u>3.80E+0</u>	<u>2.55E+0</u>	<u>5.96E+0</u>
Iodine-131.....	<u>8.93E-1</u>	<u>1.96E+0</u>	<u>7.19E-1</u>	<u>2.35E+0</u>
Particulates.....	<u>7.67E-2</u>	<u>1.80E-1</u>	<u>1.43E-1</u>	<u>4.41E-1</u>
Tritium.....	<u>1.83E+1</u>	<u>2.67E+1</u>	<u>2.70E+1</u>	<u>9.20E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>3.46E+1</u>	<u>4.08E+1</u>	<u>2.57E+1</u>	<u>2.10E+1</u>
Cobalt-58.....	<u>7.25E-1</u>	<u>0.0</u>	<u>1.50E-2</u>	<u>2.26E-1</u>
Cobalt-60.....	<u>9.10E+0</u>	<u>4.99E+0</u>	<u>5.16E+0</u>	<u>3.77E+0</u>
Strontium-90.....	<u>2.50E-2</u>	<u>0.0</u>	<u>1.23E-1</u>	<u>4.70E-2</u>
Iodine-131.....	<u>3.43E+0</u>	<u>2.50E+0</u>	<u>1.01E+0</u>	<u>5.14E-1</u>
Cesium-134.....	<u>3.90E+0</u>	<u>9.01E+0</u>	<u>4.64E+0</u>	<u>4.94E+0</u>
Cesium-137.....	<u>1.03E+1</u>	<u>1.94E+1</u>	<u>9.77E+0</u>	<u>9.04E+0</u>
Tritium.....	<u>2.78E+1</u>	<u>4.65E+1</u>	<u>1.87E+1</u>	<u>2.81E+1</u>
Dissolved Gases.....	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1.04E-1</u>
Liquid Waste Volume (l)....	<u>1.53E+7</u>	<u>1.38E+7</u>	<u>1.31E+7</u>	<u>8.84E+6</u>
Liquid Dilution Volume (l)...	<u>4.43E+11</u>	<u>4.62E+11</u>	<u>4.38E+11</u>	<u>4.86E+11</u>

SOLID WASTES

Volume (m ³).....	<u>4.27E+2</u>	<u>5.45E+2</u>	<u>4.52E+2</u>	<u>4.89E+2</u>
Activity (curies).....	<u>2.65E+2</u>	<u>1.01E+3</u>	<u>1.93E+3</u>	<u>3.26E+3</u>
Shipments.....	<u>35</u>	<u>66</u>	<u>75</u>	<u>95</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>4.17E+5</u>	<u>4.57E+5</u>	<u>4.26E+5</u>	<u>4.03E+5</u>
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Facility Oyster Creek Unit No. 1 Utility Jersey Central Power & Light Co.
 Type BWR EPA Region II Rated Power Level 640 MWe 1930 MWT
 Location Lacey Township, New Jersey

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>8.66E+5</u>	<u>8.12E+5</u>	<u>2.79E+5</u>	<u>2.06E+5</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>1.51E+5</u>	<u>1.26E+5</u>	<u>2.26E+4</u>	<u>9.29E+3</u>
Total Halogens.....	<u>1.91E+1</u>	<u>3.03E+1</u>	<u>2.33E+1</u>	<u>4.13E+1</u>
Iodine-131.....	<u>6.25E+0</u>	<u>6.73E+0</u>	<u>3.31E+0</u>	<u>5.46E+0</u>
Particulates.....	<u>2.30E-1</u>	<u>4.24E-1</u>	<u>2.16E-1</u>	<u>1.78E-1</u>
Tritium.....	<u>7.54E-1</u>	<u>3.20E-1</u>	<u>4.15E-1</u>	<u>2.77E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>1.00E+1</u>	<u>4.15E+0</u>	<u>6.60E-1</u>	<u>4.08E-1</u>
Cobalt-58.....	<u>1.53E-1</u>	<u>4.30E-2</u>	<u>9.20E-3</u>	<u>6.50E-3</u>
Cobalt-60.....	<u>1.68E+0</u>	<u>2.72E-1</u>	<u>7.35E-2</u>	<u>7.44E-2</u>
Strontium-90.....	<u>3.90E-1</u>	<u>2.80E-2</u>	<u>6.20E-3</u>	<u>6.00E-4</u>
Iodine-131.....	<u>4.52E-1</u>	<u>8.20E-2</u>	<u>1.42E-2</u>	<u>5.89E-2</u>
Cesium-134.....	<u>2.06E+0</u>	<u>8.30E-2</u>	<u>2.56E-2</u>	<u>6.67E-2</u>
Cesium-137.....	<u>3.05E+0</u>	<u>8.40E-2</u>	<u>1.50E-2</u>	<u>8.21E-2</u>
Tritium.....	<u>6.16E+1</u>	<u>3.59E+1</u>	<u>1.41E+1</u>	<u>1.79E+1</u>
Dissolved Gases.....	<u>3.29E+0</u>	<u>2.97E+0</u>	<u>1.67E+0</u>	<u>4.26E-1</u>
Liquid Waste Volume (l)....	<u>1.58E+7</u>	<u>1.24E+7</u>	<u>7.34E+6</u>	<u>3.16E+6</u>
Liquid Dilution Volume (l)..	<u>1.16E+12</u>	<u>1.19E+12</u>	<u>1.23E+12</u>	<u>1.44E+12</u>

SOLID WASTES

Volume (m ³).....	<u>4.35E+2</u> ²	<u>8.32E+2</u>	<u>1.21E+3</u>	<u>9.90E+2</u>
Activity (curies).....	<u>1.30E+3</u> ²	<u>2.89E+3</u>	<u>1.57E+3</u>	<u>2.81E+3</u>
Shipments.....	<u>45</u>	<u>153</u>	<u>163</u>	<u>162</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>5.41E+5</u>	<u>4.53E+5</u>	<u>4.64E+5</u>	<u>4.09E+5</u>
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¹ Includes SR-89

² Does not include 84,228 gallons of liquid waste containing 23.8 curies.

Facility Peach Bottom Units 2 & 3 Utility Philadelphia Electric Co.
 each
 Type BWR EPA Region III Rated Power Level 1065 MWe 3293 MWT
 Location Peach Bottom Township, Pennsylvania

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....		<u>2.48E+2</u>	<u>1.30E+4</u>
Krypton-85.....		<u>NR</u>	<u>NR</u>
Xenon-133.....		<u>NR</u>	<u>NR</u>
Total Halogens.....		<u>1.04E-3</u>	<u>3.63E-2</u>
Iodine-131.....		<u>NR</u>	<u>NR</u>
Particulates.....		<u>6.54E-4</u>	<u>3.84E-3</u>
Tritium.....		<u>5.57E+0</u> ¹	<u>3.06E-1</u>

<u>LIQUID RELEASES (curies)</u>		1974	1975
Total MF & Act. Products....		<u>9.45E-1</u>	<u>9.29E-1</u>
Cobalt-58.....		<u>4.47E-2</u>	<u>4.79E-2</u>
Cobalt-60.....		<u>7.49E-3</u>	<u>1.83E-2</u>
Strontium-90.....		<u>NR</u>	<u>2.50E-4</u>
Iodine-131.....		<u>NR</u>	<u>2.56E-2</u>
Cesium-134.....		<u>NR</u>	<u>2.19E-1</u>
Cesium-137.....		<u>NR</u>	<u>3.87E-3</u>
Tritium.....		<u>1.07E+1</u>	<u>3.08E+1</u>
Dissolved Gases.....		<u>6.91E-3</u>	<u>ND</u>
Liquid Waste Volume (l)....		<u>4.69E+7</u>	<u>4.57E+7</u>
Liquid Dilution Volume (l)...		<u>3.02E+11</u>	<u>4.41E+11</u>

<u>SOLID WASTES</u>		1974	1975
Volume (m ³).....		<u>3.97E+2</u>	<u>5.82E+2</u>
Activity (curies).....		<u>5.80E+1</u>	<u>2.17E+2</u>
Shipments.....		<u>41</u>	<u>68</u>

<u>POWER PRODUCTION</u>		1974	1975
Gross Thermal (MWD).....		<u>5.11E+5</u>	<u>1.39E+6</u>

¹ Not reported during the first half of the year.

Facility	Pilgrim Unit 1	Utility	Boston Edison Company
Type	BWR	EPA Region	I
Location	Plymouth, Massachusetts		
<hr/>			
<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974
Total Noble Gases.....	<u>1.81E+4</u>	<u>2.28E+5</u>	<u>5.46E+5</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>2.99E+3</u>	<u>4.54E+4</u>	<u>8.14E+4</u>
Total Halogens.....	<u>1.22E-1</u>	<u>8.17E+0</u>	<u>1.45E+0</u>
Iodine-131.....	<u>3.08E-2</u>	<u>4.56E-1</u>	<u>1.44E+0</u>
Particulates.....	<u>1.01E-3</u>	<u>2.07E-2</u>	<u>1.87E-2</u>
Tritium.....	<u>1.06E+0</u>	<u>1.40E+1</u>	<u>7.97E+0</u>
<u>LIQUID RELEASES (curies)</u>			
Total MF & Act. Products....	<u>1.45E+0</u>	<u>9.09E-1</u>	<u>4.22E+0</u>
Cobalt-58.....	<u>1.57E-1</u>	<u>4.99E-2</u>	<u>2.96E-1</u>
Cobalt-60.....	<u>8.58E-4</u>	<u>4.98E-3</u>	<u>9.55E-1</u>
Strontium-90.....	<u>7.80E-4</u>	<u>3.16E-5</u>	<u>2.71E-3</u>
Iodine-131.....	<u>4.19E-1</u>	<u>3.32E-1</u>	<u>1.71E-1</u>
Cesium-134.....	<u>NR</u>	<u>1.89E-4</u>	<u>4.99E-1</u>
Cesium-137.....	<u>NR</u>	<u>3.58E-2</u>	<u>1.58E+0</u>
Tritium.....	<u>4.18E+0</u>	<u>4.29E-1</u>	<u>1.05E+1</u>
Dissolved Gases.....	<u>ND</u>	<u>ND</u>	<u>NR</u>
Liquid Waste Volume (l)....	<u>5.87E+6</u>	<u>8.78E+5</u>	<u>8.82E+6</u>
Liquid Dilution Volume (l)..	<u>2.60E+10</u>	<u>1.99E+10</u>	<u>2.56E+10</u>
<u>SOLID WASTES</u>			
Volume (m ³).....	<u>6.75E+1</u>	<u>2.10E+2</u>	<u>4.06E+2</u>
Activity (curies).....	<u>1.94E+1</u>	<u>5.67E+2</u>	<u>1.46E+3</u>
Shipments.....	<u>4</u>	<u>19</u>	<u>34</u>
<u>POWER PRODUCTION</u>			
Gross Thermal (MWD).....	<u>1.11E+5</u>	<u>5.22E+5</u>	<u>2.50E+5</u>
			<u>3.38E+5</u>

Facility Quad Cities Units 1 & 2 Utility Commonwealth Edison Co.
Type BWR EPA Region V Rated Power Level 800 MWe 2511 Mwt
Location Cordova, Illinois

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>1.32E+5</u>	<u>9.00E+5</u>	<u>9.50E+5</u>	<u>1.10E+5</u>
Krypton-85.....	<u>NR</u>	<u>5.80E+3</u>	<u>6.60E+3</u>	<u>7.33E+3</u>
Xenon-133.....	<u>3.14E+4</u>	<u>2.18E+5</u>	<u>1.93E+5</u>	<u>3.51E+4</u>
Total Halogens.....	<u>1.43E+0</u>	<u>1.24E+1</u>	<u>3.66E+1</u>	<u>2.92E+0</u>
Iodine-131.....	<u>7.30E-1</u> ¹	<u>5.49E+0</u>	<u>8.80E+0</u>	<u>9.78E-1</u> ⁴
Particulates.....	<u>1.58E-2</u>	<u>1.19E-1</u>	<u>2.10E-1</u>	<u>4.15E-1</u>
Tritium.....	<u>3.77E-1</u> ²	<u>3.40E+1</u> ¹	<u>NR</u>	<u>3.87E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>2.41E+0</u>	<u>2.14E+1</u>	<u>3.87E+1</u>	<u>1.71E+1</u>
Cobalt-58.....	<u>1.08E-1</u>	<u>9.70E-1</u>	<u>4.30E-1</u>	<u>9.21E-2</u>
Cobalt-60.....	<u>5.68E-2</u>	<u>8.30E-1</u>	<u>3.01E+0</u>	<u>1.31E+0</u>
Strontium-90.....	<u>1.04E-3</u>	<u>2.50E-3</u>	<u>1.34E-2</u> ³	<u>1.06E-2</u>
Iodine-131.....	<u>7.50E-1</u>	<u>3.80E+0</u>	<u>2.09E+0</u>	<u>1.80E-1</u>
Cesium-134.....	<u>ND</u>	<u>2.10E-1</u>	<u>2.95E+0</u>	<u>1.83E+0</u>
Cesium-137.....	<u>ND</u>	<u>5.30E-1</u>	<u>8.10E+0</u>	<u>3.10E+0</u>
Tritium.....	<u>4.70E+0</u>	<u>2.45E+1</u>	<u>3.40E+1</u>	<u>3.87E+1</u>
Dissolved Gases.....	<u>3.30E-3</u>	<u>3.40E-2</u>	<u>NR</u>	<u>ND</u>
Liquid Waste Volume (l)....	<u>3.84E+7</u>	<u>3.30E+7</u>	<u>3.00E+7</u>	<u>4.03E+7</u>
Liquid Dilution Volume (l)..	<u>1.39E+12</u>	<u>1.71E+12</u>	<u>1.23E+12</u>	<u>8.81E+11</u>

SOLID WASTES

Volume (m ³).....	<u>1.07E+3</u>	<u>1.01E+3</u>	<u>8.31E+2</u>	<u>1.40E+3</u>
Activity (curies).....	<u>9.32E+0</u>	<u>2.94E+2</u>	<u>7.35E+2</u>	<u>2.41E+3</u>
Shipments.....	<u>72</u>	<u>158</u>	<u>NR</u>	<u>NR</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>5.21E+5</u>	<u>1.18E+6</u>	<u>1.09E+6</u>	<u>9.64E+5</u>
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¹ Second half of the year only

² First half of the year only

³ SR-90 for June and December was not available

⁴ Does not include I-131 released in particulate form (.023Ci)

Facility Vermont Yankee Utility Vermont Yankee Nuclear Power Co.
 Type BWR EPA Region I Rated Power Level 514 MWe 1593 MWt
 Location Vernon, Vermont

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>5.52E+4</u>	<u>1.84E+5</u>	<u>6.45E+4</u>	<u>3.36E+3</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>2.54E+2</u>	<u>4.50E+2</u>
Xenon-133.....	<u>1.17E+4</u>	<u>4.61E+4</u>	<u>2.22E+4</u>	<u>2.56E+2</u>
Total Halogens.....	<u>3.70E-1</u>	<u>6.04E-2</u>	<u>4.84E-1</u>	<u>3.98E-1</u>
Iodine-131.....	<u>1.71E-1</u>	<u>4.56E-2</u>	<u>3.51E-1</u>	<u>2.81E-3</u>
Particulates.....	<u>4.17E-1</u>	<u>1.03E-2</u>	<u>1.30E-2</u>	<u>1.97E-3</u>
Tritium.....	<u>6.50E-2</u>	<u>1.04E+0</u>	<u>4.07E+0</u>	<u>7.12E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>0.0</u> ¹	<u>1.25E-4</u>	<u>0.0</u> ¹	<u>4.06E-6</u>
Cobalt-58.....	<u>0.0</u>	<u>NR</u>	<u>0.0</u>	<u>NR</u>
Cobalt-60.....	<u>0.0</u>	<u>NR</u>	<u>0.0</u>	<u>1.97E-6</u>
Strontium-90.....	<u>0.0</u>	<u>NR</u>	<u>0.0</u>	<u>NR</u>
Iodine-131.....	<u>0.0</u>	<u>NR</u>	<u>0.0</u>	<u>NR</u>
Cesium-134.....	<u>0.0</u>	<u>NR</u>	<u>0.0</u>	<u>6.80E-8</u>
Cesium-137.....	<u>0.0</u>	<u>NR</u>	<u>0.0</u>	<u>1.74E-7</u>
Tritium.....	<u>0.0</u>	<u>1.97E-1</u>	<u>0.0</u>	<u>0.0</u>
Dissolved Gases.....	<u>0.0</u>	<u>7.90E-4</u>	<u>0.0</u>	<u>NR</u>
Liquid Waste Volume (l).....	<u>0.0</u>	<u>1.16E+5</u>	<u>0.0</u>	<u>6.81E+1</u>
Liquid Dilution Volume (l)..	<u>NR</u>	<u>4.74E+8</u>	<u>NR</u>	<u>1.36E+3</u>

SOLID WASTES

Volume (m ³).....	<u>1.26E+2</u>	<u>1.86E+2</u>	<u>1.98E+2</u>	<u>3.08E+2</u>
Activity (curies).....	<u>1.81E+1</u>	<u>2.35E+1</u>	<u>1.08E+2</u>	<u>2.25E+1</u>
Shipments.....	<u>13</u>	<u>37</u>	<u>34</u>	<u>43</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>6.16E+4</u>	<u>2.53E+5</u>	<u>3.42E+5</u>	<u>4.69E+5</u>
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¹ no liquid releases

Facility Arkansas Nuclear One Unit 1 Utility Arkansas Power & Light Co.

