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April 29, 1996

10 CFR 50.36a(a)(2)

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Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Radioactive Effluent Release Report January - December, 1995

Enclosed please find a copy of the Kewaunee Nuclear Power Plant Radioactive Effluent Release Report for January through December, 1995. This report is submitted to meet the requirements of Technical Specification 6.9.b.2.

Sincerely,

A handwritten signature in cursive script, appearing to read "M L Marchi".

M. L. Marchi
Manager - Nuclear Business Group

DFS/jmf

Enc.

cc - US NRC Senior Resident Inspector
US NRC Region III

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KEWAUNEE

RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY - DECEMBER 1995

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KEWAUNEE NUCLEAR POWER PLANT

**RADIOACTIVE
EFFLUENT RELEASE REPORT
JANUARY - DECEMBER 1995**

**WISCONSIN PUBLIC SERVICE CORPORATION
WISCONSIN POWER & LIGHT COMPANY
MADISON GAS & ELECTRIC COMPANY**

DOCKET 50-305

KEWAUNEE NUCLEAR POWER PLANT

**ANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT**

January 1 - December 31, 1995

**Wisconsin Public Service Corporation
Green Bay, Wisconsin
April 15, 1996**

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Appendix A Meteorological Data

0.0 SUMMARY

During 1995 all solid, liquid, and gaseous radioactive effluents from the Kewaunee Nuclear Plant were well below regulatory limits. For individual effluent streams, the limit most closely approached was:

<u>GASEOUS:</u>	Ingestion Pathway-Organ Quarterly Limit (mRems) Actual Dose (mRems) % of Specification 0.01599	Total Body 7.5 0.001200
<u>LIQUID:</u>	Ingestion Pathway-Organ Quarterly Limit (mRems) Actual Dose (mRems) % of Limit	GI-LLI 10 0.05758 0.58
<u>SOLID:</u>	No upper limit for solid radioactive waste applies. Cubic Meters Shipped	0.00

1.0 INTRODUCTION

This report is being submitted in accordance with the requirements of Kewaunee Technical Specifications, Section 6.9.b.2 and the Offsite Dose Calculation Manual, Section 3/4.7. It includes data from all effluent releases made from January 1 - December 31, 1995. The report contains summaries of the gaseous and liquid releases made to the environment including the quantity, characterization, time duration and calculated radiation dose at the site boundary resulting from these releases. The report also includes a summation of solid waste disposal, revisions to the Process Control Program and the Offsite Dose Calculation Manual, and addresses the cumulative meteorological data.

1.1 Effluent Dose Limits

Specifications are set to insure that offsite doses are maintained as low as reasonably achievable while still allowing for practical and dependable operation of the Kewaunee Plant.

The Kewaunee Offsite Dose Calculation Manual (ODCM) describes the methodology and parameters used in:

1. The calculation of radioactive liquid and gaseous effluent monitoring instrumentation alarm/trip setpoints.
2. The calculation of radioactive liquid and gaseous concentrations, dose rates and cumulative quarterly and annual doses. The ODCM methodology is acceptable for use in demonstrating compliance with 10 CFR 20.106; 10 CFR 50, Appendix I; and 40 CFR 190.

2.0 GASEOUS EFFLUENTS

2.1 Lower Limits of Detection (LLD) for Gaseous Effluents

Gaseous radioactive effluents are released in both the continuous mode and the batch mode. The auxiliary building stack is sampled continuously for particulates, halogens and Strontium by an "off-line" sample train. This stack is also grab-sampled daily for gaseous gamma emitters. Batch releases are sampled prior to release for principal gaseous and particulate gamma emitters, halogens and tritium.

The LLD's for gaseous radioanalyses, as listed in Table 4.4 of the Kewaunee ODCM are:

Analysis	LLD ($\mu\text{Ci/ml}$)
Gaseous Gamma Emitters	1.00 E-04
Iodine 131	3.00 E-12
Particulate Gamma Emitters	1.00 E-11
Particulate Gross Alpha	1.00 E-11
Strontium 89, 90	1.00 E-11
Noble Gases, Gross Beta or Gamma	1.00 E-06

The nominal "a priori" LLD values are shown below.

Isotope	a priori LLD ($\mu\text{Ci/ml}$)
---------	------------------------------------

a. Gaseous emissions:

Kr-87	5.73 E-8
Kr-88	6.79 E-8
Xe-133	7.27 E-8
Xe-133m	1.79 E-7
Xe-135	2.14 E-8
Xe-138	8.64 E-8

b. Particulate emissions:

Mn-54	5.58 E-16
Fe-59	1.32 E-13
Co-58	1.58 E-13
Co-60	2.18 E-13
Zn-65	5.00 E-14
Mo-99	1.16 E-13
Cs-134	2.90 E-13
Cs-137	4.55 E-14
Ce-141	1.16 E-13
Ce-144	9.86 E-13

c. Other identifiable gamma emitters:

Ar-41	1.20 E-8
Kr-85	7.76 E-6
Kr-85m	2.56 E-8
Kr-89	1.53 E-7
Xe-127	3.14 E-8
Xe-131m	1.26 E-6
Xe-135m	2.48 E-8
Xe-137	1.28 E-7
I-131	5.92 E-14

d. Composite particulate samples:

Sr-89	1 E-14
Sr-90	1 E-14
Gross Alpha	1.00 E-14

These "a priori" LLD's represent the capabilities of the counting systems in use, not an after the fact "a posteriori" limit for a particular measurement.

2.2 Gaseous Batch Release Statistics

The following is a summation of all gaseous batch releases made during 1995.

Number of batch releases	34
Total time for all batch releases (sec)	7.721E+005
Maximum time for a batch release (sec)	1.392E+005
Average time for a batch release (sec)	2.271E+004
Minimum time for a batch release (sec)	1.200E+003

2.3 Gaseous Effluent Data

The following table 2.1 presents a quarterly summation of the total activity released and average release rates of four categories of gaseous effluents. Table 2.2 lists the quarterly sums of individual gaseous radionuclides released by continuous and batch modes. Table 2.3 is essentially the same data, but is presented as monthly summations. Table 2.4 presents the dose limits for gaseous effluents, and the calculated doses this year from gaseous effluents.

Table 2.1
Annual Radioactive Effluent Release Report 1995
Gaseous Effluents - Summation of all Releases

Fission and Activation Gases	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Total Activity Released (Ci)	7.108E-004	1.659E-001	7.222E-003	0.000E+000
Average Release Rate (μ Ci/sec)	9.041E-005	2.109E-002	9.186E-004	0.000E+000

Iodines

Total Activity Released (Ci)	0.000E+000	0.000E+000	1.973E-008	0.000E+000
Average Release Rate (μ Ci/sec)	0.000E+000	0.000E+000	2.510E-009	0.000E+000

Particulates

Total Activity Released (Ci)	7.621E-007	6.920E-006	6.781E-006	0.000E+000
Average Release Rate (μ Ci/sec)	9.693E-008	8.802E-007	8.624E-007	0.000E+000
Gross Alpha Released (Ci)	1.955E-007	3.870E-007	4.966E-005	0.000E+000

Tritium

Total Activity Released (Ci)	2.439E+000	5.653E+001	4.588E+000	2.209E+000
Average Release Rate (μ Ci/sec)	3.102E-001	7.189E+000	5.836E-001	2.810E-001

Table 2.2
Annual Radioactive Effluent Release Report 1995
Gaseous Effluents

Nuclides Released (Ci)
Continuous Mode

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Fission Gases				
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Iodines				
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Particulates				
Co-58	0.000E+000	4.505E-006	0.000E+000	0.000E+000
Co-60	7.621E-007	4.942E-007	1.085E-006	0.000E+000
Sr-89	0.000E+000	1.456E-008	1.541E-006	0.000E+000
Sr-90	0.000E+000	1.099E-006	3.502E-007	0.000E+000
Cs-137	0.000E+000	4.464E-008	0.000E+000	0.000E+000
Total	7.621E-007	6.157E-006	2.976E-006	0.000E+000

Table 2.2(continued)
Annual Radioactive Effluent Release Report 1995
Gaseous Effluents

Nuclides Released (Ci)
Batch Mode

Fission Gases

Ar-41	0.000E+000	1.049E-001	0.000E+000	0.000E+000
Xe-131m	0.000E+000	2.277E-004	0.000E+000	0.000E+000
Xe-133m	0.000E+000	5.072E-004	1.400E-004	0.000E+000
Xe-133	7.108E-004	6.015E-002	7.062E-003	0.000E+000
Xe-135	0.000E+000	9.477E-005	2.014E-005	0.000E+000
Total	7.108E-004	1.659E-001	7.222E-003	0.000E+000

Iodines

I-131	0.000E+000	0.000E+000	1.973E-008	0.000E+000
Total	0.000E+000	0.000E+000	1.973E-008	0.000E+000

Particulates

Co-58	0.000E+000	7.387E-007	0.000E+000	0.000E+000
Co-60	0.000E+000	2.420E-008	3.804E-006	0.000E+000
Total	0.000E+000	7.629E-007	3.804E-006	0.000E+000

Table 2.3A
Annual Radioactive Effluent Release Report 1995
1st Quarter Gaseous Release
Total of all Releases

Noble Gases (Curies)

Isotope	January	February	March	Total
Xe-133	0.000E+000	7.108E-004	0.000E+000	7.108E-004
Total	0.000E+000	7.108E-004	0.000E+000	7.108E-004

Particulates (Curies)

Isotope	January	February	March	Total
Co-60	7.621E-007	0.000E+000	0.000E+000	7.621E-007
Total	7.621E-007	0.000E+000	0.000E+000	7.621E-007

Halogens (Curies)

Isotope	January	February	March	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
1st Quarter Gaseous Release
Total of all Releases

Summary	January	February	March	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	7.108E-004	0.000E+000	7.108E-004
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives>8 Days (Ci)	7.621E-007	0.000E+000	0.000E+000	7.621E-007
Total Tritium (Ci)	5.841E-001	8.524E-001	1.002E+000	2.439E+000
Total Particulate Gross Alpha (Ci)	8.657E-008	1.089E-007	0.000E+000	1.955E-007

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
2nd Quarter Gaseous Release
Total of all Releases

Noble Gases (Curies)

Isotope	April	May	June	Total
Ar-41	1.049E-001	0.000E+000	9.446E-006	1.049E-001
Xe-131m	2.277E-004	0.000E+000	0.000E+000	2.277E-004
Xe-133m	5.072E-004	0.000E+000	0.000E+000	5.072E-004
Xe-133	5.809E-002	5.990E-004	1.457E-003	6.015E-002
Xe-135	9.090E-005	0.000E+000	3.872E-006	9.477E-005
Total	1.638E-001	5.990E-004	1.470E-003	1.659E-001

Particulates (Curies)

