

**RADIOACTIVE MATERIALS RELEASED  
FROM NUCLEAR POWER PLANTS  
1974**

Office of Management Information and Program Control  
U.S. Nuclear Regulatory Commission

8007240310

Available from  
National Technical Information Service  
Springfield, Virginia 22161  
Price: Printed Copy \$5.50; Microfiche \$2.25

**RADIOACTIVE MATERIALS RELEASED  
FROM NUCLEAR POWER PLANTS  
1974**

Manuscript Completed: May 1976

Date Published: June 1976

Performance Evaluation Branch  
Office of Management Information and Program Control  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

## ABSTRACT

Measured releases of radioactive materials in airborne and liquid effluents and solid waste from nuclear power plants during 1974 are summarized. This report supplements the earlier annual reports issued by the Atomic Energy Commission and the Nuclear Regulatory Commission. The 1974 release data are compared with previous year releases in tabular form. Data covering specific isotopes are summarized.

## TABLE OF CONTENTS

|  | <u>Page No.</u> |
|--|-----------------|
| ABSTRACT .....                         | i               |
| 1.0 Introduction .....                 | 1.0             |
| 1.1 Purpose .....                      | 1.0             |
| 1.2 Scope .....                        | 1.0             |
| 1.3 Source of Data .....               | 1.0             |
| <br>                                   |                 |
| 2.0 Tabulated Data .....               | 2.0             |
| 2.1 Energy Generation .....            | 2.0             |
| 2.2 Airborne and Liquid Effluent ..... | 2.0             |
| 2.3 Solid Waste .....                  | 3.0             |
| 2.4 Individual Plant Summaries .....   | 3.0             |
| 2.5 Numerical Notation .....           | 3.0             |
| <br>                                   |                 |
| 3.0 Summary .....                      | 4.0             |
| <br>                                   |                 |
| Individual Plant Summaries             |                 |
| Arkansas 1 .....                       | 20.0            |
| Big Rock Point 1 .....                 | 23.0            |
| Browns Ferry 1 .....                   | 26.0            |
| Connecticut Yankee .....               | 29.0            |
| Cooper Station .....                   | 31.0            |

|                           | <u>Page No.</u> |
|---------------------------|-----------------|
| Dresden 1 .....           | 34.0            |
| Dresden 2, 3 .....        | 37.0            |
| Fort Calhoun .....        | 40.0            |
| R. E. Ginna .....         | 42.0            |
| Humboldt Bay .....        | 44.0            |
| Indian Point 1 .....      | 47.0            |
| Indian Point 2 .....      | 49.0            |
| Kewaunee .....            | 51.0            |
| LaCrosse .....            | 54.0            |
| Maine Yankee .....        | 57.0            |
| Millstone Point 1 .....   | 59.0            |
| Monticello .....          | 62.0            |
| Nine Mile Point 1 .....   | 64.0            |
| Oconee 1, 2, 3 .....      | 67.0            |
| Oyster Creek .....        | 70.0            |
| Palisades .....           | 73.0            |
| Peach Bottom 2, 3 .....   | 76.0            |
| Pilgrim 1 .....           | 78.0            |
| Point Beach 1, 2 .....    | 81.0            |
| Prairie Island 1, 2 ..... | 84.0            |
| Quad Cities 1, 2 .....    | 86.0            |
| H. B. Robinson .....      | 89.0            |
| San Onofre 1 .....        | 92.0            |

|                           | <u>Page No.</u> |
|---------------------------|-----------------|
| Surry 1, 2 .....          | 94.0            |
| Three Mile Island 1 ..... | 97.0            |
| Turkey Point 3, 4 .....   | 100.0           |
| Vermont Yankee .....      | 103.0           |
| Yankee-Rowe .....         | 105.0           |
| Zion 1, 2 .....           | 108.0           |

LIST OF TABLES

|  | <u>Page No.</u> |
|--|-----------------|
| TABLE 1 Power Generation Comparison By Year, Boiling<br>Water Reactors .....                                 | 5.0             |
| TABLE 2 Power Generation Comparison By Year, Pressurized<br>Water Reactors .....                             | 6.0             |
| TABLE 3 Airborne Effluent Comparison By Year, Noble<br>Gases, Boiling Water Reactors .....                   | 8.0             |
| TABLE 4 Airborne Effluent Comparison By Year, Noble<br>Gases, Pressurized Water Reactors .....               | 9.0             |
| TABLE 5 Airborne Effluent Comparison By Year, Halogens<br>and Particulates, Boiling Water Reactors .....     | 10.0            |
| TABLE 6 Airborne Effluent Comparison By Year, Halogens<br>and Particulates, Pressurized Water Reactors ..... | 11.0            |
| TABLE 7 Liquid Effluent Comparison By Year, Tritium,<br>Boiling Water Reactors .....                         | 12.0            |



|          |   |      |
|----------|---|------|
| TABLE 8  | Liquid Effluent Comparison By Year, Tritium,<br>Pressurized Water Reactors .....                                  | 13.0 |
| TABLE 9  | Liquid Effluent Comparison By Year, Mixed<br>Fission and Activation Products, Boiling<br>Water Reactors .....     | 14.0 |
| TABLE 10 | Liquid Effluent Comparison By Year, Mixed<br>Fission and Activation Products, Pressurized<br>Water Reactors ..... | 15.0 |
| TABLE 11 | Solid Waste Summary 1974, Boiling Water Reactors .  | 16.0 |
| TABLE 12 | Solid Waste Summary 1974, Pressurized Water<br>Reactors .....   | 17.0 |
| TABLE 13 | Solid Waste Comparison By Year, Boiling Water<br>Reactors .....   | 18.0 |
| TABLE 14 | Solid Waste Comparison By Year, Pressurized<br>Water Reactors .....   | 19.0 |

## 1.0 Introduction

### 1.1 Purpose

This report by the U.S. Nuclear Regulatory Commission summarizes the measured data on radioactive materials in effluents from licensed operating commercial nuclear power plants during 1974. This information supplements the earlier annual reports issued by the Atomic Energy Commission and the Nuclear Regulatory Commission.

### 1.2 Scope

Releases of radioactive materials are governed by 10 CFR Part 20 and by limits established in the Technical Specifications for each facility. Each licensee is required in accordance with 10 CFR 50.36a to report to the NRC the principal radionuclides released to unrestricted areas in liquid and gaseous effluents. This report summarizes data from the 44 licensed nuclear power plants that were declared by the utilities to be in commercial operation as of December 31, 1974. It includes eight new plants that went into operation in 1974 while one, Peach Bottom 1, was not included due to its decommissioning.

### 1.3 Source of Data

The information included in this report was obtained from data reported by the licensees. Individual licensee reports are available in the NRC Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555 and in Public Document Rooms located near each licensed facility. Licensee reports varied in the extent of information provided. These variations

will diminish as more licensees adopt the reporting format of Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," June 1974.

Prior years data used in the comparison tables were obtained from the two previous annual summaries.<sup>1</sup>

## 2.0 Tabulated Data

### 2.1 Energy Generation

Tables 1 and 2 present a summary of the thermal energy generated by each plant during 1974 and previous years back to 1970. The reader is cautioned against making simplistic comparisons of radioactive releases with the energy generated because of the many factors which affect the amount of radioactive materials released; factors such as the condition of the fuel, primary system integrity, effluent and radioactive waste treatment systems and the extent to which these systems are used.

### 2.2 Airborne and Liquid Effluents

Tables 3 through 6 list for each reactor, the measured quantities of total noble gases, halogens, and particulates released in effluents to

---

<sup>1</sup>"Report on Releases of Radioactivity in Effluents and Solid Waste from Nuclear Power Plants for 1972," Directorate of Regulatory Operations, August 1973. "Summary of Radioactivity Released in Effluents from Nuclear Power Plants During 1973," NUREG-75/001, January 1975.

the atmosphere during each of the years 1970 through 1974. Tables 7 through 10 list the total measured quantities of tritium and of mixed fission and activation products released in liquid effluents in each of the years.

### 2.3 Solid Waste

The total volumes, quantities of radioactive materials and the number of shipments of solid waste for each plant during 1974 are summarized in Tables 11 and 12. A comparison for the years 1972 through 1974 is made in Tables 13 and 14.

### 2.4 Individual Plant Summaries

Individual plant summaries are presented in alphabetical order. The summaries include general plant information, power production, effluent and solid waste data, and a summary of specific radionuclides measured in effluents.

### 2.5 Numerical Notation

The following notation is used:

$$1.86 (6) = 1.86 \times 10^6$$

$$1.86 (-3) = 1.86 \times 10^{-3}$$

The "less than" notation (<) is used in the tables to indicate non zero values that are less than the smallest value tabulated; i.e., a reported value of 0.004 may be indicated as < 0.01 if the smallest value tabulated is 0.01.

### 3.0 Summary

The total measured amount of radioactivity released in airborne effluents increased slightly (about 2%) while radioactivity released in liquid effluents decreased (about 6%) in 1974 compared to 1973. In all cases, the total releases were below the limits set forth in applicable regulations and in technical specifications for each plant.

TABLE 1

POWER GENERATION COMPARISON BY YEAR

Terawatt Hours Thermal\*

BOILING WATER REACTORS

| <u>Facility</u>   | <u>Initial<br/>Criticality</u> | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> |
|-------------------|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| Big Rock Point 1  | 9/27/62                        | 1.18        | 1.21        | 1.20        | 1.41        | 1.13        |
| Browns Ferry 1    | 8/17/73                        | -           | -           | -           | 1.37        | 16.38       |
| Cooper Station    | 2/21/74                        | -           | -           | -           | -           | 6.90        |
| Dresden 1         | 10/15/59                       | 4.77        | 2.38        | 3.76        | 2.43        | 1.36        |
| Dresden 2, 3      | 1/7/70<br>1/31/71              | 4.11        | 12.33       | 25.20       | 28.25       | 21.82       |
| Humboldt Bay      | 2/16/63                        | 1.40        | 1.14        | 1.25        | 1.47        | 1.27        |
| Lacrosse          | 7/11/67                        | 0.45        | 0.71        | 0.82        | 0.69        | 1.08        |
| Millstone Point 1 | 10/26/70                       | 0.26        | 11.11       | 9.69        | 5.96        | 11.16       |
| Monticello        | 12/10/70                       | -           | 14.87       | 11.00       | 9.90        | 8.94        |
| Nine Mile Point 1 | 9/5/69                         | 5.94        | 9.94        | 10.01       | 10.97       | 10.51       |
| Oyster Creek      | 5/3/69                         | 10.60       | 11.68       | 12.98       | 10.86       | 11.34       |
| Peach Bottom 2, 3 | 9/16/73<br>8/7/74              | -           | -           | -           | -           | 12.27       |
| Pilgrim 1         | 6/16/72                        | -           | -           | 2.65        | 12.54       | 6.00        |
| Quad Cities 1, 2  | 10/18/71<br>4/26/72            | -           | -           | 12.52       | 31.71       | 26.07       |
| Vermont Yankee    | 3/24/72                        | -           | -           | 1.48        | 6.08        | 8.20        |
| Total             |                                | 28.71       | 65.37       | 92.56       | 123.64      | 144.43      |

\*Terawatt =  $10^{12}$  watts

TABLE 2

POWER GENERATION COMPARISON BY YEAR

Terawatt Hours Thermal\*

PRESSURIZED WATER REACTORS

| <u>Facility</u>        | <u>Initial<br/>Criticality</u> | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> |
|------------------------|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| Arkansas 1             | 8/6/74                         | -           | -           | -           | -           | 1.99        |
| Connecticut Yankee     | 7/24/67                        | 11.41       | 13.42       | 13.78       | 7.73        | 14.16       |
| Fort Calhoun           | 8/6/73                         | -           | -           | -           | 2.03        | 7.58        |
| H. B. Robinson         | 9/20/70                        | 0.06        | 7.85        | 15.54       | 12.46       | 15.55       |
| Indian Point 1         | 8/2/62                         | 0.79        | 2.88        | 2.69        | 0           | 2.92        |
| Indian Point 2         | 5/22/73                        | -           | -           | -           | 1.47        | 11.46       |
| Kewaunee               | 3/7/74                         | -           | -           | -           | -           | 5.03        |
| Maine Yankee           | 10/23/72                       | -           | -           | 1.44        | 10.81       | 11.39       |
| Oconee 1, 2, 3         | 4/19/73<br>11/11/73<br>9/5/74  | -           | -           | -           | 6.62        | 16.98       |
| Palisades              | 5/24/71                        | -           | 0           | 5.91        | 7.80        | 0.40        |
| Point Beach 1, 2       | 11/2/70<br>5/30/72             | 0.63        | 10.03       | 9.96        | 18.43       | 20.35       |
| Prairie Island<br>1, 2 | 12/1/73<br>12/17/74            | -           | -           | -           | -           | 5.26        |
| R. E. Ginna            | 11/8/69                        | 6.84        | 8.50        | 7.71        | 10.75       | 6.71        |
| San Onofre 1           | 6/14/67                        | 9.19        | 9.60        | 8.53        | 7.09        | 9.73        |
| Surry 1, 2             | 7/1/72<br>3/7/73               | -           | -           | 1.29        | 22.65       | 19.16       |
| Three Mile Island 1    | 6/5/74                         | -           | -           | -           | -           | 6.20        |

\*Terawatt =  $10^{12}$  watts

POWER GENERATION COMPARISON BY YEAR

Terawatt Hours Thermal\*

PRESSURIZED WATER REACTORS (Cont'd)

| <u>Facility</u>   | <u>Initial<br/>Criticality</u> | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> |
|-------------------|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| Turkey Point 3, 4 | 10/20/72<br>6/11/73            | -           | -           | 0.29        | 15.30       | 25.47       |
| Yankee Rowe       | 8/19/60                        | 4.13        | 5.02        | 2.40        | 3.57        | 3.07        |
| Zion 1, 2         | 6/19/73<br>12/24/73            | -           | -           | -           | 2.73        | 16.90       |
| Total             |                                | 33.05       | 57.30       | 69.54       | 129.44      | 200.31      |

\*Terawatt =  $10^{12}$  watts



TABLE 3

AIRBORNE EFFLUENT COMPARISON BY YEAR

Noble Gases

Kilocuries

• BOILING WATER REACTORS

| <u>Facility</u>   | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| Big Rock Point 1  | 280         | 284         | 258         | 230         | 188         |
| Browns Ferry 1    | -           | -           | -           | -           | 64          |
| Cooper Station    | -           | -           | -           | -           | 2           |
| Dresden 1         | 900         | 753         | 877         | 840         | 98          |
| Dresden 2, 3      | -           | 580         | 429         | 880         | 627         |
| Humboldt Bay      | 540         | 514         | 430         | 350         | 572         |
| Lacrosse          | 1           | 1           | 31          | 91          | 49          |
| Millstone Point 1 | -           | 276         | 726         | 79          | 912         |
| Monticello        | -           | 76          | 751         | 870         | 1480        |
| Nine Mile Point 1 | 10          | 253         | 517         | 872         | 558         |
| Oyster Creek      | 110         | 516         | 866         | 810         | 279         |
| Peach Bottom 2, 3 | -           | -           | -           | <1          | <1          |
| Pilgrim 1         | -           | -           | 18          | 230         | 546         |
| Quad Cities 1, 2  | -           | -           | 132         | 900         | 950         |
| Vermont Yankee    | -           | -           | 55          | 180         | 64          |
| Total             | 1841        | 3253        | 5090        | 6332        | 6389        |

TABLE 4

AIRBORNE EFFLUENT COMPARISON BY YEAR

Noble Gases

CURIES

PRESSURIZED WATER REACTORS

| Facility            | 1970 | 1971 | 1972 | 1973   | 1974    |
|---------------------|------|------|------|--------|---------|
| Arkansas 1          | -    | -    | -    | -      | 196     |
| Connecticut Yankee  | 1    | 3    | 1    | 32     | 7       |
| Fort Calhoun        | -    | -    | -    | 67     | 303     |
| H. B. Robinson      | -    | <1   | <1   | 3100   | 2310    |
| Indian Point 1      | 2    | <1   | 1    | 122    | 611     |
| Indian Point 2      | -    | -    | -    | 15     | 5580    |
| Kewaunee            | -    | -    | -    | -      | 3350    |
| Maine Yankee        | -    | -    | <1   | 161    | 6360    |
| Oconee 1, 2, 3      | -    | -    | -    | 9300   | 19400   |
| Palisades           | -    | -    | 1    | 454    | <1      |
| Point Beach 1, 2    | -    | 1    | 3    | 5750   | 9740    |
| Prairie Island 1, 2 | -    | -    | -    | 9      | 358     |
| R. E. Ginna         | 10   | 32   | 12   | 576    | 757     |
| San Onofre 1        | <1   | 8    | 19   | 11000  | 1780    |
| Surry 1, 2          | -    | -    | <1   | 866    | 55000   |
| Three Mile Island 1 | -    | -    | -    | -      | 916     |
| Turkey Point 3, 4   | -    | -    | -    | 530    | 4660    |
| Yankee Rowe         | <1   | <1   | <1   | 35     | 40      |
| Zion 1, 2           | -    | -    | -    | 4      | 2990    |
| Total               | 13   | 44.0 | 37   | 32,021 | 114,358 |