Type PWR (B&W) EPA Region VI Rated Power Level 902 MWe 2584 Mwt

Location Russeleville, Arkansas

AIRBORNE RELEASES (curies) 1974 1975

Total Noble Gases.....		<u>1.96E+2</u>	<u>1.04E+3</u>
Krypton-85.....		<u>5.60E-2</u>	<u>3.15E+0</u>
Xenon-133.....		<u>1.93E+2</u>	<u>9.69E+2</u>
 Total Halogens.....		<u>5.30E-2</u>	<u>< 2.18E-2</u>
Iodine-131.....		<u>5.30E-2</u>	<u>< 7.28E-3</u>
 Particulates.....		<u>4.40E-4</u>	<u>1.11E-2</u>
 Tritium.....		<u>3.00E-2</u>	<u>5.20E-1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....		<u>1.22E+1</u>	<u>3.11E+0</u>
Cobalt-58.....		<u>3.30E-2</u>	<u>1.94E+0</u>
Cobalt-60.....		<u>5.70E-4</u>	<u>4.60E-2</u>
Strontium-90.....		<u>2.50E-3</u>	<u>< 1.26E-2</u>
Iodine-131.....		<u>1.90E-2</u>	<u>2.80E-1</u>
Cesium-134.....		<u>NR</u>	<u>7.65E-2</u>
Cesium-137.....		<u>1.90E-4</u>	<u>2.56E-1</u>
 Tritium.....		<u>2.55E+1</u>	<u>4.60E+2</u>
 Dissolved Gases.....		<u>1.15E+0</u>	<u>3.31E+1</u>
 Liquid Waste Volume (l)....		<u>4.80E+6</u>	<u>7.89E+6</u>
 Liquid Dilution Volume (l)..		<u>5.20E+11</u>	<u>1.26E+12</u>

SOLID WASTES

Volume (m ³).....		<u>0</u>	<u>0</u>
Activity (curies).....		<u>0</u>	<u>0</u>
Shipments.....		<u>0</u>	<u>0</u>

POWER PRODUCTION

Gross Thermal (MWD).....		<u>8.29E+4</u>	<u>6.42E+5</u>
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Facility Calvert Cliffs Unit 1 Utility Baltimore Gas & Electric Co.

Type PWR (CE) EPA Region III Rated Power Level 880 MWe 2570 MWt

Location Lusby, Maryland

AIRBORNE RELEASES (curies)

		1974	1975
Total Noble Gases.....		<u>8.77E+1</u>	<u>7.72E+3</u>
Krypton-85.....		<u>NR</u>	<u>8.12E-1</u>
Xenon-133.....		<u>8.77E+1</u>	<u>7.42E+3</u>
Total Halogens.....		<u>8.32E-4</u>	<u>3.56E-2</u>
Iodine-131.....		<u>8.32E-4</u>	<u>2.19E-2</u>
Particulates.....		<u>4.81E-5</u>	<u>1.07E-2</u>
Tritium.....		<u>4.55E-2</u>	<u>1.23E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....		<u>1.99E-2</u>	<u>1.49E+0</u>
Cobalt-58.....		<u>NR</u>	<u>5.63E-1</u>
Cobalt-60.....		<u>NR</u>	<u>2.91E-2</u>
Strontium-90.....		<u>4.33E-5</u>	<u>2.75E-3</u>
Iodine-131.....		<u>5.30E-3</u>	<u>2.35E-1</u>
Cesium-134.....		<u>NR</u>	<u>4.36E-5</u>
Cesium-137.....		<u>6.32E-3</u>	<u>1.12E-1</u>
Tritium.....		<u>4.48E-3</u>	<u>2.63E+2</u>
Dissolved Gases.....		<u>9.53E-3</u>	<u>1.31E+1</u>
Liquid Waste Volume (l)....		<u>7.76E+6</u>	<u>1.03E+8</u>
Liquid Dilution Volume (l)...		<u>3.15E+11</u>	<u>2.12E+12</u>

SOLID WASTES

Volume (m ³).....		<u>0</u>	<u>0</u>
Activity (curies).....		<u>0</u>	<u>0</u>
Shipments.....		<u>0</u>	<u>0</u>

POWER PRODUCTION

Gross Thermal (MWD).....		<u>1.60E+0</u>	<u>5.84E+5</u>
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Facility Donald C Cook Utility Indiana & Michigan Power Co.

Type PWR (W) EPA Region V Rated Power Level 1090 MWe 3250 MWt

Location Bridgman, Michigan

AIRBORNE RELEASES (curies) 1975

Total Noble Gases.....				<u>2.64E+0</u>
Krypton-85.....				<u>NR</u>
Xenon-133.....				<u>2.43E+0</u>
Total Halogens.....				<u>1.65E-4</u>
Iodine-131.....				<u>1.49E-4</u>
Particulates.....				<u>NR</u>
Tritium.....				<u>1.82E-2</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....				<u>2.60E-1</u>
Cobalt-58.....				<u>1.59E-1</u>
Cobalt-60.....				<u>1.47E-2</u>
Strontium-90.....				<u>NR</u>
Iodine-131.....				<u>1.82E-3</u>
Cesium-134.....				<u>4.46E-5</u>
Cesium-137.....				<u>3.32E-4</u>
Tritium.....				<u>5.64E+1</u>
Dissolved Gases.....				<u>4.22E-4</u>
Liquid Waste Volume (l)....				<u>2.40E+6</u>
Liquid Dilution Volume (l)..				<u>8.14E+10</u>

SOLID WASTES

Volume (m^3).....				<u>1.72E+2</u>
Activity (curies).....				<u>5.37E-1</u>
Shipments.....				<u>9</u>

POWER PRODUCTION

Gross Thermal (MWD).....				<u>6.08E+5</u>
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Facility Fort Calhoun Unit 1 Utility Omaha Public Power District

Type PWR (CE) EPA Region VII Rated Power Level 501 MWe 1500 MWt

Location Fort Calhoun, Nebraska

<u>AIRBORNE RELEASES (curies)</u>	1973	1974	1975
Total Noble Gases.....	<u>6.66E+1</u>	<u>3.03E+2</u>	<u>4.29E+2</u>
Krypton-85.....	<u>6.17E+0</u>	<u>3.25E-1</u> ¹	< <u>4.91E+0</u>
Xenon-133.....	<u>2.36E+1</u>	<u>1.57E+2</u> ¹	<u>4.12E+2</u>
Total Halogens.....	<u>1.20E-4</u>	<u>5.65E-4</u>	<u>6.89E-3</u>
Iodine-131.....	<u>4.30E-5</u>	<u>4.22E-4</u>	<u>6.58E-3</u>
Particulates.....	<u>5.50E-6</u>	<u>1.14E-5</u>	<u>1.11E-4</u>
Tritium.....	<u>3.30E-1</u>	<u>7.51E-1</u>	<u>2.44E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>1.73E-2</u>	<u>1.94E-1</u>	<u>1.33E-1</u>
Cobalt-58.....	<u>4.69E-5</u>	<u>1.35E-1</u>	<u>1.63E-1</u>
Cobalt-60.....	ND	<u>2.87E-3</u>	<u>5.00E-3</u>
Strontium-90.....	<u>1.69E-5</u>	<u>6.95E-5</u>	< <u>3.53E-6</u>
Iodine-131.....	<u>4.48E-3</u>	<u>1.66E-2</u>	< <u>6.36E-2</u>
Cesium-134.....	ND	ND	<u>2.12E-3</u>
Cesium-137.....	ND	<u>5.02E-4</u>	<u>5.56E-3</u>
Tritium.....	<u>1.58E+1</u>	<u>1.24E+2</u>	<u>1.11E+2</u>
Dissolved Gases.....	<u>5.90E-2</u>	<u>2.62E-1</u>	< <u>8.16E-2</u>
Liquid Waste Volume (l)....	<u>3.30E+6</u>	<u>8.14E+6</u>	<u>8.26E+6</u>
Liquid Dilution Volume (l)..	<u>2.17E+11</u>	<u>7.22E+10</u>	<u>8.82E+10</u>

SOLID WASTES

Volume (m ³).....	<u>4.54E+1</u>	<u>3.23E+2</u>	<u>5.37E+2</u>
Activity (curies).....	<u>2.00E-2</u>	<u>1.00E+1</u>	<u>5.61E+1</u>
Shipments.....	2	18	38

POWER PRODUCTION

Gross Thermal (MWD).....	<u>8.54E+4</u>	<u>3.16E+5</u>	<u>2.80E+5</u>
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¹ Isotopic totals for second half of year only

Facility R. E. Ginna Utility Rochester Gas & Electric Co.
 Type PWR (W) EPA Region II Rated Power Level 517 MWe 1520 MWt
 Location Ontario, New York

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>1.18E+4</u>	<u>5.76E+2</u>	<u>7.57E+2</u>	<u>1.05E+4</u>
Krypton-85.....	<u>1.14E+3</u>	<u>6.03E+1</u>	<u>8.90E+0</u>	<u>3.25E+1</u>
Xenon-133.....	<u>1.01E+4</u>	<u>4.40E+2</u>	<u>6.30E+2</u>	<u>1.02E+4</u>
Total Halogens.....	<u>4.38E-2</u>	<u>9.85E-4</u>	<u>4.46E-4</u>	<u>6.54E-2</u>
Iodine-131.....	<u>3.35E-2</u>	<u>5.31E-4</u>	<u>2.82E-4</u>	<u>2.12E-2</u>
Particulates.....	<u>7.81E-5</u>	<u>3.32E-5</u>	<u>4.19E-5</u>	<u>4.18E-5</u>
Tritium.....	<u>8.77E-3</u>	<u>1.14E+0</u>	<u>3.56E-1</u>	<u>5.83E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>3.75E-1</u>	<u>7.40E-2</u>	<u>1.38E-1</u>	<u>4.20E-1</u>
Cobalt-58.....	<u>7.90E-3</u>	<u>3.27E-3</u>	<u>1.35E-2</u>	<u>9.29E-3</u>
Cobalt-60.....	<u>4.21E-2</u>	<u>9.24E-3</u>	<u>3.19E-2</u>	<u>2.08E-2</u>
Strontium-90.....	NR	NR	ND	NR
Iodine-131.....	<u>4.52E-3</u>	<u>6.85E-4</u>	<u>9.80E-5</u>	<u>1.65E-2</u>
Cesium-134.....	<u>4.39E-2</u>	<u>1.68E-2</u>	<u>1.26E-2</u>	<u>5.85E-3</u>
Cesium-137.....	<u>7.01E-2</u>	<u>3.44E-2</u>	<u>3.86E-2</u>	<u>2.06E-2</u>
Tritium.....	<u>1.99E+2</u>	<u>2.86E+2</u>	<u>1.95E+2</u>	<u>2.60E+2</u>
Dissolved Gases.....	ND	<u>3.03E-4</u>	ND	<u>5.19E-5</u>
Liquid Waste Volume (l)....	<u>1.88E+6</u>	<u>1.70E+6</u>	<u>1.92E+6</u>	<u>3.76E+6</u>
Liquid Dilution Volume (l)..	<u>7.24E+11</u>	<u>7.57E+11</u>	<u>6.42E+11</u>	<u>6.90E+11</u>

SOLID WASTES

Volume (m ³).....	<u>3.66E+2</u>	<u>1.98E+2</u>	<u>2.75E+2</u>	<u>4.58E+2</u>
Activity (curies).....	<u>1.41E+3</u>	<u>5.99E+2</u>	<u>6.14E+2</u>	<u>1.38E+2</u>
Shipments.....	<u>51</u>	<u>29</u>	<u>26</u>	<u>22</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>3.21E+5</u>	<u>4.48E+5</u>	<u>2.80E+5</u>	<u>4.04E+5</u>
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Facility	Haddam Neck (Connecticut Yankee)	Utility	Connecticut Yankee	America Power Co.				
Type	PWR (W)	EPA Region	I	Rated Power Level	600	MWe	1825	MWT
Location	Haddam Neck, Connecticut							

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	6.45E+2	3.18E+1	7.73E+0	4.80E+2
Krypton-85.....	1.09E+2	1.12E+1	4.01E+0	2.41E+2
Xenon-133.....	4.94E+2	1.78E+1	2.34E+0	1.82E+2
Total Halogens.....	1.01E-2	1.54E-3	4.57E-8	8.91E-4
Iodine-131.....	1.00E-2	1.29E-3	4.57E-8	8.91E-4
Particulates.....	2.21E-1	2.73E-2	1.60E-4	2.05E-3
Tritium.....	6.55E+0	5.06E+1	2.13E-1	6.97E+1

LIQUID RELEASES (curies)

Total MF & Act. Products....	4.78E+0	3.04E+0	2.23E+0	1.24E+0
Cobalt-58.....	9.71E-1	7.57E-1	4.23E-1	3.28E-1
Cobalt-60.....	1.08E+0	5.88E-1	6.79E-1	3.32E-1
Strontium-90.....	ND	3.14E-4	9.11E-4	5.58E-3
Iodine-131.....	3.01E-1	5.48E-2	9.01E-5	7.67E-3
Cesium-134.....	NR	NR	2.97E-3	3.90E-2
Cesium-137.....	7.06E-1	3.12E-1	2.72E-1	1.59E-1
Tritium.....	5.89E+3	3.90E+3	2.24E+3	5.67E+3
Dissolved Gases.....	7.51E+0	1.23E+0	7.53E-1	2.56E-1
Liquid Waste Volume (l)....	3.94E+7	2.68E+7	4.05E+7	2.61E+8
Liquid Dilution Volume (l)..	7.71E+11	5.03E+11	7.34E+11	7.28E+11

SOLID WASTES

Volume (m ³).....	1.88E+2	1.59E+2	2.04E+2	6.24E+2
Activity (curies).....	4.77E+3	5.71E+2	9.42E+2	1.32E+3
Shipments.....	21	11	24	33

POWER PRODUCTION

Gross Thermal (MWD).....	5.74E+5	2.91E+5	5.90E+5	5.58E+5
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Facility Indian Point Unit 1 Utility Consolidated Edison Co. of New York
 Type PWR (B&W) EPA Region II Rated Power Level 275 MWe 615 Mwt
 Location Buchanan, New York

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>5.43E+2</u>	<u>1.22E+2</u>	<u>6.11E+2</u>	< <u>3.66E+2</u>
Krypton-85.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>
Total Halogens.....	<u>5.95E-2</u>	<u>1.20E-2</u>	<u>9.47E-2</u>	<u>1.04E-2</u>
Iodine-131.....	<u>5.95E-2</u>	<u>1.20E-2</u>	<u>9.00E-2</u>	<u>1.04E-2</u>
Particulates.....	<u>8.02E-1</u>	<u>5.60E-2</u>	<u>3.42E-1</u>	<u>2.93E-2</u>
Tritium.....	<u>NR</u>	<u>2.54E+1</u>	<u>3.23E+1</u>	<u>1.11E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>2.54E+1</u>	<u>1.07E+0</u>	<u>2.88E+0</u>	<u>1.30E+0</u>
Cobalt-58.....	<u>3.50E-1</u>	<u>3.21E-2</u>	<u>1.23E-1</u>	<u>9.71E-2</u>
Cobalt-60.....	<u>1.23E+0</u>	<u>1.08E-1</u>	<u>1.56E-1</u>	<u>5.35E-2</u>
Strontium-90.....	< <u>1.23E-2</u>	<u>6.04E-4</u>	<u>7.98E-4</u>	< <u>1.11E-3</u>
Iodine-131.....	<u>2.17E+0</u>	<u>6.03E-2</u>	<u>3.96E-1</u>	<u>1.63E-1</u>
Cesium-134.....	<u>4.49E+0</u>	<u>3.30E-1</u>	<u>1.95E-1</u>	<u>3.14E-1</u>
Cesium-137.....	<u>6.94E+0</u>	<u>5.14E-1</u>	<u>4.59E-1</u>	<u>6.13E-1</u>
Tritium.....	<u>5.80E+2</u>	<u>1.38E+2</u>	<u>6.84E+2</u>	<u>2.87E+2</u>
Dissolved Gases.....	< <u>2.10E+0</u>	<u>4.09E+0</u>	<u>7.57E+0</u>	<u>2.98E-1</u>
Liquid Waste Volume (l)....	<u>5.38E+7</u>	<u>8.78E+6</u>	<u>5.21E+7</u>	<u>1.10E+7</u>
Liquid Dilution Volume (l)..	<u>4.96E+11</u>	<u>6.21E+11</u>	<u>1.54E+12</u>	<u>1.34E+12</u>

SOLID WASTES

Volume (m^3).....	<u>1.91E+2</u>	_____	_____	_____
Activity (curies).....	<u>1.57E+2</u>	Included with Unit	2	_____
Shipments.....	<u>NR</u>	_____	_____	_____

POWER PRODUCTION

Gross Thermal (MWD).....	<u>1.12E+5</u>	<u>0.00E+0</u>	<u>1.22E+5</u>	<u>0.00E+0</u>
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Facility Indian Point Unit 2 Utility Consolidated Edison Co. of New York

Type PWR (W) EPA Region II Rated Power Level 906 MWe 2758 Mwt

Location Buchanan, New York

AIRBORNE RELEASES (curies)

		1973	1974	1975
Total Noble Gases.....		<u>1.54E+1</u>	<u>5.59E+3</u>	<u>8.20E+3</u>
Krypton-85.....		<u>NR</u>	<u>NR</u>	<u>NR</u>
Xenon-133.....		<u>NR</u>	<u>NR</u>	<u>NR</u>
Total Halogens.....		<u>2.90E-4</u>	<u>4.25E-1</u>	<u>4.00E-1</u>
Iodine-131.....		<u>2.90E-4</u>	<u>3.69E-1</u>	<u>3.65E-1</u>
Particulates.....		<u>2.80E-4</u>	<u>2.86E-1</u>	<u>1.25E+0</u>
Tritium.....		<u>2.00E+0</u>	<u>1.99E+1</u>	<u>1.34E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....		<u>2.17E+0</u>	<u>4.19E+0</u>	<u>4.95E+0</u>
Cobalt-58.....		<u>2.31E+0</u>	<u>1.35E+0</u>	<u>4.69E-1</u>
Cobalt-60.....		<u>6.64E-2</u>	<u>1.39E-1</u>	<u>2.42E+0</u>
Strontium-90.....		<u>8.93E-4</u>	<u>2.65E-4</u>	<u>1.37E-3</u>
Iodine-131.....		<u>1.62E-1</u>	<u>2.18E+0</u>	<u>3.31E-1</u>
Cesium-134.....		<u>2.42E-2</u>	<u>1.13E-1</u>	<u>3.67E-1</u>
Cesium-137.....		<u>5.10E-2</u>	<u>2.39E-1</u>	<u>8.30E-1</u>
Tritium.....		<u>2.75E+1</u>	<u>4.79E+1</u>	<u>7.93E+1</u>
Dissolved Gases.....		<u>3.31E+0</u>	<u>5.28E+0</u>	<u>5.40E-1</u>
Liquid Waste Volume (l)....		<u>7.93E+6</u>	<u>1.98E+7</u>	<u>4.70E+7</u>
Liquid Dilution Volume (l)..		<u>4.40E+11</u>	<u>1.45E+12</u>	<u>1.34E+12</u>

SOLID WASTES 2

Volume (m^3).....		<u>4.11E+2</u>	<u>4.45E+2</u>	<u>6.22E+2</u>
Activity (curies).....		<u>2.08E+2</u>	<u>6.19E+1</u>	<u>2.00E+3</u>
Shipments.....		<u>12</u>	<u>3</u>	<u>27</u>

POWER PRODUCTION

Gross Thermal (MWD).....		<u>6.13E+4</u>	<u>4.78E+5</u>	<u>6.85E+5</u>
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1 Co-58 release reported is greater than total release.

