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Exelon SM
Nuclear
10 CFR 50.36a

April 26, 2002

LTR: BYRON 2002-0034
File: 2.12.1522

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454 and STN 50-455

Subject: 2001 Annual Radioactive Effluent Release Report

Enclosed is the Annual Radioactive Effluent Release Report for Byron Station. This report is being submitted in accordance with 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors," paragraph (a)(2), and includes a summary of radiological liquid and gaseous effluents and solid waste released from the site from January 2001, through December 2001.

If you have any questions regarding this information, please contact W. Grundmann, Regulatory Assurance Manager, at (815) 406-2800.

Respectfully,

Richard P. Lopriore
Site Vice President
Byron Nuclear Generating Station

RPL/DAT/rf/bka

Attachment

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Byron Station
NRC Project Manager – NRR – Byron Station (w/o enclosure)
Office of Nuclear Facility Safety / Illinois Department of Nuclear Safety
U.S. Environmental Protection Agency, Air and Radiation Division – Region V

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BYRON NUCLEAR POWER STATION
UNIT 1/2 DOCKET NUMBER STN-50-454/455
RADIOACTIVE EFFLUENT RELEASE REPORT
January, 2001 THROUGH December, 2001
Supplemental Information

1. Regulatory Limits

   a. Fission and activation gases:

Tech Spec Whole Body	=	500 mrem/year
Skin	=	3000 mrem/year
10CFR50 Gamma	=	5 mrad/quarter; 10 mrad/year
Beta	=	10 mrad/quarter; 20 mrad/year

   b. Iodine: (summed with particulate, see below)

   c. Particulates with half-lives > 8 days:

Tech Spec Organ	=	1500 mrem/year
10CFR50 Organ	=	7.5 mrem/quarter; 15 mrem/year

   d. Liquid Effluents:

10CFR50 Whole Body	=	1.5 mrem/quarter; 3 mrem year
Organ	=	5 mrem/quarter; 10 mrem/year

   e. Total Effective Dose Equivalent:

10CFR20 TEDE	=	100 mrem/year

2. Maximum Permissible Concentration

   a. Fission and Activation Gases: 10CFR20 Appendix B Table 2
   b. Iodine: 10CFR20 Appendix B Table 2
   c. Particulates: 10CFR20 Appendix B Table 2
   d. Liquid Effluents: 10 X 10CFR20 Appendix B Table 2

3. Average Energy: This item is not applicable. Release rates are calculated using an isotopic mix rather than average energy.

4. Measurements and Approximations of Total Radioactivity

   a. Fission and Activation Gases: Prior to release, the isotopic content is determined. Released activity is calculated using volume of release, which is determined by the change in tank or containment pressure. Additional methods of calculation utilize historical data and assign an isotopic mix which is representative of normal vent stack isotopics.

   b. Particulate, Tritium and Iodine sampling media for the plant vent stacks are collected and isotopically analyzed weekly for the plant vent stacks.

c. Liquid effluents: Batch releases are isotopically analyzed prior to release. Total release activity is calculated using volume of release. Total tritium activity released is calculated from the highest of a monthly circulating water blowdown composite activity or a sum of the input composite activities.

d. Analysis results which are less than the lower limit of detection (<LLD) are reported in units of Ci/ml unless otherwise noted. All LLD values are listed in Attachment A.

5. Batch Releases:

a. Liquid:

1. Number of batch releases = 142
2. Total time period for batch releases = 14,936 minutes
3. Maximum time period for a batch release = 329 minutes
4. Average time period for a batch release = 105 minutes
5. Minimum time period for a batch release = 09 minutes
6. Average stream flow during periods of release of effluent into a flowing stream = 236.8 m^3/sec, based on information from the National Weather Service or Army Corps of Engineers for the Rock River.

b. Gaseous:

1. Number of batch releases = 279
2. Total time period for batch releases = 48,540 minutes
3. Maximum time period for a batch release = 4,940 minutes
4. Average time period for batch releases = 174 minutes
5. Minimum time period for a batch release = 46 minutes

6. Abnormal Releases:

a. Liquid - None

b. Gaseous – None

BYRON NUCLEAR POWER STATION
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RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
A. FISSION AND ACTIVATION GAS RELEASES					
1. Total Release Activity:	Ci	2.18E-01	2.68E-01	1.23E-01	3.04E-01
2. Maximum Release Rate for Quarter:	uCi/sec	4.27E+00	1.56E+00	1.56E+00	3.74E+00
3. % of Tech. Spec. Limits *					
a. Whole Body (500 mrem/yr):	%	0.00	0.00	0.00	0.00
b. Skin (3000 mrem/yr):	%	0.00	0.00	0.00	0.00
4. % of 10CFR50 Limits					
a. Gamma Quarterly (5 mrad):	%	0.00	0.00	0.00	0.00
b. Beta Quarterly (10 mrad):	%	0.00	0.00	0.00	0.00
c. Gamma Annual (10 mrad):	%	0.00	0.00	0.00	0.00
d. Beta Annual (20 mrad):	%	0.00	0.00	0.00	0.00
B. IODINE RELEASES **					
1. Total I-131 Activity:	Ci	<LLD	<LLD	<LLD	<LLD
2. Average I-131 Release Rate:	uCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C. PARTICULATE (>8 day half-life) RELEASES **					
1. Total Particulate Activity:	Ci	<LLD	6.96E-06	<LLD	<LLD
2. Average Particulate Release Rate:	uCi/sec	0.00E+00	8.85E-07	0.00E+00	0.00E+00
3. Gross Alpha Activity for Quarter:	Ci	<LLD	<LLD	<LLD	<LLD
D. TRITIUM RELEASES **					
1. Total Tritium Activity:	Ci	8.00E-01	2.46E-01	4.98E-01	6.99E-01
2. Average Tritium Release Rate:	uCi/sec	1.03E-01	3.12E-02	6.27E-02	8.79E-02

* % of Tech. Spec. limits is based on the maximum release rate for the period considered.

** Iodine, particulate, and tritium are expressed as a total limit. See Step E.

BYRON NUCLEAR POWER STATION
UNIT 1 DOCKET NUMBER STN-50-454
RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
E. TOTAL OF IODINE, PARTICULATE (>8 day half-life), AND TRITIUM RELEASES					
1. Total Activity:	Ci	8.00E-01	2.46E-01	4.98E-01	6.99E-01
2. % of Tech. Spec. Limits a. Any Organ (1500 mrem/yr):	%	0.00	0.00	0.00	0.00
3. % of 10CFR50 Limit a. Quarterly Any Organ (7.5 mrem):	%	0.00	0.00	0.00	0.00
b. Annual Any Organ (15 mrem):	%	0.00	0.00	0.01	0.00

GASEOUS EFFLUENTS - VENT STACK RELEASES - BATCH MODE

F. FISSION AND ACTIVATION GAS RELEASES					
Ar-41:	Ci	4.25E-05	3.32E-03	5.36E-03	5.44E-03
Kr-85:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-85m:	Ci	<LLD	<LLD	<LLD	2.01E-04
Kr-87:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-88:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-131m:	Ci	<LLD	<LLD	1.27E-03	<LLD
Xe-133:	Ci	1.09E-01	9.51E-02	9.35E-02	2.41E-01
Xe-133m:	Ci	1.30E-03	5.21E-04	7.00E-04	3.98E-03
Xe-135:	Ci	3.41E-03	9.27E-05	1.09E-03	1.24E-02
Xe-138:	Ci	<LLD	<LLD	<LLD	<LLD

BYRON NUCLEAR POWER STATION
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RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - VENT STACK RELEASES - BATCH MODE (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
G. IODINE RELEASES					
I-131:	Ci	*	*	*	*
I-133:	Ci	*	*	*	*
I-135:	Ci	*	*	*	*

* Value reported as CONTINUOUS RELEASE MODE.

