

Exelon Generation Company, LLC  
LaSalle County Station  
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Marseilles, IL 61341-9757

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Nuclear

October 31, 2001

10 CFR 50.36

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374

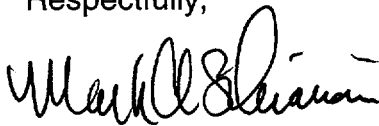
Subject: Errata Report for the 1999 and 2000 Radioactive Effluent Reports

Enclosed is the Exelon Generation Company, (EGC), LLC, LaSalle County Station Errata Report for the 1999 and 2000 Annual Effluent Reports. This errata submittal includes; the replacement of estimated values with actual data for hard to detect nuclides, revised data for 1999 and 2000, and correction of typographical errors. The revised data for 2000 is included in Attachment 1, and the revised data for 1999 is included in Attachment 2.

These errors were identified through the station self-assessment process. The implementation of new ODCM software and the increased use of other software to automate data calculations will reduce the chance of human errors introduced into future reports.

Should you have any questions concerning this letter, please contact Mr. William Riffer, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,



Mark A. Schiavoni  
Plant Manager  
LaSalle County Station

Attachments: Attachment 1 – 2000 Annual Effluent Report Errata  
Attachment 2 – 1999 Annual Effluent Report Errata

cc: Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - LaSalle County Station

IE 48

## ATTACHMENT 1

# 2000 Annual Effluent Report Errata

# 2000 Annual Effluent Report Errata

## Index

- Summary of Changes
- Revised Page of the “Supplemental Information” Section
- Revised “Gaseous Effluent-Summation of all Releases” Section
- Revised “Gaseous Effluent-Elevated Release” Section
- Revised “Liquid Releases” Sections (for both Unit-1 and Unit-2)
- Revised Dose Reports for Aquatic Releases

# 2000 Annual Effluent Report Errata

## Summary of Changes

## **LASALLE COUNTY NUCLEAR POWER STATION**

### **ERRATA SUMMARY FOR THE 2000 ANNUAL EFFLUENT REPORT**

#### **Errata #2000-01**

A typographical error was identified in Section 5.b.2 of the Supplemental Report for the total time period for batch releases. This number (in minutes) is listed as 1.67E+02, but should have been listed as 1.67E+03.

The applicable corrected page of the "Supplemental Report" section that contains the revision identified above is included in this submittal.

#### **Errata #2000-02**

The "Gaseous Effluents-Summation of All Releases" and "Gaseous Effluents-Elevated Release" sections have been modified as follows:

- The actual analysis results of "hard to detect" nuclides replaced values that were originally entered as "estimated" (Fe-55, Sr-89, Sr-90, and Alpha emitters).
- The addition of total activity for the month of December 2000, which included the following radioisotopes:
  - Iodine-131: 233 uCi
  - Iodine-132: 969 uCi
  - Iodine-133: 824 uCi
  - Iodine-135: 564 uCi
  - Cobalt-60: 17 uCi
- A typographical error showed Cerium-144 for an October gaseous release, when the radioisotope was actually Cerium-141.

The revised "Gaseous Effluents-Summation of All Releases" and "Gaseous Effluents-Elevated Release" sections that contain the revisions identified above are included in this submittal.

#### **Errata #2000-03**

The "Liquid Releases-Summation of All Releases", "Liquid Releases-Batch Mode", and "Liquid Releases-Continuous Mode" sections for both Unit-1 and Unit-2 have been modified as follows:

- The actual analysis results of "hard to detect" nuclides replaced values that were originally entered as "estimated" (H-3, Fe-55, Sr-89, Sr-90, and Alpha emitters).

The addition of aquatic effluent nuclides from the fourth quarter of 2000 had a slight affect on the calculated maximum doses to the public, therefore the applicable revised dose reports are included in this submittal.

# 2000 Annual Effluent Report Errata

Revised Page of the “Supplemental  
Information” Section

# EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)

## Supplemental Information (continued)

- 4) All release types as listed in 1 and 2 above, at the vent stack and as listed in 3 above, at the Standby Gas Treatment System whenever there is a flow, are continuously sampled by charcoal, particulate and composite samples which are analyzed for iodines, principal gamma emitters, gross alpha, Sr-89 and Sr-90. Noble gases, gross beta and gamma are continuously monitored by noble gas monitors for the vent stack and the standby gas treatment system.

### b. Liquid Effluents

- 1) Batch waste release tanks are sampled each batch for principal gamma emitters, I-131, dissolved and entrained noble gases, H-3, gross alpha, Sr-89, Sr-90 and Fe-55.
- 2) Continuous releases are sampled continuously in proportion to the rate of flow of the effluent stream and by grab sample. Samples are analyzed for principal gamma emitters, I-131, dissolved and entrained noble gases, H-3, gross alpha, Sr-89, Sr-90 and Fe-55.