Isotope	April	May	June	Total
Co-58	3.723E-006	8.259E-007	6.947E-007	5.244E-006
Co-60	2.761E-007	2.181E-007	2.420E-008	5.184E-007
Sr-89	0.000E+000	0.000E+000	1.456E-008	1.456E-008
Sr-90	0.000E+000	1.097E-006	1.820E-009	1.099E-006
Cs-137	0.000E+000	4.464E-008	0.000E+000	4.464E-008
Total	3.999E-006	2.186E-006	7.353E-007	6.920E-006

Halogens (Curies)

Isotope	April	May	June	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
2nd Quarter Gaseous Release
Total of all Releases

Summary	April	May	June	<u>Total</u>
Total Noble Gases (Ci)	1.638E-001	5.990E-004	1.470E-003	1.659E-001
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives>8 Days (Ci)	3.999E-006	2.186E-006	7.353E-007	6.920E-006
Total Tritium (Ci)	4.262E+001	1.303E+001	8.751E-001	5.653E+001
Total Particulate Gross Alpha (Ci)	1.364E-007	2.312E-007	1.942E-008	3.870E-007

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
3rd Quarter Gaseous Release
Total of all Releases

Noble Gases (Curies)

Isotope	July	August	September	Total
Xe-133m	1.400E-004	0.000E+000	0.000E+000	1.400E-004
Xe-133	7.062E-003	0.000E+000	0.000E+000	7.062E-003
Xe-135	2.014E-005	0.000E+000	0.000E+000	2.014E-005
Total	7.222E-003	0.000E+000	0.000E+000	7.222E-003

Particulates (Curies)

Isotope	July	August	September	Total
Co-60	3.804E-006	0.000E+000	1.085E-006	4.889E-006
Sr-89	1.541E-006	0.000E+000	0.000E+000	1.541E-006
Sr-90	1.927E-007	0.000E+000	1.576E-007	3.502E-007
Total	5.538E-006	0.000E+000	1.242E-006	6.781E-006

Halogens (Curies)

Isotope	July	August	September	Total
I-131	1.973E-008	0.000E+000	0.000E+000	1.973E-008
Total	1.973E-008	0.000E+000	0.000E+000	1.973E-008

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
3rd Quarter Gaseous Release
Total of all Releases

Summary	July	August	September	<u>Total</u>
Total Noble Gases (Ci)	7.222E-003	0.000E+000	0.000E+000	7.222E-003
Total Halogens (Ci)	1.973E-008	0.000E+000	0.000E+000	1.973E-008
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	5.538E-006	0.000E+000	1.242E-006	6.781E-006
Total Tritium (Ci)	1.061E+000	2.267E+000	1.261E+000	4.588E+000
Total Particulate Gross Alpha (Ci)	4.318E-008	2.571E-007	4.936E-005	4.966E-005

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
4th Quarter Gaseous Release
Total of all Releases

Noble Gases (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Particulates (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Halogens (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3A (continued)
Annual Radioactive Effluent Release Report 1995
4th Quarter Gaseous Release
Total of all Releases

Summary	October	November	December	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Tritium (Ci)	4.496E-001	1.056E+000	7.031E-001	2.209E+000
Total Particulate Gross Alpha (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3B
Annual Radioactive Effluent Release Report 1995
1st Quarter Gaseous Release
Continuous Mode Only

Noble Gases (Curies)

Isotope	January	February	March	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Particulates (Curies)

Isotope	January	February	March	Total
Co-60	7.621E-007	0.000E+000	0.000E+000	7.621E-007
Total	7.621E-007	0.000E+000	0.000E+000	7.621E-007

Halogens (Curies)

Isotope	January	February	March	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
1st Quarter Gaseous Release
Continuons Mode Only

Summary	January	February	March	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives>8 Days (Ci)	7.621E-007	0.000E+000	0.000E+000	7.621E-007
Total Tritium (Ci)	5.841E-001	8.523E-001	1.002E+000	2.438E+000
Total Particulate Gross Alpha (Ci)	8.657E-008	1.089E-007	0.000E+000	1.955E-007

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
2nd Quarter Gaseous Release
Continuons Mode Only

Noble Gases (Curies)

Isotope	April	May	June	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Particulates (Curies)

Isotope	April	May	June	Total
Co-58	3.723E-006	7.819E-007	0.000E+000	4.505E-006
Co-60	2.761E-007	2.181E-007	0.000E+000	4.942E-007
Sr-89	0.000E+000	0.000E+000	1.456E-008	1.456E-008
Sr-90	0.000E+000	1.097E-006	1.820E-009	1.099E-006
Cs-137	0.000E+000	4.464E-008	0.000E+000	4.464E-008
Total	3.999E-006	2.142E-006	1.638E-008	6.157E-006

Halogens (Curies)

Isotope	April	May	June	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
2nd Quarter Gaseous Release
Continuous Mode Only

Summary	April	May	June	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	3.999E-006	2.142E-006	1.638E-008	6.157E-006
Total Tritium (Ci)	4.118E+001	1.303E+001	8.723E-001	5.509E+001
Total Particulate Gross Alpha (Ci)	1.364E-007	2.303E-007	1.876E-008	3.854E-007

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
3rd Quarter Gaseous Release
Continuous Mode Only

Noble Gases (Curies)

Isotope	July	August	September	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Particulates (Curies)

Isotope	July	August	September	Total
Co-60	0.000E+000	0.000E+000	1.085E-006	1.085E-006
Sr-89	1.541E-006	0.000E+000	0.000E+000	1.541E-006
Sr-90	1.927E-007	0.000E+000	1.576E-007	3.502E-007
Total	1.734E-006	0.000E+000	1.242E-006	2.976E-006

Halogens (Curies)

Isotope	July	August	September	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
3rd Quarter Gaseous Release
Continuous Mode Only

Summary	July	August	September	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives>8 Days (Ci)	1.734E-006	0.000E+000	1.242E-006	2.976E-006
Total Tritium (Ci)	1.055E+000	2.267E+000	1.256E+000	4.577E+000
Total Particulate Gross Alpha (Ci)	4.318E-008	2.571E-007	0.000E+000	3.002E-007

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
4th Quarter Gaseous Release
Continuous Mode Only

Noble Gases (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Particulates (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Halogens (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3B (continued)
Annual Radioactive Effluent Release Report 1995
4th Quarter Gaseous Release
Continuous Mode Only

Summary	October	November	December	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Tritium (Ci)	4.496E-001	1.056E+000	6.625E-001	2.168E+000
Total Particulate Gross Alpha (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3C
Annual Radioactive Effluent Release Report 1995
1st Quarter Gaseous Release
Batch Mode Only

Noble Gases (Curies)

Isotope	January	February	March	Total
Xe-133	0.000E+000	7.108E-004	0.000E+000	7.108E-004
Total	0.000E+000	7.108E-004	0.000E+000	7.108E-004

Particulates (Curies)

Isotope	January	February	March	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Halogens (Curies)

Isotope	January	February	March	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
1st Quarter Gaseous Release
Batch Mode Only

Summary	January	February	March	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	7.108E-004	0.000E+000	7.108E-004
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives>8 Days (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Tritium (Ci)	0.000E+000	8.595E-005	0.000E+000	8.595E-005
Total Particulate Gross Alpha (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
2nd Quarter Gaseous Release
Batch Mode Only

Noble Gases (Curies)

Isotope	April	May	June	Total
Ar-41	1.049E-001	0.000E+000	9.446E-006	1.049E-001
Xe-131m	2.277E-004	0.000E+000	0.000E+000	2.277E-004
Xe-133m	5.072E-004	0.000E+000	0.000E+000	5.072E-004
Xe-133	5.809E-002	5.990E-004	1.457E-003	6.015E-002
Xe-135	9.090E-005	0.000E+000	3.872E-006	9.477E-005
Total	1.638E-001	5.990E-004	1.470E-003	1.659E-001

Particulates (Curies)

Isotope	April	May	June	Total
Co-58	0.000E+000	4.402E-008	6.947E-007	7.387E-007
Co-60	0.000E+000	0.000E+000	2.420E-008	2.420E-008
Total	0.000E+000	4.402E-008	7.189E-007	7.629E-007

Halogens (Curies)

Isotope	April	May	June	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
2nd Quarter Gaseous Release
Batch Mode Only

Summary	April	May	June	<u>Total</u>
Total Noble Gases (Ci)	1.638E-001	5.990E-004	1.470E-003	1.659E-001
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	0.000E+000	4.402E-008	7.189E-007	7.629E-007
Total Tritium (Ci)	1.436E+000	1.048E-003	2.786E-003	1.440E+000
Total Particulate Gross Alpha (Ci)	0.000E+000	9.412E-010	6.550E-010	1.596E-009

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
3rd Quarter Gaseous Release
Batch Mode Only

Noble Gases (Curies)

Isotope	July	August	September	Total
Xe-133m	1.400E-004	0.000E+000	0.000E+000	1.400E-004
Xe-133	7.062E-003	0.000E+000	0.000E+000	7.062E-003
Xe-135	2.014E-005	0.000E+000	0.000E+000	2.014E-005
Total	7.222E-003	0.000E+000	0.000E+000	7.222E-003

Particulates (Curies)

Isotope	July	August	September	Total
Co-60	3.804E-006	0.000E+000	0.000E+000	3.804E-006
Total	3.804E-006	0.000E+000	0.000E+000	3.804E-006

Halogens (Curies)

Isotope	July	August	September	Total
I-131	1.973E-008	0.000E+000	0.000E+000	1.973E-008
Total	1.973E-008	0.000E+000	0.000E+000	1.973E-008

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
3rd Quarter Gaseous Release
Batch Mode Only

Summary	July	August	September	<u>Total</u>
Total Noble Gases (Ci)	7.222E-003	0.000E+000	0.000E+000	7.222E-003
Total Halogens (Ci)	1.973E-008	0.000E+000	0.000E+000	1.973E-008
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	3.804E-006	0.000E+000	0.000E+000	3.804E-006
Total Tritium (Ci)	5.776E-003	0.000E+000	5.190E-003	1.097E-002
Total Particulate Gross Alpha (Ci)	0.000E+000	0.000E+000	4.936E-005	4.936E-005

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
4th Quarter Gaseous Release
Batch Mode Only

Noble Gases (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Particulates (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Halogens (Curies)

Isotope	October	November	December	Total
Total	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.3C (continued)
Annual Radioactive Effluent Release Report 1995
4th Quarter Gaseous Release
Batch Mode Only

Summary	October	November	December	<u>Total</u>
Total Noble Gases (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Halogens (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Particulate Gross Beta-Gamma Half-Lives > 8 Days (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Total Tritium (Ci)	0.000E+000	0.000E+000	4.057E-002	4.057E-002
Total Particulate Gross Alpha (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000

Table 2.4
Annual Radioactive Effluent Release Report 1995
Dose From Gaseous Effluents