H. PARTICULATE (>8 day half-life) RELEASES					
Sr-89:	Ci	*	*	*	*
Sr-90:	Ci	*	*	*	*

* Value reported as CONTINUOUS RELEASE MODE.

GASEOUS EFFLUENTS - VENT STACK RELEASES - CONTINUOUS MODE

I. FISSION AND ACTIVATION GAS RELEASES					
Xe-133:	Ci	1.04E-01	1.70E-01	2.07E-02	4.14E-02

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RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - VENT STACK RELEASES - CONTINUOUS MODE (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
J. IODINE RELEASES					
I-131:	Ci	<LLD	<LLD	<LLD	<LLD
I-133:	Ci	<LLD	<LLD	<LLD	<LLD
I-135:	Ci	<LLD	<LLD	<LLD	<LLD
K. PARTICULATE (>8 day half-life) RELEASES					
Sr-89:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-90:	Ci	<LLD	<LLD	<LLD	<LLD
Cr-51:	Ci	<LLD	5.28E-06	<LLD	<LLD
Co-60:	Ci	<LLD	1.68E-06	<LLD	<LLD

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

L. FISSION AND ACTIVATION PRODUCT RELEASES					
1. Total Activity Released:	Ci	1.66E-02	3.37E-02	5.54E-02	3.68E-02
2. Average Concentration Released For Quarter:	uCi/ml	5.18E-09	1.04E-08	1.51E-08	1.12E-08
3. % of 10CFR50 Limits					
a. Quarterly Whole Body (1.5 mrem):	%	0.04	0.03	0.04	0.05
b. Quarterly Any Organ (5.0 mrem):	%	0.01	0.02	0.02	0.02
c. Annual Whole Body (3.0 mrem):	%	0.02	0.02	0.02	0.03
d. Annual Any Organ (10.0 mrem):	%	0.00	0.01	0.01	0.01

BYRON NUCLEAR POWER STATION
UNIT 1 DOCKET NUMBER STN-50-454
RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
M. TRITIUM					
1. Total Activity Released:	Ci	3.03E+02	1.95E+02	3.22E+02	3.85E+02
2. Average Concentration Released For Quarter:	uCi/ml	9.47E-05	6.04E-05	8.75E-05	1.17E-04
3. % of Tech Spec Limit (1.00E-2 uCi/ml):	%	0.95	0.60	0.88	1.17
N. DISSOLVED NOBLE GASES					
1. Total Activity Released:	Ci	2.64E-03	5.10E-03	8.91E-05	6.86E-04
2. Average Concentration Released For Quarter:	uCi/ml	8.24E-10	1.58E-09	2.42E-11	2.09E-10
3. % of Tech. Reqt. Manual Limit (2.00E-4 uCi/ml):	%	4.12E-04	7.90E-04	1.21E-05	1.04E-04
O. GROSS ALPHA					
1. Total Activity Released:	Ci	<LLD	<LLD	<LLD	<LLD
2. Average Concentration Released For Quarter:	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00
P. VOLUME OF WASTE RELEASED PER UNIT:	liters	1.23E+06	1.47E+06	1.44E+06	1.70E+06
Q. VOLUME OF DILUTION WATER PER UNIT:	liters	3.20E+09	3.23E+09	3.68E+09	3.29E+09

LIQUID EFFLUENTS - CONTINUOUS MODE

R. LIQUID EFFLUENTS

* Value reported as LIQUID EFFLUENTS - BATCH MODE

Fe-55:	Ci	*	*	*	*
Sr-89:	Ci	*	*	*	*
Sr-90:	Ci	*	*	*	*

BYRON NUCLEAR POWER STATION
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RADIOACTIVE EFFLUENT RELEASE REPORT
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LIQUID EFFLUENTS - BATCH MODE

S. LIQUID EFFLUENTS

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Fe-55:	Ci	3.15E-03	7.65E-04	5.00E-04	8.12E-03
Sr-89:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-90:	Ci	<LLD	<LLD	<LLD	<LLD
H-3:	Ci	3.03E+02	1.95E+02	3.22E+02	3.85E+02
Ar-41:	Ci	<LLD	<LLD	<LLD	<LLD
Cr-51:	Ci	<LLD	1.17E-04	1.72E-03	3.59E-05
Mn-54:	Ci	1.19E-04	4.67E-05	2.34E-04	4.40E-05
Fe-59:	Ci	2.78E-06	7.92E-06	<LLD	<LLD
Co-57:	Ci	5.01E-05	1.14E-05	1.80E-05	5.31E-06
Co-58:	Ci	7.51E-03	3.90E-03	3.66E-03	7.26E-04
Co-60:	Ci	1.64E-03	1.40E-03	2.78E-03	2.12E-03
Zn-65:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-85:	Ci	2.05E-03	3.66E-03	<LLD	3.70E-04
Kr-85m:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-87:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-88:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-92:	Ci	3.89E-06	<LLD	<LLD	<LLD
Nb-95:	Ci	1.50E-05	8.35E-06	1.12E-04	<LLD
Zr-95:	Ci	6.11E-06	<LLD	<LLD	<LLD
Zr-97:	Ci	<LLD	<LLD	<LLD	<LLD
Mo-99:	Ci	<LLD	<LLD	<LLD	<LLD
Tc-99m:	Ci	<LLD	<LLD	<LLD	<LLD
Tc-104:	Ci	<LLD	<LLD	<LLD	<LLD
Ag-110m:	Ci	2.81E-05	1.04E-05	1.19E-05	1.48E-04
Sn-113:	Ci	<LLD	<LLD	<LLD	<LLD
Te-121m:	Ci	<LLD	<LLD	<LLD	<LLD
Te-123m:	Ci	5.14E-05	5.10E-04	1.43E-05	3.42E-04
Te-125m:	Ci	2.80E-03	2.38E-02	3.54E-03	2.75E-02
Sb-122:	Ci	<LLD	9.24E-06	<LLD	<LLD
Sb-124:	Ci	3.73E-04	2.51E-04	2.87E-03	3.29E-05
Sb-125:	Ci	3.97E-03	3.12E-03	4.04E-02	5.97E-03
Sb-126:	Ci	<LLD	7.97E-06	<LLD	<LLD

BYRON NUCLEAR POWER STATION
UNIT 1 DOCKET NUMBER STN-50-454
RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

LIQUID EFFLUENTS - BATCH MODE (CONT.)

