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Exelon SM
Nuclear

April 30, 2002

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: 2001 Radioactive Effluent Release Report

Enclosed is the Exelon Generation Company, (EGC), LLC, LaSalle County Station 2001 Annual Radioactive Effluent Release Report. This report is submitted in accordance with Technical Specification 5.6.3, "Radioactive Effluent Release Report."

Program enhancements are in-place and on-going in an effort to minimize previously identified human errors associated with the Annual Radioactive Effluent Release Report.

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

Respectfully,

Susan R. Landahl for

Mark A. Schiavoni
Plant Manager
LaSalle County Station

Attachment

IE48

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

Summary of Changes to the Annual Effluent Report

1) The formatting of the supplemental information section has been revised to be more consistent with the recommendations of Regulatory Guide 1.21, while maintaining some site specific procedurally required information.

2) While there were no liquid radwaste discharges conducted, or occurrences of positive nuclide activity detected in the plant's ultimate outfall during 2001, the reporting of liquid effluents has been changed to reflect actual plant configuration. Since the plant has a common radwaste treatment facility and does not segregate inputs into radwaste by unit, and since there is a common release point from the plant's cooling pond to the Illinois River, it is appropriate for any liquid releases to be reported under Unit 1. This practice is consistent with that for reporting gaseous releases via the common vent stack. The past practice of applying half of the total liquid release activity to each unit and reporting releases under Unit 1 and Unit 2 will no longer be followed based on the reasons stated above and the fact that there is no value added from this practice.

3) In the Solid waste and Irradiated Fuel Shipments Section, "Container Type" has been changed to "Shipment Type" based on technical accuracy. While this information is not specified in Regulatory Guide 1.21, LaSalle Station's ODCM and local procedure for preparation of the Annual Effluent Report currently require it.

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)

Supplemental Information

1. Regulatory Limits

a. Gaseous Effluents

1) The air dose due to noble gases released in gaseous effluents, from each reactor unit, from the site shall be limited to the following:

a) During any calendar quarter: Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation, and

b) During any calendar year: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation.

2) The dose to an individual from radioiodines and radioactive materials in particulate form, and radionuclides, other than noble gases, with half-lives greater than eight days in gaseous effluents released, from each reactor unit, from the site shall be limited to the following:

3)

a) During any calendar quarter: Less than or equal to 7.5 mRems to any organ, and

b) During any calendar year: Less than or equal to 15 mRems to any organ.

b. Liquid Effluents

1) The dose or dose commitment to an individual from radioactive materials in liquid effluents released, from each reactor unit, from the site shall be limited:

a) During any calendar quarter: Less than or equal to 1.5 mRem to the total body and to less than or equal to 5 mRem to any organ, and

b) During any calendar year: Less than or equal to 3 mRem to the total body and to less than or equal to 10 mRem to any organ.

c. Total Dose -

1) The dose or dose commitment to any member of the public, due to releases or radioactivity and radiation, from uranium fuel cycle sources shall be limited to less than or equal to 25 mRem to the body or any organ (except the thyroid, which shall be limited to less than or equal to 75 mRem) over 12 consecutive months.

2. Allowable Concentrations –

a. Gaseous Effluents

1) The dose rate due to radioactive materials released in gaseous effluents from the site shall be limited to the following:

a) For noble gases: Less than or equal to 500 mRem/year to the total body and less than or equal to 3000 mRem/year to the skin, and

b) For all radioiodines and for all radioactive materials in particulate form, and radionuclides, other than noble gases, with half-lives greater than eight days: Less than or equal to 1500 mRem/year to any organ via the inhalation pathway.

b. Liquid Effluents

1) The concentration of radioactive material released from the site shall be limited to ten (10) times the concentrations specified in 10 CFR Part 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to the following:

Nuclide	DWC (µci/ml)
Kr-85m	2.00E-04
Kr-85	5.00E-04
Kr-87	4.00E-05
Kr-88	9.00E-05
Ar-41	7.00E-05
Xe-131m	7.00E-04
Xe-133m	5.00E-04
Xe-133	6.00E-04
Xe-135m	2.00E-04
Xe-135	2.00E-04

3. Average Energy

Not applicable - average energy is no longer used to determine dose to the public.

4. Measurements and Approximations of Total Radioactivity

a. Gaseous Effluents

1) Containment Vent and Purge System is sampled by grab sample which is analyzed for principal gamma emitters and H-3.

2) Main Vent Stack is sampled by grab sample, which is analyzed for principal gamma emitters and H-3.

3) Standby Gas Treatment System is sampled by grab sample, which is analyzed for principal gamma emitters.

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 cartridge and particulate filter paper which are analyzed for iodines and principal gamma emitters. Particulate filter papers are composited and analyzed for 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:	None
2)	Total time period for batch releases: Min.	N/A
3)	Maximum time period for a batch release: Min.	N/A
4)	Average time period for batch releases: Min.	N/A
5)	Minimum time period for a batch release: Min.	N/A
6)	Average stream flow during periods of release of effluent into a flowing stream: gpm	N/A

6. Abnormal Releases

a. Gaseous

1)	Number of releases:	None
2)	Total activity released:	N/A

b. Liquid

1)	Number of releases:	None
2)	Total activity released:	N/A

7. Process Control Program

There were no changes to the Process Control Program during this time period.

8. Effluent Monitoring Instrumentation timeclocks and sample anomalies.

There were no effluent monitoring instrumentation timeclocks exceeded during this time period.

9. Offsite Dose Calculation Manual Revisions. The ODCM was revised in May 2001 in support of and as a result of the implementation of Improved Technical Specifications at LaSalle Station. Concurrent with the revision, the ODCM LaSalle Annex was relocated to the Technical Requirements Manual.

An entire copy of the ODCM LaSalle Annex, along with the ITS change summary, is submitted in accordance with Technical Specification 5.5.1 (refer to Appendix A).

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
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 %
A. Fission and Activation Gas Releases						
1. Total Release Activity	Ci	4.01E+02	1.09E+03	6.74E+02	3.24E+02	35%
2. Average Release Rate	uCi/sec	5.15E+01	1.38E+02	8.47E+01	4.08E+01	
3. Percent of Technical Specification Limit	%	*	*	*	*	
B. Iodine Releases						
1. Total I-131 Activity	Ci	5.81E-03	6.95E-03	1.25E-02	1.09E-02	35%
2. Average Release Rate	uCi/sec	7.47E-04	8.84E-04	1.57E-03	1.37E-03	
3. Percent of Technical Specification Limit	%	*	*	*	*	
C. Particulate (> 8 day half-life) Releases						
1. Gross Activity	Ci	5.43E-04	6.97E-04	2.25E-03	7.48E-04	33%
2. Average Release Rate	uCi/sec	6.98E-05	8.87E-05	2.83E-04	9.41E-05	
3. Percent of Technical Specification Limit	%	*	*	*	*	
3. Gross Alpha Activity	Ci	5.08E-06	1.95E-06	1.19E-6	<1.00E-11	
D. Tritium Releases						
1. Total Release Activity	Ci	5.02E+01	9.17E+01	4.85E+01	5.14E+01	21%
2. Average Release Rate	uCi/sec	6.46E+00	1.17E+01	6.10E+00	6.47E+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