The offsite dose limits from radioactive materials in gaseous effluents are specified in Section 3/4.4 of the Kewaunee ODCM and can be summarized as follows:

Limit	Whole Body Gamma	Skin Beta	Organ
Quarterly	5.0 mRad	10.0 mRad	7.5 mRem
Annual	10.0 mRad	20.0 mRad	15.0 mRem

The total release of gaseous effluents during each quarter of 1995 was within limits. The following offsite doses were calculated using equations 2.7, 2.8, and 2.11 from the Kewaunee ODCM. Calculated offsite doses versus quarterly limits are shown below:

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1. Gamma-Whole Body				
Specification (mRads)	5.000E+000	5.000E+000	5.000E+000	5.000E+000
Actual Dose (mRads)	2.864E-008	1.138E-004	2.941E-007	0.000E+000
% of Specification	5.727E-007	2.275E-003	5.883E-006	0.000E+000
2. Beta-Skin				
Specification (mRads)	1.000E+001	1.000E+001	1.000E+001	1.000E+001
Actual Dose (mRads)	8.518E-008	4.660E-005	8.755E-007	0.000E+000
% of Specification	8.518E-007	4.660E-004	8.755E-006	0.000E+000
3. Ingestion Pathway-Organ				
Specification (mRems)	7.500E+000	7.500E+000	7.500E+000	7.500E+000
Actual Dose (mRems)	5.445E-005	1.200E-003	1.175E-004	4.667E-005
% of Specification	7.260E-004	1.599E-002	1.567E-003	6.222E-004
	GI-LLI	TBody	Thyroid	Liver

Table 2.4 (continued)
Annual Radioactive Effluent Release Report 1995
Dose From Gaseous Effluents

In addition, the cumulative annual offsite doses for the period January 1 - December 31, 1995 versus the ODCM annual limits were:

	Annual
1. Gamma-Whole Body	
Specification (mRads)	1.000E+001
Actual Dose (mRads)	1.141E-004
% of Specification	1.141E-003
2. Beta-Skin	
Specification (mRads)	2.000E+001
Actual Dose (mRads)	4.756E-005
% of Specification	2.378E-004
3. Ingestion Pathway-Organ	
Specification (mRems)	1.500E+001
Actual Dose (mRems)	1.417E-003
% of Specification	9.450E-003
	TBody

3.0 LIQUID EFFLUENTS

3.1 Lower Limits of Detection (LLD) for Liquid Effluents

Liquid radioactive effluents are released as both batch releases and continuous releases. Each batch is sampled prior to release and analyzed for gamma emitters and tritium. A fraction of each sample is retained for a monthly proportional composite which is then analyzed for Gross Alpha, Strontium 89, Strontium 90 and Iron 55.

The LLD's for liquid batch release radioanalyses, as listed in Table 4.3 of the Kewaunee Nuclear Power Plant Off-Site Dose Calculation Manual, are:

<u>Analysis</u>	<u>LLD ($\mu\text{Ci/ml}$)</u>
Principal Gamma Emitters	1.00 E-06
Iodine 131	1.00 E-06
Tritium	1.00 E-05
Gross Alpha	5.00 E-07
Strontium 89, 90	5.00 E-08
Iron 55	1.00 E-06

The actual obtained "a priori" LLD values for batch releases are shown below.

Isotope	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Average a priori LLD ($\mu\text{Ci/ml}$)
Mn-54	8.42E-10	8.42E-10	8.42E-10	8.42E-10	8.42E-10
F-59	1.82E-07	1.82E-09	1.82E-07	1.82E-09	9.19E-08
Co-58	1.17E-07	8.28E-10	8.28E-10	8.28E-10	2.99E-08
Co-60	1.19E-07	1.08E-07	1.19E-09	1.08E-07	8.40E-08
Zn-65	2.05E-09	2.05E-09	1.42E-07	2.05E-09	3.70E-08
Mo-99	6.01E-09	6.01E-09	1.39E-06 [†]	6.01E-09	3.52E-07
Cs-134	6.75E-10	9.54E-08	6.75E-10	6.75E-10	2.44E-08
Cs-137	2.00E-07	8.29E-10	8.29E-10	8.29E-10	7.11E-08
Ce-141	5.55E-08	5.55E-10	1.19E-07	5.55E-08	5.76E-08
Ce-144	4.06E-07	3.18E-06 [†]	9.58E-07	4.71E-07	1.25E-06
I-131	5.40E-10	1.86E-07	5.40E-10	5.40E-10	4.69E-08
H-3	3.78E-06	3.37E-06	3.57E-06	3.83E-06	3.64E-06
Sr-89	7.77E-09	1.39E-08	9.80E-09	1.23E-08	1.09E-08
Sr-90	6.70E-09	6.43E-09	4.97E-09	5.80E-09	5.98E-09
Gross Alpha	7.67E-09	8.40E-09	9.57E-09	1.14E-08	9.26E-09
Fe-55	5.33E-07	5.03E-07	6.10E-07	6.63E-07	5.78E-07

[†] The 2nd quarter Ce-144 and the 3rd quarter Mo-99 LLD's are above the ODCM listed LLD's. A review of the daily background (LLD) samples around these periods indicate routine LLD's are less than the ODCM listed LLD's. These two LLD results are anomalies.

Continuous liquid releases are grab sampled weekly and analyzed for principal gamma emitters. A fraction of each weekly sample is retained for a monthly proportional composite which is then analyzed for Tritium, Gross Alpha, Strontium 89, Strontium 90 and Iron 55.

The LLD's for liquid continuous release radioanalyses, as listed in Table 4.3 of the Kewaunee Nuclear Power Plant Off-Site Dose Calculation Manual, are:

<u>Analysis</u>	<u>LLD (μCi/ml)</u>
Principal Gamma Emitters	5.00 E-07
Iodine 131	1.00 E-06
Tritium	1.00 E-05
Gross Alpha	5.00 E-07
Strontium 89, 90	5.00 E-08
Iron 55	1.00 E-06

The actual obtained "a priori" LLD values for continuous releases are shown below.

Isotope	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Average a priori LLD (μCi/ml)
Mn-54	1.40E-08	1.40E-10	1.40E-10	5.00E-11	3.58E-09
F-59	3.04E-10	3.04E-10	3.04E-08	1.11E-08	1.05E-08
Co-58	4.55E-08	3.77E-08	3.65E-08	5.42E-09	3.13E-08
Co-60	5.22E-08	4.03E-08	3.12E-08	1.04E-08	3.35E-08
Zn-65	1.01E-07	6.74E-08	3.42E-08	1.25E-10	5.07E-08
Mo-99	4.21E-07	1.00E-07	3.39E-07	1.26E-07	2.47E-07
Cs-134	2.97E-08	3.29E-08	3.83E-08	1.16E-08	2.81E-08
Cs-137	5.60E-08	8.10E-08	7.23E-08	3.09E-08	6.01E-08
Ce-141	6.59E-08	6.17E-08	2.07E-08	8.28E-09	3.91E-08
Ce-144	1.12E-07	1.80E-07	4.24E-10	1.25E-10	7.31E-08
I-131	1.27E-08	3.97E-08	2.03E-08	5.10E-09	1.95E-08
H-3	3.78E-06	3.37E-06	3.57E-06	3.83E-06	3.64E-06
Sr-89	7.18E-09	1.10E-08	9.95E-09	9.43E-09	9.39E-09
Sr-90	4.87E-09	5.50E-09	5.17E-09	5.53E-09	5.27E-09
Gross Alpha	5.65E-09	6.55E-09	7.02E-09	8.32E-09	6.88E-09
Fe-55	5.15E-07	4.92E-07	6.07E-07	6.55E-07	5.67E-07

3.2 Liquid Batch Release Statistics

The following is a summation of all liquid batch releases made during 1995.

<u>Release Type</u>	<u>Number</u>	<u>Gallons Released</u>
A SGBT Monitor Tk.	8	73743.0
B SGBT Monitor Tk.	12	111404.0
A Laundry Hot Shower	1	665.0
B Laundry Hot Shower	1	672.0
A Waste Condensate	22	20325.0
B Waste Condensate	21	19560.0
A CVC Monitor	17	111745.0
B CVC Monitor	17	110247.8
miscellaneous [†]	2	1290.0
Both WCTs	74	134855.0
Both Laundry Hot Shower	3	3794.0

Total time for all batch releases..... 22680.0 Min.

Maximum time for a batch release..... 600.0 Min.

Minimum time for a batch release..... 13.0 Min.

Average time for a batch release..... 127.4 Min.

[†] The two miscellaneous batch releases are from the heating boiler blowdown following a period of steam generator tube leakage.

3.3 Liquid Effluent Data

The following Table 3.1 presents a quarterly summation of the total activity released and average concentration for all liquid effluents. It also presents the gross alpha activity released, volume of waste released and volume of dilution water used. Tables 3.2 and 3.3 are monthly summations of the same information in Table 3.1. Table 3.2 contains the quantity of the individual isotopes released to the unrestricted area for batch releases. Table 3.3 presents a monthly summation of gross radioactivity, tritium, gross alpha and isotopic activity for the secondary blowdown and leakage releases. It also presents the monthly total volume for these releases and dilution volumes. Table 3.4 presents the doses from liquid effluents for each quarter and the calculated doses this year from liquid effluents.