2 Units 1 & 2 solid wastes are reported together

3 Second half of year only

Wisconsin Public Service Corp.
Wisconsin Power & Light Co.

Facility Kewaunee Utility Madison Gas & Electric Co.

Type PWR (W) EPA Region V Rated Power Level 563 MWe 1650 MWt

Location Kewaunee, Wisconsin

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....		<u>3.35E+3</u>	<u>2.45E+3</u>
Krypton-85.....		<u>ND</u>	<u>ND</u>
Xenon-133.....		<u>2.69E+3</u>	<u>2.07E+3</u>
Total Halogens.....		<u>2.88E-2</u>	<u>1.99E-2</u>
Iodine-131.....		<u>2.40E-2</u>	<u>1.38E-2</u>
Particulates.....		<u>3.86E-1</u>	<u>6.46E-1</u>
Tritium.....		<u>1.03E+2</u>	<u>3.73E+1</u>

<u>LIQUID RELEASES (curies)</u>		1974	1975
Total MF & Act. Products....		<u>4.22E-1</u>	<u>4.47E-1</u>
Cobalt-58.....		<u>2.91E-1</u>	<u>1.94E-1</u>
Cobalt-60.....		<u>< 3.02E-2</u> ¹	<u>1.48E-2</u>
Strontium-90.....		<u>5.30E-4</u> ²	<u>8.82E-5</u>
Iodine-131.....		<u>2.11E-2</u>	<u>7.17E-2</u>
Cesium-134.....		<u>< 1.43E-2</u> ¹	<u>3.09E-2</u>
Cesium-137.....		<u>< 2.04E-2</u> ¹	<u>1.05E-1</u>
Tritium.....		<u>9.24E+1</u>	<u>2.77E+2</u>
Dissolved Gases.....		<u>3.19E-2</u>	<u>2.47E-1</u>
Liquid Waste Volume (l)....		<u>6.23E+6</u>	<u>9.45E+6</u>
Liquid Dilution Volume (l)..		<u>1.21E+11</u>	<u>1.67E+11</u>

SOLID WASTES

Volume (m^3).....		<u>0</u>	<u>1.59E+1</u>
Activity (curies).....		<u>0</u>	<u>2.12E+0</u>
Shipments.....		<u>0</u>	<u>1</u>

POWER PRODUCTION

Gross Thermal (MWD).....		<u>2.57E+5</u>	<u>4.51E+5</u>
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¹ Calculated value based on concentration of $< 1.0E-5 \mu\text{Ci}/\text{ml}$ for March to June

² For first half of 1974 Sr-89 and Sr-90 were reported together, $< 2.58E-4 \text{ Ci}$

Facility Maine Yankee Utility Maine Yankee Atomic Power Co.
 Type PWR (CE) EPA Region I Rated Power Level 830 MWe 2440 MWT
 Location Wiscasset, Maine

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>2.13E+0</u>	<u>1.62E+2</u>	<u>7.34E+3</u>	<u>4.12E+3</u>
Krypton-85.....	<u>ND</u>	<u>1.51E+0</u>	<u>7.86E+2</u>	<u>1.40E+2</u>
Xenon-133.....	<u>2.05E+0</u>	<u>1.58E+2</u>	<u>6.22E+3</u>	<u>3.93E+3</u>
Total Halogens.....	<u>1.71E-6</u>	<u>1.96E-3</u>	<u>1.52E-1</u>	<u>5.90E-3</u>
Iodine-131.....	<u>1.71E-6</u>	<u>1.60E-3</u>	<u>1.16E-1</u>	<u>5.21E-3</u>
Particulates.....	<u>2.00E-6</u>	<u>1.30E-4</u>	<u>2.57E-3</u>	<u>2.51E-4</u>
Tritium.....	<u>1.63E-3</u>	<u>1.89E+0</u>	<u>7.46E+0</u>	<u>4.71E+0</u>

<u>LIQUID RELEASES (curies)</u>	1972	1973	1974	1975
Total MF & Act. Products....	<u>1.84E-2</u>	<u>4.57E-1</u>	<u>2.92E+0</u> ¹	<u>3.20E+0</u>
Cobalt-58.....	<u>5.48E-3</u>	<u>2.62E-2</u>	<u>2.82E-1</u>	<u>2.30E-1</u>
Cobalt-60.....	<u>2.04E-4</u>	<u>1.15E-2</u>	<u>2.00E-2</u>	<u>3.48E-2</u>
Strontium-90.....	<u>ND</u>	<u>ND</u>	<u>NR</u>	<u>5.87E-4</u> ²
Iodine-131.....	<u>4.54E-3</u>	<u>3.44E-3</u>	<u>3.58E-1</u>	<u>5.93E-2</u>
Cesium-134.....	<u>ND</u>	<u>ND</u>	<u>7.34E-1</u>	<u>2.00E-1</u>
Cesium-137.....	<u>ND</u>	<u>ND</u>	<u>9.87E-1</u>	<u>1.54E+0</u>
Tritium.....	<u>9.22E+0</u>	<u>1.54E+2</u>	<u>2.19E+2</u>	<u>1.77E+2</u>
Dissolved Gases.....	<u>1.49E-3</u>	<u>7.05E-2</u>	<u>1.18E+0</u>	<u>3.77E-2</u>
Liquid Waste Volume (l)....	<u>3.39E+7</u>	<u>9.69E+7</u>	<u>1.07E+8</u>	<u>1.26E+8</u>
Liquid Dilution Volume (l)..	<u>9.63E+10</u>	<u>5.60E+11</u>	<u>6.02E+11</u>	<u>7.07E+11</u>

SOLID WASTES

Volume (m ³).....	<u>0</u>	<u>6.70E+1</u>	<u>1.59E+2</u>	<u>2.31E+2</u>
Activity (curies).....	<u>0</u>	<u>3.24E+0</u>	<u>5.30E+2</u>	<u>1.48E+3</u>
Shipments.....	<u>0</u>	<u>5</u>	<u>14</u>	<u>30</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>6.00E+4</u>	<u>4.51E+5</u>	<u>4.81E+5</u>	<u>6.12E+5</u>
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¹ Isotopic sum not reported value

² January to September

Facility Millstone Point Unit 2 Utility Northeast Nuclear Energy Co.
 Type PWR (CE) EPA Region I Rated Power Level 860 MWe 2560 MWt
 Location Waterford, Connecticut

AIRBORNE RELEASES (curies) 1975

Total Noble Gases.....	_____	_____	_____	< 1.70E-6
Krypton-85.....	_____	_____	_____	< 3.00E-6
Xenon-133.....	_____	_____	_____	ND
 Total Halogens.....	_____	_____	_____	4.59E-5
Iodine-131.....	_____	_____	_____	2.37E-5
 Particulates.....	_____	_____	_____	8.81E-6
 Tritium.....	_____	_____	_____	1.69E+0

LIQUID RELEASES (curies)

Total MF & Act. Products....	_____	_____	_____	2.03E-2
Cobalt-58.....	_____	_____	_____	1.40E-2
Cobalt-60.....	_____	_____	_____	7.11E-4
Strontium-90.....	_____	_____	_____	5.21E-5
Iodine-131.....	_____	_____	_____	9.27E-4
Cesium-134.....	_____	_____	_____	9.03E-4
Cesium-137.....	_____	_____	_____	1.43E-3
 Tritium.....	_____	_____	_____	7.60E+0
 Dissolved Gases.....	_____	_____	_____	7.64E-3
 Liquid Waste Volume (l)....	_____	_____	_____	2.38E+6
 Liquid Dilution Volume (l)..	_____	_____	_____	7.81E+9

SOLID WASTES

Volume (m ³).....	_____	_____	_____	0
Activity (curies).....	_____	_____	_____	0
Shipments.....	_____	_____	_____	0

POWER PRODUCTION

Gross Thermal (MWD).....	_____	_____	_____	2.66E+4
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Facility Oconee Unit 1,2 & 3 Utility Duke Power Company

Type PWR (B&W) EPA Region IV Rated Power Level 922 MWe 2568 MWt

Location Seneca, South Carolina

<u>AIRBORNE RELEASES (curies)</u>	1973	1974	1975
Total Noble Gases.....	<u>9.34E+3</u>	<u>1.94E+4</u>	<u>1.52E+4</u>
Krypton-85.....	<u>8.86E-2</u>	<u>7.34E-1</u>	<u>7.04E+0</u>
Xenon-133.....	<u>8.63E+3</u>	<u>1.86E+4</u>	<u>1.38E+4</u>
Total Halogens.....	<u>1.77E-2</u>	<u>3.21E-2</u>	<u>1.07E-2</u>
Iodine-131.....	<u>1.23E-2</u>	<u>3.17E-2</u>	<u>8.87E-3</u>
Particulates.....	<u>ND</u>	<u>9.17E-4</u>	<u>2.68E-4</u>
Tritium.....	<u>1.31E+1</u>	<u>8.78E+2</u>	<u>1.66E+3</u>

<u>LIQUID RELEASES (curies)</u>	1973	1974	1975
Total MF & Act. Products....	<u>2.83E+0</u>	<u>1.93E+0</u>	<u>5.06E+0</u>
Cobalt-58.....	<u>4.85E-1</u>	<u>4.68E-1</u>	<u>2.21E+0</u>
Cobalt-60.....	<u>4.52E-2</u>	<u>2.80E-2</u>	<u>5.59E-1</u>
Strontium-90.....	<u>ND</u>	<u>1.95E-3</u>	<u>6.36E-4</u>
Iodine-131.....	<u>1.55E+0</u>	<u>1.10E+0</u>	<u>1.16E+0</u>
Cesium-134.....	<u>ND</u>	<u>4.00E-2</u>	<u>1.66E-1</u>
Cesium-137.....	<u>1.10E-2</u>	<u>6.02E-2</u>	<u>4.36E-1</u>
Tritium.....	<u>7.07E+1</u>	<u>3.50E+2</u>	<u>3.55E+3</u>
Dissolved Gases.....	<u>5.66E+0</u>	<u>2.01E+0</u>	<u>2.87E+0</u>
Liquid Waste Volume (l)....	<u>1.36E+7</u>	<u>1.11E+7</u>	<u>2.95E+7</u>
Liquid Dilution Volume (l)..	<u>7.24E+11</u>	<u>1.04E+12</u>	<u>1.47E+12</u>

SOLID WASTES ¹

Volume (m ³).....	<u>2.63E+2</u>	<u>5.71E+2</u>	<u>1.42E+3</u>
Activity (curies).....	<u>3.23E+1</u>	<u>2.19E+2</u>	<u>1.68E+3</u>
Shipments.....	<u>24</u>	<u>96</u>	<u>104</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>3.11E+5</u>	<u>7.07E+5</u>	<u>1.96E+6</u>
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¹ Liquid waste has also been trucked offsite: 4.44E+5 liters and 3.63 Ci (total activity) in 1973, 3.36E+5 liters and 1.05E+1 Ci (total) in 1974, and 3.79E+4 liters and 1.01 Ci (total) in 1975.

Facility Palisades Utility Consumers Power Co.
 Type PWR (CE) EPA Region V Rated Power Level 811 MWe 2472 Mwt
 Location South Haven, Michigan

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>5.05E+02</u>	<u>4.54E+2</u>	<u>3.36E-2</u>	<u>2.61E+3</u>
Krypton-85.....	<u>NR</u>	<u>2.40E+0</u>	<u>ND</u>	<u>4.78E+0</u>
Xenon-133.....	<u>4.09E+2</u>	<u>4.20E+2</u>	<u>1.67E-2</u>	<u>2.52E+3</u>
Total Halogens.....	<u>1.46E-2</u>	<u>2.89E-1</u>	<u>3.29E-2</u>	<u>4.27E-1</u>
Iodine-131.....	<u>8.70E-3</u>	<u>2.85E-1</u>	<u>9.95E-3</u>	<u>3.75E-1</u>
Particulates.....	<u>1.00E-3</u>	<u>1.51E-1</u>	<u>3.65E-3</u>	<u>6.18E-4</u>
Tritium.....	<u>2.15E+2</u>	<u>1.80E-1</u>	<u>NR</u>	<u>0</u>

<u>LIQUID RELEASES (curies)</u>	1972	1973	1974	1975
Total MF & Act. Products....	<u>6.81E+0</u>	<u>2.78E+1</u>	<u>5.87E+0</u>	<u>3.45E+0</u>
Cobalt-58.....	<u>3.16E+0</u>	<u>1.02E+1</u>	<u>7.01E-1</u>	<u>1.49E-1</u>
Cobalt-60.....	<u>7.18E-2</u>	<u>4.58E-1</u>	<u>4.30E-1</u>	<u>1.18E-1</u>
Strontium-90.....	<u>4.00E-5</u>	<u>1.63E-3</u>	<u>2.26E-3</u>	<u>NR</u>
Iodine-131.....	<u>2.20E-1</u>	<u>3.65E-1</u>	<u>5.59E-3</u>	<u>1.86E-1</u>
Cesium-134.....	<u>6.00E-4</u>	<u>8.82E-1</u>	<u>7.01E-1</u>	<u>4.50E-2</u>
Cesium-137.....	<u>1.38E-2</u>	<u>1.88E+0</u>	<u>1.61E+0</u>	<u>1.43E-1</u>
Tritium.....	<u>1.20E+2</u>	<u>1.85E+2</u>	<u>8.28E+0</u>	<u>4.16E+1</u>
Dissolved Gases.....	<u>1.84E+0</u>	<u>2.57E+0</u>	<u>4.74E-2</u>	<u>5.18E-2</u>
Liquid Waste Volume (l)....	<u>8.90E+6</u>	<u>1.90E+7</u>	<u>4.10E+7</u>	<u>2.98E+7</u>
Liquid Dilution Volume (l)..	<u>8.05E+11</u>	<u>6.27E+11</u>	<u>1.14E+11</u>	<u>1.23E+11</u>

<u>SOLID WASTES</u>	1972	1973	1974	1975
Volume (m^3).....	<u>9.63E+0</u>	<u>6.30E+1</u>	<u>2.34E+2</u>	<u>8.01E+2</u>
Activity (curies).....	<u>1.85E+0</u>	<u>2.86E+1</u>	<u>2.66E+1</u>	<u>2.10E+2</u>
Shipments.....	<u>2</u>	<u>5</u>	<u>13</u>	<u>57</u>

<u>POWER PRODUCTION</u>	1972	1973	1974	1975
Gross Thermal (MWD).....	<u>2.46E+5</u>	<u>3.25E+5</u>	<u>1.65E+4</u>	<u>3.71E+5</u>

¹ Second half only

Facility Point Beach Units 1 & 2 Utility Wisconsin Electric Power Co.
 Type PWR (W) EPA Region V Rated Power Level 497 MWe 1518 Mwt
 Location Manitowoc, Wisconsin

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>2.81E+3</u>	<u>4.49E+3</u>	<u>9.74E+3</u>	<u>4.53E+4</u>
Krypton-85.....	<u>9.70E+1</u>	<u>2.32E+2</u>	<u>2.31E+1</u>	<u>4.48E+1</u>
Xenon-133.....	<u>1.95E+3</u>	<u>3.65E+3</u>	<u>6.04E+3</u>	<u>2.05E+4</u>
Total Halogens.....	<u>1.15E-2</u>	<u>2.35E-2</u>	<u>9.15E-2</u>	<u>1.89E-1</u>
Iodine-131.....	<u>1.15E-2</u>	<u>1.07E-2</u>	<u>5.31E-2</u>	<u>2.41E-2</u>
Particulates.....	<u>1.82E-2</u>	<u>5.39E-1</u>	<u>6.93E-3</u>	<u>9.40E-2</u>
Tritium.....	<u>7.98E+0</u>	<u>2.55E+1</u>	<u>4.28E+1</u>	<u>4.20E+2</u>
<u>LIQUID RELEASES (curies)</u>				
Total MF & Act. Products....	<u>9.34E-1</u>	<u>7.46E-1</u>	<u>1.96E-1</u>	<u>3.35E+0</u>
Cobalt-58.....	<u>1.11E-2</u>	<u>2.07E-4</u>	<u>1.25E-3</u>	<u>3.35E-1</u>
Cobalt-60.....	<u>< 2.00E-3</u>	<u>2.32E-4</u>	<u>2.12E-4</u>	<u>7.93E-2</u>
Strontium-90.....	<u>< 1.00E-3</u>	<u>ND</u>	<u>1.60E-4</u>	<u>2.34E-3</u>
Iodine-131.....	<u>7.40E-1</u>	<u>1.20E-5</u>	<u>1.82E-2</u>	<u>2.52E-1</u>
Cesium-134.....	<u>2.60E-2</u>	<u>3.25E-1</u>	<u>3.84E-2</u>	<u>2.06E-2</u>
Cesium-137.....	<u>3.82E-2</u>	<u>4.21E-1</u>	<u>9.82E-2</u>	<u>3.96E-2</u>
Tritium.....	<u>5.63E+2</u>	<u>5.56E+2</u>	<u>8.33E+2</u>	<u>1.02E+3</u>
Dissolved Gases.....	<u>5.97E-1</u>	<u>7.19E-3</u>	<u>2.11E-1</u>	<u>4.51E-1</u>
Liquid Waste Volume (1) ²	<u>1.39E+7</u>	<u>7.92E+7</u>	<u>6.61E+7</u>	<u>1.20E+8</u>
Liquid Dilution Volume (1)..	<u>4.92E+11</u>	<u>1.01E+12</u>	<u>5.95E+11</u>	<u>5.55E+11</u>
<u>SOLID WASTES</u>				
Volume (m ³).....	<u>1.94E+2</u>	<u>2.95E+2</u>	<u>1.32E+2</u>	<u>4.08E+2</u>
Activity (curies).....	<u>2.14E+2</u>	<u>1.83E+3</u>	<u>2.12E+3</u>	<u>8.23E+3</u>
Shipments.....	<u>14</u>	<u>19</u>	<u>12</u>	<u>29</u>
<u>POWER PRODUCTION</u>				
Gross Thermal (MWD).....	<u>4.15E+5</u>	<u>7.68E+5</u>	<u>8.48E+5</u>	<u>8.72E+5</u>

¹ Through November 1975. December not available

² Includes volumes from liquid radwaste system and steam generator blow down.