S. LIQUID EFFLUENTS (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
I-131:	Ci	<LLD	1.62E-05	1.81E-06	3.25E-06
I-132:	Ci	<LLD	2.49E-04	<LLD	<LLD
I-133:	Ci	<LLD	2.37E-06	<LLD	<LLD
I-135:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-131m:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-133:	Ci	5.69E-04	1.37E-03	8.91E-05	3.16E-04
Xe-133m:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-135:	Ci	1.14E-05	7.67E-05	<LLD	<LLD
Xe-135m:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-138:	Ci	<LLD	<LLD	<LLD	<LLD
Cs-134:	Ci	<LLD	<LLD	<LLD	<LLD
Cs-137:	Ci	<LLD	<LLD	<LLD	<LLD
Ba-140:	Ci	<LLD	<LLD	<LLD	<LLD
La-140:	Ci	<LLD	<LLD	<LLD	<LLD
Ce-141:	Ci	<LLD	<LLD	<LLD	<LLD
Ce-144:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-85:	Ci	9.09E-06	1.61E-05	<LLD	<LLD
Te-132:	Ci	<LLD	2.17E-04	3.71E-05	<LLD
Ba-133:	Ci	<LLD	3.19E-06	<LLD	<LLD
Na-24:	Ci	<LLD	<LLD	2.35E-05	<LLD

T. 10CFR20 PUBLIC TEDE COMPLIANCE

1. % OF 10CFR20 TEDE LIMIT (100 mrem/yr):	%	0.00	0.00	0.00	0.00

U. 40CFR190 Compliance

1. % of 40CFR190 DDE (25 mrem/yr)	%	0.00	0.00	0.00	0.00
2. % of 40CFR190 CDE (25 mrem/yr)	%	0.00	0.00	0.00	0.00
3. % of 40CFR190 CDE (Thyroid) (75 mrem/yr)	%	0.00	0.00	0.00	0.00

BYRON NUCLEAR POWER STATION
UNIT 2 DOCKET NUMBER STN-50-455
RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
A. FISSION AND ACTIVATION GAS RELEASES					
1. Total Release Activity:	Ci	2.18E-01	2.73E-01	9.13E-02	2.55E-01
2. Maximum Release Rate for Quarter:	uCi/sec	4.27E+00	1.22E+00	9.84E-01	3.74E+00
3. % of Tech. Spec. Limits:*					
a. Whole Body (500 mrem/yr):	%	0.00	0.00	0.00	0.00
b. Skin (3000 mrem/yr):	%	0.00	0.00	0.00	0.00
4. % of 10CFR50 Limits					
a. Gamma Quarterly (5 mrad):	%	0.00	0.00	0.00	0.00
b. Beta Quarterly (10 mrad):	%	0.00	0.00	0.00	0.00
c. Gamma Annual (10 mrad):	%	0.00	0.00	0.00	0.00
d. Beta Annual (20 mrad):	%	0.00	0.00	0.00	0.00
B. IODINE RELEASES **					
1. Total I-131 Activity:	Ci	<LLD	<LLD	<LLD	<LLD
2. Average I-131 Release Rate:	uCi/sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C. PARTICULATE (>8 day half-life) RELEASES **					
1. Total Particulate Activity:	Ci	<LLD	1.18E-06	1.36E-06	1.78E-07
2. Average Particulate Release Rate:	uCi/sec	0.00E+00	1.50E-07	1.71E-07	2.24E-08
3. Gross Alpha Activity for Quarter:	Ci	<LLD	<LLD	<LLD	<LLD
D. TRITIUM RELEASES **					
1. Total Tritium Activity:	Ci	2.84E+00	7.26E-01	4.16E-01	5.99E-01
2. Average Tritium Release Rate:	uCi/sec	3.65E-01	9.23E-02	5.23E-02	7.53E-02

* % of Tech. Spec. limits is based on the maximum release rate for the period considered.

** Iodine, particulate, and tritium are expressed as a total limit. See Step E.

BYRON NUCLEAR POWER STATION
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RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
E. TOTAL OF IODINE, PARTICULATE (>8 day half-life), AND TRITIUM RELEASES					
1. Total Activity:	Ci	2.84E+00	7.26E-01	4.16E-01	5.99E-01
2. % of Tech. Spec. Limits					
a. Any Organ (1500 mrem/yr):	%	0.00	0.00	0.00	0.00
3. % of 10CFR50 Limit					
a. Quarterly Any Organ (7.5 mrem):	%	0.02	0.01	0.01	0.01
a. Annual Any Organ (15 mrem):	%	0.01	0.00	0.00	0.00

GASEOUS EFFLUENTS - VENT STACK RELEASES - BATCH MODE

F. FISSION AND ACTIVATION GAS RELEASES

Ar-41:	Ci	7.17E-03	<LLD	<LLD	2.23E-04
Kr-85:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-85m:	Ci	<LLD	<LLD	<LLD	2.01E-04
Kr-87:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-88:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-131m:	Ci	<LLD	<LLD	1.27E-03	<LLD
Xe-133:	Ci	1.01E-01	1.03E-01	6.85E-02	1.97E-01
Xe-133m:	Ci	4.28E-03	5.21E-04	7.00E-04	3.98E-03
Xe-135:	Ci	2.61E-03	9.27E-05	1.14E-04	1.24E-02
Xe-138:	Ci	<LLD	<LLD	<LLD	<LLD

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RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

GASEOUS EFFLUENTS - VENT STACK RELEASES - BATCH MODE (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
G. IODINE RELEASES					
I-131:	Ci	*	*	*	*
I-133:	Ci	*	*	*	*
I-135:	Ci	*	*	*	*

* Value reported as CONTINUOUS RELEASE MODE.

H. PARTICULATE (>8 day half-life) RELEASES					
Sr-89:	Ci	*	*	*	*
Sr-90:	Ci	*	*	*	*

* Value reported as CONTINUOUS RELEASE MODE.

GASEOUS EFFLUENTS - VENT STACK RELEASES - CONTINUOUS MODE

I. FISSION AND ACTIVATION GAS RELEASES					
Xe-133:	Ci	1.04E-01	1.70E-01	2.07E-02	4.14E-02

BYRON NUCLEAR POWER STATION
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GASEOUS EFFLUENTS - VENT STACK RELEASES - CONTINUOUS MODE (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
J. IODINE RELEASES					
I-131:	Ci	<LLD	<LLD	<LLD	<LLD
I-133:	Ci	6.73E-06	<LLD	<LLD	<LLD
I-135:	Ci	<LLD	<LLD	<LLD	<LLD
K. PARTICULATE (>8 day half-life) RELEASES					
Sr-89:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-90:	Ci	<LLD	<LLD	<LLD	<LLD
Co-60:	Ci	<LLD	1.18E-06	1.36E-06	1.78E-07

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

L. FISSION AND ACTIVATION PRODUCT RELEASES					
1. Total Activity Released:	Ci	1.66E-02	3.37E-02	5.54E-02	3.68E-02
2. Average Concentration Released For Quarter:	uCi/ml	5.18E-09	1.04E-08	1.51E-08	1.12E-08
3. % of 10CFR50 Limits					
a. Quarterly Whole Body (1.5 mrem):	%	0.04	0.03	0.04	0.05
b. Quarterly Any Organ (5.0 mrem):	%	0.01	0.02	0.02	0.02
c. Annual Whole Body (3.0 mrem):	%	0.02	0.02	0.02	0.03
d. Annual Any Organ (10.0 mrem):	%	0.00	0.01	0.01	0.01