TABLE 3.1
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Summation of all Releases

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Fission and Activation Products				
Total Release Excluding H3 and Dissolved Gases (Ci)	2.863E-003	4.049E-002	6.687E-003	3.207E-002
Average Concentration (μCi/ml)	2.791E-011	3.006E-010	3.244E-011	2.121E-010
Tritium				
Total Release (Ci)	9.489E+001	2.747E+001	7.344E+001	3.985E+001
Average Concentration (μCi/ml)	9.252E-007	2.040E-007	3.563E-007	2.635E-007
% of Tech. Spec. Limit(3.0E-3 μCi/ml)	3.084E-002	6.799E-003	1.188E-002	8.783E-003
Dissolved Gases				
Total Release (Ci)	7.802E-005	0.000E+000	0.000E+000	0.000E+000
Average Concentration (μCi/ml)	7.607E-013	0.000E+000	0.000E+000	0.000E+000
% of Tech. Spec. Limit(2.0E-4 μCi/ml)	3.803E-007	0.000E+000	0.000E+000	0.000E+000
Gross Alpha Activity				
Total Release (Ci)	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Volume of Waste Released				
Batch (liters)	4.761E+005	1.079E+006	4.691E+005	2.033E+005
Continuous (liters)	5.602E+007	3.318E+007	4.001E+007	3.007E+007
Total (liters)	5.650E+007	3.426E+007	4.048E+007	3.027E+007
Volume of Dilution Water				
Batch (liters)	4.440E+009	7.779E+009	6.475E+009	2.513E+009
Continuous (liters)	9.812E+010	1.269E+011	1.996E+011	1.487E+011
Total (liters)	1.026E+011	1.347E+011	2.061E+011	1.512E+011

TABLE 3.2A
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

	January	February	March	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	5.784E-004	1.084E-004	2.640E-004	9.508E-004
Avg. Conc. (µCi/ml)				
	6.410E-010	3.596E-011	5.038E-010	
Tritium				
Total Release (Ci)				
	2.483E+001	6.910E+001	9.566E-001	9.489E+001
Avg. Conc. (µCi/ml)				
	2.751E-005	2.293E-005	1.826E-006	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	9.322E+004	3.054E+005	7.739E+004	4.761E+005
Volume of Dilution Water				
(liters)	9.024E+008	3.014E+009	5.239E+008	4.440E+009

TABLE 3.2A (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

Isotope (Ci)	January	February	March	Total
H-3	2.483E+001	6.910E+001	9.566E-001	9.489E+001
Mn-54	0.000E+000	0.000E+000	3.098E-006	3.098E-006
Fe-55	2.983E-004	0.000E+000	1.083E-004	4.067E-004
Co-58	5.955E-005	2.327E-005	3.239E-005	1.152E-004
Co-60	2.664E-005	2.064E-005	5.399E-005	1.013E-004
Ag-110m	0.000E+000	0.000E+000	1.578E-005	1.578E-005
Sb-125	1.939E-004	6.446E-005	5.036E-005	3.087E-004
Total	2.483E+001	6.911E+001	9.569E-001	9.489E+001

TABLE 3.2B
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

	April	May	June	<u>Total</u>
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	8.086E-003	1.656E-002	1.445E-002	3.910E-002
Avg. Conc. (µCi/ml)				
	2.229E-009	6.422E-009	9.196E-009	
Tritium				
Total Release (Ci)				
	1.586E+001	8.598E+000	3.006E+000	2.747E+001
Avg. Conc. (µCi/ml)				
	4.372E-006	3.333E-006	1.913E-006	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	6.174E+005	3.510E+005	1.101E+005	1.079E+006
Volume of Dilution Water				
(liters)	3.628E+009	2.579E+009	1.572E+009	7.779E+009

TABLE 3.2B (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

Isotope (Ci)	April	May	June	Total
H-3	1.586E+001	8.598E+000	3.006E+000	2.747E+001
Na-24	0.000E+000	8.903E-005	0.000E+000	8.903E-005
Cr-51	4.791E-004	0.000E+000	6.615E-004	1.141E-003
Mn-54	2.158E-005	1.193E-004	8.314E-005	2.240E-004
Fe-55	2.655E-003	2.036E-003	4.733E-003	9.423E-003
Mn-56	1.408E-005	0.000E+000	0.000E+000	1.408E-005
Co-57	0.000E+000	1.954E-005	0.000E+000	1.954E-005
Co-58	2.745E-003	5.936E-003	6.611E-003	1.529E-002
Fe-59	0.000E+000	0.000E+000	1.718E-004	1.718E-004
Co-60	7.492E-004	1.139E-003	6.230E-004	2.512E-003
Zn-65	0.000E+000	0.000E+000	6.432E-005	6.432E-005
Nb-95	8.126E-005	1.649E-004	2.882E-004	5.343E-004
Zr-95	5.658E-005	1.499E-004	2.046E-004	4.111E-004
Ag-110m	1.677E-004	3.255E-004	1.013E-003	1.507E-003
Sn-113	6.807E-007	0.000E+000	0.000E+000	6.807E-007
Sb-124	3.159E-004	2.399E-003	0.000E+000	2.715E-003
Sb-125	4.869E-004	3.819E-003	0.000E+000	4.306E-003
Cs-137	3.129E-004	3.662E-004	0.000E+000	6.791E-004
Total	1.587E+001	8.614E+000	3.020E+000	2.751E+001

TABLE 3.2C
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

	July	August	September	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	4.731E-003	1.465E-003	4.204E-004	6.617E-003
Avg. Conc. (µCi/ml)				
	1.841E-009	1.342E-009	1.494E-010	
Tritium				
Total Release (Ci)				
	8.607E+000	2.384E+001	4.099E+001	7.344E+001
Avg. Conc. (µCi/ml)				
	3.350E-006	2.184E-005	1.457E-005	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	1.638E+005	1.078E+005	1.975E+005	4.691E+005
Volume of Dilution Water				
(liters)	2.570E+009	1.092E+009	2.813E+009	6.475E+009

TABLE 3.2C (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

Isotope (Ci)	July	August	September	Total
H-3	8.607E+000	2.384E+001	4.099E+001	7.344E+001
Fe-55	8.683E-004	3.125E-004	1.975E-004	1.378E-003
Co-58	3.314E-003	9.996E-004	1.914E-004	4.505E-003
Co-60	3.303E-004	1.510E-004	3.149E-005	5.128E-004
Nb-95	9.817E-006	2.218E-006	0.000E+000	1.204E-005
Ag-110m	2.079E-004	0.000E+000	0.000E+000	2.079E-004
Total	8.612E+000	2.384E+001	4.099E+001	7.344E+001

TABLE 3.2D
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

	October	November	December	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	2.020E-002	7.100E-003	4.734E-003	3.204E-002
Avg. Conc. (µCi/ml)				
	1.974E-008	7.605E-009	8.519E-009	
Tritium				
Total Release (Ci)				
	2.295E+000	1.755E+001	2.001E+001	3.985E+001
Avg. Conc. (µCi/ml)				
	2.242E-006	1.880E-005	3.600E-005	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	4.991E+004	8.235E+004	7.100E+004	2.033E+005
Volume of Dilution Water				
(liters)	1.024E+009	9.335E+008	5.557E+008	2.513E+009

TABLE 3.2D (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Batch Releases

Isotope (Ci)	October	November	December	Total
H-3	2.295E+000	1.755E+001	2.001E+001	3.985E+001
Fe-55	9.983E-003	3.871E-003	1.917E-003	1.577E-002
Co-58	1.663E-003	7.492E-004	1.814E-003	4.227E-003
Co-60	1.103E-003	3.348E-004	4.221E-004	1.860E-003
Sr-90	5.990E-007	0.000E+000	0.000E+000	5.990E-007
Zr-97	1.096E-004	0.000E+000	0.000E+000	1.096E-004
Ag-110m	7.343E-003	1.975E-003	2.786E-004	9.596E-003
Sb-125	0.000E+000	1.704E-004	3.021E-004	4.725E-004
Total	2.315E+000	1.756E+001	2.001E+001	3.988E+001

TABLE 3.3A
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

	January	February	March	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	8.154E-004	5.925E-004	5.039E-004	1.912E-003
Avg. Conc. (µCi/ml)				
	2.413E-011	1.941E-011	1.491E-011	
Tritium				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Dissolved Gases				
Total Release (Ci)				
	7.802E-005	0.000E+000	0.000E+000	7.802E-005
Avg. Conc. (µCi/ml)				
	2.308E-012	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (µCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	1.739E+007	1.895E+007	1.968E+007	5.602E+007
Volume of Dilution Water				
(liters)	3.380E+010	3.053E+010	3.380E+010	9.812E+010

TABLE 3.3A (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

Isotope (Ci)	January	February	March	Total
Co-58	0.000E+000	0.000E+000	5.008E-005	5.008E-005
Co-60	1.070E-004	0.000E+000	0.000E+000	1.070E-004
I-131	4.824E-005	0.000E+000	0.000E+000	4.824E-005
I-133	6.601E-004	5.925E-004	4.538E-004	1.706E-003
Xe-135	7.802E-005	0.000E+000	0.000E+000	7.802E-005
Total	8.934E-004	5.925E-004	5.039E-004	1.990E-003

TABLE 3.3B
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

	April	May	June	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	6.687E-006	9.847E-004	3.951E-004	1.387E-003
Avg. Conc. (μCi/ml)				
	2.506E-013	2.830E-011	6.040E-012	
Tritium				
Total Release (Ci)				
	4.125E-003	0.000E+000	0.000E+000	4.125E-003
Avg. Conc. (μCi/ml)				
	1.545E-010	0.000E+000	0.000E+000	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	5.497E+006	1.316E+007	1.453E+007	3.318E+007
Volume of Dilution Water				
(liters)	2.669E+010	3.480E+010	6.541E+010	1.269E+011

TABLE 3.3B (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

Isotope (Ci)	April	May	June	Total
H-3	4.125E-003	0.000E+000	0.000E+000	4.125E-003
Mn-54	0.000E+000	8.605E-006	0.000E+000	8.605E-006
Co-58	6.687E-006	7.243E-004	1.565E-004	8.875E-004
Co-60	0.000E+000	2.518E-004	2.387E-004	4.904E-004
Total	4.131E-003	9.847E-004	3.951E-004	5.511E-003

TABLE 3.3C
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

	July	August	September	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	3.559E-005	3.521E-005	0.000E+000	7.080E-005
Avg. Conc. (μCi/ml)				
	5.265E-013	5.209E-013	0.000E+000	
Tritium				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	1.289E+007	1.217E+007	1.495E+007	4.001E+007
Volume of Dilution Water				
(liters)	6.759E+010	6.759E+010	6.446E+010	1.996E+011

TABLE 3.3C (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuons Releases

Isotope (Ci)	July	August	September	Total
Sr-90	3.559E-005	3.521E-005	0.000E+000	7.080E-005
Total	3.559E-005	3.521E-005	0.000E+000	7.080E-005

TABLE 3.3D
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

	October	November	December	Total
Gross Radioactivity				
Total Release Excluding H3 and Dissolved Gases (Ci)				
	0.000E+000	3.656E-005	0.000E+000	3.656E-005
Avg. Conc. (μCi/ml)				
	0.000E+000	7.723E-013	0.000E+000	
Tritium				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Dissolved Gases				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Gross Alpha Activity				
Total Release (Ci)				
	0.000E+000	0.000E+000	0.000E+000	0.000E+000
Avg. Conc. (μCi/ml)				
	0.000E+000	0.000E+000	0.000E+000	
Volume of Waste Released				
(liters)	1.071E+007	8.901E+006	1.046E+007	3.007E+007
Volume of Dilution Water				
(liters)	6.759E+010	4.733E+010	3.380E+010	1.487E+011

TABLE 3.3D (continued)
Annual Radioactive Effluent Release Report 1995
Liquid Effluents - Continuous Releases

Isotope (Ci)	October	November	December	Total
Sb-122	0.000E+000	3.656E-005	0.000E+000	3.656E-005
Total	0.000E+000	3.656E-005	0.000E+000	3.656E-005

Table 3.4
Annual Radioactive Effluent Report 1995
Dose From Liquid Effluents

The dose to a member of the public from total liquid radioactive release for each quarter was well below the ODCM limits of 1.5 mRem to the body and less than or equal to 5 mRem to any organ.