## 5. Batch Releases

### a. Gaseous

- |    |  |      |
|----|--|------|
| 1) | Number of batch releases:                | None |
| 2) | Total time period for batch releases:    | N/A  |
| 3) | Maximum time period for a batch release: | N/A  |
| 4) | Average time period for batch releases:  | N/A  |
| 5) | Minimum time period for a batch release: | N/A  |

### b. Liquid

- |    |  |          |
|----|--|----------|
| 1) | Number of batch releases:  | 3        |
| 2) | Total time period for batch releases: Min.   | 1.67E+03 |
| 3) | Maximum time period for a batch release: Min.  | 5.99E+02 |
| 4) | Average time period for batch releases: Min.   | 5.57E+02 |
| 5) | Minimum time period for a batch release: Min.  | 5.32E+02 |
| 6) | Average stream flow during periods of release of effluent into a flowing stream: gpm | 8.30E+06 |

# 2000 Annual Effluent Report Errata

Revised “Gaseous Effluent-Summation of all  
Releases” Section

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
UNITS ONE AND TWO  
DOCKET NUMBERS 50-373 AND 50-374  
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Estimated Total Error %
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**A. Fission and Activation Gas Releases**

1. Total Release Activity	Ci	3.65E+02	7.76E+02	4.71E+02	3.99E+02	35%
2. Average Release Rate	uCi/sec	4.64E+01	9.88E+01	5.92E+01	5.02E+01	
3. Percent of Technical Specification Limit	%	*	*	*	*	

**B. Iodine Releases**

1. Total I-131 Activity	Ci	1.99E-03	3.59E-03	9.25E-03	8.41E-03	35%
2. Average Release Rate	uCi/sec	2.53E-04	4.56E-04	1.16E-03	1.06E-03	
3. Percent of Technical Specification Limit	%	*	*	*	*	

**C. Particulate (> 8 day half-life) Releases**

1. Gross Activity	Ci	3.23E-04	4.63E-04	6.96E-03	5.53E-04	33%
2. Average Release Rate	uCi/sec	4.11E-05	5.89E-05	8.75E-04	6.96E-05	
3. Percent of Technical Specification Limit	%	*	*	*	*	
3. Gross Alpha Activity (estimate)	Ci	4.66E-06	2.48E-06	1.09E-06	6.31E-06	

**D. Tritium Releases**

1. Total Release Activity	Ci	8.99E+00	1.93E+01	1.68E+01	2.80E+01	21%
2. Average Release Rate	uCi/sec	1.14E+00	2.45E+00	2.12E+00	3.53E+00	
3. Percent of Technical Specification Limit	%	*	*	*	*	

"" This information is contained in the Radiological Impact on Man section of the report.

"<" indicates activity of sample is less than LLD given in uCi/ml

# 2000 Annual Effluent Report Errata

## Revised “Gaseous Effluent-Elevated Release” Section

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
GASEOUS EFFLUENTS-ELEVATED RELEASE  
Unit 1 and Unit 2 Continuous Mode

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
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**1. Fission and Activation Gas Releases**

Ar-41	Ci	1.03E-03	<1.00E-06	3.50E-04	5.44E-04
Kr-85	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-85m	Ci	7.30E+01	1.80E+02	1.03E+02	1.08E+02
Kr-87	Ci	2.99E+01	8.60E+01	6.25E+01	4.30E+01
Kr-88	Ci	1.58E+02	4.47E+02	2.55E+02	2.10E+02
Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-133	Ci	3.67E+01	5.17E+01	3.76E+01	3.72E+01
Xe-133m	Ci	<1.00E-06	<1.00E-06	1.27E+01	<1.00E-06
Xe-135	Ci	4.39E+01	6.57E+00	1.15E-04	3.51E-04
Xe-135m	Ci	2.31E+01	5.17E+00	<1.00E-06	<1.00E-06
Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
<b>TOTAL</b>	<b>Ci</b>	<b>3.65E+02</b>	<b>7.76E+02</b>	<b>4.71E+02</b>	<b>3.98E+02</b>

**2. Iodine Releases**

I-131	Ci	1.99E-03	3.59E-03	9.25E-03	8.41E-03
I-132	Ci	6.32E-03	9.62E-03	2.88E-02	8.78E-03
I-133	Ci	7.96E-03	9.64E-03	2.63E-02	1.93E-02
I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-135	Ci	1.80E-03	7.38E-03	3.35E-02	1.65E-02
<b>TOTAL IODINE</b>	<b>Ci</b>	<b>1.81E-02</b>	<b>3.02E-02</b>	<b>9.79E-02</b>	<b>5.30E-02</b>
<b>TOTAL I-131, I-133, I-135</b>	<b>Ci</b>	<b>1.18E-02</b>	<b>2.06E-02</b>	<b>6.91E-02</b>	<b>4.42E-02</b>

**3. Particulate (> 8 day half-life) Releases**

Cr-51	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Mn-54	Ci	<1.00E-11	<1.00E-11	<1.00E-11	2.60E-05
Co-57	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Fe-55	Ci	<1.00E-11	<1.00E-11	6.62E-03	2.23E-05
Co-58	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Fe-59	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Co-60	Ci	2.04E-04	2.78E-04	2.42E-04	2.36E-04
Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sr-89	Ci	1.20E-04	1.86E-04	9.94E-05	1.43E-04
Sr-90	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Zr-95	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Mo-99	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ru-103	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sn-117m	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Cs-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Cs-137	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ba/La-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	4.55E-05
Ce-141	Ci	<1.00E-11	<1.00E-11	<1.00E-11	8.03E-05
Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
<b>TOTAL PARTICULATES</b>	<b>Ci</b>	<b>3.24E-04</b>	<b>4.64E-04</b>	<b>6.96E-03</b>	<b>5.53E-04</b>