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
GASEOUS EFFLUENTS-ELEVATED RELEASE
Unit 1 and Unit 2 Continuous Mode

	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1. Fission and Activation Gas Releases					
Ar-41	Ci	<1.00E-06	<1.00E-06	2.04E-04	<1.00E-06
Kr-85	Ci	<1.00E-06	7.21E+02	<1.00E-06	<1.00E-06
Kr-85m	Ci	9.72E+01	8.41E+01	7.45E+01	9.04E+01
Kr-87	Ci	3.10E+01	2.92E+01	9.24E+00	2.62E+01
Kr-88	Ci	2.03E+02	1.75E+02	1.02E+02	1.52E+02
Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-133	Ci	5.27E+01	6.71E+01	4.73E+02	5.39E+01
Xe-133m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-135	Ci	7.33E+00	1.01E+01	1.51E+01	1.48E+00
Xe-135m	Ci	9.07E+00	<1.00E-06	7.70E-04	<1.00E-06
Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
TOTAL	Ci	4.01E+02	1.09E+03	6.74E+02	3.24E+02
2. Iodine Releases					
I-131	Ci	5.81E-03	6.95E-03	1.25E-02	1.09E-02
I-132	Ci	1.98E-03	5.48E-03	1.41E-02	8.33E-03
I-133	Ci	1.08E-02	1.42E-02	2.55E-02	2.13E-02
I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-135	Ci	2.16E-03	6.06E-03	2.47E-02	1.45E-02
TOTAL IODINE	Ci	2.08E-02	3.27E-02	7.68E-02	5.50E-02
TOTAL I-131, I-133, I-135	Ci	1.88E-02	2.72E-02	6.27E-02	4.67E-02
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	2.06E-05	1.52E-04	1.42E-04	5.70E-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	<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	2.79E-04	2.11E-04	4.66E-04	2.78E-04
Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sr-89	Ci	2.42E-04	3.34E-04	1.22E-03	4.13E-04
Sr-90	Ci	1.54E-06	<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	8.00E-05	<1.00E-11
Ce-141	Ci	<1.00E-11	<1.00E-11	3.41E-04	<1.00E-11
Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
TOTAL PARTICULATES	Ci	5.43E-04	6.97E-04	2.25E-03	7.48E-04
4. Tritium Releases					
1. Total Release Activity	Ci	5.02E+01	9.17E+01	4.85E+01	5.14E+01

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

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
LIQUID RELEASES
UNIT 1 and UNIT 2
SUMMATION OF ALL LIQUID RELEASES

	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Estimated Total Error %
A. Fission and Activation Products						
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	%	*	*	*	*	
B. Tritium						
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	%	*	*	*	*	
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	<LLD	<LLD	<LLD	<LLD	N/A
2. Average Concentration Released	uCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of Applicable Limit	%	*	*	*	*	
E. Volume of Liquid Waste to Discharge	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	N/A
F. Volume of Dilution Water	liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00	N/A

"*" 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 (2001)
LIQUID RELEASES
UNIT 1 and UNIT 2
BATCH MODE

Nuclides From Batch Releases	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
H-3	Ci				
Cr-51	Ci				
Mn-54	Ci				
Fe-55	Ci				
Co-58	Ci				
Fe-59	Ci				
Co-60	Ci				
Zn-65	Ci				
Sr-89	Ci				
Sr-90	Ci				
Nb-95	Ci				
Zr-95	Ci				
Mo-99	Ci				
Tc-99m	Ci				
Ag-110m	Ci				
Sb-122	Ci				
Sb-124	Ci				
I-131	Ci				
Cs-134	Ci				
Cs-137	Ci				
Ba\La-140	Ci				
Ce-141	Ci				
Ce-144	Ci				
W-187	Ci				
TOTAL	Ci	None	None	None	None

Xe-131m	Ci				
Xe-133	Ci				
Xe-133m	Ci				
Xe-135	Ci				
Xe-135m	Ci				
TOTAL	Ci	None	None	None	None

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

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
LIQUID RELEASES
UNIT 1 and UNIT 2
CONTINUOUS MODE

Nuclides From Continuous Releases	Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Gross Alpha	Ci	<1.00E-07	<1.00E-07	<1.00E-07	<1.00E-07
H-3	Ci	<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
Mn-54	Ci	<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
Co-58	Ci	<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
Co-60	Ci	<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
Sr-89	Ci	<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
Nb-95	Ci	<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
Mo-99	Ci	<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
Ag-110m	Ci	<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
Sb-124	Ci	<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
Cs-134	Ci	<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
Ba\La-140	Ci	<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
Ce-144	Ci	<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
TOTAL	Ci	<LLD	<LLD	<LLD	<LLD

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

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

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
FIRST QUARTER

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

1. Spent resins, filter sludges, evaporator bottoms, etc.

a.	Quantity shipped	cu.m.	4.66E+01
b.	Total activity	Ci	1.81E+00
c.	Major nuclides (estimate %)		
	Mn-54	%	9.09
	Fe-55	%	23.92
	Cs-137	%	2.73
	Co-60	%	59.74
d.	Shipment type		LSA
e.	Solidification agent		None

2. Dry compressible waste, contaminated equipment, etc.

a.	Quantity shipped	cu.m.	7.25E+01
b.	Total activity	Ci	1.22E-01
c.	Major nuclides (estimate %)		
	Fe-59	%	2.74
	Mn-54	%	8.84
	Fe-55	%	67.73
	Co-60	%	17.33
d.	Shipment type		LSA

3. Other

a.	Quantity shipped cu.m.	0.00E+00
b.	Total activity Ci	0.00E+00
c.	Major nuclides (estimate %)	N/A
d.	Shipment type	N/A

4. Irradiated Components

a.	Quantity shipped cu.m	0.00E+00
b.	Total activity Ci	0.00E+00
c.	Major nuclides (estimate %)	N/A
d.	Number of shipments	0
e.	Mode of Transportation	N/A
f.	Destination	N/A

5. Solid Waste Disposition

	Number of Shipments	Transportation Mode	Destination
	4	Truck	CNSI, Barnwell, SC
	2	Truck	Duratek- Bear Creek, TN
TOTAL THIS QUARTER	**6**		

Estimated total error % for spent resins, filter sludges, evaporator bottoms, etc. (Jan-Dec)	25%
Estimated total error % for dry compressible waste, contaminated equipment, etc. (Jan-Dec)	25%
Estimated total error % for irradiated components (Jan-Dec)	N/A

B. IRRADIATED FUEL SHIPMENTS

None

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
SECOND QUARTER

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

1. Spent resins, filter sludges, evaporator bottoms, etc.

a.	Quantity shipped	cu.m.		5.63E+01
b.	Total activity	Ci		6.49E+01
c.	Major nuclides (estimate %)			
		Mn-54	%	4.57
		Fe-55	%	76.97
		Zn-65	%	1.73
		Co-60	%	15.59
d.	Shipment type			LSA
e.	Solidification agent			None