Instantaneous release concentrations are limited by the individual radionuclide concentrations established in 10 CFR 20, Appendix B, for unrestricted areas. During the report period, none of the isotopes released exceed the concentrations specified in Appendix B. The following offsite doses were calculated using equation 1.5 from the Kewaunee ODCM.

Organ 1st Qtr Dose	Dose Total mRem	Quarterly Limit mRem	Percent of Limit
Total Body	6.921E-004	1.5	0.05
Bone	5.958E-006	5.0	0.00
Liver	6.945E-004	5.0	0.01
Thyroid	6.893E-004	5.0	0.01
Kidney	6.894E-004	5.0	0.01
Lung	6.916E-004	5.0	0.01
GI-LLI	7.085E-004	5.0	0.01

Organ 2nd Qtr Dose	Dose Total mRem	Quarterly Limit mRem	Percent of Limit
Total Body	5.738E-003	1.5	0.38
Bone	6.204E-003	5.0	0.12
Liver	8.633E-003	5.0	0.17
Thyroid	1.896E-004	5.0	0.00
Kidney	3.010E-003	5.0	0.06
Lung	1.186E-003	5.0	0.02
GI-LLI	5.567E-002	5.0	1.11

Table 3.4 (continued)
Annual Radioactive Effluent Report 1995
Dose From Liquid Effluents

Organ 3rd Qtr Dose	Dose Total mRem	Quarterly Limit mRem	Percent of Limit
Total Body	2.816E-004	1.5	0.02
Bone	1.009E-005	5.0	0.00
Liver	2.796E-004	5.0	0.01
Thyroid	2.667E-004	5.0	0.01
Kidney	2.668E-004	5.0	0.01
Lung	2.706E-004	5.0	0.01
GI-LLI	5.892E-004	5.0	0.01

Organ 4th Qtr Dose	Dose Total mRem	Quarterly Limit mRem	Percent of Limit
Total Body	3.212E-004	1.5	0.02
Bone	1.434E-004	5.0	0.00
Liver	3.792E-004	5.0	0.01
Thyroid	2.701E-004	5.0	0.01
Kidney	2.703E-004	5.0	0.01
Lung	3.240E-004	5.0	0.01
GI-LLI	6.127E-004	5.0	0.01

Calculated Dose This Year

Organ	Dose Total mRem	Quarterly Limit mRem	Percent of Limit
Total Body	7.032E-003	3.0	0.23
Bone	6.364E-003	10.0	0.06
Liver	9.987E-003	10.0	0.10
Thyroid	1.416E-003	10.0	0.01
Kidney	4.237E-003	10.0	0.04
Lung	2.472E-003	10.0	0.02
GI-LLI	5.758E-002	10.0	0.58

4.0 UNPLANNED RELEASES

No unplanned releases were made from the Kewaunee Plant during the report period.

The January-June 1991 Semi-Annual Effluent Release Report described an unplanned release which occurred on April 25, 1991. Offsite doses attributable to this release were well below the established ODCM (Technical Specification at the time) limits.

As corrective action, WPSC stated in this report that valves WG-301 and WG-302 were scheduled to be replaced during 1992. Also, a new vent line was to be added between valves WG-300 and WG-301 to allow local leak rate testing with the Waste Gas Decay Tanks isolated. The valves were to be replaced with like-for-like replacements. However, after receipt inspection, the replacement valves failed to pass the seat leakage tests. WPSC is continuing to evaluate options associated with these valves and will continue to provide status updates in the Effluent Release Reports until resolution of this incident and completion of the corrective actions. A plant design change request, DCR-2349, was issued to address this concern.

5.0 METEOROLOGICAL DATA

Meteorological data for 1995 is retained on file at the Kewaunee Nuclear Power Plant. The data on file includes a continuous strip chart recording and a 15-minute interval listing of wind speed, wind direction and atmospheric stability. This is more conservative than the requirements of ODCM Section 3/4.7. See Appendix A for missing meteorological data times and joint frequency distribution tables.

6.0 SOLID WASTE DISPOSAL

Table 6.1 is a summation of solid wastes shipped for 1995. Presented are the types of wastes, major nuclide composition, disposition of the wastes and shipping containers used.

The containers utilized have the following volumes:

High Integrity Container (HIC)	158 ft ³
LSA Box (B-25)	98 ft ³
DOT-17H Drum	7.5 ft ³

A composite sample from the 1993 dewatered resin shipments was analyzed by a contractor for transuranic nuclides. The results showed an average transuranic concentration of 4.24 E-2 nanocuries/gram, well within the disposal site limit of 10 nanocuries/gram.

Table 6.1 contains the radionuclide content (curies) and percent abundance for each type of waste.

Isotopes denoted by an asterisk (*) in Table 6.1 are correlated values.

Table 6.1
Annual Radioactive Effluent Report 1995
Solid Waste and Irradiated Fuel Shipments

A. Solid Waste Shipped Off-Site for Burial or Disposal

No solid waste shipments were made from the Kewaunee Nuclear Power Plant 1995.

B. Irradiated Fuel Shipments

No irradiated fuel shipments were made from the Kewaunee Nuclear Power Plant during 1994.

7.0 PROGRAM REVISIONS

In accordance with Technical Specifications 6.18.b.3 and 6.19.a, the revisions to the Process Control Program, Offsite Dose Calculation Manual and radioactive waste treatment systems are listed below.

7.1 Offsite Dose Calculation Manual

The Offsite Dose Calculation Manual (ODCM) has not been revised during this report period.

7.2 Major Changes to the Radioactive Liquid, Gaseous and Solid Waste Treatment Systems

Major changes to the radioactive liquid, gaseous or solid waste systems are submitted in the annual Updated Final Safety Analysis Report consistent with Technical Specification 6.19.

8.0 REPORTABLE OCCURRENCES

None

Appendix A
Kewaunee Nuclear Power Plant
1995 Meteorological Data

Missing Meteorological Data

First Quarter:	47 Hours
Second Quarter:	134 Hours
Third Quarter:	126 Hours
Fourth Quarter:	35 Hours
Total Missing Hours:	342 Hours

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	3	10	9	0	0	22
NNE	0	2	10	34	26	1	0	73
NE	0	2	22	12	21	10	1	68
ENE	0	0	5	9	14	7	0	35
E	0	2	11	11	20	0	0	44
ESE	0	0	5	10	21	0	0	36
SE	0	1	3	10	10	1	1	26
SSE	0	0	2	9	11	5	5	32
S	0	1	2	18	8	2	0	31
SSW	0	0	1	4	1	0	0	6
SW	0	0	0	11	14	3	4	32
WSW	1	4	11	14	12	1	0	43
W	0	0	10	27	31	9	4	81
WNW	0	0	12	21	19	1	0	53
NW	2	1	8	16	20	5	0	52
NNW	4	0	6	14	12	4	0	40
TOTAL	7	13	111	230	249	49	15	674

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	2	8	7	2	0	19
NNE	0	0	3	5	3	0	0	11
NE	0	0	2	1	5	0	0	8
ENE	0	1	0	1	3	0	0	5
E	0	0	1	4	1	0	0	6
ESE	0	0	0	1	2	0	0	3
SE	0	1	1	1	0	3	0	6
SSE	0	0	0	4	1	3	0	8
S	0	0	0	11	9	0	0	20
SSW	0	0	3	3	1	0	0	7
SW	0	0	0	4	3	1	0	8
WSW	0	0	1	1	3	1	0	6
W	0	0	2	2	2	3	0	9
WNW	0	0	0	0	2	0	0	2
NW	0	0	0	4	13	2	0	19
NNW	0	0	3	10	4	2	0	19
TOTAL	0	2	18	60	59	17	0	156

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	3	6	10	1	0	20
NNE	0	0	5	6	5	0	0	16
NE	0	1	1	0	0	0	0	2
E	0	1	0	2	4	0	0	7
ESE	0	1	1	1	0	0	0	3
SE	0	0	1	0	0	0	0	1
SSE	0	1	0	0	0	0	0	1
S	0	0	1	2	1	0	0	4
SSW	0	0	3	4	3	0	0	10
SW	0	0	0	2	2	2	0	6
WSW	0	0	3	3	4	0	0	10
W	0	0	1	8	8	5	0	22
WNW	0	0	1	1	12	0	0	14
NW	1	0	1	7	16	3	0	28
NNW	1	0	7	2	8	5	0	23
TOTAL	2	4	28	44	73	16	0	167

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	9	10	6	1	0	26
NNE	0	0	7	13	1	1	0	22
NE	0	0	5	2	0	0	0	7
ENE	0	1	0	2	0	0	0	3
E	0	0	8	1	2	0	0	11
ESE	0	0	0	1	0	0	0	1
SE	0	0	0	3	1	0	0	4
SSE	0	1	4	5	0	0	0	10
S	0	1	9	9	3	0	0	22
SSW	0	4	5	7	5	1	0	22
SW	0	0	7	1	26	7	0	41
WSW	0	2	13	4	12	1	0	32
W	0	2	6	17	44	16	0	85
WNW	0	2	3	17	24	0	0	46
NW	1	0	5	4	34	9	0	53
NNW	3	0	8	13	11	3	0	38
TOTAL	4	13	89	109	169	39	0	423

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	3	2	0	0	0	5
NNE	0	0	4	5	0	0	0	9
NE	0	0	5	0	2	0	0	7
ENE	0	0	0	1	0	0	0	1
E	0	0	3	0	1	0	0	4
SE	0	0	1	1	0	0	0	2
SSE	1	0	7	3	1	0	0	12
S	0	2	13	8	0	0	0	23
SSW	0	3	9	3	4	0	0	19
SW	0	4	14	3	1	0	0	22
WSW	0	0	8	5	2	0	0	15
W	0	1	12	10	2	3	0	28
WNW	1	0	19	9	2	0	0	31
NW	6	0	14	7	5	0	0	32
NNW	0	1	12	7	2	0	0	22
TOTAL	8	11	124	64	22	3	0	232

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	0	0	2	0	0	0	2
NE	0	0	1	3	2	0	0	6
ENE	0	0	0	0	1	0	0	1
E	0	0	2	1	0	0	0	3
ESE	0	2	0	0	0	0	0	2
SE	0	1	2	0	0	0	0	3
SSE	0	0	5	3	0	0	0	8
S	0	0	20	2	0	0	0	22
SSW	0	2	11	4	0	0	0	17
SW	0	1	8	6	2	0	0	17
WSW	0	2	6	7	3	2	0	20
W	0	0	9	11	1	1	0	22
WNW	0	1	9	3	2	1	0	16
NW	3	1	11	9	0	0	0	24
NNW	0	0	2	3	0	0	0	5
TOTAL	3	10	86	54	11	4	0	168

Kewaunee Nuclear Power Plant Meteorological Data
 January 1995 to March 1995
 Wind Speed Hourly Average vs. Direction