BYRON NUCLEAR POWER STATION
UNIT 2 DOCKET NUMBER STN-50-455
RADIOACTIVE EFFLUENT RELEASE REPORT
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LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
M. TRITIUM					
1. Total Activity Released:	Ci	3.03E+02	1.95E+02	3.22E+02	3.85E+02
2. Average Concentration Released For Quarter:	uCi/ml	9.47E-05	6.04E-05	8.75E-05	1.17E-04
3. % of Tech Spec Limit (1.00E-2 uCi/ml):	%	0.95	0.60	0.88	1.17
N. DISSOLVED NOBLE GASES					
1. Total Activity Released:	Ci	2.64E-03	5.10E-03	8.91E-05	6.86E-04
2. Average Concentration Released For Quarter:	uCi/ml	8.24E-10	1.58E-09	2.42E-11	2.09E-10
3. % of Tech. Reqt. Manual Limit (2.00E-4 uCi/ml):	%	4.12E-04	7.90E-04	1.21E-05	1.04E-04
O. GROSS ALPHA					
1. Total Activity Released:	Ci	<LLD	<LLD	<LLD	<LLD
2. Average Concentration Released For Quarter:	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00
P. VOLUME OF WASTE RELEASED PER UNIT:	liters	1.23E+06	1.47E+06	1.44E+06	1.70E+06
Q. VOLUME OF DILUTION WATER PER UNIT:	liters	3.20E+09	3.23E+09	3.68E+09	3.29E+09

LIQUID EFFLUENTS - CONTINUOUS MODE

R. LIQUID EFFLUENTS

* Value reported as LIQUID EFFLUENTS - BATCH MODE

Fe-55:	Ci	*	*	*	*
Sr-89:	Ci	*	*	*	*
Sr-90:	Ci	*	*	*	*

BYRON NUCLEAR POWER STATION
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LIQUID EFFLUENTS - BATCH MODE

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
S. LIQUID EFFLUENTS					
Fe-55:	Ci	3.15E-03	7.65E-04	5.00E-04	8.12E-03
Sr-89:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-90:	Ci	<LLD	<LLD	<LLD	<LLD
H-3:	Ci	3.03E+02	1.95E+02	3.22E+02	3.85E+02
Ar-41:	Ci	<LLD	<LLD	<LLD	<LLD
Cr-51:	Ci	<LLD	1.17E-04	1.72E-03	3.59E-05
Mn-54:	Ci	1.19E-04	4.67E-05	2.34E-04	4.40E-05
Fe-59:	Ci	2.78E-06	7.92E-06	<LLD	<LLD
Co-57:	Ci	5.01E-05	1.14E-05	1.80E-05	5.31E-06
Co-58:	Ci	7.51E-03	3.90E-03	3.66E-03	7.26E-04
Co-60:	Ci	1.64E-03	1.40E-03	2.78E-03	2.12E-03
Zn-65:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-85:	Ci	2.05E-03	3.66E-03	<LLD	3.70E-04
Kr-85m:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-87:	Ci	<LLD	<LLD	<LLD	<LLD
Kr-88:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-92:	Ci	3.89E-06	<LLD	<LLD	<LLD
Nb-95:	Ci	1.50E-05	8.35E-06	1.12E-04	<LLD
Zr-95:	Ci	6.11E-06	<LLD	<LLD	<LLD
Zr-97:	Ci	<LLD	<LLD	<LLD	<LLD
Mo-99:	Ci	<LLD	<LLD	<LLD	<LLD
Tc-99m:	Ci	<LLD	<LLD	<LLD	<LLD
Tc-104:	Ci	<LLD	<LLD	<LLD	<LLD
Ag-110m:	Ci	2.81E-05	1.04E-05	1.19E-05	1.48E-04
Sn-113:	Ci	<LLD	<LLD	<LLD	<LLD
Te-121m:	Ci	<LLD	<LLD	<LLD	<LLD
Te-123m:	Ci	5.14E-05	5.10E-04	1.43E-05	3.42E-04
Te-125m:	Ci	2.80E-03	2.38E-02	3.54E-03	2.75E-02
Sb-122:	Ci	<LLD	9.24E-06	<LLD	<LLD
Sb-124:	Ci	3.73E-04	2.51E-04	2.87E-03	3.29E-05
Sb-125:	Ci	3.97E-03	3.12E-03	4.04E-02	5.97E-03
Sb-126:	Ci	<LLD	7.97E-06	<LLD	<LLD

BYRON NUCLEAR POWER STATION
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RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

LIQUID EFFLUENTS - BATCH MODE (CONT.)

S. LIQUID EFFLUENTS (CONT.)

	UNITS	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
I-131:	Ci	<LLD	1.62E-05	1.81E-06	3.25E-06
I-132:	Ci	<LLD	2.49E-04	<LLD	<LLD
I-133:	Ci	<LLD	2.37E-06	<LLD	<LLD
I-135:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-131m:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-133:	Ci	5.69E-04	1.37E-03	8.91E-05	3.16E-04
Xe-133m:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-135:	Ci	1.14E-05	7.67E-05	<LLD	<LLD
Xe-135m:	Ci	<LLD	<LLD	<LLD	<LLD
Xe-138:	Ci	<LLD	<LLD	<LLD	<LLD
Cs-134:	Ci	<LLD	<LLD	<LLD	<LLD
Cs-137:	Ci	<LLD	<LLD	<LLD	<LLD
Ba-140:	Ci	<LLD	<LLD	<LLD	<LLD
La-140:	Ci	<LLD	<LLD	<LLD	<LLD
Ce-141:	Ci	<LLD	<LLD	<LLD	<LLD
Ce-144:	Ci	<LLD	<LLD	<LLD	<LLD
Sr-85:	Ci	9.09E-06	1.61E-05	<LLD	<LLD
Te-132:	Ci	<LLD	2.17E-04	3.71E-05	<LLD
Ba-133:	Ci	<LLD	3.19E-06	<LLD	<LLD
Na-24:	Ci	<LLD	<LLD	2.35E-05	<LLD

T. 10CFR20 PUBLIC TEDE COMPLIANCE

1. % OF 10CFR20 TEDE LIMIT: (100 mrem/yr)	%	0.00	0.00	0.00	0.00

U. 40CFR190 Compliance

1. % of 40CFR190 DDE (25 mrem/yr)	%	0.00	0.00	0.00	0.00
2. % of 40CFR190 CDE (25 mrem/yr)	%	0.00	0.00	0.00	0.00
3. % of 40CFR190 CDE (Thyroid) (75 mrem/yr)	%	0.00	0.00	0.00	0.00

BYRON NUCLEAR POWER STATION
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SOLID RADIOACTVE WASTE FOR BURIAL 1ST QUARTER, 2001

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT	Curies* Per Shipment
01/04/2001	MECHANICAL FILTERS, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, RQ, CLASS C, TYPE A CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	5.83E+00	3.60E+01
01/18/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	3.63E+01	2.24E-01
03/26/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	7.25E+01	1.52E-02
Quarterly Totals	Number of Shipments: 3			1.15E+02	3.62E+01
				CUBIC M	CURIES

* Calculated using measured ratios

BYRON NUCLEAR POWER STATION
UNIT 1/2, DOCKET NUMBER STN-50-454/455
RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY, 2001 THROUGH DECEMBER, 2001