Facility Prairie Island Units 1 & 2 Utility Northern States Power Co.

Type PWR (W) EPA Region V Rated Power Level 538 MWe 1650 MWt

Location Red Wing, Minnesota

AIRBORNE RELEASES (curies)

		1973	1974	1975
Total Noble Gases.....	_____	<u>8.72E+0</u>	<u>3.58E+2</u>	<u>2.18E+3</u>
Krypton-85.....	_____	<u>ND</u>	<u>5.36E-4</u>	<u>ND</u>
Xenon-133.....	_____	<u>7.00E+0</u>	<u>3.57E+2</u>	<u>2.13E+3</u>
Total Halogens.....	_____	<u>1.02E-4</u>	<u>6.03E-4</u>	<u>2.10E-2</u>
Iodine-131.....	_____	<u>1.35E-5</u>	<u>4.49E-4</u>	<u>1.84E-2</u>
Particulates.....	_____	<u>ND</u>	<u>ND</u>	<u>3.60E-3</u>
Tritium.....	_____	<u>NR</u>	<u>3.91E+0</u>	<u>1.01E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	_____	<u>1.56E-8</u>	<u>2.78E-4</u>	<u>4.54E-1</u>
Cobalt-58.....	_____	<u>ND</u>	<u>2.60E-4</u>	<u>4.02E-1</u>
Cobalt-60.....	_____	<u>ND</u>	<u>4.00E-5</u>	<u>3.13E-2</u>
Strontium-90.....	_____	<u>ND</u>	<u>ND</u>	<u>ND</u>
Iodine-131.....	_____	<u>ND</u>	<u>ND</u>	<u>4.58E-3</u>
Cesium-134.....	_____	<u>ND</u>	<u>ND</u>	<u>1.73E-3</u>
Cesium-137.....	_____	<u>ND</u>	<u>ND</u>	<u>3.06E-3</u>
Tritium.....	_____	<u>7.30E-5</u>	<u>1.42E+2</u>	<u>7.63E+2</u>
Dissolved Gases.....	_____	<u>ND</u>	<u>1.28E-1</u>	<u>2.79E+0</u>
Liquid Waste Volume (l)....	_____	<u>2.44E+7</u>	<u>3.00E+8</u>	<u>4.30E+8</u>
Liquid Dilution Volume (l)..	_____	<u>1.15E+10</u>	<u>1.21E+11</u>	<u>3.84E+11</u>

SOLID WASTES

Volume (m^3).....	_____	<u>0</u>	<u>1.36E+2</u>	<u>1.50E+2</u>
Activity (curies).....	_____	<u>0</u>	<u>7.61E+0</u>	<u>3.47E+1</u>
Shipments.....	_____	<u>0</u>	<u>10</u>	<u>13</u>

POWER PRODUCTION

Gross Thermal (MWD).....	_____	<u>5.33E+3</u>	<u>2.19E+5</u>	<u>9.38E+5</u>
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Facility Rancho Seco Utility Sacramento Municipal Utility Dist.
 Type PWR (B&W) EPA Region IX Rated Power Level 889 MWe 2568 MWT
 Location Sacramento, California

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....		<u>2.98E-3</u>	<u>1.18E+2</u>
Krypton-85.....		<u>8.72E-4</u>	<u>5.50E-4</u>
Xenon-133.....		<u>2.03E-3</u>	<u>1.05E+2</u>
Total Halogens.....		<u>ND</u>	<u>1.90E-4</u>
Iodine-131.....		<u>ND</u>	<u>1.90E-4</u>
Particulates.....		<u>9.56E-6</u>	<u>8.18E-5</u>
Tritium.....		<u>6.06E-3</u>	<u>7.73E-4</u>
<u>LIQUID RELEASES (curies)</u>			
Total MF & Act. Products....		<u>2.28E-3</u>	<u>2.87E-4</u>
Cobalt-58.....		<u>ND</u>	<u>2.87E-4</u>
Cobalt-60.....		<u>ND</u>	<u>ND</u>
Strontium-90.....		<u>ND</u>	<u>ND</u>
Iodine-131.....		<u>ND</u>	<u>ND</u>
Cesium-134.....		<u>ND</u>	<u>ND</u>
Cesium-137.....		<u>ND</u>	<u>ND</u>
Tritium.....		<u>1.97E-2</u>	<u>1.32E+2</u>
Dissolved Gases.....		<u>ND</u>	<u>ND</u>
Liquid Waste Volume (l)....		<u>2.26E+6</u>	<u>5.19E+7</u>
Liquid Dilution Volume (l)..		<u>1.47E+7</u>	<u>1.75E+8</u>
<u>SOLID WASTES</u>			
Volume (m^3).....		<u>0</u>	<u>1.10E-2</u>
Activity (curies).....		<u>0</u>	<u>1.15E-1</u>
Shipments.....		<u>0¹</u>	<u>1¹</u>
<u>POWER PRODUCTION</u>			
Gross Thermal (MWD).....		<u>3.94E+4</u>	<u>5.50E+4</u>

¹ Liquid waste is also trucked offsite:

1974: $3.88E+4$ liters, $1.34E-1$ Ci H-3, $1.86E-2$ non H-3

1975: $3.70E+5$ liters, $1.55E+1$ Ci H-3, $1.09E+0$ non H-3

Facility H. B. Robinson Utility Carolina Power & Light Co.
 Type PWR (W) EPA Region IV Rated Power Level 772 MWe 2300 Mwt
 Location Hartsville, South Carolina

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>2.57E+2</u>	<u>3.10E+3</u>	<u>2.50E+3</u>	<u>1.17E+3</u>
Krypton-85.....	<u>NR</u>	<u>9.37E-3</u>	<u>1.47E+1</u>	<u>7.99E+1</u>
Xenon-133.....	<u>NR</u>	<u>1.65E+3</u>	<u>2.45E+3</u>	<u>1.00E+3</u>
Total Halogens.....	<u>NR</u>	<u>2.99E-1</u>	<u>5.15E-2</u>	<u>2.34E-2</u>
Iodine-131.....	<u>NR</u>	<u>2.96E-1</u>	<u>4.63E-2</u>	<u>1.79E-2</u>
Particulates.....	<u>NR</u>	<u>4.75E-5</u>	<u>1.69E-3</u>	<u>1.34E-3</u>
Tritium.....	<u>NR</u>	<u>2.50E+0</u>	<u>5.15E+1</u>	<u>1.93E+2</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>3.71E-1</u>	<u>3.06E-1</u> ²	<u>2.90E+0</u>	<u>4.40E-1</u>
Cobalt-58.....	<u>NR</u>	<u>8.46E-2</u>	<u>2.15E-1</u>	<u>1.05E-1</u>
Cobalt-60.....	<u>NR</u>	<u>8.11E-2</u>	<u>1.62E-1</u>	<u>8.05E-2</u>
Strontium-90.....	<u>NR</u>	<u>2.49E-2</u>	<u>1.07E-3</u>	<u>ND</u>
Iodine-131.....	<u>NR</u>	<u>4.07E-2</u>	<u>8.23E-1</u>	<u>4.37E-2</u>
Cesium-134.....	<u>NR</u>	<u>4.91E-2</u>	<u>1.35E-1</u>	<u>6.74E-2</u>
Cesium-137.....	<u>NR</u>	<u>9.97E-2</u>	<u>1.52E-1</u>	<u>7.55E-2</u>
Tritium.....	<u>4.25E+2</u>	<u>4.32E+2</u>	<u>4.49E+2</u>	<u>6.24E+2</u>
Dissolved Gases.....	<u>NR</u>	<u>2.53E-1</u>	<u>4.38E-1</u>	<u>9.98E-2</u>
Liquid Waste Volume (l)....	<u>9.53E+6</u>	<u>6.87E+6</u>	<u>4.26E+7</u>	<u>9.57E+7</u>
Liquid Dilution Volume (l)..	<u>1.09E+11</u>	<u>1.46E+11</u>	<u>5.57E+11</u>	<u>6.48E+11</u>

SOLID WASTES

Volume (m ³).....	<u>7.06E+1</u>	<u>2.92E+2</u>	<u>3.53E+2</u>	<u>3.56E+2</u>
Activity (curies).....	<u>4.85E+0</u>	<u>9.67E+1</u>	<u>1.97E+2</u>	<u>1.34E+3</u>
Shipments.....	<u>5</u> ¹	<u>31</u>	<u>29</u> ¹	<u>44</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>6.47E+5</u>	<u>5.08E+5</u>	<u>6.48E+5</u>	<u>5.66E+5</u>
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¹ Liquid waste is also trucked offsite:

1972: 2.47E+5 liters; 9.55 Ci H-3, 1.06E+1 ci non H-3

1974: 3.33E+4 liters; 1.96E-1 Ci H-3, 3.76 Ci non H-3

² Number was adjusted to exclude Dissolved Noble Gases for the first half year

Facility San Onofre Southern California Edison Co.
 Utility San Diego Gas & Electric Co.
 Type PWR (W) EPA Region IX Rated Power Level 450 MWe 1347 Mwt
 Location San Clemente, California

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>1.90E+4</u>	<u>1.07E+4</u>	<u>1.78E+3</u>	<u>1.79E+3</u>
Krypton-85.....	<u>3.39E+2</u>	<u>5.46E+1</u>	<u>6.39E+1</u>	<u>3.61E+0</u>
Xenon-133.....	<u>1.33E+4</u>	<u>7.50E+3</u>	<u>1.42E+3</u>	<u>1.11E+3</u>
Total Halogens.....	<u>4.42E-5</u>	<u>6.51E-1</u>	<u>2.31E-4</u>	<u>2.46E-1</u>
Iodine-131.....	<u>4.42E-5</u>	<u>4.23E-1</u>	<u>1.88E-4</u>	<u>4.50E-3</u>
Particulates.....	<u>4.27E-4</u>	<u>1.18E+0</u>	<u>8.74E-5</u>	<u>3.56E-2</u>
Tritium.....	<u>2.81E+2</u>	<u>2.69E+2</u>	<u>9.14E+1</u>	<u>3.43E+1</u>

<u>LIQUID RELEASES (curies)</u>	1972	1973	1974	1975
Total MF & Act. Products....	<u>1.32E+1</u>	<u>1.60E+1</u>	<u>5.80E+0</u>	<u>1.22E+0</u>
Cobalt-58.....	<u>1.52E+0</u>	<u>1.31E+0</u>	<u>3.53E-1</u>	<u>2.70E-1</u>
Cobalt-60.....	<u>1.95E-1</u>	<u>1.09E-1</u>	<u>6.97E-2</u>	<u>2.36E-2</u>
Strontium-90.....	<u>NR</u>	<u>1.80E-3</u>	<u>4.56E-3</u>	<u>2.60E-3</u>
Iodine-131.....	<u>1.95E+0</u>	<u>2.70E-1</u>	<u>4.70E-2</u>	<u>5.95E-5</u>
Cesium-134.....	<u>1</u>	<u>1</u>	<u>1</u>	<u>2.67E-1</u>
Cesium-137.....	<u>8.65E+0</u>	<u>1.06E+1</u>	<u>3.97E+0</u>	<u>5.95E-1</u>
Tritium.....	<u>3.47E+3</u>	<u>4.07E+3</u>	<u>3.81E+3</u>	<u>4.00E+3</u>
Dissolved Gases.....	<u>1.71E+1</u>	<u>5.36E+1</u>	<u>3.37E+0</u>	<u>4.74E+0</u>
Liquid Waste Volume (l)....	<u>2.45E+7</u>	<u>9.03E+6</u>	<u>2.64E+7</u>	<u>1.31E+7</u>
Liquid Dilution Volume (l)..	<u>5.81E+11</u>	<u>5.11E+11</u>	<u>5.47E+11</u>	<u>4.66E+11</u>

<u>SOLID WASTES</u>	1972	1973	1974	1975
Volume (m^3).....	<u>1.07E+2</u>	<u>1.13E+2</u>	<u>6.83E+1</u>	<u>7.96E+1</u>
Activity (curies).....	<u>7.97E+0</u>	<u>3.81E+2</u>	<u>2.30E+2</u>	<u>2.60E+1</u>
Shipments.....	<u>NR</u>	<u>13</u>	<u>11</u>	<u>6</u>

<u>POWER PRODUCTION</u>	1972	1973	1974	1975
Gross Thermal (MWD).....	<u>3.56E+5</u>	<u>2.93E+5</u>	<u>4.06E+5</u>	<u>4.17E+5</u>

¹ Included with Cs-137

Facility Surry Units 1 & 2 Utility Virginia Electric Power Co.
 each
 Type PWR (W) EPA Region III Rated Power Level 788 MWe 2441 Mwt
 Location Surry, Virginia

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>1.54E-2¹</u>	<u>8.66E+2</u>	<u>5.50E+4</u>	<u>9.47E+3</u>
Krypton-85.....	<u>5.51E-4</u>	<u>2.62E+0</u>	<u>8.12E+0</u>	<u>ND</u>
Xenon-133.....	<u>1.45E-2</u>	<u>8.61E+2</u>	<u>5.46E+4</u>	<u>9.31E+3</u>
Total Halogens.....	<u>5.66E-5¹</u>	<u>4.26E-2</u>	<u>1.22E-1</u>	<u>5.22E-2</u>
Iodine-131.....	<u>1.21E-5</u>	<u>4.22E-2</u>	<u>1.02E-1</u>	<u>4.56E-2</u>
Particulates.....	<u>1.19E-4</u>	<u>1.52E-3</u>	<u>4.29E-2</u>	<u>1.23E-2</u>
Tritium.....	<u>3.52E-1</u>	<u>4.24E+1</u>	<u>6.04E+1</u>	<u>3.20E+1</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>8.34E-2¹</u>	<u>1.45E-1</u>	<u>2.92E+11</u>	<u>2.75E+1</u>
Cobalt-58.....	<u>6.05E-2</u>	<u>4.43E-2</u>	<u>1.93E+0</u>	<u>2.46E+0</u>
Cobalt-60.....	<u>1.02E-2</u>	<u>6.96E-3</u>	<u>1.00E+0</u>	<u>1.51E+0</u>
Strontium-90.....	<u>4.66E-6</u>	<u>1.30E-4</u>	<u>1.49E-3</u>	<u>1.34E-3</u>
Iodine-131.....	<u>1.29E-3</u>	<u>4.43E-2</u>	<u>1.10E+1</u>	<u>2.43E+0</u>
Cesium-134.....	<u>ND</u>	<u>8.26E-3</u>	<u>3.73E+0</u>	<u>8.13E+0</u>
Cesium-137.....	<u>ND</u>	<u>2.35E-2</u>	<u>6.83E+0</u>	<u>1.40E+1</u>
Tritium.....	<u>5.03E+0</u>	<u>4.48E+2</u>	<u>2.46E+2</u>	<u>4.42E+2</u>
Dissolved Gases.....	<u>ND</u>	<u>1.29E+0</u>	<u>7.96E+0</u>	<u>2.81E+1</u>
Liquid Waste Volume (l).....	<u>4.60E+6</u>	<u>1.67E+7</u>	<u>7.54E+7</u>	<u>7.08E+7</u>
Liquid Dilution Volume (l)..	<u>1.38E+11</u>	<u>5.48E+11</u>	<u>1.26E+12</u>	<u>2.45E+12</u>

SOLID WASTES

Volume (m ³).....	<u>1.60E+2</u>	<u>3.65E+2</u>	<u>1.25E+3²</u>	<u>9.21E+3²</u>
Activity (curies).....	<u>1.91E-4</u>	<u>1.59E+0</u>	<u>5.06E+1</u>	<u>2.64E+3</u>
Shipments.....	<u>13</u>	<u>28</u>	<u>68</u>	<u>94</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>5.33E+4</u>	<u>9.46E+5</u>	<u>4.60E+5</u>	<u>1.21E+6</u>
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¹ Values given represent the sum of the reported isotopes and not the sum reported