**4. Tritium Releases**

1. Total Release Activity	Ci	8.99E+00	1.93E+01	1.68E+01	2.80E+01
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"<" indicates activity of sample is less than LLD given in uCi/ml

# 2000 Annual Effluent Report Errata

## Revised “Liquid Releases” Sections

- Unit-1 Sections
- Unit-2 Sections

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
LIQUID RELEASES  
UNIT 1  
SUMMATION OF ALL LIQUID RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Estimated Total Error %
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**A. Fission and Activation Products**

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	5.14E-03	10%
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	8.12E-08	
3. Percent of Applicable Limit	%	*	*	*	*	

**B. Tritium**

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	2.35E-01	12%
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	3.72E-06	
3. Percent of Applicable Limit	%	*	*	*	*	

**C. Dissolved Noble Gases**

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	

**D. Gross Alpha**

1. Total Activity Released (estimate)	Ci	<1.00E-07	<1.00E-07	<1.00E-07	<1.00E-07	N/A
2. Average Concentration Released	uCi/ml	<1.00E-07	<1.00E-07	<1.00E-07	<1.00E-07	
3. Percent of Applicable Limit	%	*	*	*	*	

<b>E. Volume of Liquid Waste to Discharge</b>	liters	0.00E+00	0.00E+00	0.00E+00	8.63E+04	2%
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<b>F. Volume of Dilution Water</b>	liters	0.00E+00	0.00E+00	0.00E+00	6.32E+07	5%
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\*\*\* This information is contained in the Radiological Impact on Man section of the report.

"<" indicates activity of sample is less than LLD given in uCi/ml

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
LIQUID RELEASES  
UNIT 1  
BATCH MODE

Nuclides From Batch Releases	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
H-3	Ci				2.35E-01
Cr-51	Ci				8.40E-04
Mn-54	Ci				8.60E-04
Fe-55	Ci				5.70E-04
Co-58	Ci				5.88E-05
Fe-59	Ci				3.63E-04
Co-60	Ci				1.26E-03
Zn-65	Ci				3.24E-04
Sr-89	Ci				<5.00E-08
Sr-90	Ci				<5.00E-08
Nb-95	Ci				1.12E-05
Zr-95	Ci				1.08E-05
Mo-99	Ci				<5.00E-07
Tc-99m	Ci				<5.00E-07
Ag-110m	Ci				1.17E-05
Sb-122	Ci				3.91E-05
Sb-124	Ci				1.00E-05
I-131	Ci				<1.00E-06
Cs-134	Ci				2.14E-04
Cs-137	Ci				5.46E-04
BaLa-140	Ci				4.94E-06
Ce-141	Ci				<5.00E-07
Ce-144	Ci				1.80E-05
W-187	Ci				<5.00E-07
TOTAL	Ci	None	None	None	2.40E-01

Xe-131m	Ci				<1.00E-05
Xe-133	Ci				<1.00E-05
Xe-133m	Ci				<1.00E-05
Xe-135	Ci				<1.00E-05
Xe-135m	Ci				<1.00E-05
TOTAL	Ci	None	None	None	<LLD

"<" indicates activity of sample is less than LLD given in uCi/ml

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
LIQUID RELEASES  
UNIT 1  
CONTINUOUS MODE

Nuclides From Batch Releases					Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
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H-3	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Cr-51	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Mn-54	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Fe-55	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Co-58	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Fe-59	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Co-60	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Zn-65	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sr-89	Ci	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08
Sr-90	Ci	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08
Nb-95	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Zr-95	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Mo-99	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Tc-99m	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Ag-110m	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sb-122	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sb-124	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sb-124	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
I-131	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Cs-134	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Cs-137	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
BaLa-140	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Ce-141	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Ce-144	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
W-187	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
TOTAL	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05

"<" indicates activity of sample is less than LLD given in uCi/ml

Xe-131m	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-133	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-133m	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-135	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-135m	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
TOTAL	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
LIQUID RELEASES  
UNIT 2  
SUMMATION OF ALL LIQUID RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Estimated Total Error %
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**A. Fission and Activation Products**

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	5.14E-03	10%
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	8.12E-08	
3. Percent of Applicable Limit	%	*	*	*	*	

**B. Tritium**

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	2.35E-01	12%
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	3.72E-06	
3. Percent of Applicable Limit	%	*	*	*	*	

**C. Dissolved Noble Gases**

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	

**D. Gross Alpha**

1. Total Activity Released (estimate)	Ci	<1.00E-07	<1.00E-07	<1.00E-07	<1.00E-07	N/A
2. Average Concentration Released	uCi/ml	<1.00E-07	<1.00E-07	<1.00E-07	<1.00E-07	
3. Percent of Applicable Limit	%	*	*	*	*	

<b>E. Volume of Liquid Waste to Discharge</b>	liters	0.00E+00	0.00E+00	0.00E+00	8.63E+04	2%
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<b>F. Volume of Dilution Water</b>	liters	0.00E+00	0.00E+00	0.00E+00	6.32E+07	5%
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"\*" This information is contained in the Radiological Impact on Man section of the report.