2. Dry compressible waste, contaminated equipment, etc.

a.	Quantity shipped	cu.m.		2.17E+02
b.	Total activity	Ci		3.93E-02
c.	Major nuclides (estimate %)			
		Fe-59	%	2.65
		Mn-54	%	22.93
		Fe-55	%	60.02
		Co-60	%	11.85
d.	Shipment type			LSA

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
SECOND QUARTER

3. Other

a.	Quantity shipped cu.m.	0.00E+00
b.	Total activity Ci	0.00E+00
c.	Major nuclides (estimate %)	N/A
d.	Shipment type	N/A

4. Irradiated Components

a.	Quantity shipped cu.m	0.00E+00
b.	Total activity Ci	0.00E+00
c.	Major nuclides (estimate %)	N/A
d.	Number of shipments	N/A
e.	Mode of Transportation	N/A
f.	Destination	N/A

5. Solid Waste Disposition

	Number of Shipments	Transportation Mode	Destination
	7	Truck	CNSI, Barnwell, SC
	3	Truck	Duratek-Bear Creek, TN
	2	Truck	US Ecology Recycle Ctr
TOTAL THIS QUARTER	**12**		

Estimated total error % for spent resins, filter sludges, evaporator bottoms, etc. (Jan-Dec)	25%
Estimated total error % for dry compressible waste, contaminated equipment, etc. (Jan-Dec)	25%
Estimated total error % for irradiated components (Jan-Dec)	N/A

B. IRRADIATED FUEL SHIPMENTS

None

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
THIRD QUARTER

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

1. Spent resins, filter sludges, evaporator bottoms, etc.

a.	Quantity shipped	cu.m.		0.00E+00
b.	Total activity	Ci		0.00E+00
c.	Major nuclides (estimate %)			N/A
d.	Shipment type			N/A
f.	Solidification agent			N/A

2. Dry compressible waste, contaminated equipment, etc.

a.	Quantity shipped	cu.m.		3.26E+02
b.	Total activity	Ci		2.74E-01
c.	Major nuclides (estimate %)			
		Fe-59	%	2.70
		Mn-54	%	23.07
		Fe-55	%	60.15
		Co-60	%	11.87
d.	Shipment type			LSA

3. Other

a.	Quantity shipped cu.m.	0.00E+00
b.	Total activity Ci	0.00E+00
c.	Major nuclides (estimate %)	N/A
d.	Shipment type	N/A

4. Irradiated Components

a.	Number of shipments	0
b.	Mode of Transportation	N/A
c.	Destination	N/A

5. Solid Waste Disposition

	Number of Shipments	Transportation Mode	Destination
	2	Truck	ATG, Richland, WA
	2	Truck	Duratek-Bear Creek, TN
	2	Truck	US Ecology Recycle Ctr
TOTAL THIS QUARTER	**6**		

Estimated total error % for spent resins, filter sludges, evaporator bottoms, etc. (Jan-Dec)	25%
Estimated total error % for dry compressible waste, contaminated equipment, etc. (Jan-Dec)	25%
Estimated total error % for irradiated components (Jan-Dec)	N/A

B. IRRADIATED FUEL SHIPMENTS

None

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
FOURTH QUARTER

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

1. Spent resins, filter sludges, evaporator bottoms, etc.

a.	Quantity shipped		cu.m.	1.89E+01
b.	Total activity		Ci	3.06E+02
c.	Major nuclides (estimate %)			
		Mn-54	%	3.90
		Fe-55	%	73.60
		Zn-65	%	6.64
		Co-60	%	14.95
d.	Shipment type			LSA (5) Type B (1)
e.	Solidification agent			None

2. Dry compressible waste, contaminated equipment, etc.

a.	Quantity shipped	cu.m.		1.09E+02
b.	Total activity	Ci		3.75E-02
c.	Major nuclides (estimate %)			
		Fe-59	%	3.13
		Mn-54	%	23.11
		Fe-55	%	59.25
		Co-60	%	11.64
d.	Shipment type			LSA

3. Other (Oil for incineration)

a.	Quantity shipped cu.m.	0.00E+00
b.	Total activity Ci	0.00E+00
c.	Major nuclides (estimate %)	N/A
d.	Shipment type	N/A

4. Irradiated Components

a.	Number of shipments	0
b.	Mode of Transportation	N/A
c.	Destination	N/A

5. Solid Waste Disposition

	Number of Shipments	Transportation Mode	Destination
	3	Truck	CNSI, Barnwell, SC
	2	Truck	Duratek-Bear Creek, TN
	1	Truck (Type B)	Studsvik, TN
TOTAL THIS QUARTER	**6**		

Estimated total error % for spent resins, filter sludges, evaporator bottoms, etc. (Jan-Dec)	25%
Estimated total error % for dry compressible waste, contaminated equipment, etc. (Jan-Dec)	25%
Estimated total error % for other irradiated components (Jan-Dec)	N/A

B. IRRADIATED FUEL SHIPMENTS

None

RADIOLOGICAL IMPACT ON MAN
MAXIMUM DOSES RESULTING FROM RELEASES AND COMPLIANCE STATUS

LASALLE STATION UNIT ONE

ACTUAL 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	9.29E-03 (WSW)	8.05E-03 (WSW)	4.74E-03 (WSW)	6.99E-03 (WSW)	2.91E-02 (WSW)
BETA AIR (MRAD)	2.88E-04 (ESE)	6.18E-04 (ESE)	2.67E-04 (ESE)	2.32E-04 (ESE)	1.40E-03 (ESE)
TOT. BODY (MREM)	7.02E-03 (WSW)	6.08E-03 (WSW)	3.58E-03 (WSW)	5.28E-03 (WSW)	2.20E-02 (WSW)
SKIN (MREM)	7.39E-03 (WSW)	6.59E-03 (WSW)	3.79E-03 (WSW)	5.57E-03 (WSW)	2.33E-02 (WSW)
ORGAN (MREM)	4.65E-03 (ESE)	2.07E-02 (ESE)	3.48E-02 (ESE)	1.55E-02 (ESE)	7.56E-02 (ESE)
	THYROID	THYROID	THYROID	THYROID	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	0.19	0.16	0.09	0.14	10.0	0.29
BETA AIR (MRAD)	10.0	0.00	0.01	0.00	0.00	20.0	0.01
TOT. BODY (MREM)	2.5	0.28	0.24	0.14	0.21	5.0	0.44
SKIN (MREM)	7.5	0.10	0.09	0.05	0.07	15.0	0.16
ORGAN (MREM)	7.5	0.06	0.28	0.46	0.21	15.0	0.50
		THYROID	THYROID	THYROID	THYROID		THYROID