TABLE 5

AIRBORNE EFFLUENT COMPARISON BY YEAR

Halogens and Particulates\*  
(Half-life greater than or equal to 8 days)

CURIES

BOILING WATER REACTORS

| Facility          | 1970  | 1971  | 1972  | 1973  | 1974  |
|-------------------|-------|-------|-------|-------|-------|
| Big Rock Point 1  | 0.13  | 0.61  | 0.15  | 4.60  | 0.16  |
| Browns Ferry 1    | -     | -     | -     | -     | 0.12  |
| Cooper Station    | -     | -     | -     | -     | 0.24  |
| Dresden 1         | 3.3   | 0.67  | 2.75  | 0.04  | 0.68  |
| Dresden 2,3       | 1.6   | 8.68  | 5.89  | 6.70  | 6.50  |
| Humboldt Bay      | 0.35  | 0.3   | 0.48  | 0.29  | 0.84  |
| Lacrosse          | <0.06 | <0.01 | 0.71  | 0.20  | 0.04  |
| Millstone Point 1 | -     | 4.0   | 1.32  | 0.20  | 3.26  |
| Monticello        | -     | 0.05  | 0.59  | 1.20  | 5.69  |
| Nine Mile Point 1 | <0.01 | 0.06  | 0.97  | 1.98  | 0.89  |
| Oyster Creek      | 0.32  | 2.14  | 6.48  | 7.62  | 3.51  |
| Peach Bottom 2, 3 | -     | -     | -     | <0.01 | 0.01  |
| Pilgrim 1         | -     | -     | 0.03  | 0.47  | 1.45  |
| Quad Cities 1, 2  | -     | -     | 0.75  | 5.5   | 8.88  |
| Vermont Yankee    | -     | -     | 0.17  | 0.07  | 0.36  |
| Total             | 5.76  | 16.51 | 20.29 | 28.27 | 32.63 |

\*Includes I-131

TABLE 6

AIRBORNE EFFLUENT COMPARISON BY YEAR

Halogens and Particulates\*  
(Half-life greater than or equal to 8 days)

CURIES

PRESSURIZED WATER REACTORS

| Facility            | 1970  | 1971  | 1972  | 1973  | 1974  |
|---------------------|-------|-------|-------|-------|-------|
| Arkansas 1          | -     | -     | -     | -     | 0.05  |
| Connecticut Yankee  | <0.01 | 0.03  | 0.02  | 0.05  | <0.01 |
| Fort Calhoun        | -     | -     | -     | <0.01 | <0.01 |
| H. B. Robinson      | -     | 0     | 0.03  | 0.30  | 0.05  |
| Indian Point 1      | 0.08  | 0.21  | 0.93  | 0.01  | 0.11  |
| Indian Point 2      | -     | -     | -     | <.01  | 0.43  |
| Kewaunee            | -     | -     | -     | -     | 0.02  |
| Maine Yankee        | -     | -     | <0.01 | 0.94  | 0.05  |
| Oconee 1, 2 3       | -     | -     | -     | 0.01  | 0.03  |
| Palisades           | -     | -     | <0.01 | 0.31  | 0.01  |
| Point Beach 1, 2    | -     | <0.01 | 0.03  | 0.55  | 0.16  |
| Prairie Island 1, 2 | -     | -     | -     | <0.01 | <0.01 |
| R. E. Ginna         | 0.05  | 0.17  | 0.04  | <0.01 | <0.01 |
| San Onofre 1        | <0.01 | <0.01 | <0.01 | 1.61  | <0.01 |
| Surry 1, 2          | -     | -     | <0.01 | 0.04  | 0.14  |
| Three Mile Island 1 | -     | -     | -     | -     | <0.01 |
| Turkey Point 3, 4   | -     | -     | -     | 0.06  | 3.63  |
| Yankee Rowe         | <0.01 | <0.01 | <0.01 | 0.19  | 0.53  |
| Zion 1, 2           | -     | -     | -     | <0.01 | 0.01  |
| Total               | 0.13  | 0.41  | 1.05  | 4.07  | 5.22  |

\* Includes I-131.

TABLE 7

LIQUID EFFLUENT COMPARISON BY YEAR

Tritium

CURIES

BOILING WATER REACTORS

| <u>Facility</u>   | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| Big Rock Point 1  | 54.0        | 10.3        | 10.4        | 19.7        | 5.1         |
| Browns Ferry 1    | -           | -           | -           | -           | 2.8         |
| Cooper Station    | -           | -           | -           | -           | 1.7         |
| Dresden 1         | 5.0         | 8.7         | 43.3        | 18.5        | 18.8        |
| Dresden 2, 3      | 31.0        | 38.5        | 25.9        | 25.8        | 22.6        |
| Humboldt Bay      | 7.0         | 7.5         | 13.0        | 51.3        | 31.7        |
| Lacrosse          | 20.0        | 91.4        | 120.0       | 103.0       | 115.0       |
| Millstone Point 1 | -           | 12.7        | 20.9        | 3.7         | 24.1        |
| Monticello        | -           | 0.6         | <0.1        | 0           | 0           |
| Nine Mile Point 1 | 20.0        | 12.4        | 27.8        | 46.5        | 18.7        |
| Oyster Creek      | 22.0        | 21.5        | 61.6        | 35.9        | 14.1        |
| Peach Bottom 2, 3 | -           | -           | -           | <0.1        | 10.0        |
| Pilgrim 1         | -           | -           | 4.2         | 0.4         | 10.5        |
| Quad Cities 1, 2  | -           | -           | 4.7         | 24.5        | 34.0        |
| Vermont Yankee    | -           | -           | 0           | 0.1         | 0           |
| Total             | 159.0       | 203.6       | 331.8       | 329.4       | 309.1       |

TABLE 8

LIQUID EFFLUENT COMPARISON BY YEAR

Tritium

CURIES

PRESSURIZED WATER REACTORS

| Facility            | 1970   | 1971   | 1972     | 1973     | 1974     |
|---------------------|--------|--------|----------|----------|----------|
| Arkansas 1          | -      | -      | -        | -        | 25.6     |
| Connecticut Yankee  | 7400.0 | 5830.0 | 5890.0   | 3900.0   | 2240     |
| Fort Calhoun        | -      | -      | -        | 15.8     | 124      |
| H. B. Robinson      | -      | 118.0  | 405.0    | 432.0    | 449      |
| Indian Point 1      | 410.0  | 725.0  | 574.0    | 137.9    | 684      |
| Indian Point 2      | -      | -      | -        | 27.5     | 47.9     |
| Kewaunee            | -      | -      | -        | -        | 92.4     |
| Main Yankee         | -      | -      | 9.2      | 153.6    | 219      |
| Oconee 1, 2, 3      | -      | -      | -        | 70.7     | 350      |
| Palisades           | -      | -      | 208.0    | 184.8    | 8.1      |
| Point Beach 1, 2    | -      | 266.0  | 563.0    | 556.0    | 833      |
| Prairie Island 1, 2 | -      | -      | -        | <0.1     | 142      |
| R. E. Ginna         | 110.0  | 154.0  | 119.0    | 286.0    | 195      |
| San Onofre 1        | 4800.0 | 4570.0 | 3480.0   | 4070.0   | 3810     |
| Surry 1, 2          | -      | -      | 5.0      | 488.0    | 245      |
| Three Mile Island 1 | -      | -      | -        | -        | 130      |
| Turke, Point 3, 4   | -      | -      | -        | 329.0    | 580      |
| Yankee Rowe         | 1500.0 | 1680.0 | 803.0    | 693.6    | 314      |
| Zion 1, 2           | -      | -      | -        | <0.1     | 2.3      |
| TOTAL               | 14,200 | 9,230  | 12,056.2 | 11,344.9 | 10,491.3 |

TABLE 9

LIQUID EFFLUENT COMPARISON BY YEAR

Mixed Fission & Activation Products

CURIES

BOILING WATER REACTORS

| <u>Facility</u>   | <u>1970</u> | <u>1971</u> | <u>1972</u> | <u>1973</u> | <u>1974</u> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| Big Rock Point 1  | 4.7         | 3.5         | 1.1         | 2.7         | 1.1         |
| Browns Ferry 1    | -           | -           | -           | -           | 0.8         |
| Cooper Station    | -           | -           | -           | -           | 1.4         |
| Dresden 1         | 8.2         | 6.2         | 6.8         | 9.2         | 6.9         |
| Dresden 2, 3      | -           | 23.0        | 22.0        | 25.9        | 33.1        |
| Humboldt Bay      | 2.4         | 1.8         | 1.4         | 2.4         | 4.4         |
| Lacrosse          | 6.4         | 17.1        | 48.5        | 35.9        | 13.1        |
| Millstone Point 1 | -           | 19.7        | 51.5        | 33.4        | 198.0       |
| Monticello        | -           | <0.1        | <0.1        | 0           | 0           |
| Nine Mile Point 1 | 28.0        | 32.2        | 34.6        | 40.8        | 25.6        |
| Oyster Creek      | 18.5        | 12.0        | 10.0        | 4.2         | 0.7         |
| Peach Bottom 2, 3 | -           | -           | -           | <0.1        | 0.9         |
| Pilgrim 1         | -           | -           | 1.5         | 0.9         | 4.2         |
| Quad Cities 1, 2  | -           | -           | 2.4         | 21.4        | 38.8        |
| Vermont Yankee    | -           | -           | 0           | <0.1        | 0           |
| Total             | 63.5        | 115.5       | 179.8       | 176.8       | 329.0       |

TABLE 10

LIQUID EFFLUENT COMPARISON BY YEAR

Mixed Fission & Activation Products

CURIES

PRESSURIZED WATER REACTORS

| Facility            | 1970 | 1971 | 1972 | 1973 | 1974 |
|---------------------|------|------|------|------|------|
| Arkansas 1          | -    | -    | -    | -    | 6.5  |
| Connecticut Yankee  | 6.7  | 5.9  | 4.8  | 3.0  | 2.2  |
| Fort Calhoun        | -    | -    | -    | <0.1 | 2.3  |
| H. B. Robinson      | -    | 0.7  | 0.8  | 0.6  | 2.5  |
| Indian Point 1      | 7.8  | 81.1 | 25.4 | 0.6  | 2.9  |
| Indian Point 2      | -    | -    | -    | 2.2  | 4.2  |
| Kewaunee            | -    | -    | -    | -    | 0.4  |
| Maine Yankee        | -    | -    | <0.1 | <0.1 | 4.0  |
| Oconee 1, 2, 3      | -    | -    | -    | 2.8  | 1.9  |
| Palisades           | -    | -    | 6.8  | 27.8 | 5.9  |
| Point Beach 1, 2    | -    | 0.1  | 1.5  | 0.8  | 0.2  |
| Prairie Island 1, 2 | -    | -    | -    | <0.1 | <0.1 |
| R. E. Ginna         | 10.0 | 0.9  | 0.3  | <0.1 | 0.1  |
| San Onofre 1        | 7.6  | 1.5  | 30.3 | 16.0 | 5.0  |
| Surry 1, 2          | -    | -    | 0.2  | 0.1  | 3.8  |
| Three Mile Island 1 | -    | -    | -    | -    | 1.3  |
| Turkey Point 3, 4   | -    | -    | -    | <0.1 | 1.6  |
| Yankee Rowe         | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Zion 1, 2           | -    | -    | -    | <0.1 | <0.1 |
| Total               | 32.1 | 90.2 | 70.1 | 53.9 | 44.8 |



TABLE 11

SOLID WASTE SUMMARY 1970

BOILING WATER REACTORS

| Facility          | Volume<br>(cubic meters) | Activity<br>(curies) | No. of<br>Shipments |
|-------------------|--------------------------|----------------------|---------------------|
| Big Rock Point 1  | NR                       | 1.99(2)              | 10                  |
| Browns Ferry 1    | 2.65(2)                  | 8.29(1)              | 74                  |
| Cooper Station    | 3.78(2)                  | 1.72(1)              | 26                  |
| Dresden 1         | Included with Units 2-3  |                      |                     |
| Dresden 2,3       | 2.19(3)                  | 5.05(3)              | 627                 |
| Humboldt Bay      | 7.81(1)                  | 1.26(1)              | 15                  |
| Lacrosse          | 4.19(1)                  | 4.71(2)              | 5                   |
| Millstone Point 1 | 1.26(3)                  | 2.57(2)              | NR                  |
| Monticello        | 2.68(2)                  | 2.80(1)              | 47                  |
| Nine Mile Point 1 | 4.52(2)                  | 1.93(3)              | 75                  |
| Oyster Creek      | 1.21(3)                  | 1.57(3)              | 158                 |
| Peach Bottom 2, 3 | 5.10(2)                  | 6.38(1)              | 41                  |
| Pilgrim 1         | 4.06(2)                  | 1.47(1)              | 34                  |
| Quad Cities 1, 2  | 5.61(2)                  | 7.35(2)              | 284                 |
| Vermont Yankee    | 1.83(2)                  | 1.02(2)              | 34                  |

TABLE 12

SOLID WASTE SUMMARY 1974

PRESSURIZED WATER REACTORS

| Facility            | Volume<br>(cubic meters) | Activity<br>(curies) | No. of<br>Shipments |
|---------------------|--------------------------|----------------------|---------------------|
| Arkansas 1          | 0                        | 0                    | 0                   |
| Connecticut Yankee  | 2.05(2)                  | 9.42(2)              | 21                  |
| Fort Calhoun        | 3.23(2)                  | 1.00(1)              | 18                  |
| H. B. Robinson      | 3.82(2)                  | 2.00(2)              | 32                  |
| Indian Point 1      | 4.29(2)                  | 6.19(1)              | 27                  |
| Indian Point 2      | Included with Unit 2     |                      |                     |
| Kewaunee            | NR                       | NR                   | 0                   |
| Maine Yankee        | 3.00(2)                  | 1.77(2)              | 34                  |
| Oconee 1, 2, 3      | 5.99(2)                  | 2.18(2)              | 97                  |
| Palisades           | 4.03(2)                  | 4.98(3)              | 58                  |
| Point Beach 1, 2    | 1.32(2)                  | 2.12(3)              | 12                  |
| Prairie Island 1, 2 | 1.35(2)                  | 7.61                 | 10                  |
| R. E. Ginna         | 2.75(2)                  | 6.14(2)              | 26                  |
| San Onofre 1        | 6.82(1)                  | 2.3 (2)              | 11                  |
| Surry 1, 2          | 1.21(3)                  | 5.06(1)              | 70                  |
| Three Mile Island 1 | 2.00(2)                  | 6.06(1)              | 16                  |
| Turkey Point 3, 4   | 4.23(2)                  | 4.19(1)              | 22                  |
| Yankee Rowe         | 4.18(2)                  | 1.27(2)              | 24                  |
| Zion 1, 2           | 2.70(3)                  | 4.65                 | 58                  |

NR = Not reported

TABLE 13

SOLID WASTE COMPARISON BY YEAR

Volume (Cubic meters) - Activity (curies)