² Includes liquid waste shipped offsite: 5.55E+1 m³ (5.55E+4 liters) in 1974 and 1.54E+2 m³ (1.54E+5 liters) in 1975

Facility Three Mile Island 1 Utility Metropolitan Edison & Others
 Type PWR (B&W) EPA Region III Rated Power Level 870 MWe 2535 MWT
 Location Middletown, Pennsylvania

<u>AIRBORNE RELEASES (curies)</u>		1974	1975
Total Noble Gases.....	_____	<u>9.18E+2</u>	<u>3.63E+3</u>
Krypton-85.....	_____	<u>ND</u>	<u>2.86E-1</u>
Xenon-133.....	_____	<u>8.91E+2</u>	<u>2.28E+1</u>
Total Halogens.....	_____	<u>3.11E-3</u>	<u>9.38E-4</u>
Iodine-131.....	_____	<u>2.83E-3</u>	<u>9.20E-4</u>
Particulates.....	_____	<u>2.49E-4</u>	<u>9.61E-5</u>
Tritium.....	_____	<u>1.22E+1</u>	<u>4.02E+1</u>
<u>LIQUID RELEASES (curies)</u>			
Total MF & Act. Products....	_____	<u>3.99E-2</u>	<u>6.50E-2</u>
Cobalt-58.....	_____	<u>1.79E-2</u>	<u>5.18E-2</u>
Cobalt-60.....	_____	<u>1.31E-4</u>	<u>3.85E-3</u>
Strontium-90.....	_____	<u>ND</u>	<u>1.15E-4</u>
Iodine-131.....	_____	<u>9.21E-3</u>	<u>4.60E-3</u>
Cesium-134.....	_____	<u>3.29E-5</u>	<u>3.12E-4</u>
Cesium-137.....	_____	<u>3.52E-3</u>	<u>3.39E-3</u>
Tritium.....	_____	<u>1.30E+2</u>	<u>4.63E+2</u>
Dissolved Gases.....	_____	<u>1.27E+0</u>	<u>1.08E+0</u>
Liquid Waste Volume (l)....	_____	<u>2.96E+6</u>	<u>1.78E+6</u>
Liquid Dilution Volume (l)..	_____	<u>6.40E+9</u>	<u>2.93E+10</u>
<u>SOLID WASTES</u>			
Volume (m^3).....	_____	<u>2.00E+2</u>	<u>4.58E+2</u>
Activity (curies).....	_____	<u>6.06E+0</u>	<u>2.58E+2</u>
Shipments.....	_____	<u>16</u>	<u>39</u>
<u>POWER PRODUCTION</u>			
Gross Thermal (MWD).....	_____	<u>3.26E+5</u>	<u>7.34E+5</u>

Facility Turkey Point Units 3 & 4 Utility Florida Power & Light
 Type PWR (W) EPA Region IV Rated Power Level 760 MWe 2300 MWT
 Location Miami, Florida

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>6.88E+0</u>	<u>5.30E+2</u>	<u>4.66E+3</u>	<u>1.34E+4</u>
Krypton-85.....	<u>1.88E-2</u>	<u>3.73E+0</u>	<u>2.92E+2</u>	<u>3.18E+2</u>
Xenon-133.....	<u>1.88E+0</u>	<u>4.64E+2</u>	<u>3.98E+3</u>	<u>1.24E+4</u>
Total Halogens.....	<u>1.56E-4</u>	<u>6.58E-2</u>	<u>3.45E+0</u>	<u>4.65E-1</u>
Iodine-131.....	<u>6.96E-5</u>	<u>5.47E-2</u>	<u>3.41E+0</u>	<u>4.16E-1</u>
Particulates.....	<u>2.86E-6</u>	<u>2.48E-4</u>	<u>2.20E-1</u>	<u>5.89E-2</u>
Tritium.....	<u>2.30E-2</u>	<u>4.10E+0</u>	<u>9.22E+0</u>	<u>3.49E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>5.86E-2</u>	<u>3.69E-2</u>	<u>1.69E+0</u>	<u>3.07E+0</u>
Cobalt-58.....	<u>4.66E-3</u>	<u>1.09E-2</u>	<u>1.57E-1</u>	<u>2.08E-1</u>
Cobalt-60.....	<u>7.41E-4</u>	<u>1.53E-3</u>	<u>2.86E-2</u>	<u>8.68E-2</u>
Strontium-90.....	<u>1.03E-4</u>	<u>2.64E-5</u>	<u>1.93E-4</u>	<u>3.13E-4</u>
Iodine-131.....	<u>7.85E-4</u>	<u>1.46E-2</u>	<u>1.07E+0</u>	<u>4.25E-1</u>
Cesium-134.....	<u>1.57E-4</u>	<u>6.50E-4</u>	<u>3.56E-2</u>	<u>4.75E-2</u>
Cesium-137.....	<u>1.71E-4</u>	<u>1.21E-3</u>	<u>6.74E-2</u>	<u>7.39E-2</u>
Tritium.....	<u>4.09E+0</u>	<u>3.29E+2</u>	<u>5.80E+2</u>	<u>7.93E+2</u>
Dissolved Gases.....	<u>1.74E-2</u>	<u>4.51E-2</u>	<u>2.43E-1</u>	<u>4.75E+0</u>
Liquid Waste Volume (l)....	<u>3.96E+6</u>	<u>8.18E+6</u>	<u>4.03E+7</u>	<u>1.10E+8</u>
Liquid Dilution Volume (l)..	<u>1.88E+11</u>	<u>1.87E+11</u>	<u>5.27E+11</u>	<u>1.33E+12</u>

SOLID WASTES

Volume (m^3).....	<u>0.0</u>	<u>2.33E+2</u>	<u>4.49E+2</u>	<u>8.89E+2</u>
Activity (curies).....	<u>0.0</u>	<u>3.98E+0</u>	<u>4.47E+1</u>	<u>1.04E+2</u>
Shipments.....	<u>0</u>	<u>12</u>	<u>22</u>	<u>50</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>1.47E+4</u>	<u>6.43E+5</u>	<u>1.06E+6</u>	<u>1.16E+6</u>
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Facility	Yankee (Rowe)			Utility	Yankee Atomic Electric Co.			
Type	PWR (W)	EPA Region	I	Rated Power Level	185	MWe	600	MWt
Location	Rowe, Massachusetts							

<u>AIRBORNE RELEASES (curies)</u>	1972	1973	1974	1975
Total Noble Gases.....	<u>1.93E+1</u>	<u>4.30E+1</u> ²	<u>3.97E+1</u>	<u>2.47E+1</u>
Krypton-85.....	<u>1.60E+0</u> ¹	<u>2.32E-1</u> ³	<u>1.47E+0</u>	<u>2.72E+0</u>
Xenon-133.....	<u>1.02E+1</u> ¹	<u>2.66E+1</u> ³	<u>1.64E+1</u>	<u>1.45E+1</u>
Total Halogens.....	<u>2.17E-4</u> ¹	<u>1.95E-3</u> ³	<u>1.01E-3</u>	<u>2.73E-3</u>
Iodine-131.....	<u>2.17E-4</u> ¹	<u>1.95E-3</u> ³	<u>7.10E-4</u>	<u>2.19E-3</u>
Particulates.....	<u>1.93E-4</u> ¹	<u>3.63E-4</u> ³	<u>4.09E-3</u>	<u>8.02E-3</u>
Tritium.....	<u>8.93E+0</u>	<u>6.12E+0</u> ²	<u>3.84E+0</u>	<u>2.06E+0</u>

LIQUID RELEASES (curies)

Total MF & Act. Products....	<u>1.26E-3</u>	<u>2.27E-2</u> ²	<u>8.55E-3</u>	<u>9.51E-3</u>
Cobalt-58.....	<u>6.00E-5</u> ¹	<u>ND</u> ³	<u>1.21E-4</u>	<u>6.53E-4</u>
Cobalt-60.....	<u>1.07E-4</u> ¹	<u>3.11E-5</u> ³	<u>3.96E-4</u>	<u>2.38E-4</u>
Strontium-90.....	<u>5.00E-6</u> ¹	<u>ND</u> ³	<u>7.16E-5</u>	<u>2.90E-4</u>
Iodine-131.....	<u>1.53E-3</u> ¹	<u>1.40E-3</u> ³	<u>5.86E-4</u>	<u>1.21E-3</u>
Cesium-134.....	<u>8.00E-6</u> ¹	<u>2.94E-5</u> ³	<u>2.04E-3</u>	<u>5.90E-4</u>
Cesium-137.....	<u>1.70E-5</u> ¹	<u>1.31E-4</u> ³	<u>3.21E-3</u>	<u>6.76E-4</u>
Tritium.....	<u>6.69E+2</u>	<u>6.87E+2</u> ²	<u>3.14E+2</u>	<u>2.47E+2</u>
Dissolved Gases.....	<u>2.11E-2</u> ¹	<u>1.66E-2</u> ³	<u>7.70E-2</u>	<u>2.03E-1</u>
Liquid Waste Volume (l)....	<u>1.13E+7</u>	<u>1.66E+7</u>	<u>1.46E+7</u>	<u>1.58E+7</u>
Liquid Dilution Volume (l)..	<u>8.79E+10</u> ¹	<u>1.71E+11</u> ⁴	<u>2.00E+11</u>	<u>2.28E+11</u>

SOLID WASTES

Volume (m ³).....	<u>2.22E+2</u>	<u>1.74E+2</u>	<u>2.18E+2</u>	<u>2.38E+2</u>
Activity (curies).....	<u>2.31E+0</u>	<u>3.39E+0</u>	<u>1.27E+2</u>	<u>3.33E+0</u>
Shipments.....	<u>18</u>	<u>14</u>	<u>24</u>	<u>11</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>9.98E+4</u>	<u>1.58E+5</u>	<u>1.28E+5</u>	<u>1.68E+5</u>
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¹ July to December only

² not including December

³ June to November only

⁴ June to December only

Facility	Zion Units 1 & 2	Utility	Commonwealth Edison Co.	
Type	PWR (W)	EPA Region	V	each
				Rated Power Level
				1050 MWe
				3250 MWt
Location	Zion, Illinois			

<u>AIRBORNE RELEASES (curies)</u>	1973	1974	1975
Total Noble Gases.....	<u>4.24E+0</u>	<u>2.94E+3</u>	<u>4.53E+4</u>
Krypton-85.....	<u>ND</u>	<u>ND</u>	<u>7.68E-1</u>
Xenon-133.....	<u>3.97E+0</u>	<u>2.88E+3</u>	<u>4.29E+4</u>
Total Halogens.....	<u>1.19E-6</u>	<u>1.56E-2</u>	<u>2.17E-1</u>
Iodine-131.....	<u>6.70E-7</u>	<u>1.42E-2</u>	<u>1.34E-1</u>
Particulates.....	<u>5.50E-6</u>	<u>7.40E-3</u>	<u>1.90E-3</u>
Tritium.....	<u>ND</u>	<u>1.80E+2</u>	<u>ND</u>

<u>LIQUID RELEASES (curies)</u>	1973	1974	1975
Total MF & Act. Products....	<u>2.00E-4</u>	<u>4.90E-3</u>	<u>8.70E-3</u>
Cobalt-58.....	<u>ND</u>	<u>4.90E-3</u>	<u>3.80E-3</u>
Cobalt-60.....	<u>ND</u>	<u>ND</u>	<u>1.90E-3</u>
Strontium-90.....	<u>ND</u>	<u>ND</u>	<u>NR</u>
Iodine-131.....	<u>ND</u>	<u>ND</u>	<u>ND</u>
Cesium-134.....	<u>ND</u>	<u>ND</u>	<u>ND</u>
Cesium-137.....	<u>ND</u>	<u>ND</u>	<u>7.60E-4</u>
Tritium.....	<u>ND</u>	<u>2.30E+0</u>	<u>4.00E+1</u>
Dissolved Gases.....	<u>ND</u>	<u>ND</u>	<u>ND</u>
Liquid Waste Volume (l)....	<u>3.60E+6</u>	<u>1.12E+6</u>	<u>1.20E+7</u>
Liquid Dilution Volume (l)..	<u>7.23E+11</u>	<u>6.10E+11</u>	<u>7.40E+11</u>

SOLID WASTES

Volume (m^3).....	<u>4.16E+2</u>	<u>1.62E+3</u>	<u>1.58E+3</u>
Activity (curies).....	<u>1.59E-1</u>	<u>4,65E+0</u>	<u>1.54E+1</u>
Shipments.....	<u>33</u>	<u>58¹</u>	<u>105</u>

POWER PRODUCTION

Gross Thermal (MWD).....	<u>1.14E+5</u>	<u>7.03E+5</u>	<u>1.37E+6</u>
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¹ January to June only

SECTION II

SUMMARY OF AIRBORNE EFFLUENTS

TABLE 1
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1972

<u>Boiling Water Reactors</u>	Releases in Curies			
	<u>Noble Gases</u>	<u>Tritium</u>	<u>Halogens</u>	<u>Particulates</u>
<u>Single Units</u>				
Dresden 1	877,000	NR	2.46	.298
Big Rock Point	258,000	77.1	.131	.026
Humboldt Bay 3	430,000	NR	2.10	.082
La Crosse	30,600	NR	1.17	.0187
Oyster Creek 1	866,000	.754	19.1	.230
Nine Mile Point 1	517,000	18.3	1.77	.0767
Millstone Point 1	792,000	4.21	1.23	.0557
Monticello	751,000	4.62 ¹	4.00	.0125
Vermont Yankee	55,200	.065	.37	.417
Pilgrim 1	18,100	1.06	.122	.00101
 <u>Multi Units</u>				
Dresden 2 & 3	429,000	31.2	NR ²	.825
Quad Cities 1 & 2	132,000	.377 ¹	1.43	.0158

¹ January to June only

² No information on Halogens other than I-131

TABLE 2
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1973

<u>Boiling Water Reactors</u> <u>Single Units</u>	Releases in Curies			
	Noble Gases	Tritium	Halogens	Partic- lates
Dresden 1	836,000	NR	.465	.318
Big Rock Point	225,000	77.1	4.68	.37
Humboldt Bay 3	351,000	1.93	.867	.122
La Crosse	91,200	50.6	.235	126.
Oyster Creek 1	812,000	.32	30.3	.424
Nine Mile Point 1	872,000	26.7	3.80	.18
Millstone Point 1	78,900	1.69	.154	.041
Monticello	870,000	NR	6.53	.0242
Vermont Yankee	184,000	1.04	.0604	.0103
Pilgrim 1	228,000	14.	8.17	.0207
<u>Multi Units</u>				
Dresden 2 & 3	881,000	10.	26.5 ²	2,62
Quad Cities 1 & 2	900,000	34. ¹	12.4	.119

¹ July to December only

² July to December only, monitors inoperative during January to June

TABLE 3
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1974

<u>Boiling Water Reactors</u> <u>Single Units</u>	Releases in Curies				<u>Partic- lates</u>
	Noble Gases	Tritium	Halogens		
Dresden 1	99,400	NR	13.5	.335	
Big Rock Point	188,000	38.7	.355	.0907	
Humboldt Bay 3	572,000	1.73	1.70	.334	
La Crosse	49,100	18.3	.0633	65.	
Oyster Creek 1	279,000	.415	23.3	.216	
Nine Mile Point 1	618,000	27.	2.55	.143	
Millstone Point 1	912,000	7.85	3.18	.0877	
Monticello	1,570,000	NR	47.6	.412	
Vermont Yankee	64,500	4.07	.484	.013	
Pilgrim 1	546,000	7.97	1.45	.0187	
Cooper	1,570	.0159	3.54	.176	
Duane Arnold 1	936	1.5	.00273	.00152	
Hatch 1	3,200	.26	.00171	7.5E-5	
FitzPatrick 2	ND	ND	ND	ND	
<u>Multi Units</u>					
Dresden 2 & 3	628,000	114.	37.7	2.83	
Quad Cities 1 & 2	950,000	NR	36.6	.21	
Browns Ferry 1 & 2	2,000	17.8	21.1	.0218	
Peach Bottom 2 & 3	248	.557 ¹	.00104	.00065	

¹ Not reported for January to June

TABLE 4
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1975

<u>Boiling Water Reactors</u> <u>Single Units</u>	Releases in Curies			
	Noble Gases	Tritium	Halogens	Partic- lates
Dresden 1	520,000	34.2	5.7	.359
Big Rock Point	50,600	7.39	.267	.098
Humboldt Bay 3	296,000	2.49	1.07	.839
La Crosse	57,100	16.7	.133	79.2
Oyster Creek 1	206,000	2.77	41.3	.178
Nine Mile Point 1	1,300,000	92.0	5.96	.441
Millstone Point 1	2,970,000	17.2	62.9	.188
Monticello	155,000	NR	15.2	.673
Vermont Yankee	3,360	7.12	.398	.00197
Pilgrim 1	105,000	74.4	6.22	.660
Cooper	19,700	43.0	.419	.0312
Duane Arnold 1	1,540	18.5	.406	.00888
Hatch 1	1,550	1.77	.00642	.000281
FitzPatrick 2	4,080 ¹	.33 ²	<.0182	3
Brunswick 2	185	2.02	.0027	.00383
<u>Multi Units</u>				
Dresden 2 & 3	369,000	221.	11.7	4.16
Quad Cities 1 & 2	110,000	38.7	2.92	.415
Browns Ferry 1 & 2	25,200	5.08	.597	.0589
Peach Bottom 2 & 3	13,000	.306	.0363	.00384

¹ Stack and building vents

² July to December only

³ included in Halogens

TABLE 5
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1972

<u>Pressurized Water Reactors</u> <u>Single Units</u>	Releases in Curies			<u>Partic- lates</u>
	Noble Gases	Tritium	Halogens	
Yankee (Rowe)	19.3	8.93	2.17E-4 ²	1.93E-4
Indian Point 1	543.	NR	.0595	.802
San Onofre 1	19,000.	281.	4.42E-5	4.27E-4
Haddam Neck	645	6.55	.0101	.221
Ginna, R. E.	11,800.	.00877	.0438	7.81E-5
Robinson, H. B.	257.	NR	NR	NR
Palisades	505.	215.	.0146	.001
Surry 1	.0154 ¹	.352	5.66E-5 ¹	1.19E-4
Turkey Point 3	6.88	.023	1.56E-4	2.86E-6
Maine Yankee	2.13	.00163	1.71E-6	2.00E-6
<u>Multi Units</u>				
Point Beach 1 & 2	2,810.	7.98	.0115	.0182

¹ Values given represent the sum of the reported isotopes and not the sum reported

² July to December only

TABLE 6
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1973

<u>Pressurized Water Reactors</u> <u>Single Units</u>	Releases in Curies				<u>Partic- lates</u>
	Noble Gases	Tritium	Halogens		
Yankee (Rowe)	43. ²	612. ²	.00195 ³	3.63E-4 ³	
Indian Point 1	122.	25.4	.012	.056	
San Onofre 1	10,700.	269.	.651	1.18	
Haddam Neck	31.8	50.6	.00154	.0273	
Ginna, R. E.	576.	1.14	9.85E-4	3.32E-5	
Robinson, H. B.	3,100.	2.5	.299	4.75E-5	
Palisades	454.	.18	.289	.151	
Maine Yankee	162.	1.89	.00196	1.30E-4	
Indian Point 2	15.4	2.0	2.90E-4	2.80E-4	
Zion 1 ¹	4.24	ND	1.19E-6	5.50E-6	
Fort Calhoun 1	66.6	.33	1.2E-4	5.5E-6	
Prairie Island 1	8.72	NR	1.02E-4	ND	
<u>Multi Units</u>					
Point Beach 1 & 2	4,490.	25.5	.0235	.539	
Surry 1 & 2	866.	42.4	.0426	.00152	
Turkey Point 3 & 4	530.	4.10	.0658	2.48E-4	
Oconee 1 & 2	9,340.	13.1	.0177	ND	

¹ Considered as single unit for 1973, Unit 2 did not achieve criticality until December 24, 1973.