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 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	9.29E-03 (WSW)	8.05E-03 (WSW)	4.74E-03 (WSW)	6.99E-03 (WSW)	2.91E-02 (WSW)
BETA AIR (MRAD)	2.88E-04 (ESE)	6.18E-04 (ESE)	2.67E-04 (ESE)	2.32E-04 (ESE)	1.40E-03 (ESE)
TOT. BODY (MREM)	7.02E-03 (WSW)	6.08E-03 (WSW)	3.58E-03 (WSW)	5.28E-03 (WSW)	2.20E-02 (WSW)
SKIN (MREM)	7.39E-03 (WSW)	6.59E-03 (WSW)	3.79E-03 (WSW)	5.57E-03 (WSW)	2.33E-02 (WSW)
ORGAN (MREM)	3.83E-03 (NNE)	3.46E-02 (NNE)	5.40E-02 (NNE)	2.28E-02 (NNE)	1.15E-01 (NNE)
	THYROID	THYROID	THYROID	THYROID	THYROID

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	0.19	0.16	0.09	0.14	10.0	0.29
BETA AIR (MRAD)	10.0	0.00	0.01	0.00	0.00	20.0	0.01
TOT. BODY (MREM)	2.5	0.28	0.24	0.14	0.21	5.0	0.44
SKIN (MREM)	7.5	0.10	0.09	0.05	0.07	15.0	0.16
ORGAN (MREM)	7.5	0.05	0.46	0.72	0.30	15.0	0.77
		THYROID	THYROID	THYROID	THYROID		THYROID

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 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	9.29E-03 (WSW)	8.05E-03 (WSW)	4.74E-03 (WSW)	6.99E-03 (WSW)	2.91E-02 (WSW)
BETA AIR (MRAD)	2.88E-04 (ESE)	6.18E-04 (ESE)	2.67E-04 (ESE)	2.32E-04 (ESE)	1.40E-03 (ESE)
TOT. BODY (MREM)	7.02E-03 (WSW)	6.08E-03 (WSW)	3.58E-03 (WSW)	5.28E-03 (WSW)	2.20E-02 (WSW)
SKIN (MREM)	7.39E-03 (WSW)	6.59E-03 (WSW)	3.79E-03 (WSW)	5.57E-03 (WSW)	2.33E-02 (WSW)
ORGAN (MREM)	2.76E-03 (NNE)	2.23E-02 (NNE)	3.41E-02 (NNE)	1.46E-02 (NNE)	7.38E-02 (NNE)
	THYROID	THYROID	THYROID	THYROID	THYROID

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	0.19	0.16	0.09	0.14	10.0	0.29
BETA AIR (MRAD)	10.0	0.00	0.01	0.00	0.00	20.0	0.01
TOT. BODY (MREM)	2.5	0.28	0.24	0.14	0.21	5.0	0.44
SKIN (MREM)	7.5	0.10	0.09	0.05	0.07	15.0	0.16
ORGAN (MREM)	7.5	0.04	0.30	0.45	0.19	15.0	0.49
		THYROID	THYROID	THYROID	THYROID		THYROID

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 2001
MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	9.29E-03 (WSW)	8.05E-03 (WSW)	4.74E-03 (WSW)	6.99E-03 (WSW)	2.91E-02 (WSW)
BETA AIR (MRAD)	2.88E-04 (ESE)	6.18E-04 (ESE)	2.67E-04 (ESE)	2.32E-04 (ESE)	1.40E-03 (ESE)
TOT. BODY (MREM)	7.02E-03 (WSW)	6.08E-03 (WSW)	3.58E-03 (WSW)	5.28E-03 (WSW)	2.20E-02 (WSW)
SKIN (MREM)	7.39E-03 (WSW)	6.59E-03 (WSW)	3.79E-03 (WSW)	5.57E-03 (WSW)	2.33E-02 (WSW)
ORGAN (MREM)	3.12E-03 (NNE)	2.21E-02 (NNE)	3.36E-02 (NNE)	1.46E-02 (NNE)	7.33E-02 (NNE)
	THYROID	THYROID	THYROID	THYROID	THYROID

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	0.19	0.16	0.09	0.14	10.0	0.29
BETA AIR (MRAD)	10.0	0.00	0.01	0.00	0.00	20.0	0.01
TOT. BODY (MREM)	2.5	0.28	0.24	0.14	0.21	5.0	0.44
SKIN (MREM)	7.5	0.10	0.09	0.05	0.07	15.0	0.16
ORGAN (MREM)	7.5	0.04	0.29	0.45	0.19	15.0	0.49
		THYROID	THYROID	THYROID	THYROID		THYROID

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 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
INFANT 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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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	0.00	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

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

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
INFANT 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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

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

* 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 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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	0.00	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

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

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

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

* 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 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
TEENAGER 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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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	0.00	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

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

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
TEENAGER 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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

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

* 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 2001
MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
ADULT 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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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	0.00	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

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

2001 ANNUAL REPORT
PROJECTED DOSE AT NEAREST COMMUNITY WATER SYSTEM *
PERIOD OF RELEASE - 01/01/01 TO 12/31/01 CALCULATED 04/16/02
ADULT 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	0.00E+00	0.00E+00
INTERNAL ORGAN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

THIS IS A REPORT FOR THE CALENDAR YEAR 2001

COMPLIANCE STATUS - 40 CFR 141

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

* 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

10 CFR 20 COMPLIANCE ASSESSMENT

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

CALCULATED 04/16/02

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

Total Effective Dose Eqivalent,	mrem/yr	3.97E-01
10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
	% of limit	0.40

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	9.41E-02	1.04E-01	1.02E-01	9.77E-02	0.40

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

10 CFR 20 COMPLIANCE ASSESSMENT

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

CALCULATED 04/16/02

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

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body (DDE)	Plume	2.20E-02		
	Skyshine	3.48E-01		
	Ground	9.39E-04		
	Total	3.71E-01	25.0	1.49
Organ Dose (CDE)	Thyroid	5.60E-02	75.0	0.07
	Gonads	2.49E-02	25.0	0.10
	Breast	2.49E-02	25.0	0.10
	Lung	2.49E-02	25.0	0.10
	Marrow	2.49E-02	25.0	0.10
	Bone	2.49E-02	25.0	0.10
	Remainder	2.50E-02	25.0	0.10
	CEDE	2.59E-02		
	TEDE	3.97E-01	100.0	0.40

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

10 CFR 20 COMPLIANCE ASSESSMENT

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

CALCULATED 04/16/02

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

Total Effective Dose Eqivalent,	mrem/yr	3.41E-01
10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
	% of limit	0.34

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	8.73E-02	8.29E-02	8.15E-02	8.94E-02	0.34

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

10 CFR 20 COMPLIANCE ASSESSMENT

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

CALCULATED 04/16/02

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

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body (DDE)	Plume	0.00E+00		
	Skyshine	3.41E-01		
	Ground	0.00E+00		
	Total	3.41E-01	25.0	1.36
Organ Dose (CDE)	Thyroid	0.00E+00	75.0	0.00
	Gonads	0.00E+00	25.0	0.00
	Breast	0.00E+00	25.0	0.00
	Lung	0.00E+00	25.0	0.00
	Marrow	0.00E+00	25.0	0.00
	Bone	0.00E+00	25.0	0.00
	Remainder	0.00E+00	25.0	0.00
	CEDE	0.00E+00		
	TEDE	3.41E-01	100.0	0.34

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

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2001)

METEOROLOGICAL DATA

MURRAY & TRETTEL, INC.