BOILING WATER REACTORS

| <u>Facility</u>   | <u>1972</u> |         | <u>1973</u> |         | <u>1974</u> |         |
|-------------------|-------------|---------|-------------|---------|-------------|---------|
| Big Rock Point 1  | 8.25(2)     | 1.05(5) | -           | 1.2(4)  | -           | 1.99(2) |
| Browns Ferry 1    | -           | -       | -           | -       | 2.65(2)     | 8.29(1) |
| Cooper Station    | -           | -       | -           | -       | 3.78(2)     | 1.72(1) |
| Dresden 1,2,3     | 7.07(1)     | 8.36(2) | 2.20(3)     | 1.34(2) | 2.19(3)     | 5.05(3) |
| Humboldt Bay      | 5.89(1)     | 5.3     | 8.83(1)     | 1.76(1) | 7.81(1)     | 1.26(1) |
| Lacrosse          | -           | -       | -           | -       | 4.19(1)     | 4.71(2) |
| Millstone Point 1 | 5.67(2)     | 1.64(3) | 2.44(2)     | 1.51(3) | 1.26(3)     | 2.57(2) |
| Monticello        | 1.78(2)     | 8.82(1) | 2.11(2)     | 3.93(2) | 2.68(2)     | 2.80(1) |
| Nine Mile Point 1 | 4.27(2)     | 2.65(2) | 5.45(2)     | 1.01(3) | 4.52(2)     | 1.93(3) |
| Oyster Creek      | 4.26(1)     | 4.47(1) | 8.33(2)     | 2.89(3) | 1.21(3)     | 1.57(3) |
| Peach Bottom 2,3  | -           | -       | 3.02(1)     | 3.0(-1) | 5.10(2)     | 6.38(1) |
| Pilgrim 1         | 6.75(1)     | 1.94(1) | 2.17(2)     | 5.66(2) | 4.06(2)     | 1.47(1) |
| Quad Cities 1,2   | 1.07(3)     | 9.3     | 1.01(3)     | 2.94(2) | 5.61(2)     | 7.35(2) |
| Vermont Yankee    | 1.41(2)     | 1.75(1) | 1.86(2)     | 2.35(1) | 1.83(2)     | 1.02(2) |
| Total             | 2.49(3)     | 1.08(5) | 5.56(3)     | 1.88(4) | 7.80(3)     | 1.05(4) |

TABLE 14

SOLID WASTE COMPARISON BY YEAR

Volume(cubic meters)-Activity(curies)

PRESSURIZED WATER REACTORS

| <u>Facility</u>     | <u>1972</u> |         | <u>1973</u> |         | <u>1974</u> |         |
|---------------------|-------------|---------|-------------|---------|-------------|---------|
| Arkansas 1          | -           | -       | -           | -       | 0           | 0       |
| Connecticut Yankee  | 1.07(2)     | 4.00(3) | 1.59(2)     | 5.71(2) | 2.05(2)     | 9.42(2) |
| Fort Calhoun        | -           | -       | 4.54(1)     | <0.1    | 3.23(2)     | 1.00(1) |
| H. B. Robinson      | 7.1(1)      | 4.9     | 2.92(2)     | 9.70(1) | 3.82(2)     | 2.00(2) |
| Indian Point 1, 2   | 1.91(2)     | 1.57(2) | 2.16(2)     | 3.26(2) | 4.29(2)     | 6.19(1) |
| Kewaunee            | -           | -       | -           | -       | NR          | NR      |
| Maine Yankee        | 0           | 0       | 6.70(1)     | 3.2     | 3.00(2)     | 1.77(2) |
| Oconee 1, 2, 3      | -           | -       | 2.65(2)     | 3.22(1) | 5.99(2)     | 2.18(2) |
| Palisades           | 3.32(1)     | 2.5     | 6.30(1)     | 6.29(2) | 4.03(2)     | 4.98(3) |
| Point Beach 1, 2    | 1.93(2)     | 2.13(2) | 2.95(2)     | 1.83(3) | 1.32(2)     | 2.12(3) |
| Prairie Island 1, 2 | -           | -       | 0           | 0       | 1.35(2)     | 7.6     |
| R. E. Ginna         | 3.65(1)     | 1.41(3) | 1.98(2)     | 5.99(2) | 2.75(2)     | 6.14(2) |
| San Onofre 1        | 1.09(2)     | 7.97(1) | 1.13(2)     | 3.81(2) | 6.82(1)     | 2.30(2) |
| Surry 1, 2          | 1.60(2)     | <0.1    | 3.65(2)     | 1.6     | 1.21(3)     | 5.06(1) |
| Three Mile Island   | -           | -       | -           | -       | 2.00(2)     | 6.06(1) |
| Turkey Point 3, 4   | -           | -       | 2.56(2)     | 6.8     | 4.23(2)     | 4.9     |
| Yankee Rowe         | 2.22(2)     | 2.3     | 1.20(1)     | 2.9     | 2.18(2)     | 1.27(2) |
| Zion 1, 2           | -           | -       | 0           | 0       | 2.70(3)     | 4.65(2) |
| Total               | 1.12(3)     | 5.87(3) | 2.35(3)     | 4.48(3) | 8.00(3)     | 1.03(4) |

### Individual Plant Summary 1974

Facility: ARKANSAS 1 Docket No: 50-313  
Type: PWR Licensed Power Level: 2568 MWT  
Location: 6 Mi WNW Russellville, Initial Criticality: 8/6/74  
Arkansas  
Cooling Water Source: Dardenelle Reservoir

#### Operation

Gross Thermal Generation: 2.0 (6) MWHT  
Net Electrical: 5.7 (5) MWHE  
Thermal Capacity Factor: <sup>\*</sup> 6.57 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 1.96 (2) Curies  
B) Total I-131 5.3 (-2) Curies  
C) Total Halogens (including I-131) 5.3 (-2) Curies  
D) Total Particulates 2.5 (-6) Curies  
E) Total Tritium 3.0 (-2) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 6.53 Curies  
B) Total Tritium 2.56 (1) Curies

\*During Commercial Operation

|                                    |          |        |
|------------------------------------|----------|--------|
| C) Dissolved Noble Gases*          | 1.15     | Curies |
| D) Volume of Liquid Waste Released | 4.8 (6)  | Liters |
| E) Volume of Dilution Water        | 5.2 (11) | Liters |

Solid Waste

|                        |     |              |
|------------------------|-----|--------------|
| A) Volume              | 0.0 | Cubic meters |
| B) Activity            | 0.0 | Curies       |
| C) Number of Shipments | 0.0 |              |

Airborne Effluents (curies)

Noble Gas

|         |          |
|---------|----------|
| Kr-85   | 5.6 (-2) |
| Xe-133  | 1.93 (2) |
| Xe-131m | 2.3 (-2) |
| Kr-87   | 1.4 (-4) |
| Kr-85m  | 3.3 (-2) |
| Ar-41   | 1.3 (-4) |
| Xe-133m | 2.48     |

Halogens

|       |          |
|-------|----------|
| I-131 | 5.3 (-2) |
|-------|----------|

Particulates

|       |          |
|-------|----------|
| Sr-89 | 2.5 (-6) |
|-------|----------|

\* Includes Xe-133, Xe-135, and others

NR Not reported

Liquid Effluents (curies)

|         |          |         |          |
|---------|----------|---------|----------|
| Sr-89   | 1.7 (-2) | I-133   | 2.5 (-4) |
| I-131   | 1.9 (-2) | I-134   | 1.3 (-4) |
| Xe-133  | 1.13     | I-135   | 4.0 (-9) |
| La-135  | 1.3 (-2) | Mn-56   | 2.1 (-5) |
| Cs-137  | 1.9 (-4) | Mo-99   | 1.6 (-5) |
| Co-60   | 5.7 (-4) | Ru-103  | 6.2 (-7) |
| Co-58   | 3.3 (-2) | Rh-106  | 1.8 (-5) |
| Cr-51   | 9.1 (-3) | Fe-59   | 1.8 (-3) |
| Mn-54   | 2.1 (-3) | Sr-92   | 3.5 (-6) |
| Zn-65   | 1.9 (-6) | W-187   | 1.5 (-4) |
| Sr-90   | 2.5 (-3) | Zr-95   | 2.3 (-4) |
| Ba-133  | 4.5 (-3) | Nb-95   | 3.0 (-4) |
| Be-7    | 2.7 (-6) | Zr-97   | 1.5 (-4) |
| Cs-136  | 5.3 (-7) | Nb-97   | 3.8 (-3) |
| Cs-138  | 1.1 (-8) | Ce-144  | 1.5 (-3) |
| Co-57   | 1.1 (-6) | Na-24   | 2.1 (-3) |
| Ag-110m | 1.3 (-3) | H-3     | 2.56(1)  |
|         |          | Xe-133m | 6.2 (-3) |

### Individual Plant Summary 1974

Facility: BIG ROCK POINT 1 Docket No: 50-155  
Type: BWR Licensed Power Level: 240 MWT  
Location: 4 Mi NE Charlevoix, Mich. Initial Criticality: 9/27/62  
Cooling Water Source: Lake Michigan

#### Operation

Gross Thermal Generation: 1.1 (6) MWHT  
Net Electrical: 3.4 (5) MWHE  
Thermal Capacity Factor: 5.38 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 1.88 (5) Curies  
B) Total I-131 9.01 (-2) Curies  
C) Total Halogens (including I-131) 3.55 (-1) Curies  
D) Total Particulates 9.07 (-2) Curies  
E) Total Tritium 3.87 (1) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 1.07 Curies  
B) Total Tritium 5.07 (1) Curies



- C) Dissolved Noble Gases\* \_\_\_\_\_ 0.0 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 4.33 (5) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 1.03 (11) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ Not Reported \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 1.99 (2) \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 10 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gas

|         |          |         |          |
|---------|----------|---------|----------|
| Kr-85   | 4.48 (2) | Xe-131m | 7.65 (1) |
| Kr-87   | 3.02 (4) | Kr-88   | 1.75 (4) |
| Kr-90   | 1.90 (3) | Kr-85m  | 1.02 (4) |
| Kr-89   | 2.20 (3) | Kr-91   | 6.40     |
| Xe-135m | 8.20 (3) | Xe-138  | 5.48 (4) |
| Xe-140  | 8.70 (1) | Xe-139  | 3.14 (2) |
| Xe-137  | 3.84 (3) | Xe-133m | 7.14 (2) |

Halogens

|       |           |
|-------|-----------|
| I-131 | 9.01 (-2) |
| I-133 | 2.64 (-1) |
| I-135 | 6.27 (-4) |

Particulates

|        |           |           |           |
|--------|-----------|-----------|-----------|
| Cs-137 | 7.79 (-3) | Ba La-140 | 4.57 (-2) |
| Mn-54  | 1.29 (-3) | Cs-134    | 1.59 (-3) |
| Cr-51  | 7.69 (-3) | Co-60     | 5.23 (-3) |
| Zn-65  | 3.97 (-5) | Cs-137    | 7.79 (-3) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)

|        |           |
|--------|-----------|
| I-131  | 5.23 (-3) |
| Mn-54  | 4.92 (-2) |
| Zn-65  | 2.12 (-2) |
| I-133  | 1.53 (-4) |
| Cs-137 | 1.84 (-1) |
| Cs-134 | 7.52 (-2) |
| Fe-59  | 1.02 (-2) |

### Individual Plant Summary 1974

Facility: BROWNS FERRY 1 Docket No: 50-259  
Type: BWR Licensed Power Level: 3293 MWT  
Location: 10 Mi NW Decatur, Ala. Initial Criticality: 8/17/73  
Cooling Water Source: Tennessee River

#### Operation

Gross Thermal Generation: 1.6 (7) MWHT  
Net Electrical: 5.2 (6) MWHE  
Thermal Capacity Factor: 6.17 (-1)

#### Summary of Effluents (includes Unit 2 releases)

##### Airborne

A) Total Noble Gases 6.4 (4) Curies  
B) Total I-131 3.81 (-2) Curies  
C) Total Halogens (including I-131) 4.05 (1) Curies  
D) Total Particulates 1.01 (-1) Curies  
E) Total Tritium 6.49 (-1) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 8.07 (-1) Curies  
B) Total Tritium 2.82 Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 1.62 (-1) \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 2.44 (7) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 1.88 (11) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ 2.65(2) \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 8.29(1) \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 74 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gas

|         |          |        |          |
|---------|----------|--------|----------|
| Kr-85   | 4.56 (4) | Kr-88  | 8.33 (2) |
| Kr-87   | 1.35 (3) | Kr-85m | 3.85 (2) |
| Xe-133  | 4.50 (3) | Xe-138 | 5.75 (3) |
| Xe-135m | 6.30 (3) | Xe-135 | 5.04 (2) |
| Ar-41   | 1.47 (3) |        |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 3.82 (-2) |
| I-133 | 4.52 (-2) |
| I-135 | 4.05 (1)  |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 9.15 (-3) | Ba-140 | 3.59 (-2) |
| Sr-90  | 3.02 (-5) | Sr-89  | 1.56 (-4) |
| Cs-134 | 3.84 (-2) |        |           |

Liquid Effluent (curies)

|       |           |       |           |
|-------|-----------|-------|-----------|
| I-131 | 1.01 (-2) | Zn-65 | 3.03 (-2) |
| Sr-90 | 5.08 (-3) | Na-24 | 1.70 (-2) |
| Mn-54 | 1.35 (-2) |       |           |

\* Includes Xe-133, Xe-135, and others

Liquid Effluent (curies) (Cont'd)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Co-58  | 1.37 (-2) | Co-60  | 1.77 (-2) |
| Cs-137 | 1.06 (-3) | Fe-59  | 1.56 (-2) |
| Sr-89  | 5.19 (-3) | Xe-133 | 1.57 (-1) |
| Cr-51  | 9.11 (-2) | Xe-135 | 5.55 (-3) |
| Cs-134 | 8.09 (-3) |        |           |

The indicated activities represent sums of values influenced by threshold limits of analytical sensitivities.

### Individual Plant Summary 1974

Facility: CONNECTICUT YANKEE Docket No: 50-213  
Type: PWR Licensed Power Level: 1825 MWT  
Location: 9.5 Mi. S.E. Middletown, CT Initial Criticality: 7/24/67  
Cooling Water Source: Connecticut River

#### Operation

Gross Thermal Generation: 1.4 (7) MWHT  
Net Electrical: 4.4 (6) MWHE  
Thermal Capacity Factor: 8.86 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 7.44 Curies  
B) Total I-131 4.57 (-8) Curies  
C) Total Halogens (including I-131) 4.57 (-8) Curies  
D) Total Particulates 1.63 (-3) Curies  
E) Total Tritium 1.18 (-2) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 2.23 Curies  
B) Total Tritium 2.24 (3) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 7.54 (-1) | Curies |
| D) Volume of Liquid Waste Released | 4.05 (7)  | Liters |
| E) Volume of Dilution Water        | 7.34 (11) | Liters |

Solid Waste

|                          |          |              |
|--------------------------|----------|--------------|
| A) Volume                | 2.05 (2) | Cubic meters |
| B) Activity              | 9.42 (2) | Curies       |
| C) Number of Shipments** | 24       |              |

Airborne Effluents (curies)

Noble Gases

|         |           |        |           |
|---------|-----------|--------|-----------|
| Kr-85   | 4.01      | Kr-88  | 3.45 (-1) |
| Kr-87   | 1.77 (-1) | Xe-135 | 4.04 (-1) |
| Xe-133  | 2.34      |        |           |
| Xe-135m | 2.51 (-1) |        |           |

Halogens

|       |           |
|-------|-----------|
| I-131 | 4.57 (-8) |
|-------|-----------|

Particulates

|       |           |
|-------|-----------|
| Rb-88 | 1.58 (-4) |
|-------|-----------|

Liquid Effluent (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| I-131  | 9.01 (-5) | Cr-51  | 5.14 (-1) |
| Mn-54  | 4.46 (-3) | Cs-134 | 2.97 (-3) |
| Ce-144 | 2.77 (-1) | Co-60  | 6.79 (-1) |
| Co-58  | 4.24 (-1) | Ru-103 | 4.76 (-2) |
| Cs-137 | 2.72 (-1) | Xe-133 | 7.13 (-1) |
|        |           | Xe-135 | 4.11 (-2) |

\* Includes Xe-133, Xe-135, and others

\*\* Includes 3 shipments of special nuclear materials

### Individual Plant Summary 1974

Facility: COOPER STATION Docket No: 50-298  
Type: BWR Licensed Power Level: 2381 MWT  
Location: 70 Mi. S. Omaha, Neb. Initial Criticality: 2/21/74  
Cooling Water Source: Missouri River

#### Operation

Gross Thermal Generation: 6.9 (6) MWHT  
Net Electrical: 1.8 (6) MWHE  
Thermal Capacity Factor: 3.88 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 1.57 (3) Curies  
B) Total I-131 1.27 (-2) Curies  
C) Total Halogens (including I-131) 3.54 Curies  
D) Total Particulates 2.40 (-1) Curies  
E) Total Tritium 1.59 (-2) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 1.42 Curies  
B) Total Tritium 1.70 Curies



|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 2.87 (-2) | Curies |
| D) Volume of Liquid Waste Released | 1.32 (7)  | Liters |
| E) Volume of Dilution Water        | 6.71 (10) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 3.78 (2) | Cubic meters |
| B) Activity            | 1.72 (1) | Curies       |
| C) Number of Shipments | 26       |              |

Airborne Effluents (curies)

Noble Gas

|         |           |        |          |
|---------|-----------|--------|----------|
| Kr-85   | 3.20 (-4) | Kr-88  | 1.48 (2) |
| Kr-87   | 2.49 (2)  | Kr-85m | 3.64 (1) |
| Xe-133  | 1.44 (1)  | Kr-83m | 2.44 (1) |
| Xe-135m | 2.17 (2)  | Xe-135 | 8.87 (1) |
| Xe-137  | 4.73 (1)  |        |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 1.27 (-2) |
| I-133 | 8.57 (-2) |
| I-135 | 3.44      |

Particulates

|        |           |
|--------|-----------|
| Sr-90  | 1.20 (-5) |
| Ba-140 | 1.95 (-1) |
| Sr-89  | 2.34 (-5) |
| Cs-134 | 2.88 (-2) |

Liquid Effluents (curies)

|       |           |       |           |
|-------|-----------|-------|-----------|
| Mo-99 | 1.00 (-2) | Sr-89 | 9.75 (-3) |
| I-131 | 2.79 (-3) | Cr-51 | 7.15 (-1) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies) (Cont'd)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Sr-90  | 8.50 (-4) | Cs-134 | 2.20 (-3) |
| Mn-54  | 2.35 (-3) | Co-60  | 7.66 (-2) |
| Zn-65  | 1.99 (-2) | Ce-141 | 3.80 (-3) |
| Zr-95  | 1.95 (-3) | Fe-59  | 8.67 (-3) |
| Co-58  | 5.65 (-1) | Xe-133 | 1.51 (-2) |
| Tc-99m | 1.05 (-2) | Xe-135 | 1.37 (-2) |
| Cs-137 | 1.93 (-3) |        |           |

### Individual Plant Summary 1974

Facility: DRESDEN 1 Docket No: 50-010  
Type: BWP Licensed Power Level: 700 MWT  
Location: 14 Mi SW Joliet, Ill. Initial Criticality: 10/15/59  
Cooling Water Source: Kankakee River

#### Operation

Gross Thermal Generation: 1.4 (6) MWHT  
Net Electrical: 3.5 (5) MWHE  
Thermal Capacity Factor: 2.12 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 9.84 (4) Curies  
B) Total I-131 4.10 (-1) Curies  
C) Total Halogens (including I-131) 1.35 (1) Curies  
D) Total Particulates 2.40 (-1) Curies  
E) Total Tritium Not required to be reported Curies

##### Liquid

A) Total Mixed Fission & Activation Products 6.89 Curies  
B) Total Tritium 1.88 (1) Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 0.0 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 6.8 (6) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 1.50 (11) \_\_\_\_\_ Liters

Solid Waste (Included with Dresden Units 2, 3)

- A) Volume \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_

Specific nuclide data from second half of year only. Plant shutdown entire first half.