² not including December

³ June to November only

TABLE 7
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1974

<u>Pressurized Water Reactors</u> <u>Single Units</u>	Releases in Curies			
	Noble Gases	Tritium	Halogens	Partic- lates
Yankee (Rowe)	39.7	3.84	.00101	.00409
Indian Point 1	611.	32.3	.0947	.342
San Onofre 1	1,780.	91.4	2.31E-4	8.74E-5
Haddam Neck	7.73	.213	4.57E-8	1.6E-4
Ginna, R. E.	757.	.356	4.46E-4	4.19E-5
Robinson, H. B.	2,500.	51.5	.0515	.00169
Palisades	.0336	NR	.0329	.00365
Maine Yankee	7,340.	7.46	.152	.00257
Indian Point 2	5,590.	19.9	.425	.286
Fort Calhoun 1	303.	.751	5.65E-4	1.14E-5
Kewaunee	3,350.	103.	.0288	.386
Three Mile Island 1	918.	12.2	.00311	2.49E-4
Arkansas One 1	196.	.03	.053	4.4E-4
Rancho Seco 1	.00298	.00606	ND	9.56E-6
Calvert Cliffs 1	87.7	.0455	8.32E-4	4.81E-5

TABLE 7 (continued)

SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1974

<u>Pressurized Water Reactors</u> <u>Multi Units</u>	Releases in Curies			
	Noble Gases	Tritium	Halogens	Partic- lates
Point Beach 1 & 2	9,740.	42.8	.0915	.00693
Surry 1 & 2	55,000.	60.4	.122	.0429
Turkey Point 3 & 4	4,660.	9.22	3.45	.220
Oconee 1, 2 & 3	19,400.	878.	.0321	9.17E-4
Zion 1 & 2	2,940.	180.	.0156	.0074
Prairie Island 1 & 2	358.	3.91	6.03E-4	ND

TABLE 8
SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1975

<u>Pressurized Water Reactors</u> <u>Single Units</u>	Releases in Curies			
	Noble Gases	Tritium	Halogens	Partic- lates
Yankee (Rowe)	24.7	2.06	.00273	.00802
Indian Point 1	< 366.	11.1	.0104	.0293
San Onofre 1	1,790.	34.3	.246	.0356
Haddam Neck	480.	69.7	8.91E-4	.00205
Ginna, R. E.	10,500.	5.83	.0654	4.18E-5
Robinson, H. B.	1,170.	193.	.0234	.00134
Palisades	2,610.	0.0	.427	6.18E-4
Maine Yankee	4,120.	4.71	.0059	2.51E-4
Indian Point 2	8,200.	13.4	.40	1.25
Fort Calhoun 1	429.	2.44	.00689	1.11E-4
Keweenaw	2,450.	37.3	.0199	.646
Three Mile Island 1	3,630.	40.2	9.38E-4	9.61E-5
Arkansas One 1	1,040.	.52	< .0218	.0111
Rancho Seco 1	118.	7.73E-4	1.9E-4	8.18E-5
Calvert Cliffs 1	7,720.	1.23	.0356	.0107
Cook, Donald C. 1	2.64	.0182	1.65E-4	NR
Millstone Point 2	< 1.70E-6	1.69	4.59E-5	8.81E-6

TABLE 8 (continued)

SUMMARY OF AIRBORNE RADIOACTIVITY RELEASED TO THE
ENVIRONMENT IN CALENDAR YEAR 1975

<u>Pressurized Water Reactors</u>	<u>Releases in Curies</u>			
	<u>Noble Gases</u>	<u>Tritium</u>	<u>Halogens</u>	<u>Particulates</u>
<u>Multi Units</u>				
Point Beach 1 & 2	45,300.	420.	.189	.094
Surry 1 & 2	9,470.	32.	.0522	.0123
Turkey Point 3 & 4	13,400.	3.49	.465	.0589
Oconee 1, 2 & 3	15,200.	1,660.	.0107	2.68E-4
Zion 1 & 2	45,300.	ND	.217	.0019
Prairie Island 1 & 2	2,180.	10.1	.021	.0036

SECTION III

SUMMARY OF LIQUID EFFLUENTS

TABLE 9
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1972

<u>Boiling Water Reactors</u> <u>Single Units</u>	Liquid Waste Volume*	Releases in Curies			
		Total Curies	MF and Act. Products	Tritium	Dissolved Gases
Dresden 1	12.2	49.96	6.76	43.2	NR
Big Rock Point	.464	11.49	1.09	10.4	ND
Humboldt Bay 3	1.30	-	1.40	2.55 ¹	NR
La Crosse	3.30	168.5	48.5	120.	NR
Oyster Creek 1	15.8	74.9	10.0	61.6	3.29
Nine Mile Point 1	15.3	62.4	34.6	27.8	ND
Millstone Point 1	19.4	97.7	51.6	20.9	25.2
Monticello	.00378	7.9E-5	2.96E-6	7.6E-5	0.0
Vermont Yankee			No Liquid Releases		
Pilgrim 1	5.87	5.63	1.45	4.18	ND
<u>Multi Units</u>					
Dresden 2 & 3	26.7	47.9	22.0	25.9	NR
Quad Cities 1 & 2	38.4	7.11	2.41	4.7	.0033

¹ January to June only

* 10^6 liters

TABLE 10
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1973

<u>Boiling Water Reactors</u>	Liquid Waste Volume *	Releases in Curies			
		Total Curies	MF and Act. Products	Tritium	Dissolved Gases
<u>Single Units</u>					
Dresden 1	3.1	27.7	9.24	18.5	NR
Big Rock Point	.817	22.4	2.65	19.7	.0173
Humboldt Bay 3	1.92	53.7	2.37	51.3	NR
La Crosse	2.46	140.	35.9	103.	.61
Oyster Creek 1	12.4	43.0	4.15	35.9	2.97
Nine Mile Point 1	13.8	87.3	40.8	46.5	ND
Millstone Point 1	9.8	37.3	33.4	3.67	.25
Monticello		No Liquid Releases			
Vermont Yankee	.116	.198	1.25E-4	.197	7.9E-4
Pilgrim 1	.878	1.34	.909	.429	ND
<u>Multi Units</u>					
Dresden 2 & 3	25.6	51.7	25.9	25.8	NR
Quad Cities 1 & 2	33.0	45.9	21.4	24.5	.034

* 10^6 liters

TABLE 11
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1974

<u>Boiling Water Reactors</u>	Liquid Waste Volume*	Releases in Curies			
		Total Curies	MF and Act. Products	Tritium	Dissolved Gases
<u>Single Units</u>					
Dresden 1	6.77	25.7	6.89	18.8	ND
Big Rock Point	.433	6.14	1.07	5.07	NR
Humboldt Bay 3	2.06	36.1	4.40	31.7	.027
La Crosse	1.83	128.	13.1	115.	.083
Oyster Creek 1	7.34	16.4	.66	14.1	1.67
Nine Mile Point 1	13.1	44.4	25.7	18.7	ND
Millstone Point 1	10.6	222.	198.	24.1	.185
Monticello		No Liquid Releases			
Vermont Yankee		No Liquid Releases			
Pilgrim 1	8.82	14.7	4.22	10.5	NR
Cooper	13.2	3.15	1.42	1.7	.0287
Duane Arnold 1	.80	.171	.0006	.17	5.5E-5
Hatch, Edwin I. 1	2.97	.0984	.00255	.0781	.0177
FitzPatrick, James A. 2	14.6	.00146	.00146	NR	NR
<u>Multi Units</u>					
Dresden 2 & 3	14.7	55.8	33.2	22.6	NR
Quad Cities 1 & 2	30.0	72.7	38.7	34.0	NR
Browns Ferry 1 & 2	17.8	5.18	.721	4.44	.0196
Peach Bottom 2 & 3	46.9	11.7	.945	10.7	.00691

* 10^6 liters

TABLE 12
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1975

<u>Boiling Water Reactors</u> <u>Single Units</u>	Liquid Waste Volume*	Releases in Curies				
		Total Curies	MF and Act. Products	Tritium	Dissolved Gases	
Dresden 1	5.60	1.37	.84	.53	NR	
Big Rock Point	.458	7.76	2.02	5.73	.00724	
Humboldt Bay 3	1.70	23.6	3.47	20.1	.008	
La Crosse	2.19	141.5	14.1	127.	.407	
Oyster Creek 1	3.16	18.7	.408	17.9	.426	
Nine Mile Point 1	8.84	49.2	21.0	28.1	.104	
Millstone Point 1	21.8	280.4	199.	80.3	1.11	
Monticello			No Liquid Releases			
Vermont Yankee	6.81E-5	4.06E-6	4.06E-6	0.0	NR	
Pilgrim 1	1.39	20.26	2.06	18.2	7.05E-4	
Cooper	10.9	9.99	1.73	8.25	.0055	
Duane Arnold 1	.381	.28	2.07E-3	.326	NR	
Hatch, Edwin I. 1	14.6	6.41	.0579	6.12	.234	
FitzPatrick, James A. 2	22.1 ¹	-	9.39	.342 ¹	ND	
Brunswick 2	27.3	5.12	1.92	3.20	.00107	
<u>Multi Units</u>						
Dresden 2 & 3	15.6	54.8	.81	54.	NR	
Quad Cities 1 & 2	40.3	55.8	17.1	38.7	ND	
Browns Ferry 1 & 2	60.6	13.3	2.79	10.4	.143	
Peach Bottom 2 & 3	45.7	31.7	.929	30.8	ND	

* 10⁶ liters

¹ January to June only

TABLE 13
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1972

<u>Pressurized Water Reactors</u>	Liquid Waste Volume*	Releases in Curies		
		MF and Act. Products	Tritium	Dissolved Gases
<u>Single Units</u>				
Yankee (Rowe)	11.3	.00126	669.	.0211 ²
Indian Point 1	53.8	25.4	580.	< 2.1
San Onofre 1	24.5	13.2	3,470.	17.1
Haddam Neck	39.4	4.78	5,890.	7.51
Ginna, R. E.	1.88	.375	199.	ND
Robinson, H. B.	9.53	.371	425.	NR
Palisades	8.90	6.81	120.	1.84
Surry 1	4.60	.0834 ¹	5.03	ND
Turkey Point 3	3.96	.0586	4.09	.0174
Maine Yankee	33.9	.0184	9.22	.00149
<u>Multi Units</u>				
Point Beach 1 & 2	13.9	.934	563.	.597

* 10^6 liters

¹ values given represent the sum of the reported isotopes and not the sum reported
² July to December only

TABLE 14
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1973

<u>Pressurized Water Reactors</u>	Liquid Waste Volume*	Releases in Curies		
		MF and Act. Products	Tritium	Dissolved Gases
<u>Single Units</u>				
Yankee (Rowe)	16.6	.0227 ²	687.	.0166 ⁴
Indian Point 1	8.78	1.07	138.	4.09
San Onofre 1	9.03	16.0	4,070.	53.6
Haddam Neck	26.8	3.04	3,900.	1.23
Ginna, R. E.	1.7	.074	286.	3.03E-4
Robinson, H. B.	6.87	.306 ³	432.	.253
Palisades	19.0	27.8	185.	2.57
Maine Yankee	96.9	.457	154.	.0705
Indian Point 2	7.93	2.17	27.5	3.31
Zion 1 ¹	3.6	2.0E-4	ND	ND
Fort Calhoun 1	3.3	.0173	15.8	.059
Prairie Island 1	24.4	1.56E-8	7.3E-5	ND
 <u>Multi Units</u>				
Point Beach 1 & 2	79.2	.746	556.	.00719
Surry 1 & 2	16.7	.145	448.	1.29
Turkey Point 3 & 4	8.18	.0369	329.	.0451
Oconee 1 & 2	13.6	2.83	70.7	5.66

* 10^6 liters

¹ Considered as single unit for 1973, Unit 2 did not achieve criticality until December 24, 1973

² not including December

³ number adjusted to remove dissolved noble gases for the first half of the year

⁴ June to November only

TABLE 15
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1974

<u>Pressurized Water Reactors</u> <u>Single Units</u>	Liquid Waste Volume*	Releases in Curies		
		MF and Act. Products	Tritium	Dissolved Gases
Yankee (Rowe)	14.6	.00855	314.	.077
Indian Point 1	52.1	2.88	684.	7.57
San Onofre 1	26.4	5.80	3,810.	3.37
Haddam Neck	40.5	2.23	2,240.	.753
Ginna, R. E.	1.92	.138	195.	ND
Robinson, H. B.	42.6	2.90	449.	.438
Palisades	41.0	5.87	8.28	.0474
Maine Yankee	107.	2.92 ¹	219.	1.18
Indian Point 2	19.8	4.19	47.9	5.28
Fort Calhoun 1	8.14	.194	124.	.262
Kewaunee	6.23	.422	92.4	.0319
Three Mile Island 1	2.96	.0399	130.	1.27
Arkansas One 1	4.80	12.2	25.5	1.15
Rancho Seco 1	2.26	.00228	.0197	ND
Calvert Cliffs 1	7.76	.0199	.00448	.00953

* 10 liters

¹Isotopic sum, not a reported value

TABLE 15 (Continued)

SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1974

<u>Pressurized Water Reactors</u>	<u>Multi Units</u>	<u>Liquid Waste Volume*</u>	<u>Releases in Curies</u>		
			<u>MF and Act. Products</u>	<u>Tritium</u>	<u>Dissolved Gases</u>
Point Beach 1 & 2		66.1	.196	833.	.211
Surry 1 & 2		75.4	29.2 ²	246.	7.96
Turkey Point 3 & 4		40.3	1.69	580.	,243
Oconee 1, 2 & 3		11.1	1.93	350.	2.01
Zion 1 & 2		1.12	.0049	2.3	ND
Prairie Island 1 & 2		300.	2.78E-4	142.	,128

* 10^6 liters² Value given represents the sum of the reported isotopes and not the sum reported

TABLE 16
SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1975

<u>Pressurized Water Reactors</u> <u>Single Units</u>	Liquid Waste Volume*	Releases in Curies		
		MF and Act. Products	Tritium	Dissolved Gases
Yankee (Rowe)	15.8	.00951	247.	.203
Indian Point 1	11.0	1.30	287.	.298
San Onofre 1	13.1	1.22	4,000.	4.74
Haddam Neck	261.	1.24	5,670.	.256
Ginna, R. E.	3.76	.42	260.	5.19E-5
Robinson, H. B.	95.7	.44	624.	.0998
Palisades	29.8	3.45	41.6	.0518
Maine Yankee	126.	3.20	177.	.0377
Indian Point 2	47.0	4.95	79.3	.54
Fort Calhoun 1	8.26	.133	111.	< .0816
Kewaunee	9.45	.447	277.	.247
Three Mile Island 1	1.78	.065	463.	1.08
Arkansas One 1	7.89	3.11	460.	33.1
Rancho Seco 1	51.9	2.87E-4	132.	ND
Calvert Cliffs 1	103.	1.49	263.	13.1
Cook, Donald C. 1	2.40	.26	56.4	.000422
Millstone Point 2	2.38	.0203	7.6	.00764

* 10^6 liters

TABLE 16 (Continued)

**SUMMARY OF RADIOACTIVITY IN LIQUIDS RELEASED TO
THE ENVIRONMENT IN CALENDAR YEAR 1975**

<u>Pressurized Water Reactors</u> <u>Multi Units</u>	<u>Liquid Waste Volume*</u>	<u>Releases in Curies</u>		
		<u>MF and Act. Products</u>	<u>Tritium</u>	<u>Dissolved Gases</u>
Point Beach 1 & 2	120.	3.35	1,020.	.451
Surry 1 & 2	70.8	27.5	442.	28.1
Turkey Point 3 & 4	110.	3.07	793.	4.75
Oconee 1, 2 & 3	29.5	5.06	3,550.	2.87
Zion 1 & 2	12.	.0087	40.	ND
Prairie Island 1 & 2	430.	.454	763.	2.79