SOLID RADIOACTVE WASTE FOR BURIAL 2ND QUARTER, 2001

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT	Curies* Per Shipment
04/02/2001	MIXED BED ION-EXCHANGE MEDIA, nos, 7, UN2982, RQ, CLASS B, TYPE B CONTAINER, NONE	EXCLUSIVE-USE	BARNWELL, SC	3.41E+00	1.52E+02
05/09/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, MIXED WASTE, D001, F005, PAINT SOLVENTS CONTAINING METHYL ETHYL KETONE, (RQ-D001), CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	RICHLAND, WA	3.63E+01	8.20E-02
05/24/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	7.25E+01	1.16E-01
06/07/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	3.63E+01	6.70E-02
06/20/2001	MIXED BED ION-EXCHANGE MEDIA, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A,TYPE A CONTAINER, NONE	EXCLUSIVE-USE	BARNWELL, SC	5.83E+00	3.51E+01
				1.54E+02	1.87E+02
				CUBIC M	CURIES

Quarterly Totals Number of Shipments: 5
* Calculated using measured ratios

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SOLID RADIOACTVE WASTE FOR BURIAL 3RD QUARTER, 2001

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT	Curies* Per Shipment
07/11/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	3.63E+01	3.68E-01
08/15/2001	MIXED BED ION-EXCHANGE MEDIA, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	ERWIN, TN	5.87E+00	1.62E+01
08/31/2001	OIL, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	RICHLAND, WA	2.40E+01	5.46E-03
08/31/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	7.25E+01	6.00E-02
				1.39E+02	1.66E+01
				CUBIC M	CURIES

Quarterly Totals Number of Shipments: 4

* Calculated using measured ratios

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SOLID RADIOACTVE WASTE FOR BURIAL 4TH QUARTER, 2001

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT	Curies* Per Shipment
10/09/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	3.63E+01	3.27E-05
10/23/2001	MIXED BED ION-EXCHANGE MEDIA, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, RQ, CLASS A, STRONG TIGHT CONTAINER, NONE	EXCLUSIVE-USE	KINGSTON, TN	4.84E+00	2.00E+01
11/07/2001	DRY ACTIVE WASTE, MIXED BED ION-EXCHANGE MEDIA, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	3.63E+01	1.18E-03
11/15/2001	DRY ACTIVE WASTE, LOW SPECIFIC ACTIVITY, nos, 7, UN2912, CLASS A, STRONG-TIGHT CONTAINER, NONE	EXCLUSIVE-USE	OAK RIDGE, TN	7.25E+01	1.80E-01
				1.50E+02	2.02E+01
				CUBIC M	CURIES

Quarterly Totals Number of Shipments: 4

* Calculated using measured ratios

Solid Radioactive Waste for Burial, Addendum

A. Estimated Solid Waste Composition

Resins, Filters, Evap Bottoms		
Nuclide	Percent Abundance	uCi/ml
H-3	0.896	8.99E-02
Be-7	2.256	2.26E-01
C-14	0.275	2.76E-02
Cr-51	0.362	3.63E-02
Mn-54	5.499	5.52E-01
Fe-55	24.989	2.51E+00
Fe-59	0.081	8.13E-03
Co-57	0.519	5.21E-02
Co-58	35.164	3.53E+00
Co-60	13.361	1.34E+00
Ni-63	14.888	1.49E+00
Zn-65	0.143	1.44E-02
Sr-90	0.008	8.03E-04
Zr-95	0.171	1.72E-02
Nb-95	0.223	2.24E-02
Mo-99	0.000	2.24E-07
Tc-99	0.001	1.23E-04
Sn-113	0.030	3.01E-03
Sb-125	0.398	4.00E-02
I-129	0.001	1.42E-04
I-131	0.000	1.49E-06
Cs-134	0.001	1.00E-04
Cs-137	0.157	1.58E-02
La-140	0.004	4.02E-04
Ce-144	0.566	5.68E-02
Pu-238	0.001	8.97E-05
Pu-239	0.000	4.40E-05
Pu-241	0.008	8.03E-04
Am-241	0.001	5.42E-05
Cm-242	0.000	1.52E-05
Cm-243	0.000	2.14E-08

Dry Active Waste		
Nuclide	Percent Abundance	uCi/ml
H-3	2.779	6.29E-05
C-14	0.073	1.65E-06
Cr-51	34.093	7.71E-04
Mn-54	1.030	2.33E-05
Fe-55	7.353	1.66E-04
Fe-59	1.731	3.92E-05
Co-57	0.065	1.47E-06
Co-58	33.881	7.67E-04
Co-60	3.748	8.48E-05
Ni-63	3.976	9.00E-05
Zn-65	0.162	3.67E-06
Sr-90	0.000	2.13E-09
Zr-95	2.152	4.87E-05
Zr-97	0.008	1.81E-07
Nb-95	2.840	6.43E-05
Mo-99	0.011	2.49E-07
Tc-99	0.000	1.11E-09
Ag-110m	0.041	9.28E-07
Sn-113	0.066	1.49E-06
Sb-125	0.077	1.74E-06
Te-123m	0.023	5.20E-07
Te-125m	4.950	1.12E-04
I-129	0.000	1.28E-09
Cs-134	0.000	5.08E-09
Cs-137	0.048	1.09E-06
Ce-144	0.742	1.68E-05
Hf-181	0.149	3.37E-06
Pu-238	0.000	7.43E-10
Pu-239	0.000	3.62E-10
Pu-241	0.002	4.88E-08
Am-241	0.000	4.50E-10
Cm-242	0.000	5.34E-10
Cm-243	0.000	5.67E-10

Other (Contaminated Oil)		
Nuclide	Percent Abundance	uCi/ml
H-3	66.807	2.18E-05
Be-7	1.217	3.97E-07
C-14	0.130	4.24E-08
Mn-54	0.606	1.98E-07
Fe-55	12.526	4.08E-06
Co-58	0.902	2.94E-07
Co-60	6.523	2.13E-06
Ni-63	7.059	2.30E-06
Sr-90	0.002	6.52E-10
Tc-99	0.000	2.84E-11
I-129	0.000	3.28E-11
Cs-134	0.098	3.19E-08
Cs-137	3.646	1.19E-06
Ce-144	0.480	1.56E-07
Pu-238	0.000	2.06E-11
Pu-239	0.000	1.01E-11
Pu-241	0.004	1.24E-09
Am-241	0.000	1.25E-11
Cm-242	0.000	1.08E-11
Cm-243	0.000	3.28E-11

BYRON NUCLEAR POWER STATION
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RADIOACTIVE EFFLUENT RELEASE REPORT
January, 2001 THROUGH December, 2001

A. Changes to Radioactive Waste Process Control Program for 2001 were primarily administrative in nature. Operationally, the Process Control Program remains unchanged.

B. Error Analysis

The following is an estimate of the errors associated with effluent monitoring and analysis. The estimate is calculated using the square root of the sum of the squares methodology.

1. Gaseous Effluents

Sampling error = 1 to 3.5%
Calibration error = 5%
Counting statistics error = 5%
Vent stack flowrates error = 1.5%
Total error = 7 – 8%

2. Liquid Effluents

Sampling error = 1%
Calibration error = 5%
Sample volume error = 1%
Discharged volume error = 2%
Counting statistics error = 0.41%
Total error = 5.6%

3. Waste Resin

Sample prep = 5%
Sampling error = 1%
Counting statistic error = 1%
Weight error = 0.5%
Calibration error = 5%
Total error = 7.2%

4. DAW, Mechanical Filters, and Contaminated Metal

Counting statistic error = 1%
Calibration error = 5%
Instrument calibration error = 10%
Total error = 11%

C. Meteorological and environmental impact information is reported in the Station Annual Radiological Environmental Operating Report as required by Technical Specification 5.6.2.