Airborne Effluents (curies)

Noble Gas

|         |          |        |          |
|---------|----------|--------|----------|
| Kr-87   | 1.10 (4) | Kr-85m | 1.60 (3) |
| Xe-133  | 2.10 (3) | Xe-138 | 4.80 (4) |
| Xe-135m | 2.00 (4) | Xe-135 | 1.00 (4) |
| Kr-88   | 5.70 (3) |        |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 4.10 (-1) |
| I-133 | 4.41      |
| I-135 | 8.66      |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 3.60 (-3) | Sr-89  | 7.81 (-2) |
| Sr-90  | 1.00 (-3) | Co-60  | 4.50 (-2) |
| Co-58  | 5.50 (-3) | I-131  | 3.29 (-2) |
| Ba-140 | 7.44 (-2) | Np-239 | 3.01 (-2) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)

|       |           |        |           |
|-------|-----------|--------|-----------|
| I-131 | 3.41 (-2) | Cs-137 | 1.37      |
| Sr-90 | 1.92 (-3) | Sr-89  | 9.82 (-3) |
| Mn-54 | 3.59 (-2) | Cs-134 | 6.72 (-1) |
| Co-58 | 6.03 (-3) | Co-60  | 7.24 (-1) |
| I-133 | 2.28 (-2) | Fe-59  | 2.21 (-3) |

### Individual Plant Summary 1974

Facility: DRESDEN 2, 3 Docket No: 50-237, 50-249  
Type: BWR, BWR Licensed Power Level: 2527, 2527 MWT  
Location: 14 Mi. SW Joliet, Ill. Initial Criticality: 1/7/70, 1/31/71  
Cooling Water Source: Kankakee and Des Plaines Rivers

#### Operation

Gross Thermal Generation: 1.1 (7); 1.0 (7) MWHT  
Net Electrical: 3.4 (6); 3.2 (6) MWHE  
Thermal Capacity Factor: 5.11 (-1); 4.74 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 6.27 (5) Curies  
B) Total I-131 3.86 Curies  
C) Total Halogens (including I-131) 3.80 (1) Curies  
D) Total Particulates 2.83 Curies  
E) Total Tritium 1.14 (2) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 3.31 (1) Curies  
B) Total Tritium 2.26 (1) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 1.44 (-1) | Curies |
| D) Volume of Liquid Waste Released | 1.49 (7)  | Liters |
| E) Volume of Dilution Water        | 1.25 (12) | Liters |

Solid Waste (Includes Dresden Unit 1)

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 2.19 (3) | Cubic meters |
| B) Activity            | 5.05 (3) | Curies       |
| C) Number of Shipments | 627      |              |

Airborne Effluents (curies)

Noble Gas

|         |          |        |          |
|---------|----------|--------|----------|
| Kr-87   | 1.11 (5) | Kr-85m | 3.83 (4) |
| Xe-133  | 8.38 (4) | Xe-138 | 6.76 (4) |
| Xe-135m | 4.65 (4) | Xe-135 | 1.85 (5) |
| Kr-88   | 9.51 (4) |        |          |

Halogens

|       |          |
|-------|----------|
| I-131 | 3.98     |
| I-133 | 1.47 (1) |
| I-135 | 1.93 (1) |

Particulates\*\*

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 3.32 (-2) | Sr-89  | 9.91 (-1) |
| La-140 | 2.7 (-2)  | Cs-134 | 1.56 (-2) |
| Sr-90  | 1.1 (-2)  | Co-60  | 2.67 (-1) |
| Mn-54  | 9.3 (-3)  | I-131  | 3.34 (-1) |
| Cr-51  | 4.92 (-2) | Tc-99m | 3.06 (-2) |
| Co-58  | 4.74 (-2) | Mo-99  | 2.8 (-2)  |
| Ba-140 | 8.86 (-1) |        |           |

\* Includes Xe-133, Xe-135, and others

\*\* Includes both chimney and vent particulates

Liquid Effluents (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Mo-99  | 1.55 (-3) | Tc-99m | 1.69 (-3) |
| I-131  | 5.54 (-1) | I-133  | 3.19 (-3) |
| Sr-90  | 2.78 (-2) | Cs-137 | 6.79      |
| Mn-54  | 7.22 (-1) | Sr-89  | 6.2 (-1)  |
| Zr-95  | 2.33 (-3) | Cr-51  | 5.85 (-2) |
| Ce-144 | 6.50 (-1) | Cs-134 | 2.77      |
| Co-58  | 2.27 (-1) | Co-60  | 1.23 (1)  |
|        |           | Xe-133 | 1.44 (-1) |



### Individual Plant Summary 1974

Facility: FORT CALHOUN Docket No: 50-285  
Type: PWR Licensed Power Level: 1420 MWT  
Location: 19 Mi. N Omaha, Neb. Initial Criticality: 8/6/73  
Cooling Water Source: Missouri River

#### Operation

Gross Thermal Generation: 7.6 (6) MWHT  
Net Electrical: 2.4 (6) MWHE  
Thermal Capacity Factor: 6.09 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 3.03 (2) Curies  
B) Total I-131 4.22 (-4) Curies  
C) Total Halogens (including I-131) 5.14 (-4) Curies  
D) Total Particulates 3.52 (-5) Curies  
E) Total Tritium 7.51 (-1) Curies

##### Liquid

A) Total Mixed Fission & Activation Products\*\* 2.31 (-1) Curies  
B) Total Tritium 1.24 (2) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 3.37 (-2) | Curies |
| D) Volume of Liquid Waste Released | 8.14 (6)  | Liters |
| E) Volume of Dilution Water        | 7.22 (10) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 3.23 (2) | Cubic meters |
| B) Activity            | 1.00 (1) | Curies       |
| C) Number of Shipments | 18       |              |

Airborne Effluents (curies)

Noble Gas

|        |           |
|--------|-----------|
| Kr-85  | 4.57 (-1) |
| Xe-133 | 2.84 (2)  |
| Xe-135 | 1.18      |

Halogens

|       |           |
|-------|-----------|
| I-131 | 4.22 (-4) |
| I-133 | 4.99 (-5) |
| I-135 | 4.24 (-5) |

Particulates

|        |           |
|--------|-----------|
| Sr-90  | 3.37 (-7) |
| Co-58  | 2.31 (-5) |
| Ba-140 | 1.14 (-5) |
| Jr-89  | 3.71 (-7) |

Liquid Effluents (curies)

|       |           |        |           |
|-------|-----------|--------|-----------|
| Sr-90 | 6.95 (-5) | Sr-89  | 3.68 (-5) |
| Mn-54 | 1.14 (-2) | Co-60  | 2.87 (-3) |
| Co-58 | 1.35 (-1) | Xe-133 | 3.37 (-2) |
| I-133 | 1.66 (-2) |        |           |

\* Includes Xe-133, Xe-135, and others

\*\* Total radioactivity from gross counting

### Individual Plant Summary 1974

Facility: R. E. GINNA Docket No: 50-244  
Type: PWR Licensed Power Level: 1520 MWT  
Location: 16 Mi. NE Rochester, N. Y. Initial Criticality: 11/9/69  
Cooling Water Source: Lake Ontario

#### Operation

Gross Thermal Generation: 6.7 (6) MWHT  
Net Electrical: 2.1 (6) MWHE  
Thermal Capacity Factor: 5.08 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 7.57 (2) Curies  
B) Total I-131 2.82 (-4) Curies  
C) Total Halogens (including I-131) 4.47 (-4) Curies  
D) Total Particulates 3.95 (-5) Curies  
E) Total Tritium 3.65 (-1) Curies

##### Liquid

A) Total Mixed Fission & Activation Products 1.35 (-1) Curies  
B) Total Tritium 1.95 (2) Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 0.0 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 1.92 (6) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 6.42 (11) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ 2.75 (2) \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 6.14 (2) \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 26 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gases

|        |          |        |          |
|--------|----------|--------|----------|
| Kr-85  | 8.93     | Kr-85m | 7.05     |
| Xe-133 | 6.30 (2) | Xe-135 | 1.10 (2) |
| Ar-41  | 1.09     |        |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 2.82 (-4) |
| I-133 | 1.65 (-4) |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 1.96 (-5) | Cs-134 | 4.91 (-6) |
| Mn-54  | 6.30 (-7) | Co-60  | 1.15 (-5) |
| Cr-51  | 7.80 (-7) | Fe-59  | 2.46 (-7) |
| Co-58  | 2.26 (-6) |        |           |

Liquid Effluents (curies)

|        |           |         |           |
|--------|-----------|---------|-----------|
| I-131  | 9.80 (-5) | Cs-134  | 1.26 (-2) |
| Mn-54  | 3.35 (-3) | Co-60   | 3.19 (-2) |
| Zr-95  | 6.40 (-3) | Ag-110m | 2.0 (-4)  |
| Ce-144 | 1.46 (-2) | Ce-141  | 2.99 (-4) |
| Co-58  | 1.35 (-2) | Ru-103  | 3.99 (-3) |
| Cs-137 | 3.86 (-2) |         |           |

\* Includes Xe-133, Xe-135, and others

### Individual Plant Summary 1974

Facility: HUMBOLDT BAY Docket No: 50-133  
Type: BWR Licensed Power Level: 220 MWt  
Location: 4 mi. SW Eureka, Calif. Initial Criticality: 2/16/63  
Cooling Water Source: Pacific Ocean (Humboldt Bay)

#### Operation

Gross Thermal Generation: 1.3 (6) MWHT  
Net Electrical: 3.8 (5) MWHE  
Thermal Capacity Factor: 6.94 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 5.72 (5) Curies  
B) Total I-131 5.03 (-1) Curies  
C) Total Halogens (including I-131) 1.70 Curies  
D) Total Particulates 3.34 (-1) Curies  
E) Total Tritium 1.73 Curies

##### Liquid

A) Total Mixed Fission & Activation Products 4.40 Curies  
B) Total Tritium 3.17 (1) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 2.70 (-2) | Curies |
| D) Volume of Liquid Waste Released | 2.06 (6)  | Liters |
| E) Volume of Dilution Water        | 1.58 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 7.81 (1) | Cubic meters |
| B) Activity            | 1.26 (1) | Curies       |
| C) Number of Shipments | 15       |              |

Airborne Effluents (curies)

Noble Gas

|         |          |         |          |
|---------|----------|---------|----------|
| Kr-87   | 7.50 (4) | Kr-85m  | 2.19 (4) |
| Kr-89   | 8.14 (2) | Kr-83m  | 1.44 (4) |
| Xe-133  | 3.62 (4) | Xe-138  | 1.69 (5) |
| Xe-135m | 6.56 (4) | Xe-135  | 1.07 (5) |
| Xe-137  | 4.74 (3) | Xe-133m | 1.17 (3) |
| Kr-88   | 7.64 (4) |         |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 5.03 (-1) |
| I-133 | 1.19      |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 4.47 (-3) | Ba-140 | 1.26 (-1) |
| Sr-90  | 1.66 (-4) | Sr-89  | 2.02 (-1) |
| Mn-54  | 4.73 (-4) | Cs-134 | 2.68 (-4) |
| Zn-65  | 1.40 (-4) | Co-60  | 3.45 (-4) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| I-131  | 3.36 (-2) | Co-58  | 3.06 (-3) |
| Sr-90  | 1.77 (-2) | I-133  | 1.53 (-3) |
| Mn-54  | 2.29 (-1) | Cs-137 | 2.10      |
| Zn-65  | 1.43 (-1) | Sr-89  | 7.40 (-2) |
| Ce-144 | 1.20 (-1) | Cs-134 | 1.37      |
| Co-60  | 2.80 (-1) | Xe-133 | 2.7 (-2)  |

Individual Plant Summary 1974

Facility: INDIAN POINT 1 Docket No: 50-003  
Type: PWR/Fossil Superheat Licensed Power Level: 615 MWT  
Location: 3 MI. SW Peekskill, N. Y. Initial Criticality: 8/2/62  
Cooling Water Source: Hudson River

Operation

Gross Thermal Generation: 2.9 (6) MWT  
Net Electrical: 1.2 (6) MWPE  
Thermal Capacity Factor: 5.42 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 6.11 (2) Curies  
B) Total I-131 9.00 (-2) Curies  
C) Total Halogens (including I-131) 9.44 (-2) Curies  
D) Total Particulates 5.60 (-1) Curies \*  
E) Total Tritium 3.23 (-1) Curies

Liquid

A) Total Mixed Fission & Activation Products 2.88 Curies  
B) Total Tritium 6.84 (2) Curies

\* Includes 5.42 (-1) curies of Rb-88



|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 7.57      | Curies |
| D) Volume of Liquid Waste Released | 5.21 (7)  | Liters |
| E) Volume of Dilution Water        | 1.54 (12) | Liters |

Solid Waste (Includes Units 1 and 2)

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 4.29 (2) | Cubic meters |
| B) Activity            | 6.19 (1) | Curies       |
| C) Number of Shipments | 27       |              |

Airborne Effluents (curies)

Noble Gases

No isotopic information

Halogens

|       |           |
|-------|-----------|
| I-131 | 9.00 (-2) |
| I-133 | 4.45 (-3) |

Particulates

|        |           |         |           |
|--------|-----------|---------|-----------|
| Cs-137 | 7.26 (-3) | Co-60   | 7.05 (-3) |
| Sr-90  | 2.30 (-5) | Fe-59   | 4.65 (-5) |
| Mn-54  | 8.44 (-4) | Rb-88   | 5.42 (-1) |
| Co-58  | 8.46 (-4) | Sb-124  | 2.08 (-3) |
| Sr-89  | 5.21 (-5) | Te-123m | 5.44 (-5) |
| Cs-134 | 2.74 (-3) | Cs-136  | 7.74 (-5) |
|        |           | Zr-95   | 7.53 (-7) |

Liquid Effluents (curies)

|           |           |        |           |
|-----------|-----------|--------|-----------|
| I-131     | 3.96 (-1) | Sr-89  | 6.20 (-3) |
| Sr-90     | 7.96 (-4) | Cs-134 | 1.95 (-1) |
| Mn-54     | 3.32 (-2) | Co-60  | 1.56 (-1) |
| Co-58     | 1.22 (-1) | Fe-59  | 7.74 (-3) |
| Cs-137    | 4.53 (-1) | Xe-133 | 7.57      |
| Ba-La-140 | 2.82 (-2) |        |           |