Tuesday, February 12, 2002

Mr. Mike Wolfe
Rad Protection
LaSalle Station
Exelon Nuclear
R. R. #1 – Box 220
2601 N. 21st Road
Marseillies, IL 61341

Dear Mr. Wolfe:

Enclosed are copies of the LaSalle Station meteorological site quarterly joint-frequency wind rose tables for 2001. They are being sent pursuant to the Specification for Meteorological Data and Meteorological Monitoring Services & Maintenance (MET1), 3.3.2,3.3.3, METSPECS/18/15 and METSPECS/18/41, Table 2a, format of wind rose table.

At this time, we would like to request the 2001 effluent data for your nuclear plant. The effluent data is required to process the 2001 annual report on the Meteorological Monitoring Program as per Specification No. MET1 3.3.4.

In order to expedite the annual report generation, please forward the 2001 effluent data from your plant to:

Tom Begley
Murray & Trettel, Inc
414 W. Frontage Road
Northfield, IL 60093

If you have any questions, please contract Tom Begley @ (847) 446-7800 x 142.

Thank you for your assistance.

Sincerely,

Tom Begley

Tom Begley
Environmental Meteorologist

/tb

Enclosures

414 WEST FRONTAGE ROAD • NORTHFIELD, IL • 60093
PHONE: (847) 446-7800 • FAX: (847) 446-8130
E-MAIL: MT@WEATHERCOMMAND.COM • INTERNET: HTTP://WWW.WEATHERCOMMAND.COM

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

January-March, 2001
375Ft-33Ft Delta-T (F)

Number of Observations = 2153
Values are Percent Occurrence

SPEED CLASS	WIND DIRECTION CLASSES																	STABILITY CLASSES							
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
C	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
A	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
L	SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
M	MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										0.00
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
1	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.19				0.19				
3	SS	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.19					0.19			
	MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.09						0.09		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										0.46
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
4	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	0.19	0.05	0.42	0.23	0.23	0.19	0.19	0.19	0.19	0.05	0.14	0.23	0.51	0.33	0.37	0.14	3.62				3.62				
7	SS	0.14	0.09	0.19	0.09	0.14	0.19	0.05	0.05	0.09	0.00	0.09	0.00	0.00	0.14	0.23	0.05	1.53					1.53			
	MS	0.05	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.00	0.00	0.00	0.00	0.05	0.05	0.42						0.42		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										5.57
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
8	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	0.51	1.02	0.74	0.84	0.46	0.74	0.56	0.28	0.23	0.37	0.84	1.11	0.98	0.93	1.44	0.70	11.75				11.75				
1	SS	0.05	0.14	0.51	0.33	0.09	0.19	0.14	0.23	0.14	0.42	0.65	0.23	0.23	0.60	0.33	0.46	4.74					4.74			
2	MS	0.09	0.09	0.14	0.00	0.00	0.09	0.00	0.00	0.00	0.09	0.23	0.09	0.09	0.00	0.00	0.09	1.02						1.02		
	ES	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.05	0.05	0.37							0.37	
																										17.88
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05		0.00						
3	SU	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05			0.05					
-	N	2.42	0.74	0.70	0.42	0.28	0.70	0.23	0.19	0.51	0.74	0.88	1.02	1.35	2.14	2.09	1.81	16.21				16.21				
1	SS	0.42	0.23	0.37	0.74	0.19	0.33	0.23	0.42	0.33	0.33	0.51	0.33	0.84	1.21	1.44	0.60	8.50					8.50			
8	MS	0.28	0.05	0.09	0.00	0.00	0.09	0.09	0.05	0.14	0.23	0.37	0.19	0.19	0.42	0.14	0.14	2.46						2.46		
	ES	0.14	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.05	0.19	0.00	0.14	0.14	0.23	0.09	1.16							1.16	
																										28.38

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

January-March, 2001
375Ft-33Ft Delta-T (F)

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
9 SU	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.14			0.14					
- N	0.93	0.19	0.14	0.33	0.19	0.42	0.28	0.14	0.33	0.56	0.33	0.88	1.63	1.81	3.58	1.44	13.14				13.14				
2 SS	0.19	0.00	0.05	0.14	0.00	0.33	0.23	0.19	0.74	0.56	0.42	0.42	1.25	0.93	1.30	0.42	7.15					7.15			
4 MS	0.09	0.00	0.05	0.00	0.05	0.05	0.37	0.05	0.23	0.19	0.23	0.42	0.56	0.56	0.28	0.33	3.44						3.44		
ES	0.19	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.00	0.14	0.09	0.09	0.05	0.09	0.19	0.37	1.35							1.35	
																									25.22
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
> N	0.05	0.28	1.07	0.19	0.14	0.00	0.28	0.00	0.28	0.51	0.33	0.46	1.58	1.30	2.74	0.28	9.48				9.48				
2 SS	0.05	0.00	0.00	0.05	0.14	0.84	0.51	0.09	0.42	1.21	0.84	0.23	1.02	1.63	0.51	0.09	7.62					7.62			
4 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.51	0.51	0.65	0.37	0.33	0.37	0.00	0.00	2.83						2.83		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.23	0.70	1.16	0.09	0.05	0.00	0.00	2.55							2.55	
																									22.48
TOT	5.90	3.07	4.64	3.39	2.00	4.13	3.30	2.04	4.60	6.27	7.57	7.25	10.92	12.68	15.05	7.20	100.00	0.00	0.00	0.19	54.39	29.73	10.26	5.43	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Extremely Unstable
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Moderately Unstable
0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.19	Slightly Unstable
4.09	2.28	3.11	2.04	1.30	2.04	1.53	0.79	1.53	2.23	2.51	3.72	6.08	6.55	10.22	4.37	54.39	Neutral
0.88	0.51	1.16	1.35	0.56	1.86	1.16	0.98	1.72	2.51	2.51	1.21	3.34	4.51	3.81	1.67	29.73	Slightly Stable
0.51	0.19	0.37	0.00	0.05	0.23	0.46	0.19	0.93	1.11	1.49	1.07	1.21	1.35	0.46	0.65	10.26	Moderately Stable
0.42	0.09	0.00	0.00	0.00	0.00	0.14	0.09	0.42	0.42	1.07	1.25	0.28	0.28	0.46	0.51	5.43	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
0.05	0.05	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.00	0.09	0.46	1.0- 3.5 mph
0.37	0.19	0.70	0.33	0.37	0.37	0.23	0.23	0.33	0.14	0.23	0.23	0.51	0.46	0.65	0.23	5.57	3.6- 7.5 mph
0.74	1.35	1.39	1.16	0.56	1.02	0.70	0.51	0.37	0.88	1.81	1.44	1.30	1.53	1.81	1.30	17.88	7.6-12.5 mph
3.25	1.02	1.16	1.16	0.51	1.11	0.65	0.65	1.07	1.35	1.95	1.53	2.51	3.90	3.90	2.65	28.38	12.6-18.5 mph
1.39	0.19	0.23	0.46	0.28	0.79	0.93	0.46	1.30	1.44	1.07	1.81	3.48	3.39	5.43	2.55	25.22	18.6-24.5 mph
0.09	0.28	1.07	0.23	0.28	0.84	0.79	0.19	1.53	2.46	2.51	2.23	3.02	3.34	3.25	0.37	22.48	>24.5 mph