D. No limits were exceeded in liquid hold up tanks as stated in Technical Specification 5.5.12 or in waste gas decay tanks as stated in Technical Specification 5.5.12.

E. There were no irradiated fuel shipments during this period.

F. There were no elevated releases. All releases are considered vent or ground level releases.

G. No liquid or Gaseous Effluent Monitor exceeded the specified LCO time limit.

H. In the third quarter of 2001, the REMP well location BY-14-1, was added to replace well sampling location BY-14. The original collection site had its electrical service discontinued to the pump, and samples were no longer able to be acquired. The new location is in Sector H at a distance of 1.6 km.

J. Attached are Offsite Dose Calculations for January through December of 2001.

Lower Limit of Detection
Gaseous Effluents

Nuclides	LLD (Ci/ml)
H3	4.03E-14
Ar41	6.25E-12
Cr51	3.29E-18
Mn54	7.63E-19
Co58	5.76E-19
Fe59	1.70E-18
Co60	1.25E-18
Zn65	1.84E-18
Kr85m	2.39E-18
Kr87	5.79E-18
Kr88	7.10E-18
Sr89	4.80E-18
Sr-90	8.46E-19
Mo99	3.38E-19
I131	6.13E-19
Xe131m	1.06E-16
I133	7.04E-08
Xe133	7.13E-18
Xe133m	2.20E-17
Cs134	5.19E-19
I135	3.83E-18
Xe135	2.13E-18
Cs137	7.05E-19
Xe138	8.41E-18
Ba140	2.06E-18
La140	3.51E-19
Ce141	5.86E-19
Ce144	2.27E-18
Gross Alpha	1.76E-18

Lower Limit of Detection
Aqueous Effluents

Nuclides	LLD (Ci/ml)
H3	1.68E-12
Na24	4.63E-14
Cr51	1.73E-13
Mn54	5.25E-14
Fe55	2.10E-13
Co57	1.89E-14
Co58	3.81E-14
Fe59	1.05E-13
Co60	7.62E-14
Zn65	1.13E-13
Sr85	2.43E-14
Sr89	1.17E-14
Sr-90	2.70E-15
Sr92	5.11E-14
Nb95	3.15E-14
Zr95	7.77E-14
Mo99	2.41E-14
Ag110m	2.83E-14
Sb122	4.79E-14
Te123m	1.95E-14
Sb124	1.11E-13
Sb125	1.08E-13
Te125m	6.93E-12
Sb126	1.81E-14
I131	2.52E-14
I132	4.78E-14
Te132	2.13E-14
I133	3.52E-14
Xe133	8.11E-14
Cs134	5.25E-14
Xe135	2.49E-14
Cs137	5.36E-14
Ba140	8.96E-14
La140	5.21E-14
Ce141	4.75E-14
Ce144	1.67E-13
Gross Alpha	6.76E-14

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* DELIVER TO HEALTH PHYSICS *
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AIRBORNE Effluents- 10CFR50 Listing 24-mar-2002 07:34:14

STATION: BYRON STATION
UNIT: 1
PERIOD: 01/01/01 12/31/01
NAME: THOMPSON
REPORT: ANNUAL
MODE: ACTUAL

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	8.65E-07	1.23E-06	8.39E-07	1.70E-06	4.63E-06
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
BETA AIR	3.34E-06	4.13E-06	2.03E-06	4.99E-06	1.45E-05
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
TOT. BODY	6.11E-07	8.76E-07	6.10E-07	1.22E-06	3.32E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
SKIN	1.71E-06	2.24E-06	1.40E-06	3.14E-06	8.50E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
ORGAN	3.51E-04	1.10E-04	2.20E-04	3.07E-04	9.88E-04
(MREM)	(NE)	(NE)	(NE)	(NE)	(NE)
	LIVER	LUNG	LIVER	LIVER	LUNG
	THYROID		THYROID	THYROID	
	KIDNEY		KIDNEY	KIDNEY	
	LUNG		LUNG	LUNG	
	GI_LLI		GI_LLI	GI_LLI	

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
INFANT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.01
		LIVER	LUNG	LIVER	LIVER		LUNG
		THYROID		THYROID	THYROID		
		KIDNEY		KIDNEY	KIDNEY		
		LUNG		LUNG	LUNG		
		GI_LLI		GI_LLI	GI_LLI		

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	8.65E-07	1.23E-06	8.39E-07	1.70E-06	4.63E-06
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
BETA AIR	3.34E-06	4.13E-06	2.03E-06	4.99E-06	1.45E-05
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
TOT. BODY	6.11E-07	8.76E-07	6.10E-07	1.22E-06	3.32E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
SKIN	1.71E-06	2.24E-06	1.40E-06	3.14E-06	8.50E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
ORGAN	2.47E-04	2.56E-04	8.64E-04	3.40E-04	1.53E-03
(MREM)	(NE)	(SSE)	(SSE)	(S)	(SE)
	LIVER	LUNG	LIVER	LIVER	LUNG
	THYROID		THYROID	THYROID	
	KIDNEY		KIDNEY	KIDNEY	
	LUNG		LUNG	LUNG	
	GI_LLI		GI_LLI	GI_LLI	

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
CHILD RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.01	0.00	15.0	0.01
		LIVER	LUNG	LIVER	LIVER		LUNG
		THYROID		THYROID	THYROID		
		KIDNEY		KIDNEY	KIDNEY		
		LUNG		LUNG	LUNG		
		GI_LLI		GI_LLI	GI_LLI		

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	8.65E-07 (SSE)	1.23E-06 (SSE)	8.39E-07 (SSE)	1.70E-06 (SSE)	4.63E-06 (SSE)
BETA AIR (MRAD)	3.34E-06 (SSE)	4.13E-06 (SSE)	2.03E-06 (SSE)	4.99E-06 (SSE)	1.45E-05 (SSE)
TOT. BODY (MREM)	6.11E-07 (SSE)	8.76E-07 (SSE)	6.10E-07 (SSE)	1.22E-06 (SSE)	3.32E-06 (SSE)
SKIN (MREM)	1.71E-06 (SSE)	2.24E-06 (SSE)	1.40E-06 (SSE)	3.14E-06 (SSE)	8.50E-06 (SSE)
ORGAN (MREM)	1.61E-04 (NE)	1.70E-04 (SE)	5.63E-04 (SSE)	2.44E-04 (S)	1.04E-03 (S)
	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
TEENAGER RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.01	0.00	15.0	0.01
		LIVER THYROID KIDNEY LUNG GI_LLI	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI		LUNG

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	8.65E-07	1.23E-06	8.39E-07	1.70E-06	4.63E-06
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
BETA AIR	3.34E-06	4.13E-06	2.03E-06	4.99E-06	1.45E-05
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
TOT. BODY	6.11E-07	8.76E-07	6.10E-07	1.22E-06	3.32E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
SKIN	1.71E-06	2.24E-06	1.40E-06	3.14E-06	8.50E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
ORGAN	2.24E-04	1.69E-04	5.02E-04	2.93E-04	1.17E-03
(MREM)	(S)	(S)	(SE)	(S)	(S)
	LIVER	GI_LLI	LIVER	LIVER	GI_LLI
	THYROID		THYROID	THYROID	
	KIDNEY		KIDNEY	KIDNEY	
	LUNG		LUNG	LUNG	
	GI_LLI		GI_LLI	GI_LLI	