* 10^6 liters

SECTION IV

SUMMARY OF SOLID RADIOACTIVE WASTE

TABLE 17
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1972 - BWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Dresden 1	588.	4.2	22
Big Rock Point	60.3	1130.	19
Humboldt Bay 3	56.9 ¹ ²	5.54	5
La Crosse	0.0	0.0	0
Oyster Creek 1	435. ³	1300.	45
Nine Mile Point 1	427.	265.	35
Millstone Point 1	261. ⁴	432.	47
Monticello	178.	88.2	13
Vermont Yankee	126.	18.1	13
Pilgrim 1	67.5	19.4	4
 <u>Multi Units</u>			
Dresden 2 & 3	1000.	119.	82
Quad Cities 1 & 2	1070.	9.32	72

¹ plus 288-4.5 ft³ boxes with <0.1 curies, and 500 gallons of liquid with <0.9 curies
² does not include shipments to Lawerence Radiation Lab. or General Electric
³ does not include 84,228 gallons liquid waste containing 23.8 curies
⁴ plus 2 LSA boxes

TABLE 18
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1973 - BWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Dresden 1	1	1	1
Big Rock Point	4.78	55.9	2
Humboldt Bay 3	88.3	17.6	34
La Crosse	253.	34.5 ²	2 ³
Oyster Creek 1	832.	2890.	153
Nine Mile Point 1	545.	1010.	66
Millstone Point 1	351. ⁴	2370.	87
Monticello	211.	393.	35
Vermont Yankee	186.	23.5	37
Pilgrim 1	210.	567.	19

Multi Units

Dresden 2 & 3	2200. ⁵	134.	196
Quad Cities 1 & 2	1010.	294	158

¹ included with units 2 & 3

² curie content of shipments for March and July not reported

³ number of shipments in February and March not reported

⁴ plus 17 LSA boxes

⁵ does not include 34 shipments of high level waste containing 2.80E+4 curies

TABLE 19
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1974 - BWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Dresden 1	1	1	1
Big Rock Point	39.4	94.5	4
Humboldt Bay 3	39.3 ²	32.4	3
La Crosse	41.9	471.	5
Oyster Creek 1	1210.	1570.	163
Nine Mile Point 1	542.	1930.	75
Millstone Point 1	838.	257.	NR
Monticello	268.	2480.	47
Vermont Yankee	198.	108.	34
Pilgrim 1	406.	1460.	34
Cooper	379.	17.2	26
Duane Arnold 1	321.	61.4	26
Hatch, Edwin I. 1	128.	8.33	7
FitzPatrick, James A. 2	0	0	0
 <u>Multi Units</u>			
Dresden 2 & 3	2190. ³	5050. ³	627 ³
Quad Cities 1 & 2	831.	735.	NR
Browns Ferry 1 & 2	261.	70.9	60
Peach Bottom 2 & 3	397.	58.	41

¹ included with units 2 & 3

² plus 90 boxes of unspecified size

³ from NUREG 0077

TABLE 20
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1975 - BWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Dresden 1	1	1	1
Big Rock Point	NR	1230.	16
Humboldt Bay 3	127	43.1	7
La Crosse			
Oyster Creek 1	990.	2810.	162
Nine Mile Point 1	489.	3260.	95
Millstone Point 1	1780.	2580.	NR
Monticello	380.	5430.	49
Vermont Yankee	308.	22.5	43
Pilgrim 1	456.	3800.	67
Cooper	290.	266.	36
Duane Arnold 1	262.	79.	22
Hatch, Edwin I. 1	583.	271.	31
FitzPatrick, James A. 2	510.	132.	NR
Brunswick 2	411.	6.96	34
 <u>Multi Units</u>			
Dresden 2 & 3	5850.	7340.	823
Quad Cities 1 & 2	1400.	2410.	NR
Browns Ferry 1 & 2	1270.	1250.	121
Peach Bottom 2 & 3	582.	217.	68

¹ included with units 2 & 3

TABLE 21
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1972 - PWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Yankee (Rowe)	222.	2.31	18
Indian Point 1	191.	157.	NR
San Onofre 1	107.	7.97	NR
Haddam Neck	188.	4770.	21
Ginna, R. E.	366.	1410.	51
Robinson, H. B. ¹	70.6	4.85	5 ¹
Palisades	9.63	1.85	2
Surry 1	160.	1.91E-4	13
Turkey Point 3	0	0	0
Maine Yankee	0	0	0
 <u>Multi Units</u>			
Point Beach 1 & 2	194.	214.	14

¹ Liquid Waste is also trucked offsite ~ 2.47E+5 liters, 9.55 curies tritium, 10.6 curies non-tritium

TABLE 22
SUMMARY OF SOLID RADIOACTIVITY WASTE SHIPPED
IN CALENDAR YEAR 1973 - PWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Yankee (Rowe)	174.	3.39	14
Indian Point 1	1	1	1
San Onofre 1	113.	381.	13
Haddam Neck	159.	571.	11
Ginna, R. E.	198.	599.	29
Robinson, H. B.	292.	96.7	31
Palisades	63. 3	28.6	5
Maine Yankee	67.	3.24	5
Indian Point 2	411.	208.	12 ³
Zion ²	416.	.159	33
Fort Calhoun 1	45.4	.02	2
Prairie Island 1	0	0	0

Multi Units

Point Beach 1 & 2	295.	1830.	19
Surry 1 & 2	365.	1.59	28
Turkey Point 3 & 4	233.	3.98	12
Oconee 1 & 2	263.	32.3	24

¹ included with unit 2

² considered as single unit for 1973, Unit 2 did not achieve criticality until December 24, 1973

³ July to December only

TABLE 23
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1974 - PWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Yankee (Rowe)	218.	127.	24
Indian Point 1	1	1	1
San Onofre	68.3	230.	11
Haddam Neck	204.	942.	24
Ginna, R. E.	275.	614.	26
Robinson, H. B.	353. ²	197.	29
Palisades	234.	26.6	13
Maine Yankee	159.	530.	14
Indian Point 2	445.	61.9	27
Fort Calhoun	323.	10.	18
Kewaunee	0	0	0
Three Mile Island 1	200.	6.06	16
Arkansas One 1	0	0	0
Rancho Seco 1	0 ³	0	0
Calvert Cliffs 1	0	0	0

¹ included with unit 2

² liquid waste shipped offsite- 3.33E+4 liters ; 1.96E-1 Ci H-3, 3.76E+0 non H-3

³ liquid waste shipped offsite- 3.88E+4 liters ; 1.34E-1 Ci H-3, 1.86E-2 non H-3

TABLE 23 (Continued)

SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1974 - PWR

<u>Multi Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Point Beach 1 & 2	132.	2,120.	12
Surry 1 & 2	1,250. ⁴	50.6	68
Turkey Point 3 & 4	449.	44.7	22
Oconee 1, 2 & 3	571.	219.	96
Zion 1 & 2	1,620.	4.65	58 ⁵
Prairie Island 1 & 2	136.	7.61	10

⁴ includes liquid shipped offsite- 5.55E+1 m³ (5.55E+4 liters)

⁵ number of shipments for January to June only

TABLE 24
SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1975 - PWR

<u>Single Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Yankee (Rowe)	238.	3.30	11
Indian Point 1	1	1	1
San Onofre 1	79.6	26.	6
Haddam Neck	624.	1320.	33
Ginna, R. E.	458.	138.	22
Robinson, H. B.	356.	1340.	44
Palisades	801.	210.	57
Maine Yankee	231.	1480.	30
Indian Point 2	622.	2000.	76
Fort Calhoun 1	537.	56.1	38
Keweenaw	15.9	2.12	1
Three Mile Island 1	458.	258.	39
Arkansas One 1	0	0	0
Rancho Seco 1 ²	.011	.115	1
Calvert Cliffs 1	0	0	0
Cook, Donald C. 1	172.	.537	9
Millstone Point 2	0	0	0

¹ included with unit 2

² liquid waste shipped offsite- 3.70E+5 liters ; 1.55E+1 Ci H-3, 1.09E+0 non H-3

TABLE 24 (Continued)

SUMMARY OF SOLID RADIOACTIVE WASTE SHIPPED
IN CALENDAR YEAR 1975 - PWR

<u>Multi Units</u>	<u>Volume (m³)</u>	<u>Activity (Curies)</u>	<u>Shipments</u>
Point Beach 1 & 2	408.	8230.	29
Surry 1 & 2	9210. ³	2640.	94
Turkey Point 3 & 4	889.	104.	50
Oconee 1, 2 & 3	1420.	1680.	104
Zion 1 & 2	1580.	15.4	105
Prairie Island 1 & 2	150.	34.7	13

³ includes liquid waste shipped offsite- 1.54E+2 m³ (1.54E+5 liters)

SECTION V
INDIVIDUAL ISOTOPIC SUMMARIES

TABLE 25
SUMMARY OF KRYPTON 85 RELEASES IN AIRBORNE
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	1972	1973	1974	1975
Dresden 1	NR	NR	NR	NR
Big Rock Point	440	1200	448	160
Humboldt Bay 3	NR	NR	NR	NR
La Crosse	NR	NR	NR	NR
Oyster Creek 1	NR	NR	NR	NR
Nine Mile Point 1	NR	NR	NR	NR
Millstone Point 1	NR	NR	NR	NR
Monticello	5790	8680	9740	16600
Vermont Yankee	NR	NR	254	450
Pilgrim 1	NR	NR	NR	NR
Cooper	--	--	3.21E-4	37.6
Duane Arnold	--	--	NR	NR
Hatch, Edwin I, 1	--	--	1.51E-5	7.91E-4
FitzPatrick, James A. 2	--	--	ND	NR
Brunswick 2	--	--	--	ND
<u>Multi Units</u>				
Dresden 2 & 3	1	NR	NR	NR
Quad Cities 1 & 2	NR	5800	6600	7330
Browns Ferry 1 & 2	--	--	728	6890
Peach Bottom 2 & 3	--	--	NR	NR

¹ detailed isotopic analysis not given

TABLE 26

SUMMARY OF XENON 133 RELEASES IN AIRBORNE
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Dresden 1	NR	24,000 ¹	2,100	24,900
Big Rock Point	21,000	25,600	16,500	5,790
Humboldt Bay 3	17,000	23,800	36,200	7,160
La Crosse	1,340	4,090	1,560	2,290
Oyster Creek 1	151,000	126,000	22,600	9,290
Nine Mile Point 1	65,000	82,600	59,300	128,000
Millstone Point 1	147,000	7,220	255,000	820,000
Monticello	114,000	98,600	216,000	110,000
Vermont Yankee	11,700	46,100	22,200	256
Pilgrim 1	2,990	45,400	81,400	NR
Cooper	--	--	14.4	4,900
Duane Arnold 1	--	--	7.7	336
Hatch, Edwin I. 1	--	--	1.11	2.46
FitzPatrick, James A. 2	--	--	--	610 ³
Brunswick 2	--	--	--	ND
 <u>Multi Units</u>				
Dresden 2 & 3	2	64,000 ¹	83,800	73,500
Quad Cities 1 & 2	31,400	218,000	193,000	35,100
Browns Ferry 1 & 2	--	--	167	1,610
Peach Bottom 2 & 3	--	--	NR	NR

¹ July to December only, monitor inoperative during January to June

² detailed isotopic analysis not given

³ stack only

TABLE 27
SUMMARY OF IODINE 131 RELEASES IN AIRBORNE
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Dresden 1	NR	.465	.427	.60
Big Rock Point	.122	4.60	.0901	.0219
Humboldt Bay 3	.40	.174	.503	.207
La Crosse	.693	.177	.0327	.0873
Oyster Creek 1	6.25	6.73	3.31	5.46
Nine Mile Point 1	.893	1.96	.719	2.35
Millstone Point 1	1.23	.154	3.18	9.73
Monticello	.575	1.20	5.69	3.54
Vermont Yankee	.171	.0465	.351	.00281
Pilgrim 1	.0308	.456	1.44	2.19
Cooper	--	--	.0127	.0228
Duane Arnold 1	--	--	.00273	.0206
Hatch, Edwin I. 1	--	--	3.40E-5	1.16E-4
FitzPatrick, James A. 2	--	--	ND	NR
Brunswick 2	--	--	--	6.08E-4

Multi Units

Dresden 2 & 3	5.08	4.90 ¹	3.87	.812
Quad Cities 1 & 2	.730 ¹	5.49	8.80	.978 ²
Browns Ferry 1 & 2	--	--	.00627	.189
Peach Bottom 2 & 3	--	--	NR	NR

¹ July to December only

² does not include I-131 released in particulate form - 2.30E-2 curies

TABLE 28

SUMMARY OF COBALT 58 RELEASES IN LIQUID
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	1972	1973	1974	1975
Dresden 1	NR	NR	.00603 ²	.093
Big Rock Point	.011	.029	NR	.000851
Humboldt Bay 3	.011	.0107	.00306	.00324
La Crosse	27.1	11.8	6.81	9.12
Oyster Creek 1	.153	.043	.0092	.0065
Nine Mile Point 1	.725	0	.015	.226
Millstone Point 1	1.35	.417	.497	.594
Monticello	7.80E-7	0	0	0
Vermont Yankee	0	NR	0	NR
Pilgrim 1	.157	.0499	.296	.0608
Cooper	--	--	.565	.114
Duane Arnold 1	--	--	.00012	5.35E-4
Hatch, Edwin I. 1	--	--	2.71E-4	.00701
FitzPatrick, James A. 2	--	--	NR	1.63
Brunswick 2	--	--	--	.345
<u>Multi Units</u>				
Dresden 2 & 3	1	.144 ²	.227	.014
Quad Cities 1 & 2	.108	.97	.43	.0921
Browns Ferry 1 & 2	--	--	.00629	.0357
Peach Bottom 2 & 3	--	--	.0447	.0479

¹ detailed isotopic analysis not given² July to December only

TABLE 29
SUMMARY OF COBALT 60 RELEASES IN LIQUID
RELEASES FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Dresden 1	NR	NR	.724 ²	.43
Big Rock Point	.085	.21	.0989	.344
Humboldt Bay 3	.084	.158	.28	.114
La Crosse	1.82	1.26	.528	.649
Oyster Creek 1	1.68	.272	.0735	.0744
Nine Mile Point 1	9.10	4.99	5.16	3.77
Millstone Point 1	2.82	5.39	9.67	8.67
Monticello	3.80E-7	0	0	0
Vermont Yankee	0	NR	0	1.97E-6
Pilgrim 1	8.58E-4	.00498	.955	.351
Cooper	--	--	.0766	.236
Duane Arnold 1	--	--	3.40E-5	4.19E-4
Hatch, Edwin I. 1	--	--	1.70E-6	.00239
FitzPatrick, James A. 2	--	--	NR	.403
Brunswick 2	--	--	--	.0268
 <u>Multi Units</u>				
Dresden 2 & 3	1	2.09 ²	12.3	.32
Quad Cities 1 & 2	.0568	.83	3.01	1.31
Browns Ferry 1 & 2	--	--	.00775	.0384
Peach Bottom 2 & 3	--	--	.00749	.0183

¹ detailed isotopic analysis not given

² July to December only

TABLE 30
SUMMARY OF STRONTIUM 90 RELEASES IN LIQUID
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Dresden 1	NR	NR	.00192 ³	.075
Big Rock Point	.0031	.00011	NR	.00177
Humboldt Bay 3	.0033	.0116	.0177	.00628
La Crosse	1.33E-10	.021	.012	.023
Oyster Creek 1	.39 ¹	.028	.0062	.0006
Nine Mile Point 1	.025	0	.123	.047
Millstone Point 1	.216	.0202	.205	.289
Monticello	1.00E-8	0	0	0
Vermont Yankee	0	NR	0	NR
Pilgrim 1	.00078	3.16E-5	.00271	.0217
Cooper	--	--	.00085	.000877
Duane Arnold 1	--	--	NR	NR
Hatch, Edwin I. 1	--	--	1.68E-8	4.88E-6
FitzPatrick, James A. 2	--	--	NR	.00299
Brunswick 2	--	--	--	.00449
 <u>Multi Units</u>				
Dresden 2 & 3	2	.01 ³	.0578	.0084
Quad Cities 1 & 2	.00104	.0025	.0134 ⁴	.0106
Browns Ferry 1 & 2	---	--	.00259	.00324
Peach Bottom 2 & 3	--	--	NR	.00025

¹ includes SR-89

² detailed isotopic analysis not given

³ July to December only

⁴ SR-90 for June and December was
not available

TABLE 31
SUMMARY OF IODINE 131 RELEASES IN LIQUID
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Dresden 1	NR	NR	.0341 ²	,00096
Big Rock Point	.0516	.063	.00523	.00803
Humboldt Bay 3	.06	.0736	.0336	.314
La Crosse	6.08	3.13	.474	.995
Oyster Creek 1	.452	.082	.0142	.0589
Nine Mile Point 1	3.43	2.50	1.01	.514
Millstone Point 1	11.4	.15	13.4	15.1
Monticello	6.10E-7	0	0	0
Vermont Yankee	0	NR	0	NR
Pilgrim 1	.419	.332	.171	.265
Cooper	--	--	.00279	.00717
Duane Arnold 1	--	--	NR	NR
Hatch, Edwin I. 1	--	--	1.36E-4	7.26E-5
FitzPatrick, James A. 2	--	--	NR	.00399
Brunswick 2	--	--	--	6.31E-4
 <u>Multi Units</u>				
Dresden 2 & 3	1	1.41 ²	.554	.015
Quad Cities 1 & 2	.75	3.80	2.09	.18
Browns Ferry 1 & 2	--	--	.00519	.051
Peach Bottom 2 & 3	--	--	NR	.0256