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

April-June, 2001
375Ft-33Ft Delta-T (F)

Number of Observations = 2184
Values are Percent Occurrence

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
C	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
A	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
L	SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
M	MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										0.00
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
1	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	0.05	0.05	0.00	0.18	0.05	0.00	0.05	0.05	0.09	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.60				0.60				
3	SS	0.05	0.00	0.09	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.09	0.00	0.41					0.41			
	MS	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14						0.14		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05							0.05	
																										1.19
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
4	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	1.01	1.05	0.64	0.09	0.00	0.05	0.46	0.23	0.46	0.60	0.27	0.23	0.18	0.41	0.32	0.46	6.46				6.46				
7	SS	0.14	0.00	0.05	0.05	0.09	0.00	0.00	0.05	0.05	0.14	0.18	0.37	0.09	0.18	0.23	0.05	1.65					1.65			
	MS	0.00	0.00	0.00	0.09	0.00	0.14	0.09	0.05	0.00	0.05	0.05	0.09	0.05	0.05	0.00	0.00	0.64						0.64		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										8.75
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
8	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	1.01	1.19	0.64	0.50	0.27	0.46	0.37	0.41	0.92	0.50	0.55	0.60	0.50	1.01	0.27	0.82	10.03				10.03				
1	SS	0.32	0.50	0.27	0.14	0.09	0.14	0.18	0.37	0.37	0.14	0.18	0.23	0.23	0.32	0.50	0.27	4.26					4.26			
2	MS	0.18	0.05	0.00	0.00	0.00	0.09	0.18	0.37	0.27	0.69	0.32	0.05	0.18	0.09	0.09	0.18	2.75						2.75		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.09	0.09	0.09	0.05	0.46							0.46	
																										17.49
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
3	SU	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.09	0.00	0.09	0.00	0.00	0.27			0.27					
-	N	0.27	0.37	1.37	2.47	0.60	0.46	0.60	0.73	0.73	0.64	0.64	0.60	0.69	1.37	0.50	0.18	12.23				12.23				
1	SS	0.41	0.23	0.18	0.64	0.73	0.27	0.18	0.18	0.27	0.32	0.46	0.37	0.37	0.60	0.46	0.37	6.04					6.04			
8	MS	0.05	0.09	0.00	0.00	0.05	0.14	0.37	0.46	0.82	0.78	0.37	0.23	0.14	0.14	0.23	0.00	3.85						3.85		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.23	0.00	0.00	0.14	0.05	0.00	0.18	0.78							0.78	
																										23.17

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

April-June, 2001
375Ft-33Ft Delta-T (F)

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05		0.05						
9 SU	0.00	0.00	0.18	0.00	0.14	0.00	0.00	0.00	0.14	0.23	0.41	0.00	0.05	0.05	0.00	0.00	1.19			1.19					
N	0.09	0.41	1.65	2.11	1.05	0.60	0.14	0.78	0.87	1.14	1.37	0.82	0.60	1.33	0.41	0.18	13.55				13.55				
2 SS	0.09	0.09	0.41	0.41	0.41	0.60	0.27	0.32	0.46	0.55	0.64	0.18	0.32	0.64	0.46	0.09	5.95					5.95			
4 MS	0.00	0.00	0.00	0.00	0.05	0.00	0.23	0.23	0.27	0.46	0.55	0.50	0.09	0.27	0.05	0.00	2.70						2.70		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.05	0.09	0.23	0.23	0.00	0.09	0.00	0.87							0.87	
																									24.31
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.09	0.00	0.00	0.00	0.00	0.23		0.23						
SU	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.96	0.05	0.00	0.00	0.00	0.00	1.19			1.19					
> N	0.23	0.00	0.00	0.09	0.41	0.18	0.05	0.05	0.69	1.79	1.92	0.96	0.73	0.92	0.50	0.32	8.84				8.84				
2 SS	0.00	0.05	0.05	0.18	0.37	0.14	0.41	0.50	1.33	3.39	1.28	0.73	0.87	0.69	0.37	0.00	10.35					10.35			
4 MS	0.00	0.00	0.00	0.00	0.09	0.23	0.27	0.05	0.32	1.01	0.64	0.37	0.14	0.00	0.00	0.00	3.11						3.11		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.27	0.41	0.14	0.18	0.23	0.00	0.00	0.00	1.37							1.37	
																									25.09
TOT	4.03	4.08	5.63	6.96	4.44	3.48	3.85	5.04	8.79	13.28	11.17	7.10	5.91	8.29	4.76	3.21	100.00	0.00	0.27	2.66	51.69	28.66	13.19	3.53	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Extremely Unstable
0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.09	0.00	0.00	0.00	0.00	0.27	Moderately Unstable
0.09	0.00	0.23	0.00	0.14	0.00	0.00	0.00	0.14	0.37	1.37	0.14	0.05	0.14	0.00	0.00	2.66	Slightly Unstable
2.66	3.07	4.30	5.45	2.38	1.74	1.65	2.24	3.75	4.72	4.76	3.21	2.70	5.04	2.06	1.97	51.69	Neutral
1.01	0.87	1.05	1.42	1.74	1.14	1.05	1.42	2.47	4.53	2.75	2.01	1.88	2.43	2.11	0.78	28.66	Slightly Stable
0.27	0.14	0.00	0.09	0.18	0.60	1.14	1.14	1.74	2.98	1.92	1.24	0.60	0.55	0.41	0.18	13.19	Moderately Stable
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.69	0.69	0.23	0.41	0.69	0.14	0.18	0.27	3.53	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
0.14	0.05	0.09	0.18	0.09	0.00	0.05	0.05	0.14	0.05	0.00	0.14	0.00	0.00	0.18	0.05	1.19	1.0- 3.5 mph
1.14	1.05	0.69	0.23	0.09	0.18	0.55	0.32	0.50	0.78	0.50	0.69	0.32	0.64	0.55	0.50	8.75	3.6- 7.5 mph
1.51	1.74	0.92	0.64	0.37	0.69	0.73	1.14	1.69	1.33	1.05	0.87	1.01	1.51	0.96	1.33	17.49	7.6-12.5 mph
0.73	0.69	1.60	3.11	1.37	0.87	1.14	1.47	1.92	2.01	1.47	1.28	1.33	2.24	1.19	0.73	23.17	12.6-18.5 mph
0.18	0.50	2.29	2.52	1.65	1.19	0.64	1.33	1.92	2.43	3.07	1.74	1.28	2.29	1.01	0.27	24.31	18.6-24.5 mph
0.32	0.05	0.05	0.27	0.87	0.55	0.73	0.73	2.61	6.68	5.08	2.38	1.97	1.60	0.87	0.32	25.09	>24.5 mph

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

July-September, 2001
375Ft-33Ft Delta-T (F)