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	5	0	0	0	0	5
NNE	0	0	1	2	0	0	0	3
NE	0	0	0	1	2	0	0	3
ENE	0	0	0	1	0	0	0	1
E	0	1	3	0	0	0	0	4
SE	0	2	0	1	0	0	0	3
SSE	0	2	6	11	3	0	0	22
S	0	4	19	2	0	0	0	25
SSW	0	6	14	1	0	0	0	21
SW	0	4	12	8	0	0	0	24
WSW	0	0	12	22	1	0	0	35
W	0	1	16	40	29	18	6	110
WNW	0	1	6	6	1	0	0	14
NW	0	0	9	7	0	0	0	16
NNW	0	0	4	3	0	0	0	7
TOTAL	0	21	107	105	36	18	6	293

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	10	9	3	0	22
NNE	0	0	11	41	46	18	0	116
NE	0	0	20	14	12	11	1	58
ENE	0	0	10	2	7	8	0	27
E	0	4	11	6	4	0	0	25
ESE	0	2	10	3	3	0	0	18
SE	0	2	5	3	5	3	0	18
SSE	0	0	2	9	3	7	0	21
S	0	1	2	6	6	0	0	15
SSW	0	0	5	2	0	0	0	7
SW	0	0	0	4	3	0	1	8
WSW	0	0	6	5	10	0	0	21
W	0	0	4	6	15	12	1	38
WNW	0	0	3	12	10	2	0	27
NW	0	0	5	15	14	12	0	46
NNW	0	0	1	4	4	4	0	13
TOTAL	0	9	95	142	151	80	3	480

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	4	5	0	0	9
NNE	0	0	2	3	4	0	0	9
NE	0	1	2	2	0	0	0	5
ENE	0	0	3	2	3	2	0	10
E	0	0	4	0	0	0	0	4
ESE	0	0	3	0	0	0	0	3
SE	0	0	4	1	0	0	0	5
SSE	0	0	2	0	2	0	0	4
S	0	0	0	3	2	0	0	5
SW	0	0	0	0	0	1	0	1
WSW	0	1	0	0	1	0	0	2
W	0	0	1	2	0	0	0	3
WNW	0	0	0	1	0	0	0	1
NW	0	0	0	1	1	1	0	3
NNW	0	0	3	1	1	3	0	8
TOTAL	0	2	24	20	19	7	0	72

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	4	2	0	0	6
NNE	0	0	4	6	3	0	0	13
NE	0	1	3	1	5	0	0	10
ENE	0	1	3	2	0	2	0	8
E	0	0	5	1	0	0	0	6
ESE	0	0	1	1	0	0	0	2
SE	0	1	0	0	0	0	0	1
SSE	0	0	0	1	2	1	0	4
S	0	0	0	1	2	0	0	3
SSW	0	0	1	0	0	0	0	1
WSW	0	0	1	2	0	0	0	3
W	0	0	0	0	2	0	0	2
WNW	0	0	1	2	1	0	0	4
NW	0	0	3	1	1	0	0	5
TOTAL	0	3	22	22	18	3	0	68

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	2	5	14	11	2	0	34
NNE	0	0	16	15	10	0	0	41
NE	1	3	13	2	2	1	0	22
ENE	0	1	9	7	2	1	0	20
E	0	0	13	3	0	0	0	16
ESE	0	2	5	1	0	0	0	8
SE	0	0	5	3	0	0	0	8
SSE	0	0	5	2	1	0	0	8
S	0	1	7	4	5	0	0	17
SSW	0	0	1	3	1	0	0	5
SW	0	1	1	1	0	0	0	3
WSW	0	0	4	6	0	2	0	12
W	0	0	5	6	11	1	1	24
WNW	0	0	1	7	3	0	0	11
NW	0	1	6	5	2	3	3	20
NNW	0	1	2	4	3	0	0	10
TOTAL	1	12	98	83	51	10	4	259

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	12	4	2	0	0	18
NNE	0	1	23	16	4	0	0	44
NE	0	4	16	8	1	1	0	30
ENE	1	3	8	1	8	1	0	22
E	0	9	15	0	2	0	0	26
ESE	0	10	8	2	0	0	0	20
SE	0	4	7	6	1	0	0	18
SSE	1	3	6	5	4	1	0	20
S	1	5	9	5	4	0	0	24
SSW	19	3	4	2	2	1	0	31
SW	1	1	3	2	0	0	0	7
WSW	1	2	7	4	0	1	0	15
W	0	0	4	13	5	1	0	23
WNW	0	0	5	10	4	0	0	19
NW	0	0	2	4	1	0	0	7
NNW	0	0	3	1	1	0	0	5
TOTAL	24	45	132	83	39	6	0	329

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	6	1	0	0	0	7
NNE	0	4	7	8	4	0	0	23
NE	0	3	11	4	2	0	0	20
ENE	0	2	8	2	1	1	0	14
E	0	5	9	0	0	0	0	14
ESE	0	9	7	0	0	0	0	16
SE	0	4	7	6	2	0	0	19
SSE	0	5	11	5	6	0	0	27
S	0	1	11	2	2	0	0	16
SSW	0	5	10	0	1	0	0	16
SW	0	2	2	2	0	0	0	6
WSW	0	5	7	4	2	0	0	18
W	0	3	5	6	2	0	0	16
WNW	0	1	3	2	0	0	0	6
NW	0	0	0	2	0	0	0	2
NNW	0	0	7	3	0	0	0	10
TOTAL	0	49	111	47	22	1	0	230

Kewaunee Nuclear Power Plant Meteorological Data
 April 1995 to June 1995
 Wind Speed Hourly Average vs. Direction

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	1	0	0	0	2
NNE	0	5	10	11	3	1	0	30
NE	0	1	9	11	1	0	0	22
ENE	0	4	3	2	1	0	0	10
E	0	4	5	3	0	0	0	12
ESE	0	7	3	0	1	0	0	11
SE	1	6	22	8	0	0	0	37
SSE	0	24	57	47	8	1	0	137
S	1	30	23	4	0	0	0	58
SSW	0	31	21	3	0	0	0	55
SW	0	13	31	4	0	0	0	48
WSW	0	13	32	14	0	0	0	59
W	0	13	15	29	2	0	0	59
WNW	0	7	8	13	1	0	0	29
NW	0	12	11	7	2	1	0	33
NNW	0	4	6	0	0	0	0	10
TOTAL	2	174	257	157	19	3	0	612

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	6	1	0	0	8
NNE	0	0	9	9	1	0	0	19
NE	0	0	7	1	0	0	0	8
ENE	0	0	10	1	0	0	0	11
E	0	2	33	13	2	0	0	50
ESE	0	2	31	11	4	0	0	48
SE	0	0	13	16	6	4	0	39
SSE	0	3	8	16	22	18	0	67
S	0	1	14	28	7	0	0	50
SSW	0	2	11	7	5	0	0	25
SW	0	2	5	10	13	2	0	32
WSW	0	0	13	20	22	4	0	59
W	0	0	6	12	5	5	0	28
WNW	0	0	4	16	6	0	0	26
NW	0	1	5	7	1	1	0	15
NNW	0	0	1	2	3	2	0	8
TOTAL	0	13	171	175	98	36	0	493

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	2	0	0	0	2
NNE	0	0	0	1	0	0	0	1
NE	0	0	2	1	0	0	0	3
ENE	0	0	6	0	0	0	0	6
E	0	1	4	2	1	0	0	8
ESE	0	0	3	0	1	0	0	4
SE	0	1	6	5	0	1	0	13
SSE	0	0	4	6	5	1	0	16
S	0	0	0	8	0	0	0	8
SSW	0	0	1	1	2	0	0	4
SW	0	0	2	0	0	0	0	2
WSW	0	0	1	1	0	0	0	2
W	0	0	1	1	0	0	0	2
WNW	0	0	1	0	0	0	0	1
NW	0	0	0	1	0	0	0	1
NNW	0	0	0	1	0	0	0	1
TOTAL	0	2	31	30	9	2	0	74

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	2	0	0	0	2
NNE	0	0	2	0	0	0	0	2
NE	0	0	2	0	0	0	0	2
ENE	0	0	1	0	0	0	0	1
E	0	1	7	1	0	0	0	9
ESE	0	1	10	2	2	0	0	15
SE	0	0	2	3	0	1	0	6
SSE	0	0	3	1	2	0	0	6
S	0	0	3	4	0	0	0	7
SSW	0	0	1	1	0	0	0	2
SW	0	1	0	3	1	0	0	5
WSW	0	1	1	2	2	0	0	6
NW	0	0	0	1	0	0	0	1
NNW	0	0	0	1	0	0	0	1
TOTAL	0	4	32	21	7	1	0	65

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	5	2	0	0	8
NNE	0	0	9	5	1	0	0	15
NE	0	0	9	1	1	0	0	11
ENE	0	3	3	3	1	0	0	10
E	0	8	18	2	2	0	0	30
ESE	0	5	11	5	0	0	0	21
SE	0	5	18	5	3	0	0	31
SSE	0	2	14	2	7	0	0	25
S	0	5	23	32	1	0	0	61
SSW	0	1	8	4	1	0	0	14
SW	0	3	5	1	2	1	0	12
WSW	0	1	4	7	3	0	0	15
W	0	0	5	7	6	0	0	18
WNW	0	0	1	1	3	0	0	5
NW	0	1	3	3	0	1	0	8
NNW	0	0	0	1	1	0	0	2
TOTAL	0	34	132	84	34	2	0	286

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	6	1	0	0	0	7
NNE	0	0	8	5	0	0	0	13
NE	0	0	8	0	0	0	0	8
ENE	0	0	5	1	0	0	0	6
E	0	2	6	2	0	0	0	10
ESE	0	1	8	3	0	0	0	12
SE	0	8	7	4	0	0	0	19
SSE	0	10	14	6	3	1	0	34
S	0	7	38	18	3	0	0	66
SSW	0	10	23	7	0	0	0	40
SW	0	2	12	8	6	0	0	28
WSW	0	6	11	5	3	0	0	25
W	0	3	7	9	0	0	0	19
WNW	0	2	7	7	4	0	0	20
NW	0	0	1	4	0	0	0	5
NNW	0	1	4	2	1	0	0	8
TOTAL	0	52	165	82	20	1	0	320

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	0	0	0	0	1
NNE	0	0	2	3	0	0	0	5
NE	0	0	4	0	0	0	0	4
ENE	0	3	3	0	0	0	0	6
E	0	0	6	1	0	0	0	7
ESE	0	2	6	3	0	0	0	11
SE	0	3	2	2	0	0	0	7
SSE	0	4	24	12	5	0	0	45
S	0	14	42	4	0	0	0	60
SSW	0	10	21	4	0	0	0	35
SW	0	6	6	9	2	0	0	23
WSW	0	2	12	11	3	0	0	28
W	0	2	2	2	0	0	0	6
WNW	0	0	7	1	0	0	0	8
NW	0	4	3	1	0	0	0	8
NNW	0	0	6	0	0	0	0	6
TOTAL	0	50	147	53	10	0	0	260