¹ detailed isotopic analysis not given

² July to December only

TABLE 32
SUMMARY OF CESIUM 134 RELEASES IN LIQUID
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	1972	1973	1974	1975
Dresden 1	NR	NR	.672 ²	.053
Big Rock Point	.29	.24	.0752	.167
Humboldt Bay 3	.237	.645	1.37	.963
La Crosse	2.86	5.66	1.51	.781
Oyster Creek 1	2.06	.083	.0256	.0667
Nine Mile Point 1	3.90	9.01	4.64	4.94
Millstone Point 1	8.84	8.63	72.1	61.8
Monticello	ND	0	0	0
Vermont Yankee	0	NR	0	6.80E-8
Pilgrim 1	NR	1.89E-4	.499	.21
Cooper	--	--	.0022	.00506
Duane Arnold 1	--	--	1.50E-6	4.45E-5
Hatch, Edwin I. 1	--	--	1.24E-4	2.03E-4
FitzPatrick, James A. 2	--	--	NR	.0119
Brunswick 2	--	--	--	2.47E-5
 <u>Multi Units</u>				
Dresden 2 & 3	1	1.17 ²	2.77	.0039
Quad Cities 1 & 2	ND	.21	2.95	1.83
Browns Ferry 1 & 2	--	--	.00414	.0379
Peach Bottom 2 & 3	--	--	NR	.219

¹ detailed isotopic analysis not given

² July to December only

TABLE 33
SUMMARY OF CESIUM 137 RELEASES IN LIQUID
EFFLUENTS FROM BWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Dresden 1	NR	NR	1.37 ²	.078
Big Rock Point	.30	.51	.184	.516
Humboldt Bay 3	.576	.933	2.10	2.08
La Crosse	5.33	10.1	2.72	1.41
Oyster Creek 1	3.05	.084	.015	.0821
Nine Mile Point 1	10.3	19.4	9.77	9.04
Millstone Point 1	16.4	16.7	95.2	84.5
Monticello	8.30E-7	0	0	0
Vermont Yankee	0	NR	0	1.74E-7
Pilgrim 1	NR	.0358	1.58	.521
Cooper	--	--	.00193	.00321
Duane Arnold 1	--	--	2.60E-6	7.67E-5
Hatch, Edwin I. 1	--	--	4.55E-6	1.69E-5
FitzPatrick, James A. 2	--	--	NR	.00144
Brunswick 2	--	--	--	4.26E-5
 <u>Multi Units</u>				
Dresden 2 & 3	¹	4.24 ²	6.79	.036
Quad Cities 1 & 2	ND	.530	8.10	3.10
Browns Ferry 1 & 2	--	--	.00533	.0938
Peach Bottom 2 & 3	--	--	NR	.00387

¹ detailed isotopic analysis not given

² July to December only

TABLE 34
SUMMARY OF KRYPTON 85 RELEASES IN AIRBORNE
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	1.60 ¹	.232 ²	1.47	2.72
Indian Point 1	NR	NR	NR	NR
San Onofre 1	339.	54.6	63.9	3.61
Haddam Neck	109.	11.2	4.01	241.
Ginna, R. E.	1,140.	60.3	8.90	32.5
Robinson, H. B.	NR	.00937	14.7	79.9
Palisades	NR	2.40	ND	4.78
Maine Yankee	ND	1.51	786.	140.
Indian Point 2	--	NR	NR	NR
Fort Calhoun 1	--	6.17	.325 ¹	< 4.91
Kewaunee	--	--	ND	ND
Three Mile Island 1	--	--	ND	.286
Arkansas One 1	--	--	.056	3.15
Rancho Seco 1	--	--	8.72E-4	5.50E-4
Calvert Cliffs 1	--	--	NR	.812
Cook, Donald C. 1	--	--	--	NR
Millstone Point 2	--	--	--	< 3.00E-6

¹ July to December only

² June to November only

TABLE 34 (Continued)

SUMMARY OF KRYPTON 85 RELEASES IN AIRBORNE
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	97.0	232.	23.1	44.8
Surry 1 & 2	5.51E-4	2.62	8.12	ND
Turkey Point 3 & 4	.0188	3.73	292.	318.
Oconee 1, 2 & 3	--	.0886	.734	7.04
Zion 1 & 2	--	ND	ND	.768
Prairie Island 1 & 2	--	ND	5.36E-4	ND

TABLE 35

**SUMMARY OF XENON 133 RELEASES IN AIRBORNE
EFFLUENTS FROM PWRs FOR 1972 TO 1975**

<u>Single Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	10.2 ¹	26.6 ²	16.4	14.5
Indian Point 1	NR	NR	NR	NR
San Onofre 1	13,300.	7,500.	1,420.	1,110.
Haddam Neck	494.	17.8	2.34	182.
Ginna, R. E.	10,100.	440.	630.	10,200.
Robinson, H. B.	NR	1,650.	2,450.	1,000.
Palisades	409.	420.	.0167	2,520.
Maine Yankee	2.05	158.	6,220.	3,930.
Indian Point 2	--	NR	NR	NR
Fort Calhoun 1	--	23.6	157. ¹	412.
Keweenaw	--	--	2,690.	2,070.
Three Mile Island 1	--	--	891.	22.8
Arkansas One 1	--	--	193.	969.
Rancho Seco 1	--	--	.00203	.0105
Calvert Cliffs 1	--	--	87.7	7,420.
Cook, Donald C. 1	--	--	--	2.43
Millstone Point 2	--	--	--	ND

¹ July to December only

² June to November only

TABLE 35 (Continued)

**SUMMARY OF XENON 133 RELEASES IN AIRBORNE
EFFLUENTS FROM PWRs FOR 1972 TO 1975**

<u>Multi Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	1,950.	3,650.	6,040.	20,500.
Surry 1 & 2	.0145	861.	54,600.	9,310.
Turkey Point 3 & 4	1.88	464.	3,980.	12,400.
Oconee 1, 2 & 3	--	8,630.	18,600.	13,800.
Zion 1 & 2	--	3.97	2,880.	42,900.
Prairie Island 1 & 2	--	7.00	357.	2,130.

TABLE 36
SUMMARY OF IODINE 131 RELEASES IN AIRBORNE
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	2.17E-4 ¹	.00195 ²	.00071	.00219
Indian Point 1	.0595	.012	.09	.0104
San Onofre 1	4.42E-5	.423	1.88E-4	.0045
Haddam Neck	.01	.00129	4.57E-8	8.91E-4
Ginna, R. E.	.0335	5.31E-4	2.82E-4	.0212
Robinson, H. B.	NR	.296	.0463	.0179
Palisades	.0087	.285	.00995	.375
Maine Yankee	1.71E-6	.00163	.116	.00521
Indian Point 2	--	2.90E-4	.369	.365
Fort Calhoun 1	--	4.30E-5	4.22E-4	.00658
Kewaunee	--	--	.024	.0138
Three Mile Island 1	--	--	.00283	.00092
Arkansas One 1	--	--	.053	< .00728
Rancho Seco 1	--	--	ND	.00019
Calvert Cliffs 1	--	--	8.32E-4	.0219
Cook, Donald C. 1	--	--	--	1.49E-4
Millstone Point 2	--	--	--	2.37E-5

¹ July to December only

² June to November only

TABLE 36 (Continued)

**SUMMARY OF IODINE 131 RELEASES IN AIRBORNE
EFFLUENTS FROM PWRs FOR 1972 TO 1975**

<u>Multi Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	.0115	.0107	.0531	.0241
Surry 1 & 2	1.21E-5	.0422	.102	.0456
Turkey Point 3 & 4	6.96E-5	.0547	3.41	.416
Oconee 1, 2 & 3	--	.0123	.0317	.00887
Zion 1 & 2	--	6.70E-7	.0142	.134
Prairie Island 1 & 2	--	1.34E-5	4.49E-4	.0184

TABLE 37

SUMMARY OF COBALT 58 RELEASES IN LIQUID
EFFLUENTS FROM PWRS FOR 1972 TO 1975

<u>Single Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	6.00E-5 ¹	ND ²	1.21E-4	6.53E-4
Indian Point 1	.35	.0321	.123	.0971
San Onofre 1	1.52	1.31	.353	.270
Haddam Neck	.971	.757	.423	.328
Ginna, R. E.	.0079	.00327	.0135	.00929
Robinson, H. B.	NR	.0846	.215	.105
Palisades	3.16	10.2	.701	.149
Maine Yankee	.00548	.0262	.282	.23
Indian Point 2	--	2.31 ³	1.35	.469
Fort Calhoun 1	--	4.69E-5	.135	.163
Kewaunee	--	--	< .291 ⁴	.194
Three Mile Island 1	--	--	.0179	.0518
Arkansas One 1	--	--	.033	1.94
Rancho Seco 1	--	--	ND	2.87E-4
Calvert Cliffs 1	--	--	NR	.563
Cook, Donald C. 1	--	--	--	.159
Millstone Point 2	--	--	--	.014

¹ July to December only² June to November only³ Co-58 release reported is greater than total release⁴ Calculated value based on concentration of < 1.0E-5 μ Ci/ml for March to June

TABLE 37 (Continued)

SUMMARY OF COBALT 58 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	.0111	2.07E-4	.00125	.335
Surry 1 & 2	.0605	.0443	1.93	2.46
Turkey Point 3 & 4	.00466	.0109	.157	.208
Oconee 1, 2 & 3	--	.485	.468	2.21
Zion 1 & 2	--	ND	.0049	.0038
Prairie Island 1 & 2	--	ND	.00026	.402

TABLE 38

SUMMARY OF COBALT 60 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	1.07E-4 ¹	3.11E-5 ²	3.96E-4	2.38E-4
Indian Point 1	1.23	.108	.156	.0535
San Onofre 1	.195	.109	.0697	.0236
Haddam Neck	1.08	.588	.679	.332
Ginna, R. E.	.0421	.00924	.0319	.0208
Robinson, H. B.	NR	.0811	.162	.0805
Palisades	.0718	.458	.43	.118
Maine Yankee	2.04E-4	.0115	.02	.0348
Indian Point 2	--	.0664	.139	2.42
Fort Calhoun 1	--	ND	.00287	.005
Kewaunee	--	--	< .0302 ³	.0148
Three Mile Island 1	--	--	1.31E-4	.00385
Arkansas One 1	--	--	.00057	.046
Rancho Seco 1	--	--	ND	ND
Calvert Cliffs 1	--	--	NR	.0291
Cook, Donald C. 1	--	--	--	.0147
Millstone Point 2	--	--	--	7.11E-4

¹ July to December only² June to November only³ calculated value based on concentration of < 1.0E-5 μ Ci/ml for March to June

TABLE 38 (Continued)

SUMMARY OF COBALT 60 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	< .002	2.32E-4	2.12E-4	.0793
Surry 1 & 2	.0102	.00696	1.00	1.51
Turkey Point 3 & 4	7.41E-4	.00153	.0286	.0868
Oconee 1, 2 & 3	--	.0452	.028	.559
Zion 1 & 2	--	ND	ND	.0019
Prairie Island 1 & 2	--	ND	4.00E-5	.0313

TABLE 39
SUMMARY OF STRONTIUM 90 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	5.00E-6 ¹	ND ²	7.16E-5	.00029
Indian Point 1	< .0123	6.04E-4	7.98E-4	< .00111
San Onofre 1	NR	.0018	.00456	.0026
Haddam Neck	ND	3.14E-4	9.11E-4	.00558
Ginna, R. E.	NR	NR	ND	NR
Robinson, H. B.	NR	.0249	.00107	ND
Palisades	4.00E-5	.00163	.00226	NR
Maine Yankee	ND	ND	NR	5.87E-4 ⁴
Indian Point 2	--	8.93E-4	2.65E-4	.00137
Fort Calhoun	--	1.69E-5	6.95E-5	< 3.53E-6
Kewaunee	--	--	.00053 ³	8.82E-5
Three Mile Island 1	--	--	ND	1.15E-4
Arkansas One 1	--	--	.0025	< .0126
Rancho Seco 1	--	--	ND	ND
Calvert Cliffs 1	--	--	4.33E-5	.00275
Cook, Doanld C. 1	--	--	--	NR
Millstone Point 1	--	--	--	5.21E-5

¹ July to December only

² June to November only

³ For the first half of 1974 Sr-89 and Sr-90 were combined; < 2.58E-4 Ci

⁴ January to September

TABLE 39 (Continued)

SUMMARY OF STRONTIUM 90 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	< .001	ND	1.60E-4	.00234 ⁵
Surry 1 & 2	4.66E-6	.00013	.00149	.00134
Turkey Point 3 & 4	1.03E-4	2.64E-5	1.93E-4	3.13E-4
Oconee 1, 2 & 3	--	ND	.00195	6.36E-4
Zion 1 & 2	--	ND	ND	NR
Prairie Island 1 & 2	--	ND	ND	ND

⁵ through November, December not available

TABLE 40
SUMMARY OF IODINE 131 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	.00153 ¹	.0014 ²	5.86E-4	.00121
Indian Point 1	2.17	.0603	.396	.163
San Onofre 1	1.95	.270	.047	5.95E-5
Haddam Neck	.301	.0548	9.01E-5	.00767
Ginna, R. E.	.00452	6.85E-4	9.80E-5	.0165
Robinson, H. B.	NR	.0407	.823	.0437
Palisades	.22	.365	.00559	.186
Maine Yankee	.00454	.00344	.358	.0593
Indian Point 2	--	.162	2.18	.331
Fort Calhoun 1	--	.00448	.0166	< .0636
Keweenaw	--	--	.0211	.0717
Three Mile Island 1	--	--	.00921	.0046
Arkansas One 1	--	--	.019	.28
Rancho Seco 1	--	--	ND	ND
Calvert Cliffs 1	--	--	.0053	.235
Cook, Doanld C. 1	--	--	--	.00182
Millstone Point 2	--	--	--	9.27E-4

¹ July to December only

² June to November only

TABLE 40 (Continued)

SUMMARY OF IODINE 131 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	.74	1.20E-5	.0182	.252
Surry 1 & 2	.00129	.0443	11.0	2.43
Turkey Point 3 & 4	7.85E-4	.0146	1.07	.425
Oconee 1, 2 & 3	--	1.55	1.10	1.16
Zion 1 & 2	--	ND	ND	ND
Prairie Island 1 & 2	--	ND	ND	.00458

TABLE 41
SUMMARY OF CESIUM 134 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	8.00E-6 ¹	2.94E-5 ²	.00204	.00059
Indian Point 1	4.49	.33	.195	.314
San Onofre 1	3	3	3	.267
Haddam Neck	NR	NR	.00297	.039
Ginna, R. E.	.0439	.0168	.0126	.00585
Robinson, H. B.	NR	.0491	.135	.0674
Palisades	.0006	.882	.701	.045
Maine Yankee	ND	ND	.734	.200
Indian Point 2	--	.0242	.113	.367
Fort Calhoun 1	--	ND	ND	.00212
Kewaunee	--	--	< .0143 ⁴	.0309
Three Mile Island 1	--	--	3.29E-5	3.12E-4
Arkansas One 1	--	--	NR	.0765
Rancho Seco 1	--	--	ND	ND
Calvert Cliffs 1	--	--	NR	4.36E-5
Cook, Donald C. 1	--	--	--	4.46E-5
Millstone Point 2	--	--	--	9.03E-4

¹ July to December only

² June to November only

³ Included with Cs-137

⁴ calculated value based on concentration of < 1.0E-5 μ Ci/ml for March to June

TABLE 41 (Continued)

SUMMARY OF CESIUM 134 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	.026	.325	.0384	.0206
Surry 1 & 2	ND	.00826	3.73	8.13
Turkey Point 3 & 4	1.57E-4	6.50E-4	.0356	.0475
Oconee 1, 2 & 3	--	ND	.0400	.166
Zion 1 & 2	--	ND	ND	ND
Prairie Island 1 & 2	--	ND	ND	.00173

TABLE 42
SUMMARY OF CESIUM 137 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Single Units</u>	Releases in Curies			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Yankee (Rowe)	1.70E-5 ¹	1.31E-4 ³	.00321	6.76E-4
Indian Point 1	6.94	.514	.459	.613
San Onofre 1	8.65 ²	10.6 ²	3.97 ²	.595
Haddam Neck	.706	.312	.272	.159
Ginna, R. E.	.0701	.0344	.0386	.0206
Robinson, H. B.	NR	.0997	.152	.0755
Palisades	.0138	1.88	1.61	.143
Maine Yankee	ND	ND	.987	1.54
Indian Point 2	--	.051	.239	.830
Fort Calhoun 1	--	ND	5.02E-4	.00556
Kewaunee	--	--	< .0204 ⁴	.105
Three Mile Island 1	--	--	.00352	.00339
Arkansas One 1	--	--	1.90E-4	.256
Rancho Seco 1	--	--	ND	ND
Calvert Cliffs 1	--	--	.00632	.112
Cook, Donald C. 1	--	--	--	3.32E-4
Millstone Point 2	--	--	--	.00143

¹ July to December only

² Includes Cs-134

³ June to November only

⁴ Calculated value based on concentration of < 1.0E-5 μ Ci/ml for March to June

TABLE 42 (Continued)

SUMMARY OF CESIUM 137 RELEASES IN LIQUID
EFFLUENTS FROM PWRs FOR 1972 TO 1975

<u>Multi Units</u>	<u>Releases in Curies</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Point Beach 1 & 2	.0382	.421	.0982	.0396
Surry 1 & 2	ND	.0235	6.83	14.0
Turkey Point 3 & 4	1.71E-4	.00121	.0674	.0739
Oconee 1, 2 & 3	--	.011	.0602	.436
Zion 1 & 2	--	ND	ND	7.60E-4
Prairie Island 1 & 2	--	ND	ND	.00306