Number of Observations = 2208
Values are Percent Occurrence

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
C	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
A	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
L	SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
M	MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										0.00
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
1	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	0.09	0.09	0.00	0.05	0.00	0.09	0.09	0.09	0.00	0.09	0.14	0.09	0.09	0.00	0.05	0.00	0.95				0.95				
3	SS	0.05	0.05	0.00	0.05	0.00	0.09	0.00	0.05	0.14	0.09	0.09	0.09	0.09	0.09	0.00	0.05	0.91					0.91			
	MS	0.00	0.05	0.05	0.05	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.32						0.32		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																										2.17
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
4	SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
-	N	0.32	0.63	0.91	0.27	0.36	0.27	0.41	0.63	0.91	1.27	0.72	1.13	0.45	0.36	0.32	0.54	9.51				9.51				
7	SS	0.27	0.14	0.09	0.36	0.09	0.14	0.18	0.05	0.36	0.32	0.36	0.27	0.18	0.23	0.14	0.00	3.17					3.17			
	MS	0.14	0.14	0.09	0.09	0.05	0.05	0.14	0.23	0.14	0.09	0.14	0.14	0.09	0.05	0.23	0.18	1.95						1.95		
	ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.09	0.05	0.00	0.05	0.00	0.00	0.05	0.00	0.41							0.41	
																										15.04
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
8	SU	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.18	0.14	0.00	0.00	0.00	0.45			0.45					
-	N	0.91	2.31	0.86	0.95	0.59	0.86	0.54	0.54	1.13	1.00	0.72	1.13	1.63	0.45	0.63	0.86	15.13				15.13				
1	SS	0.41	0.36	0.45	0.36	0.68	0.05	0.23	0.14	0.18	0.09	0.27	0.54	0.45	0.23	0.68	0.32	5.43					5.43			
2	MS	0.18	0.09	0.05	0.00	0.18	0.23	0.63	0.32	0.36	0.14	0.41	0.45	0.54	0.41	0.50	0.14	4.62						4.62		
	ES	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.05	0.14	0.05	0.18	0.05	0.09	0.09	0.77							0.77	
																										26.40
	EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1	MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.05		0.05						
3	SU	0.00	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.09	0.09	0.05	0.14	0.00	0.00	0.63			0.63					
-	N	0.41	0.63	1.18	1.77	0.77	0.59	0.09	0.18	0.59	0.45	0.77	1.00	0.41	0.72	0.95	0.45	10.96				10.96				
1	SS	0.23	0.63	0.72	1.40	1.22	0.68	0.36	0.32	0.68	0.50	0.63	0.63	0.41	0.50	0.50	0.36	9.78					9.78			
8	MS	0.23	0.23	0.32	0.14	0.63	0.72	0.27	0.41	0.27	0.41	0.72	0.36	0.82	0.50	0.59	0.18	6.79						6.79		
	ES	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.41	0.27	0.36	0.23	0.50	0.27	0.05	0.18	0.05	2.40							2.40	
																										30.62

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

July-September, 2001
375Ft-33Ft Delta-T (F)

SPEED CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	STABILITY CLASSES EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
9 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05			0.05					
N	0.95	0.05	1.22	0.77	0.18	0.05	0.00	0.27	0.09	0.59	0.45	0.63	0.32	0.77	0.63	0.50	7.47				7.47				
2 SS	0.50	0.05	0.54	0.45	0.45	0.32	0.18	0.27	0.41	0.41	0.59	0.50	0.23	0.41	0.27	0.14	5.71					5.71			
4 MS	0.09	0.00	0.00	0.00	0.14	0.50	0.14	0.18	0.45	0.68	0.54	0.27	0.41	0.45	0.23	0.23	4.30						4.30		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.41	0.09	0.05	0.09	0.05	0.05	0.00	0.00	1.09							1.09	
																									18.61
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.09			0.09					
> N	0.36	0.00	0.05	0.09	0.00	0.00	0.09	0.09	0.18	0.18	0.09	0.09	0.09	0.09	0.14	0.00	1.54				1.54				
2 SS	0.27	0.00	0.09	0.00	0.18	0.00	0.14	0.36	0.72	0.50	0.23	0.05	0.00	0.00	0.00	0.00	2.54					2.54			
4 MS	0.00	0.00	0.00	0.00	0.09	0.09	0.09	0.09	0.18	0.36	0.05	0.05	0.41	0.09	0.09	0.00	1.59						1.59		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.32	0.77	0.09	0.00	0.00	0.00	0.05	0.00	1.40							1.40	
																									7.16
TOT	5.39	5.66	6.70	6.79	5.62	4.76	3.62	5.43	7.93	8.79	7.52	8.38	7.38	5.62	6.34	4.08	100.00	0.00	0.05	1.22	45.56	27.54	19.57	6.07	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Extremely Unstable
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.05	Moderately Unstable
0.00	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.09	0.27	0.18	0.14	0.00	0.00	1.22	Slightly Unstable
3.03	3.71	4.21	3.89	1.90	1.86	1.22	1.81	2.90	3.58	2.90	4.08	2.99	2.40	2.72	2.36	45.56	Neutral
1.72	1.22	1.90	2.63	2.63	1.27	1.09	1.18	2.49	1.90	2.17	2.08	1.36	1.45	1.59	0.86	27.54	Slightly Stable
0.63	0.50	0.50	0.27	1.09	1.63	1.27	1.22	1.45	1.68	1.86	1.27	2.31	1.49	1.68	0.72	19.57	Moderately Stable
0.00	0.09	0.00	0.00	0.00	0.00	0.05	1.22	1.09	1.31	0.50	0.68	0.50	0.14	0.36	0.14	6.07	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
0.14	0.18	0.05	0.14	0.00	0.23	0.09	0.14	0.18	0.18	0.23	0.18	0.23	0.09	0.09	0.05	2.17	1.0- 3.5 mph
0.72	0.91	1.09	0.72	0.50	0.45	0.72	1.09	1.49	1.72	1.22	1.59	0.72	0.63	0.72	0.72	15.04	3.6- 7.5 mph
1.49	2.90	1.36	1.31	1.45	1.13	1.40	1.09	1.68	1.31	1.54	2.36	2.94	1.13	1.90	1.40	26.40	7.6-12.5 mph
0.86	1.59	2.31	3.31	2.63	1.99	0.77	1.31	1.81	1.86	2.45	2.58	1.99	1.90	2.22	1.04	30.62	12.6-18.5 mph
1.54	0.09	1.77	1.22	0.77	0.86	0.32	1.09	1.36	1.81	1.63	1.49	1.00	1.68	1.13	0.86	18.61	18.6-24.5 mph
0.63	0.00	0.14	0.09	0.27	0.09	0.32	0.72	1.40	1.90	0.45	0.18	0.50	0.18	0.27	0.00	7.16	>24.5 mph

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

October-December, 2001
375Ft-33Ft Delta-T (F)