Kewaunee Nuclear Power Plant Meteorological Data
 July 1995 to September 1995
 Wind Speed Hourly Average vs. Direction

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	1	0	0	0	1
NNE	0	3	11	1	0	0	0	15
NE	0	1	9	2	0	0	0	12
ENE	0	1	5	3	1	0	0	10
E	0	0	7	1	0	0	0	8
ESE	0	5	4	0	0	0	0	9
SE	0	4	7	2	0	0	0	13
SSE	0	6	47	34	13	3	0	103
S	1	17	39	7	0	0	0	64
SSW	0	26	52	3	0	0	0	81
SW	0	15	63	8	1	0	0	87
WSW	0	12	71	15	1	0	0	99
W	0	1	15	14	1	0	0	31
WNW	0	2	3	3	1	0	0	9
NW	0	1	7	1	2	0	0	11
NNW	0	6	20	5	0	0	0	31
TOTAL	1	100	360	100	20	3	0	584

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	1	1	3	0	5
NNE	0	0	0	3	0	0	3	6
NE	0	0	4	5	9	12	2	32
ENE	0	0	1	2	17	4	0	24
E	0	0	2	1	3	0	0	6
ESE	0	1	1	2	6	7	6	23
SE	0	0	4	5	3	5	0	17
SSE	0	0	1	4	2	2	13	22
S	0	2	3	15	4	0	0	24
SSW	0	0	10	9	5	0	0	24
SW	0	4	8	9	8	9	1	39
WSW	1	2	10	13	23	12	2	63
W	18	1	3	10	34	7	9	82
WNW	1	1	10	21	25	1	0	59
NW	1	0	13	31	20	5	0	70
NNW	0	0	1	11	10	3	0	25
TOTAL	21	11	71	142	170	70	36	521

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	0	0	0	0	1
NNE	0	0	0	0	0	1	2	3
NE	0	0	0	0	1	3	0	4
ENE	0	0	0	1	0	0	0	1
E	0	0	1	0	0	0	0	1
ESE	0	1	1	2	1	0	0	5
SE	0	0	1	0	0	1	0	2
SSE	0	0	0	1	1	0	2	4
S	0	1	2	7	5	0	0	15
SSW	0	1	3	3	1	0	0	8
SW	0	0	0	2	0	0	0	2
WSW	1	0	2	1	2	3	0	9
W	8	0	1	1	4	2	1	17
WNW	2	1	2	6	9	0	0	20
NW	0	1	2	3	2	0	0	8
NNW	0	0	2	2	1	1	0	6
TOTAL	11	5	18	29	27	11	5	106

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	3	5	0	0	8
NNE	0	0	0	2	2	0	1	5
NE	0	0	0	0	2	3	0	5
E	0	0	3	0	0	0	0	3
ESE	0	0	2	0	1	0	0	3
SE	0	0	0	1	1	0	0	2
SSE	0	0	0	0	0	2	2	4
S	0	2	3	1	2	0	0	8
SSW	0	1	3	3	4	0	0	11
SW	0	0	0	3	5	1	0	9
WSW	1	0	1	0	3	4	0	9
W	5	2	2	4	10	1	0	24
WNW	0	3	1	3	10	0	0	17
NW	0	1	2	3	3	0	0	9
NNW	0	0	2	10	3	6	0	21
TOTAL	6	9	19	33	51	17	3	138

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	3	5	0	0	8
NNE	0	0	0	6	2	0	0	8
NE	0	0	1	1	5	2	0	9
ENE	0	1	4	3	4	1	0	13
E	0	1	4	6	6	0	0	17
ESE	0	1	3	1	6	0	0	11
SE	0	0	9	2	2	0	0	13
SSE	0	0	3	9	8	7	1	28
S	0	1	6	14	5	1	0	27
SSW	0	4	14	16	3	0	0	37
SW	0	1	4	15	2	1	0	23
WSW	0	0	9	29	24	12	0	74
W	27	1	11	21	42	9	4	115
WNW	6	1	11	39	20	2	0	79
NW	0	1	14	29	15	1	0	60
NNW	0	1	10	10	18	3	0	42
TOTAL	33	13	103	204	167	39	5	564

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	2	2	0	0	4
NNE	0	1	1	0	0	0	0	2
ENE	0	0	1	1	0	0	0	2
E	0	0	4	3	1	0	0	8
ESE	0	0	7	8	1	0	0	16
SE	0	3	6	12	1	0	0	22
SSE	0	2	5	4	2	5	2	20
S	0	5	6	13	4	0	0	28
SSW	0	3	8	3	3	1	0	18
SW	0	3	9	5	1	0	0	18
WSW	0	5	13	9	13	1	0	41
W	5	3	19	15	6	1	0	49
WNW	1	5	24	40	5	0	0	75
NW	0	3	13	14	10	0	0	40
NNW	0	0	7	6	1	0	0	14
TOTAL	6	33	123	135	50	8	2	357

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	0	0	0	0	1
NNE	0	0	3	0	0	0	0	3
NE	0	1	1	0	0	0	0	2
E	0	0	2	2	0	0	0	4
ESE	0	2	3	7	2	0	0	14
SE	0	1	3	4	0	0	0	8
SSE	0	0	3	7	5	2	0	17
S	0	2	9	3	3	0	0	17
SSW	0	2	7	5	1	0	0	15
SW	0	6	7	6	3	0	0	22
WSW	0	3	15	15	6	0	0	39
W	0	1	11	4	1	0	0	17
WNW	0	3	10	3	0	0	0	16
NW	0	2	14	5	5	0	0	26
NNW	0	2	6	8	3	0	0	19
TOTAL	0	25	95	69	29	2	0	220

Kewaunee Nuclear Power Plant Meteorological Data
 October 1995 to December 1995
 Wind Speed Hourly Average vs. Direction

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	0	0	0	0	1
NNE	0	1	1	0	0	0	0	2
E	0	0	2	0	0	0	0	2
ESE	0	3	0	9	0	0	0	12
SE	0	3	0	0	1	0	0	4
SSE	0	3	1	1	1	0	0	6
S	0	3	7	4	0	0	0	14
SSW	0	5	14	1	0	0	0	20
SW	0	1	11	11	0	0	0	23
WSW	0	5	21	24	4	0	0	54
W	0	1	34	7	0	0	0	42
WNW	0	6	26	9	0	0	0	41
NW	0	4	24	11	0	0	0	39
NNW	0	0	6	1	0	0	0	7
TOTAL	0	35	148	78	6	0	0	267

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-001

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WSW	0	0	10	4	0	0	0	14
W	0	0	9	2	0	0	0	11
TOTAL	0	0	19	6	0	0	0	25

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	1	1	0	0	0	0	2
SSW	0	2	0	0	0	0	0	2
WSW	0	1	1	0	0	0	0	2
W	0	3	2	0	0	0	0	5
WNW	0	1	0	0	0	0	0	1
TOTAL	0	8	4	0	0	0	0	12

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	1	0	0	0	0	1
SW	0	1	4	0	0	0	0	5
WNW	0	1	0	0	0	0	0	1
NW	0	1	0	0	0	0	0	1
TOTAL	0	3	5	0	0	0	0	8

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-002

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	2	5	6	9	22
S	0	0	0	4	4	0	0	8
SSW	0	0	0	5	1	0	0	6
SW	0	0	0	9	0	0	0	9
TOTAL	0	0	0	20	10	6	9	45

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	0	1	0	0	1
TOTAL	0	0	0	0	1	0	0	1

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	0	1	0	0	1
S	0	0	1	1	0	0	0	2
TOTAL	0	0	1	1	1	0	0	3

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	1	4	0	0	0	5
SSW	0	0	1	1	0	0	0	2
TOTAL	0	0	2	5	0	0	0	7

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-002

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	1	0	0	0	0	1
SSW	0	0	1	1	0	0	0	2
TOTAL	0	0	2	1	0	0	0	3

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-003

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	2	0	0	0	0	2
NNE	0	0	2	0	0	0	0	2
NE	0	1	2	0	0	0	0	3
ENE	0	0	2	0	0	0	0	2
WNW	0	0	1	1	0	0	0	2
NW	0	0	4	1	0	0	0	5
NNW	0	0	3	0	0	0	0	3
TOTAL	0	1	16	2	0	0	0	19

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	0	1	0	0	0	0	1
NE	0	0	1	0	0	0	0	1
TOTAL	0	0	2	0	0	0	0	2

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-004

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WSW	0	0	0	0	1	0	0	1
TOTAL	0	0	0	0	1	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-005

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	1	0	0	0	1
S	0	0	0	1	0	0	0	1
TOTAL	0	0	0	2	0	0	0	2

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	1	0	0	0	1
S	0	0	2	2	0	0	0	4
TOTAL	0	0	2	3	0	0	0	5

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	1	2	0	0	0	3
S	0	0	2	0	0	0	0	2
TOTAL	0	0	3	2	0	0	0	5

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SE	0	0	1	0	0	0	0	1
SSE	0	0	10	10	0	0	0	20
S	0	0	5	3	0	0	0	8
TOTAL	0	0	16	13	0	0	0	29

Kewaunee Nuclear Power Plant Meteorological Data
Wind Speed Hourly Average vs. Direction
Batch Release Summary - Permit Number 95-006

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	2	0	0	0	0	2
NW	0	0	2	0	0	0	0	2
NNW	0	0	5	0	0	0	0	5
TOTAL	0	0	9	0	0	0	0	9

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-007

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	0	1	3	0	0	4
SW	0	0	1	11	8	0	0	20
WSW	0	0	4	5	0	0	0	9
W	0	0	0	4	0	0	0	4
TOTAL	0	0	5	21	11	0	0	37

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
W	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	1	0	0	0	0	0	1
SSW	0	1	0	1	0	0	0	2
SW	0	0	1	0	0	0	0	1
W	0	0	0	1	1	0	0	2
TOTAL	0	2	1	2	1	0	0	6

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-007 (continued)

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	1	2	0	0	0	0	3
SW	0	1	2	0	0	0	0	3
WSW	0	1	12	0	0	0	0	13
W	0	0	5	1	0	0	0	6
WNW	0	0	1	1	0	0	0	2
TOTAL	0	3	22	2	0	0	0	27

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	3	0	0	0	0	3
SW	0	0	2	1	0	0	0	3
W	0	0	2	3	0	0	0	5
WNW	0	0	4	0	0	0	0	4
TOTAL	0	0	11	4	0	0	0	15

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	2	0	0	0	0	2
W	0	0	3	7	0	0	0	10
WNW	0	0	4	0	0	0	0	4
NW	0	0	2	0	0	0	0	2
TOTAL	0	0	11	7	0	0	0	18