"<" indicates activity of sample is less than LLD given in uCi/ml

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
LIQUID RELEASES  
UNIT 2  
BATCH MODE

Nuclides From Batch Releases	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
H-3	Ci				2.35E-01
Cr-51	Ci				8.40E-04
Mn-54	Ci				8.60E-04
Fe-55	Ci				5.70E-04
Co-58	Ci				5.88E-05
Fe-59	Ci				3.63E-04
Co-60	Ci				1.26E-03
Zn-65	Ci				3.24E-04
Sr-89	Ci				<5.00E-08
Sr-90	Ci				<5.00E-08
Nb-95	Ci				1.12E-05
Zr-95	Ci				1.08E-05
Mo-99	Ci				<5.00E-07
Tc-99m	Ci				<5.00E-07
Ag-110m	Ci				1.17E-05
Sb-122	Ci				3.91E-05
Sb-124	Ci				1.00E-05
I-131	Ci				<1.00E-06
Cs-134	Ci				2.14E-04
Cs-137	Ci				5.46E-04
Ba\La-140	Ci				4.94E-06
Ce-141	Ci				<5.00E-07
Ce-144	Ci				1.80E-05
W-187	Ci				<5.00E-07
TOTAL	Ci	None	None	None	2.40E-01

Xe-131m	Ci				<1.00E-05
Xe-133	Ci				<1.00E-05
Xe-133m	Ci				<1.00E-05
Xe-135	Ci				<1.00E-05
Xe-135m	Ci				<1.00E-05
TOTAL	Ci	None	None	None	<LLD

"<" indicates activity of sample is less than LLD given in uCi/ml

LASALLE COUNTY NUCLEAR POWER STATION  
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2000)  
LIQUID RELEASES  
UNIT 2  
CONTINUOUS MODE

Nuclides From Batch Releases					Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
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H-3	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Cr-51	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Mn-54	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Fe-55	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Co-58	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Fe-59	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Co-60	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Zn-65	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sr-89	Ci	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08
Sr-90	Ci	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08	<5.00E-08
Nb-95	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Zr-95	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Mo-99	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Tc-99m	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Ag-110m	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sb-122	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Sb-124	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
I-131	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Cs-134	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Cs-137	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
BaLa-140	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Ce-141	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
Ce-144	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
W-187	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07
TOTAL	Ci	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07	<5.00E-07

Xe-131m	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-133	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-133m	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-135	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
Xe-135m	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05
TOTAL	Ci	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05	<1.00E-05

"<" indicates activity of sample is less than LLD given in uCi/ml

# 2000 Annual Effluent Report Errata

Revised Dose Reports for Aquatic Effluents

\*\*\*\*\*  
\* DELIVER TO HEALTH PHYSICS \*  
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AQUATIC Effluents- 10CFR50 Listing

16-oct-2001 14:46:44

STATION: LASALLE STATION  
UNIT: 1  
PERIOD: 01/01/00 12/31/00  
NAME: ODCMLAS  
REPORT: ANNUAL  
MODE: ACTUAL

# LASALLE STATION UNIT ONE

ACTUAL 2000  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	3.28E-06	3.28E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	1.25E-05	1.25E-05
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

## COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	3.28E-06	3.28E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	1.25E-05	1.25E-05
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 2000  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	6.33E-05	6.33E-05
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	3.21E-04	3.21E-04
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.01	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	3.79E-06	3.79E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	1.03E-05	1.03E-05
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 2000

MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	1.39E-04	1.39E-04
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	3.53E-04	3.53E-04
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.01	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.01	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01

TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	2.63E-06	2.63E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	5.12E-06	5.12E-06
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

# LASALLE STATION UNIT ONE

ACTUAL 2000

MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	2.43E-04	2.43E-04
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	3.49E-04	3.49E-04
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

## COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.02	3.0	0.01
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.01	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	4.32E-06	4.32E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	5.70E-06	5.70E-06
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

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

AQUATIC Effluents- 10CFR50 Listing

16-oct-2001 14:48:13

STATION: LASALLE STATION  
UNIT: 2  
PERIOD: 01/01/00 12/31/00  
NAME: ODCMLAS  
REPORT: ANNUAL  
MODE: ACTUAL

LASALLE STATION UNIT TWO

ACTUAL 2000  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	3.28E-06	3.28E-06
	0.00E+00	0.00E+00	0.00E+00	1.25E-05	1.25E-05
				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT TWO

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
INFANT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	3.28E-06	3.28E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	1.25E-05	1.25E-05
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT TWO

ACTUAL 2000  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	0.00E+00	0.00E+00	0.00E+00	6.33E-05	6.33E-05
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	3.21E-04	3.21E-04
				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.01	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT TWO

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
CHILD RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	3.79E-06	3.79E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	1.03E-05	1.03E-05
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