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
ADULT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.01	0.00	15.0	0.01
		LIVER	GI_LLI	LIVER	LIVER		GI_LLI
		THYROID		THYROID	THYROID		
		KIDNEY		KIDNEY	KIDNEY		
		LUNG		LUNG	LUNG		
		GI_LLI		GI_LLI	GI_LLI		

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

****
* DELIVER TO HEALTH PHYSICS *
****

AQUATIC Effluents- 10CFR50 Listing 24-mar-2002 07:39:32

STATION: BYRON STATION
UNIT: 1
PERIOD: 01/01/01 12/31/01
NAME: THOMPSON
REPORT: ANNUAL
MODE: ACTUAL

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.23E-04	3.36E-04	5.55E-04	6.63E-04	2.08E-03
INTERNAL ORGAN	5.23E-04	3.37E-04	5.55E-04	6.64E-04	2.08E-03
	GI_LLI	THYROID	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.03	0.02	0.04	0.04	3.0	0.07
CRIT. ORGAN(MREM)	5.0	0.01	0.01	0.01	0.01	10.0	0.02
		GI_LLI	THYROID	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.23E-04	3.36E-04	5.55E-04	6.63E-04	2.08E-03
INTERNAL ORGAN	5.23E-04	3.37E-04	5.55E-04	6.64E-04	2.08E-03
	GI_LLI	THYROID	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.052
INTERNAL ORGAN	4.0 MREM	0.052
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	6.00E-04	4.02E-04	6.37E-04	7.77E-04	2.42E-03
INTERNAL ORGAN	6.25E-04	5.23E-04	7.13E-04	9.06E-04	2.77E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.04	0.03	0.04	0.05	3.0	0.08
CRIT. ORGAN(MREM)	5.0	0.01	0.01	0.01	0.02	10.0	0.03
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.26E-04	3.38E-04	5.58E-04	6.67E-04	2.09E-03
INTERNAL ORGAN	5.26E-04	3.40E-04	5.59E-04	6.70E-04	2.10E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.052
INTERNAL ORGAN	4.0 MREM	0.052
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	3.61E-04	2.44E-04	3.83E-04	4.69E-04	1.46E-03
INTERNAL ORGAN	4.36E-04	5.66E-04	5.99E-04	8.10E-04	2.41E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.02	0.02	0.03	0.03	3.0	0.05
CRIT. ORGAN(MREM)	5.0	0.01	0.01	0.01	0.02	10.0	0.02
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	2.74E-04	1.76E-04	2.91E-04	3.48E-04	1.09E-03
INTERNAL ORGAN	2.76E-04	1.79E-04	2.93E-04	3.51E-04	1.10E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.027
INTERNAL ORGAN	4.0 MREM	0.027
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.01E-04	3.34E-04	5.31E-04	6.46E-04	2.01E-03
INTERNAL ORGAN	6.07E-04	7.53E-04	8.38E-04	1.09E-03	3.28E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.03	0.02	0.04	0.04	3.0	0.07
CRIT. ORGAN(MREM)	5.0	0.01	0.02	0.02	0.02	10.0	0.03
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	3.89E-04	2.50E-04	4.13E-04	4.94E-04	1.55E-03
INTERNAL ORGAN	3.91E-04	2.54E-04	4.15E-04	4.98E-04	1.56E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.039
INTERNAL ORGAN	4.0 MREM	0.039
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

****
* DELIVER TO HEALTH PHYSICS *
****

24-mar-2002 07:29:59

Total Effective Dose Equivalent - 10CFR20 Listing

STATION: BYRON STATION
UNIT: 1
PERIOD: 01/01/01 12/31/01
NAME: THOMPSON
REPORT: ANNUAL
MODE: ACTUAL

For ADULT dose calculations, the included pathways are:
INHALATION
MILK
PRODUCE
VEGETABLES
MEAT
GROUND DEPOSITION
FISH
WATER
SKYSHINE
WHOLE BODY

Airborne Effluents are complete from 01/01/01 to 12/31/01
Aquatic Effluents are complete from 01/01/01 to 12/31/01

BYRON STATION UNIT ONE

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/01 TO 12/31/01

CALCULATED 03/24/02

1. 10 CFR 20.1301 (a)(1) Compliance

Total Effective Dose Eqivalent,	mrem/yr	2.60E-03
10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
	% of limit	0.00

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	5.30E-04	4.86E-04	7.91E-04	7.98E-04	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/01 TO 12/31/01

CALCULATED 03/24/02

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body	Plume	3.32E-06		
(DDE)	Skyshine	0.00E+00		
	Ground	4.65E-06		
	Total	7.97E-06	25.0	0.00
Organ Dose	Thyroid	2.30E-03	75.0	0.00
(CDE)	Gonads	2.32E-03	25.0	0.01
	Breast	2.24E-03	25.0	0.01
	Lung	2.23E-03	25.0	0.01
	Marrow	2.62E-03	25.0	0.01
	Bone	6.34E-03	25.0	0.03
	Remainder	2.79E-03	25.0	0.01
	CEDE	2.60E-03		
	TEDE	2.60E-03	100.0	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

****
* DELIVER TO HEALTH PHYSICS *
****

AIRBORNE Effluents- 10CFR50 Listing 24-mar-2002 09:19:43

STATION: BYRON STATION
UNIT: 2
PERIOD: 01/01/01 12/31/01
NAME: THOMPSON
REPORT: ANNUAL
MODE: ACTUAL

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	1.35E-06 (SSE)	1.01E-06 (SSE)	3.38E-07 (SSE)	1.16E-06 (SSE)	3.85E-06 (SSE)
BETA AIR (MRAD)	3.57E-06 (SSE)	4.08E-06 (SSE)	1.37E-06 (SSE)	4.10E-06 (SSE)	1.31E-05 (SSE)
TOT. BODY (MREM)	9.74E-07 (SSE)	7.13E-07 (SSE)	2.38E-07 (SSE)	8.24E-07 (SSE)	2.75E-06 (SSE)
SKIN (MREM)	2.34E-06 (SSE)	1.98E-06 (SSE)	6.73E-07 (SSE)	2.33E-06 (SSE)	7.33E-06 (SSE)
ORGAN (MREM)	1.24E-03 (NE)	3.24E-04 (NE)	1.85E-04 (NE)	3.20E-04 (NE)	2.07E-03 (NE)
	THYROID	LUNG	LUNG	LUNG	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
INFANT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.02	0.00	0.00	0.00	15.0	0.01
		THYROID	LUNG	LUNG	LUNG		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	1.35E-06	1.01E-06	3.38E-07	1.16E-06	3.85E-06
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
BETA AIR	3.57E-06	4.08E-06	1.37E-06	4.10E-06	1.31E-05
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
TOT. BODY	9.74E-07	7.13E-07	2.38E-07	8.24E-07	2.75E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
SKIN	2.34E-06	1.98E-06	6.73E-07	2.33E-06	7.33E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
ORGAN	8.77E-04	7.59E-04	7.25E-04	6.65E-04	2.60E-03
(MREM)	(NE)	(SSE)	(SSE)	(SE)	(S)
	THYROID	LUNG	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
CHILD RECEPTOR