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-008

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
W	0	0	0	3	0	0	0	3
TOTAL	0	0	0	3	0	0	0	3

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
W	0	0	0	2	0	0	0	2
TOTAL	0	0	0	2	0	0	0	2

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-009

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	0	1	0	0	0	0	1
ENE	0	0	1	0	0	0	0	1
TOTAL	0	0	2	0	0	0	0	2

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
E	0	1	0	0	0	0	0	1
TOTAL	0	1	0	0	0	0	0	1

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-0010

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ESE	0	0	0	1	0	0	0	1
SE	0	0	4	0	0	0	0	4
TOTAL	0	0	4	1	0	0	0	5

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-0011

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-012

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-013

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	0	1	0	0	1
NNE	0	0	0	0	0	1	0	1
TOTAL	0	0	0	0	1	1	0	2

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	0	1	0	0	1
NNE	0	0	0	0	2	0	0	2
TOTAL	0	0	0	0	3	0	0	3

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-014

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SE	0	0	2	0	0	0	0	2
SSE	0	0	3	0	0	0	0	3
S	0	0	2	0	0	0	0	2
NW	0	0	0	5	3	0	0	8
NNW	0	0	0	0	5	0	0	5
TOTAL	0	0	7	5	8	0	0	20

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SE	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	1	1	0	0	0	2
TOTAL	0	0	1	1	0	0	0	2

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-014 (continued)

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
ESE	0	0	1	0	0	0	0	1
SSE	0	1	4	0	0	0	0	5
S	0	0	4	0	0	0	0	4
TOTAL	0	1	10	0	0	0	0	11

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
E	0	1	0	0	0	0	0	1
ESE	0	0	1	0	0	0	0	1
SE	0	0	2	0	0	0	0	2
SSE	0	1	7	3	0	0	0	11
S	0	3	3	0	0	0	0	6
SSW	0	0	1	0	0	0	0	1
TOTAL	0	5	14	3	0	0	0	22

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-014 (continued)

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
E	1	3	0	0	0	0	0	4
ESE	0	4	1	0	0	0	0	5
SE	0	5	4	1	0	0	0	10
SSE	0	5	34	12	0	0	0	51
S	0	0	4	0	0	0	0	4
SSW	0	5	1	0	0	0	0	6
SW	1	6	1	0	0	0	0	8
WSW	0	4	0	0	0	0	0	4
W	0	2	0	0	0	0	0	2
NW	0	1	0	0	0	0	0	1
TOTAL	2	35	46	13	0	0	0	96

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-015

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNW	0	0	0	0	1	0	0	1
TOTAL	0	0	0	0	1	0	0	1

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
ENE	0	0	1	0	0	0	0	1
E	0	1	0	0	0	0	0	1
TOTAL	0	1	1	0	0	0	0	2

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-016

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	2	0	0	0	0	2
S	0	0	2	0	0	0	0	2
TOTAL	0	0	4	0	0	0	0	4

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	7	5	0	0	0	12
TOTAL	0	0	7	5	0	0	0	12

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-017

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SE	0	1	0	0	0	0	0	1
TOTAL	0	1	0	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
Wind Speed Hourly Average vs. Direction
Batch Release Summary - Permit Number 95-018

There is no Meteorological Data available for release number 95-018.
This release was 20 minutes in duration.

Kewaunee Nuclear Power Plant Meteorological Data
Wind Speed Hourly Average vs. Direction
Batch Release Summary - Permit Number 95-019

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
Wind Speed Hourly Average vs. Direction
Batch Release Summary - Permit Number 95-020

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	1	0	0	0	0	0	1
TOTAL	0	1	0	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-021

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	1	0	0	0	0	1
WSW	0	0	1	1	2	0	0	4
W	0	0	0	7	1	0	0	8
WNW	0	0	1	3	0	0	0	4
TOTAL	0	0	3	11	3	0	0	17

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WSW	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
W	0	0	1	1	0	0	0	2
TOTAL	0	0	1	1	0	0	0	2

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-021 (continued)

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	2	1	0	0	0	3
WSW	0	0	0	3	0	0	0	3
TOTAL	0	0	2	4	0	0	0	6

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	1	0	0	0	0	1
WSW	0	0	1	0	0	0	0	1
W	0	0	0	1	1	0	0	2
TOTAL	0	0	2	1	1	0	0	4

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	3	0	0	0	0	3
WSW	0	0	7	0	1	0	0	8
W	0	0	0	5	0	0	0	5
WNW	0	0	0	2	0	0	0	2
TOTAL	0	0	10	7	1	0	0	18

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-022

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	2	0	0	0	2
TOTAL	0	0	0	2	0	0	0	2

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	0	2	0	0	0	2
NNE	0	0	7	3	0	0	0	10
TOTAL	0	0	7	5	0	0	0	12

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNW	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-023

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-024

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-025

There is no Meteorological Data available for release number 95-025.
 This release was 22 minutes in duration.

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-026

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	0	0	1	0	0	1
TOTAL	0	0	0	0	1	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-027

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	0	0	0	1	0	0	1
ENE	0	1	2	0	2	0	0	5
E	0	0	2	0	0	0	0	2
ESE	0	0	1	0	0	0	0	1
SE	0	1	6	0	0	0	0	7
SSE	0	0	13	9	2	0	0	24
SSW	0	1	0	0	0	0	0	1
TOTAL	0	3	24	9	5	0	0	41

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-028

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
W	0	0	0	0	1	0	0	1
WNW	0	0	0	5	3	0	0	8
NW	0	0	0	2	4	0	0	6
TOTAL	0	0	0	7	8	0	0	15

Stability Class C

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WNW	0	0	0	1	0	0	0	1
TOTAL	0	0	0	1	0	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NW	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	1	0	0	0	0	0	1
WNW	0	0	2	0	0	0	0	2
NW	0	0	0	1	0	0	0	1
TOTAL	0	1	2	1	0	0	0	4

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-028 (continued)

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	1	1	0	0	0	0	2
NE	0	1	0	0	0	0	0	1
WNW	0	0	4	0	0	0	0	4
TOTAL	0	2	5	0	0	0	0	7

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNE	0	1	0	0	0	0	0	1
WNW	0	1	2	0	0	0	0	3
NNW	0	1	0	0	0	0	0	1
TOTAL	0	3	2	0	0	0	0	5

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-029

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	1	0	0	0	0	0	1
TOTAL	0	1	0	0	0	0	0	1

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-030

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	0	0	1	0	0	1
TOTAL	0	0	0	0	1	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSW	0	0	1	1	0	0	0	2
SW	0	0	0	2	0	0	0	2
WSW	0	0	1	0	1	0	0	2
W	0	1	0	0	0	0	0	1
TOTAL	0	1	2	3	1	0	0	7

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-030 (continued)

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	1	1	0	0	0	0	2
NNE	0	0	1	0	0	0	0	1
E	0	0	1	0	0	0	0	1
SSE	0	0	1	0	0	0	0	1
S	0	0	7	0	0	0	0	7
SSW	0	0	6	0	0	0	0	6
SW	0	0	0	1	0	0	0	1
WSW	0	1	3	3	0	0	0	7
W	0	0	0	1	0	0	0	1
WNW	0	1	0	0	0	0	0	1
TOTAL	0	3	20	5	0	0	0	28

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NE	0	1	2	0	0	0	0	3
W	0	0	1	0	0	0	0	1
TOTAL	0	1	3	0	0	0	0	4

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-031

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SW	0	0	0	0	5	2	0	7
WSW	0	0	0	1	10	10	0	21
TOTAL	0	0	0	1	15	12	0	28

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WSW	0	0	0	0	1	0	0	1
TOTAL	0	0	0	0	1	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
SSE	0	0	1	0	0	0	0	1
S	0	0	0	1	1	0	0	2
WSW	0	0	0	3	1	0	0	4
TOTAL	0	0	1	4	2	0	0	7

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	6	2	0	0	0	8
SSW	0	0	2	0	0	0	0	2
SW	0	2	0	0	0	0	0	2
WSW	0	0	0	1	3	0	0	4
TOTAL	0	2	8	3	3	0	0	16

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-031 (continued)

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	2	0	0	0	0	2
SSW	0	0	1	0	0	0	0	1
SW	0	0	1	0	0	0	0	1
WSW	0	0	1	0	0	0	0	1
TOTAL	0	0	5	0	0	0	0	5

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-032

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	1	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	1

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	2	0	0	0	0	2
TOTAL	0	0	2	0	0	0	0	2

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	1	4	0	0	0	5
SSW	0	0	0	2	0	0	0	2
TOTAL	0	0	1	6	0	0	0	7

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	21	3	0	0	0	24
SSW	0	0	2	0	0	0	0	2
TOTAL	0	0	23	3	0	0	0	26

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
S	0	0	7	1	0	0	0	8
SSW	0	0	1	0	0	0	0	1
TOTAL	0	0	8	1	0	0	0	9

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-033

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
W	0	1	1	0	0	0	0	2
TOTAL	0	1	1	0	0	0	0	2

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WSW	0	0	1	0	0	0	0	1
W	0	0	2	0	0	0	0	2
WNW	0	0	2	0	0	0	0	2
NW	0	0	0	1	0	0	0	1
TOTAL	0	0	5	1	0	0	0	6

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WSW	0	0	1	0	0	0	0	1
W	0	0	2	0	0	0	0	2
WNW	0	0	14	2	0	0	0	16
NW	0	0	14	4	0	0	0	18
TOTAL	0	0	31	6	0	0	0	37

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-034

Stability Class A

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	0	1	0	0	0	0	1
WNW	0	0	4	2	0	0	0	6
NW	0	0	4	1	0	0	0	5
NNW	0	0	1	0	0	0	0	1
TOTAL	0	0	10	3	0	0	0	13

Stability Class B

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NNW	0	0	2	0	0	0	0	2
TOTAL	0	0	2	0	0	0	0	2

Stability Class D

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NW	0	0	2	0	0	0	0	2
NNW	0	0	12	0	0	0	0	12
TOTAL	0	0	14	0	0	0	0	14

Stability Class E

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
WNW	0	0	2	0	0	0	0	2
NW	0	0	4	0	0	0	0	4
NNW	0	0	6	0	0	0	0	6
TOTAL	0	0	12	0	0	0	0	12

Kewaunee Nuclear Power Plant Meteorological Data
 Wind Speed Hourly Average vs. Direction
 Batch Release Summary - Permit Number 95-034 (continued)

Stability Class F

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NW	0	0	5	0	0	0	0	5
NNW	0	0	2	0	0	0	0	2
TOTAL	0	0	7	0	0	0	0	7

Stability Class G

Wind Direction (from)	CALM	1-3	4-7	8-12	13-18	19-24	>24	Total
NW	0	0	5	0	0	0	0	5
TOTAL	0	0	5	0	0	0	0	5