# LASALLE STATION UNIT TWO

ACTUAL 2000  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	1.39E-04	1.39E-04
	0.00E+00	0.00E+00	0.00E+00	3.53E-04	3.53E-04
				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

## COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.01	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.01	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT TWO

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
TEENAGER RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	2.63E-06	2.63E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	5.12E-06	5.12E-06
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT TWO

ACTUAL 2000  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
 ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	2.43E-04	2.43E-04
	0.00E+00	0.00E+00	0.00E+00	3.49E-04	3.49E-04
				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % 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
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.02	3.0	0.01
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.01	10.0	0.00
					LIVER		LIVER

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT TWO

2000 ANNUAL REPORT

PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM \*

PERIOD OF RELEASE - 01/01/00 TO 12/31/00 CALCULATED 10/16/01  
ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL	0.00E+00	0.00E+00	0.00E+00	4.32E-06	4.32E-06
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	5.70E-06	5.70E-06
ORGAN				LIVER	LIVER

THIS IS A REPORT FOR THE CALENDAR YEAR 2000

COMPLIANCE STATUS - 40 CFR 141

TYPE	ANNUAL LIMIT	% OF LIMIT
TOTAL	4.0 MREM	0.000
BODY		
INTERNAL	4.0 MREM	0.000
ORGAN		

LIVER

\* 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 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

## ATTACHMENT 2

# 1999 Annual Effluent Report Errata

# 1999 Annual Effluent Report Errata

## Index

- Summary of Changes
- Revised “Gaseous Effluent-Summation of all Releases” Section
- Revised “Gaseous Effluent-Elevated Release” Section
- Revised “Liquid Effluent-Unit Two Batch Mode”  
Revised page
- Revised “Maximum Doses Resulting from Releases” Section

# 1999 Annual Effluent Report Errata

## Summary of Changes

## **LASALLE COUNTY NUCLEAR POWER STATION**

### **ERRATA SUMMARY FOR THE 1999 ANNUAL EFFLUENT REPORT**

#### **Errata #1999-01**

The "Gaseous Effluents-Summation of All Releases" and "Gaseous Effluents-Elevated Release" sections have been modified as follows:

- The actual analysis results of "hard to detect" nuclides replaced values that were originally entered as "estimated" (Sr-89, Sr-90, and Alpha emitters).
- The Iodine-131 value for May was incorrectly entered as 2.24E-02 Ci rather than the correct value of 2.24E-04 Ci (unit conversion error from uCi to Ci). This change also affected the total Iodine-131 released and the "Average release rate for period" for the second quarter.
- The Iodine-133 value for December was incorrectly entered as 8.82E-02 Ci rather than the correct value of 8.82E-04 Ci (unit conversion error from uCi to Ci).
- The original "Average release rate for period" for Particulates released during the second quarter was calculated using 60 days rather than 91 days. The second quarter release rate was also revised to include Strontium-89 (i.e.: the initial estimates were replaced with actual values.)
- Noble Gas effluent data was inadvertently omitted from the original report for a one-week period, which included the following nuclides:
  - Kr-85m: 9.86E+06 uCi
  - Kr-88: 1.66E+07 uCi
- Corrected several minor rounding errors throughout the report.

The revised "Gaseous Effluents-Summation of All Releases" and "Gaseous Effluents-Elevated Release" sections that contain the revisions identified above are included in this submittal.

#### **Errata #1999-02**

The "Liquid Effluents-Unit Two Batch Mode" section has been modified as follows:

- An inadvertent entry of 1.04E-05 Ci was placed in the October column. There was no liquid batch release in 1999; therefore this number was changed to 0.00E+00.

The revised applicable page of the "Liquid Effluents-Unit Two Batch Mode" section that contains the revision identified above is included in this submittal.

#### **Errata #1999-03**

The "Maximum Doses Resulting From Releases" section has been modified as follows and is included in this submittal:

- The addition of gaseous effluent nuclides from the fourth quarter of 1999 had a slight affect on the calculated maximum doses to the public for the fourth quarter.
- The Organ Dose for the first quarter of 1999 was initially listed as 2.70E-04 mrem (child receptor) as opposed to the maximum Organ Dose of 3.25E-04 mrem (infant receptor).

# 1999 Annual Effluent Report Errata

Revised “Gaseous Effluent-Summation of all  
Releases” Section

LASALLE COUNTY NUCLEAR POWER STATION  
UNITS ONE AND TWO  
DOCKET NUMBERS 50-373 AND 50-374

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>	<u>Estimated Total Error %</u>
A.	Fission and Activation Gases				
1.	Total release	Ci	3.37E+01	5.40E+02	35%
2.	Average release rate for period	uCi/sec	4.34E+00	6.86E+01	
B.	Iodines				
1.	Total iodine-131	Ci	2.09E-04	2.06E-03	35%
2.	Average release rate for period	uCi/sec	2.71E-05	2.63E-04	
C.	Particulates				
1.	Particulates with T1/2 >8 days	Ci	3.20E-05	1.21E-02	33%
2.	Average release rate for period	uCi/sec	4.11E-06	1.53E-03	
3.	Gross alpha radioactivity	Ci	<1.00E-11	2.41E-06	
D.	Tritium				
1.	Total release	Ci	3.44E+00	2.27E+01	21%
2.	Average release rate for period	uCi/sec	4.42E-01	2.86E+00	