\* Includes Xe-133, Xe-135, and others

Individual Plant Summary 1974

Facility: INDIAN POINT 2 Docket No: 50-247  
Type: PWR Licensed Power Level: 2758 MWT  
Location: 3 MI. SW Peekskill, N. Y. Initial Criticality: 5/22/73  
Cooling Water Source: Hudson River

Operation

Gross Thermal Generation: 1.1 (7) MWHT  
Net Electrical: 3.3 (6) MWHE  
Thermal Capacity Factor: 4.74 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 5.58 (3) Curies  
B) Total I-131 3.69 (-1) Curies  
C) Total Halogens (including I-131) 2.88 (-1) Curies  
D) Total Particulates 2.86 (-1) Curies\*  
E) Total Tritium 1.99 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 4.19 Curies  
B) Total Tritium 4.79 (1) Curies

\* Includes 1.70 (-1) curies of Rb-88

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 5.28      | Curies |
| D) Volume of Liquid Waste Released | 1.98 (7)  | Liters |
| E) Volume of Dilution Water**      | 1.45 (12) | Liters |

Solid Waste (Included with Unit 1)

|                        |              |
|------------------------|--------------|
| A) Volume              | Cubic meters |
| B) Activity            | Curies       |
| C) Number of Shipments |              |

Airborne Effluents (curies)

Noble Gases

No Isotopic Data

Halogens

|       |           |
|-------|-----------|
| I-131 | 3.69 (-1) |
| I-133 | 5.63 (-2) |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 5.26 (-4) | Cs-134 | 4.28 (-4) |
| Sr-90  | 2.74 (-4) | Co-60  | 7.06 (-3) |
| Mn-54  | 7.67 (-3) | Fe-59  | 3.08 (-3) |
| Co-58  | 4.16 (-2) | Rb-88  | 1.70 (-1) |
| Sr-89  | 1.05 (-3) |        |           |

Liquid Effluents (curies)

|           |           |        |           |
|-----------|-----------|--------|-----------|
| I-131     | 2.18      | Sr-89  | 1.92 (-3) |
| Sr-90     | 2.65 (-4) | Cs-134 | 5.64 (-2) |
| Mn-54     | 6.22 (-2) | Co-60  | 1.37 (-1) |
| Co-58     | 1.34      | Fe-59  | 1.18 (-2) |
| Cs-137    | 2.37 (-1) | Xe-133 | 5.28      |
| Ba-La-140 | 6.14 (-3) |        |           |

\* Includes Xe-133, Xe-135, and others

\*\* Dilution water is common to both Units 1 and 2 and a large percentage of the Unit 2 waste is processed by the No 1 liquid and solid waste system.

Individual Plant Summary 1974

Facility: KEWAUNEE Docket No: 50-305  
Type: PWR Licensed Power Level: 1640 MWT  
Location: 27 Mi. ESE Green Bay, Wisc. Initial Criticality: 3/7/74  
Cooling Water Source: Lake Michigan

Operation

Gross Thermal Generation: 5.0 (6) MWHT  
Net Electrical: 1.6 (6) MWHE  
Thermal Capacity Factor: 6.2 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 3.35 (3) Curies  
B) Total I-131 2.40 (-2) Curies  
C) Total Halogens (including I-131) 2.87 (-2) Curies  
D) Total Particulates 3.81 (-1) Curies  
E) Total Tritium 1.09 (2) Curies

Liquid

A) Total Mixed Fission & Activation Products 4.21 (-1) Curies  
B) Total Tritium 9.24 (1) Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 3.19 (-2) \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 6.23 (6) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 1.21 (11) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ NR \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ NR \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 0 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gases

|         |           |         |          |
|---------|-----------|---------|----------|
| Xe-133  | 2.69 (3)  | Xe-135  | 1.28 (2) |
| Kr-85m  | 2.22      | Ar-41   | 2.69     |
| Xe-135m | 1.17 (-5) | Xe-133m | 1.11 (1) |

Halogens

|       |           |
|-------|-----------|
| I-131 | 2.40 (-2) |
| I-133 | 2.66 (-3) |
| I-135 | 2.21 (-3) |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Rb-82m | 9.63 (-6) | Mn-52 | 9.76 (-5) |
| Rb-88  | 1.36 (-1) | Co-58 | 3.73 (-4) |
| Cs-138 | 1.37 (-4) | Ni-57 | 5.04 (-4) |
| Mn-58  | 3.54 (-4) |       |           |

Liquid Effluents (curies)

|          |           |       |           |
|----------|-----------|-------|-----------|
| Sr-39-90 | 1.43 (-3) | Rb-88 | 2.63 (-5) |
| Co-58    | 2.94 (-1) | Rb-89 | 5.13 (-6) |
| Mn-54    | 8.91 (-3) | I-131 | 2.10 (-2) |
| Cs-137   | 7.23 (-3) | I-133 | 2.69 (-3) |
| Cs-134   | 1.12 (-3) | I-132 | 6.25 (-5) |

\* Includes Xe-133, Xe-135, and others

NR Not reported

Liquid Effluents (curies)(Cont'd)

|        |           |         |           |
|--------|-----------|---------|-----------|
| Co-60  | 1.70 (-2) | I-134   | 1.96 (-4) |
| Cr-51  | 4.45 (-3) | I-135   | 9.54 (-5) |
| Mn-52  | 3.37 (-5) | Xe-133  | 5.30 (-4) |
| Mo-99  | 7.33 (-4) | Xe-135  | 1.77 (-2) |
| Fe-59  | 1.07 (-4) | Xe-135m | 7.68 (-5) |
| Sb-124 | 8.95 (-3) | Kr-88   | 3.44 (-4) |
| Zr-95  | 1.73 (-3) | Kr-85m  | 2.53 (-5) |
| Nb-95  | 2.42 (-3) | Kr-87   | 3.63 (-5) |
| Cs-136 | 2.44 (-4) | Misc.   | 1.12 (-2) |
| Cs-138 | 3.29 (-6) |         |           |

Individual Plant Summary 1974

Facility: LACROSSE Docket No: 50-409  
Type: BWR Licensed Power Level: 165 MWT  
Location: 19 Mi. S LaCrosse, Wisc. Initial Criticality: 7/11/67  
Cooling Water Source: Mississippi River

Operation

Gross Thermal Generation: 1.1 (6) MWHT  
Net Electrical: 3.3 (5) MWHE  
Thermal Capacity Factor: 7.50 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 4.91(4) Curies  
B) Total I-131 3.27 (-2) Curies  
C) Total Halogens (including I-131) 6.33 (-2) Curies  
D) Total Particulates 6.5 (1) Curies  
E) Total Tritium 1.83 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 1.31 (1) Curies  
B) Total Tritium 1.15 (2) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 8.3 (-2)  | Curies |
| D) Volume of Liquid Waste Released | 1.83 (6)  | Liters |
| E) Volume of Dilution Water        | 2.43 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 4.19 (1) | Cubic meters |
| B) Activity            | 4.71 (2) | Curie        |
| C) Number of Shipments | 5        |              |

Airborne Effluents (curies)

Noble Gases

|         |          |         |          |
|---------|----------|---------|----------|
| Kr-85   | 4.65     | Xe-131m | 7.76     |
| Kr-87   | 4.84 (3) | Kr-88   | 3.76 (3) |
| Kr-89   | 2.12 (2) | Kr-85m  | 1.46 (3) |
| Xe-133  | 1.56 (3) | Xe-138  | 1.82 (4) |
| Xe-135m | 8.92 (3) | Xe-135  | 6.55 (3) |
| Xe-137  | 3.27 (3) | Xe-133m | 2.86 (3) |

Halogens

|       |           |
|-------|-----------|
| I-131 | 3.27 (-2) |
| I-133 | 1.86 (-2) |
| I-135 | 1.2 (-2)  |

Particulates

|        |          |        |          |
|--------|----------|--------|----------|
| Cs-137 | 1.2 (-3) | Sr-89  | 4.7 (-3) |
| Sr-90  | 1.5 (-3) | Cs-134 | 1.2 (-3) |
| Ba-140 | 1.2 (-3) |        |          |

Liquid Effluents (curies)

|       |          |        |          |
|-------|----------|--------|----------|
| Sr-90 | 1.2 (-3) | Cr-51  | 6.1 (-2) |
| Mn-54 | 7.9 (-2) | Cs-134 | 1.51     |

\* Includes Xe-133, Xe-135, and others



Liquid Effluents (curies) (Cont'd)

|        |          |        |           |
|--------|----------|--------|-----------|
| Zn-65  | 9.6 (-2) | Co-60  | 5.28 (-1) |
| Co-58  | 6.81     | Xe-133 | 6.8 (-2)  |
| Cs-137 | 2.72     | Xe-135 | 1.6 (-2)  |
| Sr-89  | 1.3 (-2) |        |           |

Individual Plant Summary 1974

Facility: MAINE YANKEE Docket No: 50-309  
Type: PWR Licensed Power Level: 2440 MWt  
Location: 3.9 Mi. N Wiscasset, Maine Initial Criticality: 10/23/72  
Cooling Water Source: Atlantic (Back River)

Operation

Gross Thermal Generation: 1.1 (7) MWHT  
Net Electrical: 3.6 (6) MWHE  
Thermal Capacity Factor: 5.38 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 6.36 (3) Curies  
B) Total I-131 5.42 (-2) Curies  
C) Total Halogens (including I-131) 5.49 (-2) Curies  
D) Total Particulates 9.70 (-4) Curies  
E) Total Tritium 7.16 Curies

Liquid

A) Total Mixed Fission & Activation Products 4.00 Curies  
B) Total Tritium 2.03(2) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 4.68 (-2) | Curies |
| D) Volume of Liquid Waste Released | 1.05 (8)  | Liters |
| E) Volume of Dilution Water        | 5.02 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 3.00 (2) | Cubic meters |
| B) Activity            | 1.77 (3) | Curies       |
| C) Number of Shipments | 34       |              |

Airborne Effluents (curies)

Noble Gases

|        |          |         |          |
|--------|----------|---------|----------|
| Kr-85  | 5.32 (2) | Xe-133m | 3.34     |
| Xe-133 | 5.46 (3) | Xe-131m | 8.86 (1) |
| Xe-135 | 2.37 (1) |         |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 5.42 (-2) |
| I-133 | 1.90 (-3) |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 1.62 (-5) | Cr-51 | 4.56 (-6) |
| Cs-134 | 9.30 (-7) | Co-58 | 4.10 (-4) |
| Co-60  | 1.93 (-4) | Mo-99 | 4.46      |

Liquid Effluents (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Co-58  | 2.69 (-1) | Mn-54  | 2.53 (-3) |
| I-131  | 1.40 (-1) | Cs-134 | 1.49      |
| Cs-137 | 9.91 (-1) | Zr-95  | 1.59 (-3) |
| Sr-90  | 1.40 (-5) | Xe-133 | 3.77 (-2) |

\* Includes Xe-133, Xe-135, and others

Individual Plant Summary 1974

Facility: MILLSTONE POINT 1 Docket No: 50-245  
Type: BWR Licensed Power Level: 2011 MWT  
Location: 3.2 Mi. WSW New London, Conn. Initial Criticality: 10/26/70  
Cooling Water Source: Long Island Sound

Operation

Gross Thermal Generation: 1.1 (7) MWHT  
Net Electrical: 3.6 (6) MWHE  
Thermal Capacity Factor: 6.34 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 9.12 (5) Curies  
B) Total I-131 3.18 Curies  
C) Total Halogens (including I-131) 3.18 Curies  
D) Total Particulates 8.77 (-2) Curies  
E) Total Tritium 7.85 Curies

Liquid

A) Total Mixed Fission & Activation Products 1.98 (2) Curies  
B) Total Tritium 2.41 (1) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 0.0       | Curies |
| D) Volume of Liquid Waste Released | 1.06 (7)  | Liters |
| E) Volume of Dilution Water        | 7.64 (11) | Liters |

Solid Waste

|                        |              |              |
|------------------------|--------------|--------------|
| A) Volume              | 1.26 (3)     | Cubic meters |
| B) Activity            | 2.57 (2)     | Curies       |
| C) Number of Shipments | Not Reported |              |

Airborne Effluents (curies)

Noble Gases

|                    |          |        |          |
|--------------------|----------|--------|----------|
| Kr-87              | 8.99 (4) | Xe-133 | 2.55 (5) |
| Kr-88              | 1.42 (5) | Xe-138 | 6.65 (4) |
| Kr-85 <sub>m</sub> | 5.16 (4) | Xe-135 | 2.57 (5) |

Halogens

|       |      |
|-------|------|
| I-131 | 3.18 |
|-------|------|

Particulates

|           |           |       |           |
|-----------|-----------|-------|-----------|
| Cs-137    | 3.47 (-3) | Co-60 | 1.29 (-2) |
| Ba-La-140 | 1.71 (-2) | Cr-51 | 2.69 (-3) |
| Sr-89     | 3.35 (-3) | I-131 | 2.96 (-2) |
| Sr-90     | 4.05 (-4) | Co-58 | 7.91 (-4) |
| Cs-134    | 2.26 (-3) | Fe-59 | 6.25 (-4) |
| Mn-54     | 6.13 (-3) | Zn-65 | 4.60 (-5) |

Liquid Effluents (curies)

|       |           |        |           |
|-------|-----------|--------|-----------|
| Co-58 | 4.97 (-1) | Cs-134 | 7.21 (1)  |
| Y-90  | 2.05 (-1) | Co-60  | 9.67      |
| I-131 | 1.34 (1)  | Zn-65  | 1.74 (-1) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)(Cont'd)

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 9.52 (1)  | Fe-59 | 1.27 (-1) |
| Sr-89  | 1.62      |       |           |
| Sr-90  | 2.05 (-1) |       |           |
| Mn-54  | 6.18      |       |           |

### Individual Plant Summary 1974

Facility: MONTICELLO Docket No: 50-263  
Type: BWR Licensed Power Level: 1670 MWT  
Location: 23 Mi. SE St. Cloud, Minn. Initial Criticality: 12/10/70  
Cooling Water Source: Mississippi River

#### Operation

Gross Thermal Generation: 8.9 (6) MWHT  
Net Electrical: 2.9 (6) MWHE  
Thermal Capacity Factor: 6.11 (-1)

#### Summary of Effluents

##### Airborne

A) Total Noble Gases 1.49 (6) Curies  
B) Total I-131 5.69 Curies  
C) Total Halogens (including I-131) 4.76 (1) Curies  
D) Total Particulates 4.12 (-1) Curies  
E) Total Tritium 0.0 Curies

Liquid - There were no liquid releases from this unit.