---------- % OF APP I. ----------

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.01	0.01	0.01	15.0	0.02
		THYROID	LUNG	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	1.35E-06	1.01E-06	3.38E-07	1.16E-06	3.85E-06
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
BETA AIR	3.57E-06	4.08E-06	1.37E-06	4.10E-06	1.31E-05
(MRAD)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
TOT. BODY	9.74E-07	7.13E-07	2.38E-07	8.24E-07	2.75E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
SKIN	2.34E-06	1.98E-06	6.73E-07	2.33E-06	7.33E-06
(MREM)	(SSE)	(SSE)	(SSE)	(SSE)	(SSE)
ORGAN	5.72E-04	5.02E-04	4.74E-04	4.40E-04	1.85E-03
(MREM)	(NE)	(SE)	(SSE)	(SE)	(S)
	THYROID	LUNG	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
TEENAGER RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.01	0.01	0.01	15.0	0.01
		THYROID	LUNG	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	1.35E-06 (SSE)	1.01E-06 (SSE)	3.38E-07 (SSE)	1.16E-06 (SSE)	3.85E-06 (SSE)
BETA AIR (MRAD)	3.57E-06 (SSE)	4.08E-06 (SSE)	1.37E-06 (SSE)	4.10E-06 (SSE)	1.31E-05 (SSE)
TOT. BODY (MREM)	9.74E-07 (SSE)	7.13E-07 (SSE)	2.38E-07 (SSE)	8.24E-07 (SSE)	2.75E-06 (SSE)
SKIN (MREM)	2.34E-06 (SSE)	1.98E-06 (SSE)	6.73E-07 (SSE)	2.33E-06 (SSE)	7.33E-06 (SSE)
ORGAN (MREM)	7.95E-04 (S)	4.98E-04 (S)	4.23E-04 (SE)	4.54E-04 (S)	2.15E-03 (S)
	THYROID	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10CFR 50 APP. I
ADULT RECEPTOR

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
	---------- % OF APP I. ----------						
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.01	0.01	0.01	0.01	15.0	0.01
		THYROID	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

****
* DELIVER TO HEALTH PHYSICS *
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AQUATIC Effluents- 10CFR50 Listing 24-mar-2002 07:41:17

STATION: BYRON STATION
UNIT: 2
PERIOD: 01/01/01 12/31/01
NAME: THOMPSON
REPORT: ANNUAL
MODE: ACTUAL

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.23E-04	3.36E-04	5.55E-04	6.63E-04	2.08E-03
INTERNAL ORGAN	5.23E-04	3.37E-04	5.55E-04	6.64E-04	2.08E-03
	GI_LLI	THYROID	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.03	0.02	0.04	0.04	3.0	0.07
CRIT. ORGAN(MREM)	5.0	0.01	0.01	0.01	0.01	10.0	0.02
		GI_LLI	THYROID	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.23E-04	3.36E-04	5.55E-04	6.63E-04	2.08E-03
INTERNAL ORGAN	5.23E-04	3.37E-04	5.55E-04	6.64E-04	2.08E-03
	GI_LLI	THYROID	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.052
INTERNAL ORGAN	4.0 MREM	0.052
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	6.00E-04	4.02E-04	6.37E-04	7.77E-04	2.42E-03
INTERNAL ORGAN	6.25E-04	5.23E-04	7.13E-04	9.06E-04	2.77E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.04	0.03	0.04	0.05	3.0	0.08
CRIT. ORGAN(MREM)	5.0	0.01	0.01	0.01	0.02	10.0	0.03
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.26E-04	3.38E-04	5.58E-04	6.67E-04	2.09E-03
INTERNAL ORGAN	5.26E-04	3.40E-04	5.59E-04	6.70E-04	2.10E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.052
INTERNAL ORGAN	4.0 MREM	0.052
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	3.61E-04	2.44E-04	3.83E-04	4.69E-04	1.46E-03
INTERNAL ORGAN	4.36E-04	5.66E-04	5.99E-04	8.10E-04	2.41E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.02	0.02	0.03	0.03	3.0	0.05
CRIT. ORGAN(MREM)	5.0	0.01	0.01	0.01	0.02	10.0	0.02
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	2.74E-04	1.76E-04	2.91E-04	3.48E-04	1.09E-03
INTERNAL ORGAN	2.76E-04	1.79E-04	2.93E-04	3.51E-04	1.10E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.027
INTERNAL ORGAN	4.0 MREM	0.027
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	5.01E-04	3.34E-04	5.31E-04	6.46E-04	2.01E-03
INTERNAL ORGAN	6.07E-04	7.53E-04	8.38E-04	1.09E-03	3.28E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 10 CFR 50 APP. I

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
		---------- % OF APP I. ----------					
TOTAL BODY (MREM)	1.5	0.03	0.02	0.04	0.04	3.0	0.07
CRIT. ORGAN(MREM)	5.0	0.01	0.02	0.02	0.02	10.0	0.03
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 03/24/02
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	3.89E-04	2.50E-04	4.13E-04	4.94E-04	1.55E-03
INTERNAL ORGAN	3.91E-04	2.54E-04	4.15E-04	4.98E-04	1.56E-03
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL BODY	4.0 MREM	0.039
INTERNAL ORGAN	4.0 MREM	0.039
		GI_LLI

* THIS CALCULATION OF DOSE IS BASED ON TECHNIQUES DESCRIBED IN THE COMMONWEALTH EDISON OFFSITE DOSE CALCULATION MANUAL. THESE TECHNIQUES DIFFER FROM THOSE DESCRIBED IN 40 CFR 141.

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

****
* DELIVER TO HEALTH PHYSICS *
****

24-mar-2002 07:31:11

Total Effective Dose Equivalent - 10CFR20 Listing

STATION: BYRON STATION
UNIT: 2
PERIOD: 01/01/01 12/31/01
NAME: THOMPSON
REPORT: ANNUAL
MODE: ACTUAL

For ADULT dose calculations, the included pathways are:
INHALATION
MILK
PRODUCE
VEGETABLES
MEAT
GROUND DEPOSITION
FISH
WATER
SKYSHINE
WHOLE BODY

Airborne Effluents are complete from 01/01/01 to 12/31/01
Aquatic Effluents are complete from 01/01/01 to 12/31/01

BYRON STATION UNIT TWO

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/01 TO 12/31/01

CALCULATED 03/24/02

1. 10 CFR 20.1301 (a)(1) Compliance

Total Effective Dose Eqivalent,	mrem/yr	3.44E-03
10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
	% of limit	0.00

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	1.02E-03	7.61E-04	7.28E-04	9.30E-04	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/01 TO 12/31/01

CALCULATED 03/24/02

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body	Plume	2.75E-06		
(DDE)	Skyshine	0.00E+00		
	Ground	7.53E-06		
	Total	1.03E-05	25.0	0.00
Organ Dose	Thyroid	3.13E-03	75.0	0.00
(CDE)	Gonads	3.16E-03	25.0	0.01
	Breast	3.07E-03	25.0	0.01
	Lung	3.07E-03	25.0	0.01
	Marrow	3.46E-03	25.0	0.01
	Bone	7.18E-03	25.0	0.03
	Remainder	3.63E-03	25.0	0.01
	CEDE	3.43E-03		
	TEDE	3.44E-03	100.0	0.00

RESULTS BASED UPON: ODCM ANNEX REVISION 1.3 MARCH 1996
ODCM SOFTWARE VERSION 1.1 January 1995
ODCM DATABASE VERSION 1.1 January 1995