"<" indicates activity of sample is less than LLD given in uci/ml

LASALLE COUNTY NUCLEAR POWER STATION  
UNITS ONE AND TWO  
DOCKET NUMBERS 50-373 AND 50-374

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>Third Quarter</u>	<u>Fourth Quarter</u>	<u>Estimated Total Error %</u>
A.	Fission and Activation Gases				
1.	Total release	Ci	6.21E+02	4.50E+02	35%
2.	Average release rate for period	uCi/sec	7.81E+01	5.66E+01	
B.	Iodines				
1.	Total iodine-131	Ci	4.79E-03	6.67E-03	35%
2.	Average release rate for period	uCi/sec	6.02E-04	8.39E-04	
C.	Particulates				
1.	Particulates with T1/2 >8 days	Ci	5.97E-04	2.79E-04	33%
2.	Average release rate for period	uCi/sec	7.51E-05	3.51E-05	
3.	Gross alpha radioactivity	Ci	6.80E-06	5.95E-06	
D.	Tritium				
1.	Total release	Ci	9.85E+00	8.38E+00	21%
2.	Average release rate for period	uCi/sec	1.24E+00	1.07E+00	

"<" indicates activity of sample is less than LLD given in uci/ml

# 1999 Annual Effluent Report Errata

## Revised “Gaseous Effluent-Elevated Release” Section

# EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

## GASEOUS EFFLUENTS-ELEVATED RELEASE

Unit 1 and Unit 2 Continuous Mode

Nuclides Released	Fission Gases	Quarter			
		First	March	February	January
1.	Ar-41	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
		3.15E-06	<1.00E-06	3.15E-06	<1.00E-06
		1.09E+01	1.09E+01	<1.00E-06	<1.00E-06
		2.51E+00	2.51E+00	<1.00E-06	<1.00E-06
		1.68E+01	1.68E+01	<1.00E-06	<1.00E-06
		<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
		2.78E-04	2.78E-04	<1.00E-06	<1.00E-06
		<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
		3.53E+00	3.53E+00	<1.00E-06	<1.00E-06
		<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
2.	Xe-131m	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
		Kr-88	<1.00E-06	<1.00E-06	<1.00E-06
		Xe-131m	<1.00E-06	<1.00E-06	<1.00E-06
		Xe-133	<1.00E-06	<1.00E-06	<1.00E-06
		Xe-133m	<1.00E-06	<1.00E-06	<1.00E-06
		Xe-135	<1.00E-06	<1.00E-06	<1.00E-06
		Xe-135m	<1.00E-06	<1.00E-06	<1.00E-06
		Xe-138	<1.00E-06	<1.00E-06	<1.00E-06
		Total for period	3.37E+01	3.15E-06	<1.00E-06
		Iodines			
3.	I-131	<1.00E-06	1.83E-04	2.60E-05	<1.00E-11
		I-132	5.20E-04	<1.00E-11	<1.00E-11
		I-133	4.71E-04	<1.00E-11	<1.00E-11
		I-134	<1.00E-11	<1.00E-11	<1.00E-11
		I-135	7.31E-04	<1.00E-11	<1.00E-11
		Total for period	1.91E-03	2.60E-05	<1.00E-11
		Particulates			
		Cr-51	<1.00E-11	<1.00E-11	<1.00E-11
		Mn-54	<1.00E-11	<1.00E-11	<1.00E-11
		Co-58	<1.00E-11	<1.00E-11	<1.00E-11
	Fe-59	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
		Co-60	<1.00E-11	<1.00E-11	<1.00E-11
		Zn-65	<1.00E-11	<1.00E-11	<1.00E-11
		Sr-89	<1.00E-11	<1.00E-11	<1.00E-11
		Sr-90	<1.00E-11	<1.00E-11	<1.00E-11
		Nb-95	<1.00E-11	<1.00E-11	<1.00E-11
		Mo-99	<1.00E-11	<1.00E-11	<1.00E-11
		Cs-134	<1.00E-11	<1.00E-11	<1.00E-11
		Cs-137	<1.00E-11	<1.00E-11	<1.00E-11
		Ba-140	<1.00E-11	<1.00E-11	<1.00E-11
	La-140	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
		Ce-141	<1.00E-11	<1.00E-11	<1.00E-11
		Ce-144	<1.00E-11	<1.00E-11	<1.00E-11
		Total for period	3.20E-05	<1.00E-11	<1.00E-11
		<" indicates activity of sample is less than LLD given uci/ml			

# EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

## GASEOUS EFFLUENTS-ELEVATED RELEASE

Unit 1 and Unit 2 Continuous Mode

Nuclides Released		<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>	
1.	Fission Gases					
	Ar-41	Ci	2.11E-04	<1.00E-06	<1.00E-06	2.11E-04
	Kr-85	Ci	3.82E-01	<1.00E-06	<1.00E-06	3.82E-01
	Kr-85m	Ci	5.39E+01	2.43E+01	1.54E+01	9.35E+01
	Kr-87	Ci	1.78E+01	<1.00E-06	<1.00E-06	1.78E+01
	Kr-88	Ci	5.89E+01	2.38E+01	2.21E+01	1.05E+02
	Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-133	Ci	2.85E+02	2.76E+01	6.05E-06	3.13E+02
	Xe-133m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-135	Ci	8.53E+00	4.69E-04	1.86E+00	1.03E+01
	Xe-135m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Total for period	Ci	4.25E+02	7.57E+01	3.94E+01	5.40E+02
2.	Iodines					
	I-131	Ci	1.42E-03	2.24E-04	4.16E-04	2.06E-03
	I-132	Ci	9.64E-04	1.01E-04	8.60E-04	1.93E-03
	I-133	Ci	1.69E-03	1.78E-03	3.53E-03	7.01E-03
	I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	I-135	Ci	<1.00E-11	<1.00E-11	1.29E-03	1.29E-03
	Total for period	Ci	4.07E-03	2.11E-03	6.09E-03	1.23E-02
3.	Particulates					
	Cr-51	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Mn-54	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Co-58	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Fe-59	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Co-60	Ci	5.32E-05	4.03E-05	1.18E-02	1.19E-02
	Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Sr-89	Ci	7.67E-06	7.18E-06	3.52E-05	5.01E-05
	Sr-90	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Nb-95	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Mo-99	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Cs-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Cs-137	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ba-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	La-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ce-141	Ci	<1.00E-11	<1.00E-11	9.09E-05	9.09E-05
	Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Total for period	Ci	6.09E-05	4.75E-05	1.19E-02	1.21E-02

"<" indicates activity of sample is less than LLD given uci/ml

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

GASEOUS EFFLUENTS-ELEVATED RELEASE  
Unit 1 and Unit 2 Continuous Mode

Nuclides Released		<u>July</u>	<u>August</u>	<u>Sept.</u>	<u>Third Quarter</u>	
1.	Fission Gases					
	Ar-41	Ci	<1.00E-06	<1.00E-06	1.81E-04	1.81E-04
	Kr-85	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Kr-85m	Ci	3.10E+01	8.37E+01	5.05E+01	1.65E+02
	Kr-87	Ci	<1.00E-06	1.61E+01	2.00E+01	3.61E+01
	Kr-88	Ci	6.39E+01	5.81E+01	7.71E+01	1.99E+02
	Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-133	Ci	5.33E+00	5.35E+01	1.33E+02	1.92E+02
	Xe-133m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-135	Ci	<1.00E-06	1.77E+01	1.09E+01	2.86E+01
	Xe-135m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Total for period	Ci	1.00E+02	2.29E+02	2.92E+02	6.21E+02
2.	Iodines					
	I-131	Ci	2.98E-03	9.66E-04	8.46E-04	4.79E-03
	I-132	Ci	4.64E-03	4.10E-03	2.76E-02	3.63E-02
	I-133	Ci	4.24E-03	5.21E-03	3.70E-03	1.31E-02
	I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	I-135	Ci	3.24E-03	9.06E-03	6.79E-03	1.91E-02
	Total for period	Ci	1.51E-02	1.93E-02	3.89E-02	7.33E-02
3.	Particulates					
	Cr-51	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Mn-54	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Co-58	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Fe-59	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Co-60	Ci	2.84E-04	1.27E-04	5.35E-05	4.64E-04
	Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Sr-89	Ci	5.19E-05	4.68E-05	3.44E-05	1.33E-04
	Sr-90	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Nb-95	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Mo-99	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Cs-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Cs-137	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ba-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	La-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ce-141	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Total for period	Ci	3.36E-04	1.74E-04	8.79E-05	5.97E-04

"<" indicates activity of sample is less than LLD given uci/ml

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

GASEOUS EFFLUENTS-ELEVATED RELEASE

Unit 1 and Unit 2 Continuous Mode

Nuclides Released		<u>October</u>	<u>November</u>	<u>December</u>	<u>Fourth Quarter</u>	
1.	Fission Gases					
	Ar-41	Ci	<1.00E-06	9.49E-05	<1.00E-06	9.49E-05
	Kr-85	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Kr-85m	Ci	6.76E+01	6.96E+00	1.68E+01	9.14E+01
	Kr-87	Ci	1.49E+01	8.23E+00	8.23E+00	3.14E+01
	Kr-88	Ci	1.01E+02	1.87E+01	3.53E+01	1.55E+02
	Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-133	Ci	1.56E+02	8.51E+00	6.47E-04	1.64E+02
	Xe-133m	Ci	<1.00E-06	1.29E-02	<1.00E-06	1.29E-02
	Xe-135	Ci	7.80E+00	6.19E-02	<1.00E-06	7.86E+00
	Xe-135m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
	Total for period	Ci	3.47E+02	4.25E+01	6.04E+01	4.50E+02
2.	Iodines					
	I-131	Ci	1.91E-03	4.72E-03	3.96E-05	6.67E-03
	I-132	Ci	8.63E-03	<1.00E-11	1.89E-04	8.81E-03
	I-133	Ci	8.32E-03	1.23E-02	8.82E-04	2.15E-02
	I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	I-135	Ci	1.30E-02	<1.00E-11	<1.00E-11	1.30E-02
	Total for period	Ci	3.19E-02	1.70E-02	1.11E-03	5.00E-02
3.	Particulates					
	Cr-51	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Mn-54	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Co-58	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Fe-59	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Co-60	Ci	8.48E-05	4.52E-05	5.02E-05	1.80E-04
	Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Sr-89	Ci	2.74E-05	2.49E-05	4.63E-05	9.86E-05
	Sr-90	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Nb-95	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Mo-99	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Cs-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Cs-137	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ba-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	La-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ce-141	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
	Total for period	Ci	1.12E-04	9.61E-05	1.19E-04	2.79E-04