A) Total Mixed Fission & Activation Products 0.0 Curies  
B) Total Tritium 0.0 Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 0.0 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 0.0 \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 0.0 \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ 2.68 (2) \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 2.48 (3) \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 47 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gases

|       |          |        |          |
|-------|----------|--------|----------|
| Kr-85 | 9.75 (3) | Xe-138 | 2.23 (5) |
| Kr-87 | 2.10 (5) | Xe-135 | 5.33 (5) |
| Kr-88 | 2.00 (5) | Kr-85m | 9.84 (4) |

Halogens

|       |          |
|-------|----------|
| I-131 | 5.69     |
| I-133 | 1.27 (1) |
| I-135 | 2.92 (1) |

Particulates

No data

Liquid Effluents (curies)

No liquid releases

\* Includes Xe-133, Xe-135, and others



Individual Plant Summary 1974

Facility: NINE MILE POINT 1 Docket No: 50-220  
Type: BWR Licensed Power Level: 1850 MWT  
Location: 8 MI. NE Oswego, N. Y. Initial Criticality: 9/5/69  
Cooling Water Source: Lake Ontario

Operation

Gross Thermal Generation: 1.0 (7) MWHT  
Net Electrical: 3.3 (6) MWHE  
Thermal Capacity Factor: 6.15 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 5.58 (5) Curies  
B) Total I-131 7.19 (-1) Curies  
C) Total Halogens (including I-131) <2.55 Curies  
D) Total Particulates 1.43 (-1) Curies  
E) Total Tritium 1.58 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 2.56 (1) Curies  
B) Total Tritium 1.87 (1) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 0.0       | Curies |
| D) Volume of Liquid Waste Released | 1.31 (7)  | Liters |
| E) Volume of Dilution Water        | 4.38 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 4.52 (2) | Cubic meters |
| B) Activity            | 1.93 (3) | Curies       |
| C) Number of Shipments | 75       |              |

Airborne Effluents (curies)

Noble Gases

|        |          |        |          |
|--------|----------|--------|----------|
| Kr-87  | 7.87 (4) | Xe-133 | 5.93 (4) |
| Kr-88  | 1.33 (5) | Xe-138 | 6.15 (4) |
| Kr-85m | 4.30 (4) | Xe-135 | 1.82 (5) |

Halogens

|       |            |
|-------|------------|
| I-131 | 7.19 (-1)  |
| I-133 | 1.66       |
| I-135 | <1.69 (-1) |

Particulates

|                |            |        |            |
|----------------|------------|--------|------------|
| Ba-140, La-140 | <1.30 (-1) | Zn-65  | <5.61 (-5) |
| Sr-89**        | 3.65 (-3)  | Cs-137 | 7.41 (-3)  |
| Sr-90**        | 4.61 (-3)  | Sb-124 | 8.86 (-6)  |
| Cs-134         | 3.66 (-3)  | Nb-95  | 4.3 (-5)   |
| Mn-54          | 1.70 (-3)  | Be-7   | 6.72 (-4)  |
| Co-60          | 7.54 (-3)  | Ce-141 | <1.54 (-3) |
| Cr-51          | <4.58 (-3) | Ce-144 | 3.01 (-4)  |
| Co-58          | 1.62 (-4)  | Ru-103 | 2.75 (-5)  |
| Fe-59          | 1.80 (-4)  | Zr-95  | 8.54 (-4)  |

\* Includes Xe-133, Xe-135, and others

\*\* Does not include fourth quarter data

Liquid Effluents (curies)

|        |            |           |           |
|--------|------------|-----------|-----------|
| Co-58  | <1.51 (-2) | Cs-134    | 4.64      |
| Mo-99  | 3.62 (-1)  | Co-60     | 5.16      |
| I-131  | 1.01       | Np-239    | 6.5' (-2) |
| I-133  | 4.75 (-1)  | Zr-95     | 2.50 (-2) |
| Cs-137 | 9.78       | Sb-124    | 1.00 (-3) |
| Sr-89  | 8.47 (-1)  | Ce-141    | 8.00 (-3) |
| Sr-90  | 1.23 (-1)  | Na-24     | 1.73 (-1) |
| Cr-51  | 2.71 (-1)  | Fe-59     | 1.00 (-2) |
| Mn-54  | 2.46       | Ba-La-140 | 2.76 (-1) |

Individual Plant Summary 1974

Facility: OCONEE; 1/2/3 Docket No: 50-269; 50-270; 50-287  
Type: PWR/PWR/PWR Licensed Power Level: 2568/2568/2568 MW  
Location: 30 Mi. W Greenville, S.C. Initial Criticality: 4/19/73; 9/9/74;  
9/5/74  
Cooling Water Source: Keowee Lake

Operation

Gross Thermal Generation: 1.2 (7); 4.3 (6); 4.4 (5) MWHT  
Net Electrical: 4.0 (6); 1.4 (6); 1.4 (5) MWHE  
Thermal Capacity Factor: 5.42 (-1); 6.12 (-1); 4.51 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 1.94 (4) Curies  
B) Total I-131 3.17 (-2) Curies  
C) Total Halogens (including I-131) 3.21 (-2) Curies  
D) Total Particulates 9.17 (-4) Curies  
E) Total Tritium 8.78 (2) Curies

Liquid

A) Total Mixed Fission & Activation Products 1.93 Curies  
B) Total Tritium 3.5 (2) Curies

|    |                                 |           |        |
|----|---------------------------------|-----------|--------|
| C) | Dissolved Noble Gases*          | 2.01      | Curies |
| D) | Volume of Liquid Waste Released | 1.11 (7)  | Liters |
| E) | Volume of Dilution Water        | 1.04 (12) | Liters |

Solid Waste

|    |                     |          |              |
|----|---------------------|----------|--------------|
| A) | Volume              | 5.99 (2) | Cubic meters |
| B) | Activity            | 2.18 (2) | Curies       |
| C) | Number of Shipments | 97       |              |

Airborne Effluents (curies)

Noble Gases

|        |           |         |          |
|--------|-----------|---------|----------|
| Kr-85  | 7.34 (-1) | Xe-135  | 5.27 (2) |
| Kr-88  | 3.75 (1)  | Xe-133m | 3.72 (1) |
| Kr-87  | 1.58      | Xe-131m | 1.62 (1) |
| Kr-85m | 7.45 (1)  | Ar-41   | 8.74 (1) |
| Xe-133 | 1.86 (4)  |         |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 3.17 (-2) |
| I-132 | 8.55 (-6) |
| I-133 | 3.73 (-4) |
| I-135 | 8.13 (-6) |

Particulates

|         |           |        |            |
|---------|-----------|--------|------------|
| Cs-137  | 3.17 (-5) | Sr-90  | 1.18 (-10) |
| Ba-140  | 4.20 (-5) | Co-60  | 1.02 (-5)  |
| Sr-89   | 1.18 (-5) | Cr-51  | 3.86 (-6)  |
| Cs-134  | 5.46 (-7) | Co-58  | 6.98 (-5)  |
| Mn-54   | 2.22 (-6) | Mo-99  | 6.59 (-4)  |
| Ag-110m | 4.32 (-7) | Cs-136 | 4.91 (-7)  |
| Cs-138  | 4.01 (-4) | Nb-95  | 3.23 (-7)  |
|         |           | Na-24  | 3.22 (-7)  |

Liquid Effluents (curies)

|       |           |       |           |
|-------|-----------|-------|-----------|
| Mn-56 | 1.55 (-5) | Cr-51 | 1.74 (-2) |
| Co-58 | 4.68 (-1) | Mn-54 | 7.66 (-3) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)(Cont'd)

|           |           |         |           |
|-----------|-----------|---------|-----------|
| Mo-99     | 2.91 (-3) | Cs-134  | 4.00 (-2) |
| W-187     | 1.13 (-4) | Sr-92   | 6.94 (-7) |
| I-131     | 1.10 (-1) | Co-60   | 2.80 (-2) |
| I-132     | 2.99 (-3) | Np-239  | 8.50 (-4) |
| I-133     | 9.22 (-2) | Zr-95   | 1.06 (-4) |
| Cs-136    | 2.57 (-3) | Ag-110m | 1.26 (-6) |
| Cs-137    | 6.02 (-2) | Sb-124  | 1.55 (-4) |
| Sr-89     | 1.61 (-2) | Ce-144  | 4.86 (-4) |
| Sr-90     | 1.95 (-3) | Na-24   | 1.44 (-3) |
| Xe-133    | 1.94      | Fe-59   | 3.06 (-5) |
| Ba-La-140 | 6.66 (-4) | Xe-135  | 6.38 (-2) |
| Kr-87     | 1.35 (-3) | Sb-122  | 4.49 (-4) |
| Zr-97     | 2.14 (-4) | Ba-139  | 8.68 (-4) |
| Nb-97     | 7.77 (-2) | Nb-95   | 1.99 (-4) |
| Xe-133m   | 1.04 (-2) | I-135   | 3.60 (-4) |
| Kr-85m    | 2.75 (-4) | Cs-135m | 3.71 (-5) |
| Kr-88     | 6.87 (-4) | Xe-131m | 2.73 (-3) |
|           |           | Cs-138  | 2.46 (-4) |

Individual Plant Summary 1974

Facility: OYSTER CREEK Docket No: 50-219  
Type: BWR Licensed Power Level: 1930 MWT  
Location: 9 Mi S. Toms River, N.J. Initial Criticality: 5/3/69  
Cooling Water Source: Barnegat Bay

Operation

Gross Thermal Generation: 1.1 (7) MWHT  
Net Electrical: 3.7 (6) MWHE  
Thermal Capacity Factor: 6.57 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 2.79 (5) Curies  
B) Total I-131 3.31 Curies  
C) Total Halogens (including I-131) \* 2.33 (1) Curies  
D) Total Particulates \*\* 9.01 (-1) Curies  
E) Total Tritium 4.15 (-1) Curies

Liquid

A) Total Mixed Fission & Activation Products 6.60 (-1) Curies  
B) Total Tritium 1.41 (1) Curies

\* Excluding I-131 collected on particulate filters

\*\* Includes halogens on particulate filters

- C) Dissolved Noble Gases\* 1.66 Curies  
D) Volume of Liquid Waste Released 7.34 (6) Liters  
E) Volume of Dilution Water 1.23 (12) Liters

Solid Waste

- A) Volume 1.21 (3) Cubic meters  
B) Activity 1.57 (3) Curies  
C) Number of Shipments 158

Airborne Effluents (curies)

Noble Gases

|        |          |         |          |
|--------|----------|---------|----------|
| Kr-88  | 5.07 (4) | Xe-138  | 5.51 (4) |
| Kr-87  | 4.73 (4) | Xe-135m | 1.39 (4) |
| Kr-85m | 1.61 (4) | Xe-135  | 7.34 (4) |
| Kr-89  | 6.00     | Xe-137  | 3.40 (1) |
| Xe-133 | 2.26 (4) | Xe-133m | 2.33 (2) |

Halogens

|       |          |
|-------|----------|
| I-131 | 3.31     |
| I-133 | 1.05 (1) |
| I-135 | 9.54     |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 2.60 (-3) | Cr-51  | 1.50 (-3) |
| Ba-140 | 5.81 (-2) | I-131  | 3.34 (-2) |
| La-140 | 6.04 (-2) | Co-58  | 1.60 (-3) |
| Sr-89  | 4.74 (-2) | Fe-59  | 2.00 (-4) |
| Sr-90  | 1.20 (-3) | I-133  | 3.43 (-1) |
| Cs-134 | 1.70 (-3) | Tc-99m | 1.37 (-2) |
| Mn-54  | 3.30 (-3) | Mo-99  | 1.18 (-2) |
| Co-60  | 8.40 (-3) | Ce-141 | 1.00 (-4) |
| Sr-91  | 1.31 (-1) | Np-239 | 2.50 (-2) |
| Zr-95  | 2.00 (-4) |        |           |
| I-135  | 1.56 (-1) |        |           |

\* Includes Xe-133, Xe-135, and others



Liquid Effluents (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Co-58  | 9.20 (-3) | Sr-92  | 1.00 (-4) |
| Mo-99  | 1.12 (-1) | Co-60  | 7.35 (-2) |
| Tc-99m | 1.09 (-1) | Zn-65  | 2.00 (-3) |
| I-131  | 1.42 (-2) | Zr-95  | 7.70 (-3) |
| Sr-89  | 1.16 (-2) | Fe-59  | 1.23 (-2) |
| Sr-90  | 6.20 (-3) | Ba-140 | 2.40 (-2) |
| Cr-51  | 1.11 (-1) | La-140 | 2.78 (-2) |
| Mn-54  | 4.44 (-2) | I-135  | 2.1 (-3)  |
| Cs-134 | 2.56 (-2) | I-133  | 1.57 (-2) |
| Cs-138 | 1.0 (-4)  | Kr-85  | 2.0 (-4)  |
| Sr-91  | 5.5 (-3)  | I-132  | 1.0 (-4)  |
| Nb-95  | 3.2 (-3)  | Xe-133 | 3.78 (-1) |
| I-134  | 1.0 (-4)  | Ce-141 | 4.10 (-3) |
| Xe-135 | 1.28      | Ce-144 | 3.10 (-3) |
| Np-239 | 1.95 (-2) | Cs-137 | 1.5 (-2)  |

Individual Plant Summary 1974

Facility: PALISADES Docket No: 50-255  
Type: PWR Licensed Power Level: 2200 MWT  
Location: 5 Mi S. South Haven, Mich. Initial Criticality: 5/24/71  
Cooling Water Source: Lake Michigan

Operation

Gross Thermal Generation: 4.0 (5) MWHT  
Net Electrical: 7.8 (4) MWHE  
Thermal Capacity Factor: 2.05 (-2)

Summary of Effluents

Airborne

A) Total Noble Gases 3.36 (-2) Curies  
B) Total I-131 9.94 (-3) Curies  
C) Total Halogens (including I-131) 2.30 (-2) Curies  
D) Total Particulates 3.48 (-3) Curies  
E) Total Tritium 0.0 Curies

Liquid

A) Total Mixed Fission & Activation Products 5.87 Curies  
B) Total Tritium 8.11 Curies

- C) Dissolved Noble Gases\* 4.74 (-2) Curies  
D) Volume of Liquid Waste Released 4.10 (7) Liters  
E) Volume of Dilution Water 1.14 (11) Liters

Solid Waste

- A) Volume 4.03 (2) Cubic meters  
B) Activity 4.98 (3) Curies  
C) Number of Shipments 58

Airborne Effluents (curies)

Noble Gases

|        |           |         |           |
|--------|-----------|---------|-----------|
| Kr-85m | 2.17 (-4) | Xe-133m | 3.33 (-5) |
| Xe-133 | 1.67 (-2) | Xe-131m | 7.70 (-3) |
| Xe-135 | 8.91 (-3) |         |           |

Halogens

|       |           |
|-------|-----------|
| I-131 | 9.94 (-3) |
| I-133 | 9.95 (-3) |
| I-135 | 1.94 (-3) |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-134 | 4.24 (-5) | Co-58  | 1.96 (-3) |
| Mn-54  | 5.95 (-4) | Cs-137 | 1.21 (-4) |
| Co-60  | 5.76 (-4) |        |           |

Liquid Effluents (curies)

|        |           |       |           |
|--------|-----------|-------|-----------|
| Co-58  | 7.01 (-1) | Co-60 | 4.30 (-1) |
| I-131  | 5.60 (-3) | Zn-65 | 1.91 (-3) |
| I-133  | 4.84 (-4) | Zr-95 | 2.13 (-3) |
| Cs-137 | 1.48      | Fe-59 | 1.21 (-3) |
| Co-57  | 1.03 (-2) | Cr-51 | 1.39 (-2) |
| Nb-95  | 7.59 (-3) |       |           |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies) (Cont'd)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Mn-54  | 2.91 (-1) | La-140 | 1.00 (-5) |
| Cs-134 | 7.00 (-1) | Ni-63  | 2.00      |
|        |           | I-135  | 5.80 (-5) |

Individual Plant Summary 1974

Facility: PEACH BOTTOM 2/3 Docket No: 50-777/50-278  
Type: BWR/BWR Licensed Power Level: 3293/3293 MWT  
Location: 17.9 Mi. S. Lancaster, Pa Initial Criticality: 9/16/73;8/7/74  
Cooling Water Source: Susquehanna River (Conowingo Pond)

Operation

Gross Thermal Generation: 1.2 (7); 5.4 (5) MWHT  
Net Electrical: 3.7 (6); 1.7 (5) MWHE  
Thermal Capacity Factor: 8.05 (-1); 7.63 (-1)

Summary of Effluents

Airborne

- A) Total Noble Gases 2.48 (2) Curies
- B) Total I-131 6.61 (-3) Curies
- C) Total Hal. gens (including I-131) 6.6. (-3) Curies
- D) Total Particulates 1.2 (-3) Curies
- E) Total Tritium 5.57 Curies

Liquid

- A) Total Mixed Fission & Activation Products 9.46 (-1) Curies
- B) Total Tritium 9.95 Curies

- C) Dissolved Noble Gases\* 6.9 (-3) Curies
- D) Volume of Liquid Waste Released 4.69 (7) Liters
- E) Volume of Dilution Water 3.02 (11) Liters

Solid Waste

- A) Volume 5.10 (2) Cubic meters
- B) Activity 6.38 (1) Curies
- C) Number of Shipments 41

Airborne Effluents (curies)

No Isotopic Data

Liquid Effluents (curies)

|       |           |       |           |
|-------|-----------|-------|-----------|
| Co-58 | 4.47 (-2) | Co-57 | 1.51 (-3) |
| Cr-51 | 6.92 (-2) | Zn-65 | 2.99 (-3) |
| Zr-95 | 3.43 (-3) | Mo-99 | 1.77 (-3) |
| Na-24 | 2.09 (-1) | Nb-95 | 2.49 (-3) |
| Mn-56 | 1.07 (-2) | W-187 | 1.08 (-3) |
| As-76 | 3.68 (-2) | Mn-54 | 5.18 (-3) |
| Co-60 | 7.49 (-3) | Fe-59 | 5.51 (-4) |

\* Includes Xe-133, Xe-135, and others

Individual Plant Summary 1974

Facility: PILGRIM 1 Docket No: 50-293  
Type: BWR Licensed Power Level: 1998 MWT  
Location: 25 Mi. SE Boston, Mass. Initial Criticality: 6/16/72  
Cooling Water Source: Cape Cod Bay

Operation

Gross Thermal Generation: 6.0 (6) MWHT  
Net Electrical: 2.0 (6) MWHE  
Thermal Capacity Factor: 3.43 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 5.46 (5) Curies  
B) Total I-131 1.44 Curies  
C) Total Halogens (including I-131) 1.45 Curies  
D) Total Particulates 1.87 (-2) Curies  
E) Total Tritium 7.97 Curies

Liquid

A) Total Mixed Fission & Activation Products 4.22 Curies  
B) Total Tritium 1.05 (1) Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 0.0 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 8.82 (6) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 2.56 (10) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ 4.06 (2) \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 1.47 (1) \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 34 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gases

|        |          |        |          |
|--------|----------|--------|----------|
| Kr-88  | 9.08 (4) | Xe-133 | 8.14 (4) |
| Kr-87  | 7.12 (4) | Xe-138 | 6.30 (4) |
| Kr-85m | 3.63 (4) | Xe-135 | 1.53 (5) |

Halogens

|         |      |
|---------|------|
| I-125   | 1.44 |
| I-133** | 1.12 |
| I-135** | 1.87 |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 4.43 (-4) | Cr-51 | 1.35 (-5) |
| Ba-140 | 4.70 (-3) | Co-58 | 3.08 (-4) |
| Sr-89  | 8.86 (-4) | Fe-59 | 9.79 (-5) |
| Sr-90  | 5.52 (-6) | Zn-65 | 5.22 (-5) |
| Cs-134 | 1.52 (-4) |       |           |
| Mn-54  | 9.91 (-4) |       |           |
| Co-60  | 1.38 (-3) |       |           |

Liquid Effluents (curies)

|       |           |        |           |
|-------|-----------|--------|-----------|
| Co-58 | 2.96 (-1) | Cs-134 | 4.99 (-1) |
| Mo-99 | 9.98 (-3) | Co-60  | 9.55 (-1) |
| I-131 | 1.71 (-1) | Zn-65  | 5.57 (-2) |

\* Includes Xe-133, Xe-135, and others

\*\* Sum of two quarterly analyses as required by Tech Specs



Liquid Effluents (curies) (Cont'd)

|        |           |         |           |
|--------|-----------|---------|-----------|
| I-133  | 1.14 (-3) | Np-239  | 2.75 (-3) |
| Cs-136 | 1.26 (-3) | Zr-95   | 1.03 (-3) |
| Cs-137 | 1.58      | Ag-110m | 1.95 (-4) |
| Sr-89  | 1.62 (-2) | Sb-124  | 3.82 (-3) |
| Sr-90  | 2.71 (-3) | Ce-141  | 7.40 (-5) |
| Cr-51  | 1.21 (-1) | Ce-144  | 8.04 (-4) |
| Mn-54  | 2.75 (-1) | Fe-59   | 2.31 (-2) |

Individual Plant Summary 1974

Facility: POINT BEACH 1/2 Docket No: 50-266/50-301  
Type: PWR/PWR Licensed Power Level: 1518/1518 MWT  
Location: 15 Mi. N. Manitowoc, Wisc. Initial Criticality: 11/2/70;5/30/72  
Cooling Water Source: Lake Michigan

Operation

Gross Thermal Generation: 1.0 (7); 1.0 (7) MWHT  
Net Electrical: 3.3 (6); 3.4 (6) MWHE  
Thermal Capacity Factor: 7.62 (-1); 7.69 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 9.74 (3) Curies  
B) Total I-131 8.83 (-2) Curies  
C) Total Halogens (including I-131) 1.27 (-1) Curies  
D) Total Particulates 7.28 (-2) Curies  
E) Total Tritium 4.28 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 1.89 (-1) Curies  
B) Total Tritium 8.33 (2) Curies

- C) Dissolved Noble Gases\* 2.11 (-1) Curies  
D) Volume of Liquid Waste Released 6.37 (7) Liters  
E) Volume of Dilution Water 5.95 (11) Liters

Solid Waste

- A) Volume 1.32 (2) Cubic meters  
B) Activity 2.12 (3) Curies  
C) Number of Shipments 12

Airborne Effluents (curies)

Noble Gases

|        |          |         |          |
|--------|----------|---------|----------|
| Kr-85  | 2.31 (1) | Xe-135m | 3.22 (2) |
| Kr-88  | 5.42 (2) | Xe-135  | 1.30 (3) |
| Kr-87  | 2.51 (2) | Xe-133m | 1.33 (2) |
| Kr-85m | 3.74 (2) | Xe-131m | 3.94 (2) |
| Xe-133 | 6.04 (3) | Ar-41   | 3.20 (1) |
| Xe-138 | 3.21 (2) |         |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 8.83 (-2) |
| I-132 | 4.71 (-8) |
| I-133 | 3.84 (-2) |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 2.32 (-4) | Co-58  | 2.80 (-2) |
| Co-60  | 3.72 (-4) | Rb-88  | 9.15 (-4) |
| Na-24  | 3.16 (-5) | Cs-138 | 1.41 (-4) |
| Nb-95  | 6.32 (-3) |        |           |

Liquid Effluents (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Co-58  | 1.25 (-3) | Mn-54  | 1.96 (-5) |
| I-131  | 1.82 (-2) | Cs-134 | 3.84 (-2) |
| I-132  | 1.20 (-3) | Co-60  | 2.12 (-4) |
| I-133  | 2.87 (-2) | Zr-95  | 7.95 (-5) |
| Cs-137 | 9.82 (-2) | Ce-144 | 8.00 (-6) |

\*Includes Xe-133, Xe-135, and others

Liquid Effluents (curies) (Cont'd)

|        |           |         |           |
|--------|-----------|---------|-----------|
| Sr-89  | 9.30 (-4) | Ru-103  | 5.40 (-4) |
| Sr-90  | 1.60 (-4) | Xe-135  | 8.48 (-3) |
| Nb-95  | 1.27 (-4) | Xe-131m | 3.38 (-4) |
| Ru-106 | 5.79 (-4) | Xe-133m | 3.36 (-4) |
| Kr-85  | 1.08 (-3) |         |           |

Individual Plant Summary 1974

Facility: PRAIRIE ISLAND 1/2 Docket No: 50-282/50-306  
Type: PWR-PWR Licensed Power Level: 1650/1650 MWT  
Location: 26 MI SE Minneapolis, Minn. Initial Criticality: 12/1/73;12/17/74  
Cooling Water Source: Mississippi River

Operation

Gross Thermal Generation: 5.2 (6); 4.5 (4) MWHT  
Net Electrical: 1.4 (6); 1.9 (3) MWHE  
Thermal Capacity Factor: 3.67 (-1); 3.1 (-3)

Summary of Effluents

Airborne

A) Total Noble Gases 3.58 (2) Curies  
B) Total I-131 4.49 (-4) Curies  
C) Total Halogens (including I-131) 6.03 (-4) Curies  
D) Total Particulates 0.0 Curies  
E) Total Tritium 3.91 Curies

Liquid

A) Total Mixed Fission & Activation Products 2.76 (-4) Curies  
B) Total Tritium 1.42 (2) Curies

- C) Dissolved Noble Gases\* 1.28 (-1) Curies  
D) Volume of Liquid Waste Released 3.00 (8) Liters  
E) Volume of Dilution Water 1.21 (11) Liters

Solid Waste

- A) Volume 1.35 (2) Cubic meters  
B) Activity 7.61 Curies  
C) Number of Shipments 10

Airborne Effluents (Curies)

Noble Gases

|        |           |         |           |
|--------|-----------|---------|-----------|
| Kr-85  | 5.36 (-4) | Xe-135m | 2.75 (-2) |
| Kr-88  | 3.10 (-2) | Xe-135  | 1.11 (-1) |
| Kr-85m | 9.50 (-4) | Xe-133m | 2.40 (-1) |
| Xe-133 | 3.57 (2)  | Ar-41   | 1.06      |

Halogens

|       |           |
|-------|-----------|
| I-131 | 4.49 (-4) |
| I-133 | 1.38 (-4) |
| I-135 | 1.64 (-5) |

Particulates

No Measured Releases

Liquid Effluents (curies)

|         |           |        |           |
|---------|-----------|--------|-----------|
| Co-58   | 2.61 (-4) | Xe-133 | 1.28 (-1) |
| Co-60   | 4.00 (-5) | Xe-135 | 2.90 (-4) |
| Xe-133m | 1.1 (-4)  |        |           |

\* Includes Xe-133, Xe-135, and others

Individual Plant Summary 1974

Facility: QUAD CITIES 1/2 Docket No: 50-254/50-265  
Type: BWR/BWR Licensed Power Level: 2511/2511 MWT  
Location: 20 Mi. NE Moline, Ill. Initial Criticality: 10/18/71; 4/26/71  
Cooling Water Source: Mississippi River

Operation

Gross Thermal Generation: 1.1 (7); 1.5 (7) MWHT  
Net Electrical: 3.6 (6); 4.5 (6) MWHE  
Thermal Capacity Factor: 5.09 (-1); 6.74 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 9.5 (5) Curies  
B) Total I-131 8.8 Curies  
C) Total Halogens (including I-131) 3.60 (1) Curies  
D) Total Particulates 6.1 (-2) Curies  
E) Total Tritium 2.90 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 3.88 (1) Curies  
B) Total Tritium 3.40 (1) Curies

- C) Dissolved Noble Gases\* \_\_\_\_\_ 0.0 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 3.00 (7) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 1.23 (12) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ 5.61 (2) \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 7.35 (2) \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 284 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gases

|        |          |         |          |
|--------|----------|---------|----------|
| Kr-85  | 6.60 (3) | Xe-133  | 1.93 (5) |
| Kr-88  | 1.75 (5) | Xe-138  | 6.10 (4) |
| Kr-87  | 1.27 (5) | Xe-135m | 2.52 (4) |
| Kr-85m | 6.10 (4) | Xe-135  | 2.70 (5) |
| Kr-83m | 1.25 (5) | Xe-133m | 5.20 (3) |

Halogens

|       |          |
|-------|----------|
| I-131 | 8.82     |
| I-133 | 1.60 (1) |
| I-135 | 1.18 (1) |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Ba-140 | 6.90 (-3) | Co-60  | 3.50 (-3) |
| La-140 | 9.20 (-3) | Cr-51  | 6.10 (-3) |
| Sr-89  | 5.83 (-3) | I-131  | 3.40 (-2) |
| Sr-90  | 9.49 (-5) | Co-58  | 6.50 (-4) |
| Cs-134 | 3.44 (-3) | Fe-59  | 5.60 (-6) |
| Mn-54  | 7.10 (-4) | Zn-65  | 2.06 (-4) |
|        |           | Cs-137 | 4.90 (-3) |

\* Includes Xe-133, Xe-135, and others



Liquid Effluents (curies)

|        |           |         |           |
|--------|-----------|---------|-----------|
| Co-58  | 4.30 (-1) | Mn-54   | 3.80 (-1) |
| I-131  | 2.09      | Cs-134  | 2.95      |
| I-133  | 8.70 (-3) | Co-60   | 3.01      |
| Cs-136 | 9.30      | Zn-65   | 1.19 (-1) |
| Cs-137 | 6.00      | Zr-95   | 8.40 (-4) |
| Sr-89  | 2.38 (-1) | Ag-110m | 8.00 (-5) |
| Sr-90  | 4.51 (-2) | Fe-59   | 2.20 (-4) |
| Cr-51  | 1.10      |         |           |

Individual Plant Summary 1974

Facility: H. B. ROBINSON 2 Docket No: 50-261  
Type: PWR Licensed Power Level: 2200 MWT  
Location: 4.5 Mi. WNW Hartsville, S.C. Initial Criticality: 9/20/70  
Cooling Water Source: Robinson Impoundment

Operation

Gross Thermal Generation: 1.6 (7) MWHT  
Net Electrical: 4.8 (6) MWHE  
Thermal Capacity Factor: 8.10 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 2.31 (3) Curies  
B) Total I-131 4.64 (-2) Curies  
C) Total Halogens (including I-131) 5.15 (-2) Curies  
D) Total Particulates 1.69 (-3) Curies  
E) Total Tritium 5.15 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 2.48 Curies  
B) Total Tritium 4.49 (2) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 4.38 (-1) | Curies |
| D) Volume of Liquid Waste Released | 4.26 (7)  | Liters |
| E) Volume of Dilution Water        | 5.57 (10) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 3.82 (2) | Cubic meters |
| B) Activity            | 2.00 (2) | Curies       |
| C) Number of Shipments | 32       |              |

Airborne Effluents (curies)

Noble Gases

|        |          |         |           |
|--------|----------|---------|-----------|
| Kr-85m | 2.83     | Xe-131m | 7.75 (-1) |
| Xe-133 | 2.11 (3) | Ar-41   | 3.19      |
| Xe-135 | 4.31 (1) |         |           |

Halogens

|       |           |
|-------|-----------|
| I-131 | 4.64 (-2) |
| I-133 | 3.44 (-3) |
| I-135 | 9.48 (-4) |

Particulates

|        |           |        |           |
|--------|-----------|--------|-----------|
| Mn-54  | 2.43 (-5) | Cs-134 | 6.61 (-5) |
| Co-58  | 7.04 (-4) | Co-60  | 3.61 (-4) |
| Ba-140 | 9.06 (-5) |        |           |

Liquid Effluents (curies)

|       |           |         |           |
|-------|-----------|---------|-----------|
| Mo-99 | 7.50 (-5) | Cr-51   | 8.14 (-3) |
| I-131 | 8.23 (-1) | Cs-134  | 1.35 (-1) |
| Sr-90 | 1.07 (-3) | Co-60   | 1.62 (-1) |
| Mn-54 | 2.2 (-2)  | Ag-110m | 3.23 (-4) |
| Zn-65 | 2.16 (-3) | Ce-141  | 1.34 (-4) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)(Cont'd)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Sb-124 | 1.91 (-4) | Fe-59  | 1.93 (-5) |
| Co-58  | 2.15 (-1) | Xe-133 | 3.59 (-1) |
| Cs-137 | 1.52 (-1) | Xe-135 | 8.02 (-2) |
| Sr-89  | 3.15 (-3) |        |           |

Individual Plant Summary 1974

Facility: SAN ONOFRE 1 Docket No: 50-206  
Type: PWR Licensed Power Level: 1347 MWt  
Location: 2.5 Mi. S San Clemente, Calif Initial Criticality: 6/14/67  
Cooling Water Source: Pacific Ocean

Operation

Gross Thermal Generation: 9.7 (6) MWHT  
Net Electrical: 3.1 (6) MWHE  
Thermal Capacity Factor: 8.35 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 1.78 (3) Curies  
B) Total I-131 1.88 (-4) Curies  
C) Total Halogens (including I-131) 2.31 (-4) Curies  
D) Total Particulates 8.74 (-5) Curies  
E) Total Tritium 9.14 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 5.04 Curies  
B) Total Tritium 3.81 (3) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 3.37      | Curies |
| D) Volume of Liquid Waste Released | 2.64 (7)  | Liters |
| E) Volume of Dilution Water        | 5.37 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 6.82 (1) | Cubic meters |
| B) Activity            | 2.3 (2)  | Curies       |
| C) Number of Shipments | 11       |              |

Airborne Effluents (curies)

Noble Gases

|        |           |         |          |
|--------|-----------|---------|----------|
| Kr-85  | 6.39 (1)  | Xe-135  | 9.72     |
| Kr-85m | 8.93 (-1) | Xe-133m | 1.77 (2) |
| Xe-133 | 1.42 (3)  | Xe-131m | 1.05 (2) |

Halogens

|       |           |
|-------|-----------|
| I-131 | 1.88 (-4) |
| I-133 | 1.21 (-5) |
| I-135 | 3.10 (-5) |

Particulates

|              |           |
|--------------|-----------|
| Cs-134 + 137 | 8.74 (-5) |
|--------------|-----------|

Liquid Effluents (curies)

|       |           |              |           |
|-------|-----------|--------------|-----------|
| Co-58 | 3.53 (-1) | Cs-134 + 137 | 3.97      |
| I-131 | 4.70 (-2) | Co-60        | 6.96 (-2) |
| I-132 | 3.20 (-2) | Ag-110m      | 1.7 (-2)  |
| Sr-89 | 2.0 (-3)  | Sb-124       | 1.3 (-2)  |
| Sr-90 | 4. (-3)   | Na-24        | 3.00 (-1) |
| Cr-51 | 1.87 (-1) | Fe-59        | 1.8 (-2)  |
| Mn-54 | 1.1 (-2)  | C-14         | 2.5 (-2)  |