"<" indicates activity of sample is less than LLD given uci/ml

# 1999 Annual Effluent Report Errata

Revised “Liquid Effluent-Unit Two Batch  
Mode” (Revised page)

# EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

## UNIT TWO BATCH MODE

### LIQUID EFFLUENTS

Nuclides Released	Fourth Quarter				Ci	Total for period
	October	November	December	Quarter		
Cr-51	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Mn-54	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Fe-55	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Fe-59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Co-60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Zn-65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Sr-89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Sr-90	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Zr-95	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Mo-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Cs-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Cs-137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Ba-140	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
La-140	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Ce-141	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Ce-144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Total for period						
Xe-131m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Xe-133m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Xe-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Xe-135m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Xe-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Ci	0.00E+00
Total for period						

# 1999 Annual Effluent Report Errata

Revised “Maximum Doses Resulting from  
Releases” Section

# EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

## MAXIMUM DOSES RESULTING FROM RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>
A.	Gaseous Effluents (Units One and Two)			
1.	Gamma air	mrad	7.78E-04	4.99E-03
2.	Beta air	mrad	2.56E-05	2.53E-04
3.	Total body	mrem	5.88E-04	3.77E-03
4.	Skin	mrem	6.20E-04	4.00E-03
5.	Organ	mrem	3.25E-04	2.00E-02
B.	Liquid Effluents (Unit One)			
1.	Total body	mrem	0.00E+00	0.00E+00
4.	Internal organ (Child Bone)	mrem	0.00E+00	0.00E+00
C.	Liquid Effluents (Unit Two)			
1.	Total body	mrem	0.00E+00	0.00E+00
4.	Internal organ (Child Bone)	mrem	0.00E+00	0.00E+00

## COMPLIANCE STATUS

A.	Gaseous Effluents (Units One and Two)			
1.	Gamma air	% of Tech. Spec. Limit	0.02	0.10
2.	Beta air	% of Tech. Spec. Limit	0.00	0.00
3.	Total body	% of Tech. Spec. Limit	0.02	0.15
4.	Skin	% of Tech. Spec. Limit	0.01	0.05
5.	Organ (adult)	% of Tech. Spec. Limit	0.00	0.27
B.	Liquid Effluents (Unit One)			
1.	Total body	% of Tech. Spec. Limit	0.00	0.00
2.	Internal organ (Child Bone)	% of Tech. Spec. Limit	0.00	0.00
C.	Liquid Effluents (Unit Two)			
1.	Total body	% of Tech. Spec. Limit	0.00	0.00
2.	Internal organ (Child Bone)	% of Tech. Spec. Limit	0.00	0.00

# EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (1999)

## MAXIMUM DOSES RESULTING FROM RELEASES

			<u>Third Quarter</u>	<u>Fourth Quarter</u>
A.	Gaseous Effluents (Units One and Two)			
1.	Gamma air	mrad	9.41E-03	7.24E-03
2.	Beta air	mrad	3.79E-04	2.80E-04
3.	Total body	mrem	7.11E-03	5.48E-03
4.	Skin	mrem	7.52E-03	5.78E-03
5.	Organ	mrem	1.67E-02	6.44E-03
B.	Liquid Effluents (Unit One)			
1.	Total body	mrem	0.00E+00	0.00E+00
4.	Internal organ (adult liver)	mrem	0.00E+00	0.00E+00
C.	Liquid Effluents (Unit Two)			
1.	Total body	mrem	0.00E+00	0.00E+00
4.	Internal organ	mrem	0.00E+00	0.00E+00

## COMPLIANCE STATUS

A.	Gaseous Effluents (Units One and Two)			
1.	Gamma air	% of Tech. Spec. Limit	0.19	0.14
2.	Beta air	% of Tech. Spec. Limit	0.00	0.00
3.	Total body	% of Tech. Spec. Limit	0.28	0.22
4.	Skin	% of Tech. Spec. Limit	0.10	0.08
5.	Organ (adult)	% of Tech. Spec. Limit	0.22	0.09
B.	Liquid Effluents (Unit One)			
1.	Total body	% of Tech. Spec. Limit	0.00	0.00
2.	Internal organ (Adult Liver)	% of Tech. Spec. Limit	0.00	0.00
C.	Liquid Effluents (Unit Two)			
1.	Total body	% of Tech. Spec. Limit	0.00	0.00
2.	Internal organ (adult liver)	% of Tech. Spec. Limit	0.00	0.00