\* Includes Xe-133, Xe-135, and others

Individual Plant Summary 1974

Facility: SURRY 1/2 Docket No: 50-280/50-281  
Type: PWR/PWR Licensed Power Level: 2441/2441 MWT  
Location: 17 Mi. NW Newport News, Va. Initial Criticality: 7/1/72;3/7/73  
Cooling Water Source: James River

Operation

Gross Thermal Generation: 1.7 (7); 8.5 (6) MWHT  
Net Electrical: 3.3 (6); 2.6 (6) MWHE  
Thermal Capacity Factor: 5.14 (-1); 3.98 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 5.50 (4) Curies  
B) Total I-131 1.01 (-1) Curies  
C) Total Halogens (including I-131) 1.22 (-1) Curies  
D) Total Particulates 4.14 (-2) Curies  
E) Total Tritium 6.04 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 3.76 Curies  
B) Total Tritium 2.45 (2) Curies

|    |                                 |           |        |
|----|---------------------------------|-----------|--------|
| C) | Dissolved Noble Gases*          | 7.96      | Curies |
| D) | Volume of Liquid Waste Released | 7.54 (7)  | Liters |
| E) | Volume of Dilution Water        | 1.26 (12) | Liters |

Solid Waste

|    |                     |          |              |
|----|---------------------|----------|--------------|
| A) | Volume              | 1.21 (3) | Cubic meters |
| B) | Activity            | 5.06 (1) | Curies       |
| C) | Number of Shipments | 70       |              |

Airborne Effluents (curies)

Noble Gases

|        |          |         |          |
|--------|----------|---------|----------|
| Kr-85  | 8.12     | Xe-135  | 2.23 (2) |
| Kr-88  | 1.93 (1) | Xe-133m | 2.60     |
| Kr-87  | 1.49 (1) | Ar-41   | 1.50 (1) |
| Kr-85m | 1.98 (1) |         |          |
| Xe-133 | 5.46 (4) |         |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 1.01 (-1) |
| I-133 | 1.95 (-2) |
| I-135 | 4.22 (-3) |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 1.71 (-3) | Co-60 | 1.16 (-3) |
| Cs-134 | 1.01 (-7) | Co-58 | 1.16 (-3) |
| Mn-54  | 3.74 (-2) |       |           |

Liquid Effluents (curies)

|       |          |        |           |
|-------|----------|--------|-----------|
| Co-58 | 1.93     | Mn-54  | 3.58 (-1) |
| I-131 | 1.10 (1) | Cs-134 | 3.73      |
| I-133 | 4.67     | Co-60  | 1.00      |

\* Includes Xe-133, Xe-135, and others



Liquid Effluents (curies)(Cont'd)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 6.83      | Xe-133 | 7.91      |
| Sr-89  | 1.97 (-2) | Xe-135 | 1.12 (-1) |
| Sr-90  | 1.49 (-3) |        |           |

Individual Plant Summary 1974

Facility: THREE MILE ISLAND 1 Docket No: 50-289  
Type: PWR Licensed Power Level: 2535 MWT  
Location: 10 Mi. SE Harrisburg, Pa. Initial Criticality: 6/5/74  
Cooling Water Source: Susquehanna River

Operation

Gross Thermal Generation:\* 6.2 (6) MWHT  
Net Electrical:\* 2.1 (6) MWHE  
Thermal Capacity Factor:\* 8.41 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 9.16 (2) Curies  
B) Total I-131 2.83 (-3) Curies  
C) Total Halogens (including I-131) 3.11 (-3) Curies  
D) Total Particulates 2.49 (-4) Curies  
E) Total Tritium 1.27 (1) Curies

Liquid

A) Total Mixed Fission & Activation Products 1.31 Curies  
B) Total Tritium 1.30 (2) Curies

\*From Commercial Operation 9/2/74 - 12/31/74

- C) Dissolved Noble Gases\* \_\_\_\_\_ 1.27 \_\_\_\_\_ Curies  
D) Volume of Liquid Waste Released \_\_\_\_\_ 2.97 (6) \_\_\_\_\_ Liters  
E) Volume of Dilution Water \_\_\_\_\_ 6.32 (9) \_\_\_\_\_ Liters

Solid Waste

- A) Volume \_\_\_\_\_ 2.0 (2) \_\_\_\_\_ Cubic meters  
B) Activity \_\_\_\_\_ 6.06 \_\_\_\_\_ Curies  
C) Number of Shipments \_\_\_\_\_ 16 \_\_\_\_\_

Airborne Effluents (curies)

Noble Gases

|        |           |         |           |
|--------|-----------|---------|-----------|
| Kr-88  | 3.35 (-3) | Xe-135m | 1.72 (-4) |
| Kr-85m | 4.96 (-1) | Xe-133m | 6.65      |
| Xe-133 | 8.91 (2)  | Xe-131m | 6.81 (-1) |
| Xe-135 | 1.26 (1)  | Ar-41   | 5.77      |

Halogens

|       |           |
|-------|-----------|
| I-131 | 2.83 (-3) |
| I-133 | 1.25 (-4) |
| I-135 | 1.96 (-7) |

Particulates

|       |           |
|-------|-----------|
| Sr-89 | 3.41 (-7) |
| Sr-90 | 7.13 (-7) |
| Co-58 | 2.28 (-4) |

Liquid Effluents (curies)

|       |           |        |           |
|-------|-----------|--------|-----------|
| Co-58 | 1.79 (-2) | Cr-51  | 5.25 (-3) |
| Mo-99 | 3.99 (-6) | Mn-54  | 2.41 (-4) |
| W-187 | 4.71 (-5) | Cs-134 | 3.29 (-5) |
| I-131 | 9.21 (-3) | Co-60  | 1.31 (-4) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)(Cont'd)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Cs-137 | 3.52 (-3) | Zr-95  | 2.73 (-4) |
| Sr-89  | 1.62 (-5) | Na-24  | 3.28 (-5) |
| Sr-90  | 1.60 (-6) | Xe-133 | 1.21      |
| Xe-135 | 4.27 (-2) |        |           |

Individual Plant Summary 1974

Facility: TURKEY POINT 3/4 Docket No: 50-250/50-251  
Type: PWR/PWR Licensed Power Level: 2200/2200 MWT  
Location: 10 Mi. E Homestead, Fla. Initial Criticality: 10/20/72; 6/11/73  
Cooling Water Source: Biscayne Bay (closed cooling canal system)

Operation

Gross Thermal Generation: 1.2 (7); 1.4 (7) MWHT  
Net Electrical: 3.6 (6); 4.3 (6) MWHE  
Thermal Capacity Factor: 6.09 (-1); 7.12 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 4.66 (3) Curies  
B) Total I-131 3.41 Curies  
C) Total Halogens (including I-131) 3.45 Curies  
D) Total Particulates 2.20 (-1) Curies  
E) Total Tritium 9.22 Curies

Liquid

A) Total Mixed Fission & Activation Products 1.61 Curies  
B) Total Tritium 5.80 (2) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 2.43 (-1) | Curies |
| D) Volume of Liquid Waste Released | 4.03 (7)  | Liters |
| E) Volume of Dilution Water        | 5.37 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 4.23 (2) | Cubic meters |
| B) Activity            | 4.19 (1) | Curies       |
| C) Number of Shipments | 22       |              |

Airborne Effluents (curies)

Noble Gases

|        |          |         |          |
|--------|----------|---------|----------|
| Kr-85  | 2.91 (2) | Xe-135m | 5.11 (1) |
| Kr-88  | 1.45 (1) | Xe-135  | 1.72 (2) |
| Kr-87  | 4.66     | Xe-133m | 2.22 (1) |
| Kr-85m | 1.75 (1) | Xe-131m | 3.80 (1) |
| Xe-133 | 3.98 (3) | Ar-41   | 5.21 (1) |
| Xe-138 | 1.58 (1) |         |          |

Halogens

|       |           |
|-------|-----------|
| I-131 | 3.41      |
| I-133 | 3.37 (-2) |
| I-135 | 5.15 (-3) |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 8.80 (-2) | Mn-54 | 2.91 (-3) |
| Ba-140 | 1.10 (-4) | Co-60 | 1.58 (-2) |
| La-140 | 8.19 (-5) | I-131 | 4.58 (-2) |
| Sr-89  | 9.19 (-5) | Co-58 | 1.77 (-2) |
| Sr-90  | 1.18 (-5) | Fe-59 | 1.80 (-5) |
| Cs-134 | 5.20 (-2) |       |           |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)

|        |           |        |           |
|--------|-----------|--------|-----------|
| Co-58  | 1.57 (-1) | Mn-54  | 8.17 (-3) |
| Mo-99  | 5.10 (-3) | Cs-134 | 3.56 (-2) |
| W-187  | 3.97 (-3) | Co-60  | 2.86 (-2) |
| I-131  | 1.07      | Zn-65  | 2.57 (-3) |
| I-132  | 7.46 (-4) | Zr-95  | 2.82 (-3) |
| I-133  | 9.94 (-2) | Sb-124 | 1.94 (-2) |
| Cs-137 | 6.75 (-2) | Ce-144 | 7.68 (-3) |
| Sr-89  | 9.36 (-3) | Fe-59  | 2.56 (-3) |
| Sr-90  | 1.93 (-4) | Xe-133 | 3.19 (-2) |
| Cr-51  | 2.05 (-2) | Xe-135 | 5.79 (-3) |

Individual Plant Summary 1974

Facility: VERMONT YANKEE Docket No: 50-271  
Type: BWR Licensed Power Level: 1593 MWT  
Location: 5 Mi. S Brattleboro, Vt. Initial Criticality: 3/24/72  
Cooling Water Source: Connecticut River

Operation

Gross Thermal Generation: 8.2 (6) MWHT  
Net Electrical: 2.5 (6) MWHE  
Thermal Capacity Factor: 5.88 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 6.39 (4) Curies  
B) Total I-131 3.52 (-1) Curies  
C) Total Halogens (including I-131) 4.72 (-1) Curies  
D) Total Particulates 1.03 (-2) Curies  
E) Total Tritium 2.24 Curies

Liquid

A) Total Mixed Fission & Activation Products 0.0 Curies  
B) Total Tritium 0.0 Curies



|                                    |     |        |
|------------------------------------|-----|--------|
| C) Dissolved Noble Gases*          | 0.0 | Curies |
| D) Volume of Liquid Waste Released | 0.0 | Liters |
| E) Volume of Dilution Water        | 0.0 | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 1.83 (2) | Cubic meters |
| B) Activity            | 1.02 (2) | Curies       |
| C) Number of Shipments | 34       |              |

Airborne Effluents (curies)

Noble Gases

|        |          |        |          |
|--------|----------|--------|----------|
| Kr-88  | 7.87 (2) | Xe-133 | 2.22 (4) |
| Kr-87  | 1.23 (3) | Xe-138 | 3.15 (3) |
| Kr-85m | 1.74 (3) | Xe-135 | 3.48 (4) |

Halogens

|       |           |
|-------|-----------|
| I-131 | 3.52 (-1) |
| I-133 | 1.20 (-1) |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 7.80 (-4) | Mn-54 | 7.69 (-6) |
| Ba-140 | 1.63 (-3) | Co-60 | 3.10 (-5) |
| Cs-134 | 1.10 (-3) | Zn-65 | 8.86 (-5) |

Liquid Effluents (curies)

No liquid released in 1974

\* Includes Xe-133, Xe-135, and others

Individual Plant Summary 1974

Facility: YANKEE - ROWE Docket No: 50-029  
Type: PWR Licensed Power Level: 600 MWT  
Location: 20 Mi. NW Greenfield, Mass. Initial Criticality: 8/19/60  
Cooling Water Source: Deerfield River

Operation

Gross Thermal Generation: 3.1 (6) MWHT  
Net Electrical: 9.1 (5) MWHE  
Thermal Capacity Factor: 5.84 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 3.97 (1) Curies  
B) Total I-131 7.1 (-4) Curies  
C) Total Halogens (including I-131) 1.01 (-3) Curies  
D) Total Particulates 4.09 (-3) Curies  
E) Total Tritium 3.84 Curies

Liquid

A) Total Mixed Fission & Activation Products 8.55 (-3) Curies  
B) Total Tritium 3.14 (2) Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 6.98 (-2) | Curies |
| D) Volume of Liquid Waste Released | 1.46 (7)  | Liters |
| E) Volume of Dilution Water        | 1.99 (11) | Liters |

Solid Waste

|                        |          |              |
|------------------------|----------|--------------|
| A) Volume              | 2.18 (2) | Cubic meters |
| B) Activity            | 1.27 (2) | Curies       |
| C) Number of Shipments | 24       |              |

Airborne Effluents (curies)

Noble Gases

|        |           |         |           |
|--------|-----------|---------|-----------|
| Kr-85  | 1.47      | Xe-135m | 6.18 (-4) |
| Kr-88  | 3.30 (-2) | Xe-135  | 1.20      |
| Kr-87  | 1.59 (-2) | Xe-133m | 2.13 (-2) |
| Kr-85m | 5.50 (-2) | Xe-131m | 2.07 (-2) |
| Xe-133 | 1.64 (1)  | Ar-41   | 8.50 (-1) |
| Xe-138 | 5.41 (-4) | Ar-37   | 5.01 (-1) |

Halogens

|       |           |
|-------|-----------|
| I-131 | 7.10 (-4) |
| I-133 | 2.87 (-4) |
| I-135 | 3.85 (-4) |

Particulates

|        |           |       |           |
|--------|-----------|-------|-----------|
| Cs-137 | 1.58 (-5) | Mn-54 | 4.08 (-4) |
| Ba-140 | 5.24 (-4) | Co-60 | 2.18 (-3) |
| Sr-89  | 7.40 (-4) | Cr-51 | 5.00 (-4) |
| Sr-90  | 1.14 (-4) | Co-58 | 9.50 (-4) |
| Cs-134 | 8.09 (-6) | C-14  | 5.27 (-1) |

\* Includes Xe-133, Xe-135, and others

Liquid Effluents (curies)

|        |           |         |           |
|--------|-----------|---------|-----------|
| Co-58  | 1.21 (-4) | Mn-54   | 3.13 (-4) |
| I-131  | 5.86 (-4) | Cs-134  | 2.04 (-3) |
| I-133  | 5.19 (-5) | Co-60   | 2.52 (-4) |
| Cs-137 | 3.21 (-3) | Zn-65   | 2.81 (-5) |
| Sr-89  | 2.59 (-4) | Ag-110m | 4.31 (-6) |
| Sr-90  | 7.19 (-5) | C-14    | 3.08 (-3) |
| Cr-51  | 4.88 (-5) |         |           |

Individual Plant Summary 1974

Facility: ZION 1, 2 Docket No: 50-295/50-304  
Type: PWR/PWR Licensed Power Level: 2760/2760 MWT  
Location: 6 Mi. N Waukegan, Ill. Initial Criticality: 6/19/73; 12/24/73  
Cooling Water Source: Lake Michigan

Operation

Gross Thermal Generation: 1.2 (7); 4.9 (6) MWHT  
Net Electrical: 3.5 (6); 1.2 (6) MWHE  
Thermal Capacity Factor: 4.94 (-1); 2.03 (-1)

Summary of Effluents

Airborne

A) Total Noble Gases 2.99 (3) Curies  
B) Total I-131 1.42 (-2) Curies  
C) Total Halogens (including I-131) 1.53 (-2) Curies  
D) Total Particulates 2.0 (-3) Curies  
E) Total Tritium 1.80 (2) Curies

Liquid

A) Total Mixed Fission & Activation Products 7.70 (-4) Curies  
B) Total Tritium 2.30 Curies

|                                    |           |        |
|------------------------------------|-----------|--------|
| C) Dissolved Noble Gases*          | 0.0       | Curies |
| D) Volume of Liquid Waste Released | 1.13 (6)  | Liters |
| E) Volume of Dilution Water        | 6.11 (11) | Liters |

Solid Waste

|                        |         |              |
|------------------------|---------|--------------|
| A) Volume              | 2.7 (3) | Cubic meters |
| B) Activity            | 4.65    | Curies       |
| C) Number of Shipments | 58      |              |

Airborne Effluents (curies)

Nobles Gases

|        |          |
|--------|----------|
| Xe-133 | 2.98 (3) |
| Xe-135 | 6.26     |

Halogens

|       |           |
|-------|-----------|
| I-131 | 1.42 (-2) |
| I-133 | 1.14 (-3) |

Particulates

|        |           |
|--------|-----------|
| Cs-137 | 4.00 (-5) |
| Sr-89  | 5.00 (-7) |
| Sr-90  | 3.40 (-5) |
| Co-58  | 2.73 (-4) |

Liquid Effluents (curies)

|       |           |
|-------|-----------|
| Co-58 | 7.70 (-4) |
|-------|-----------|

\* Includes Xe-133, Xe-135, and others