Number of Observations = 2207
Values are Percent Occurrence

SPEED CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	STABILITY CLASSES							
																		EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
C SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
A N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
L SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
M MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																									0.00
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
1 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
- N	0.00	0.05	0.00	0.09	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.27				0.27				
3 SS	0.05	0.00	0.05	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.23					0.23			
MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05						0.05		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																									0.54
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
4 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
- N	0.27	0.32	0.23	0.50	0.09	0.23	0.18	0.05	0.18	0.09	0.05	0.14	0.27	0.18	0.23	0.05	3.04				3.04				
7 SS	0.05	0.05	0.05	0.09	0.09	0.05	0.23	0.05	0.05	0.00	0.05	0.05	0.05	0.09	0.00	0.09	1.00					1.00			
MS	0.00	0.00	0.09	0.09	0.05	0.05	0.09	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.50						0.50		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.14							0.14	
																									4.67
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
8 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
- N	1.00	0.50	0.36	0.32	0.23	0.00	0.05	0.45	0.36	0.41	0.68	0.82	0.77	0.50	0.41	0.41	7.25				7.25				
1 SS	0.18	0.23	0.18	0.14	0.18	0.14	0.05	0.23	0.45	0.09	0.27	0.23	0.18	0.18	0.18	0.36	3.26					3.26			
2 MS	0.09	0.05	0.00	0.00	0.05	0.00	0.09	0.32	0.23	0.05	0.05	0.09	0.09	0.09	0.14	0.00	1.31						1.31		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.23	0.27	0.09	0.05	0.14	0.18	0.14	0.00	1.13							1.13	
																									12.96
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
3 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
- N	1.00	0.68	0.23	0.41	0.27	0.32	0.23	0.63	0.59	0.68	0.82	1.22	1.54	1.09	0.63	0.77	11.10				11.10				
1 SS	0.45	0.18	0.32	0.18	0.45	0.32	0.14	0.14	0.68	0.45	0.54	0.23	0.32	0.68	0.54	0.41	6.03					6.03			
8 MS	0.09	0.14	0.09	0.00	0.18	0.05	0.09	0.00	0.27	0.41	0.32	0.36	0.18	0.27	0.36	0.23	3.04						3.04		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.23	0.36	0.27	0.32	0.18	0.18	0.36	0.14	0.05	2.17							2.17	
																									22.34

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

October-December, 2001
375Ft-33Ft Delta-T (F)

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
9 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05			0.05					
- N	0.14	0.00	0.68	0.36	0.00	0.23	0.14	0.23	0.68	0.54	1.54	1.22	2.27	2.40	1.50	0.18	12.10				12.10				
2 SS	0.18	0.00	0.27	0.27	0.27	0.23	0.50	0.14	0.45	0.63	0.50	0.54	0.77	1.72	0.63	0.36	7.48					7.48			
4 MS	0.00	0.00	0.00	0.00	0.09	0.09	0.14	0.14	0.32	0.32	0.54	0.50	0.50	0.63	0.36	0.14	3.76						3.76		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.36	0.32	0.27	0.09	0.27	0.05	0.00	1.63							1.63	
																									25.01
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.09	0.00	0.00	0.00	0.00	0.18			0.18					
> N	0.05	0.00	0.23	0.05	0.00	0.05	0.32	0.27	1.13	2.49	0.91	0.77	1.68	0.91	1.72	0.41	10.97				10.97				
2 SS	0.00	0.00	0.00	0.00	0.05	0.27	0.36	0.59	2.17	3.76	2.08	0.41	1.40	1.68	0.50	0.05	13.32					13.32			
4 MS	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.45	0.14	1.09	1.54	1.63	0.41	0.18	0.05	0.00	5.62						5.62		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.45	0.54	1.68	1.09	0.23	0.00	0.14	0.00	4.40							4.40	
																									34.48
TOT	3.53	2.17	2.76	2.54	1.99	2.08	2.76	4.30	9.15	12.55	12.32	9.97	11.06	11.46	7.70	3.62	100.00	0.00	0.00	0.23	44.72	31.31	14.27	9.47	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Extremely Unstable
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Moderately Unstable
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.09	0.00	0.00	0.00	0.00	0.23	Slightly Unstable
2.45	1.54	1.72	1.72	0.59	0.82	0.95	1.68	2.95	4.21	3.99	4.17	6.52	5.07	4.49	1.86	44.72	Neutral
0.91	0.45	0.86	0.72	1.04	1.00	1.27	1.18	3.81	4.94	3.44	1.50	2.72	4.35	1.86	1.27	31.31	Slightly Stable
0.18	0.18	0.18	0.09	0.36	0.27	0.45	0.91	1.00	1.86	2.45	2.58	1.18	1.22	0.91	0.45	14.27	Moderately Stable
0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.54	1.36	1.50	2.40	1.63	0.63	0.82	0.45	0.05	9.47	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
0.05	0.05	0.05	0.14	0.00	0.00	0.05	0.09	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.05	0.54	1.0- 3.5 mph
0.32	0.36	0.36	0.68	0.23	0.32	0.50	0.09	0.32	0.14	0.09	0.23	0.32	0.27	0.23	0.23	4.67	3.6- 7.5 mph
1.27	0.77	0.54	0.45	0.45	0.14	0.18	1.04	1.27	0.82	1.09	1.18	1.18	0.95	0.86	0.77	12.96	7.6-12.5 mph
1.54	1.00	0.63	0.59	0.91	0.68	0.54	1.00	1.90	1.81	1.99	1.99	2.22	2.40	1.68	1.45	22.34	12.6-18.5 mph
0.32	0.00	0.95	0.63	0.36	0.54	0.77	0.50	1.72	1.90	2.90	2.54	3.62	5.03	2.54	0.68	25.01	18.6-24.5 mph
0.05	0.00	0.23	0.05	0.05	0.41	0.72	1.59	3.94	7.88	6.25	3.99	3.72	2.76	2.40	0.45	34.48	>24.5 mph

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

January-December, 2001
375Ft-33Ft Delta-T (F)

Number of Observations = 8752
Values are Percent Occurrence

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
C SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
A N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
L SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
M MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	
																									0.00
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
1 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
- N	0.03	0.05	0.01	0.09	0.01	0.02	0.05	0.05	0.02	0.03	0.03	0.02	0.03	0.01	0.02	0.01	0.50				0.50				
3 SS	0.05	0.02	0.05	0.02	0.01	0.02	0.00	0.02	0.03	0.02	0.02	0.07	0.02	0.02	0.02	0.02	0.43					0.43			
MS	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.01	0.02	0.01	0.15						0.15		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01							0.01	
																									1.10
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
4 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00					
- N	0.45	0.51	0.55	0.27	0.17	0.18	0.31	0.27	0.43	0.50	0.30	0.43	0.35	0.32	0.31	0.30	5.67				5.67				
7 SS	0.15	0.07	0.09	0.15	0.10	0.09	0.11	0.05	0.14	0.11	0.17	0.17	0.08	0.16	0.15	0.05	1.84					1.84			
MS	0.05	0.05	0.07	0.07	0.02	0.06	0.08	0.07	0.06	0.06	0.05	0.06	0.03	0.02	0.07	0.08	0.88						0.88		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.03	0.02	0.00	0.02	0.00	0.00	0.01	0.00	0.14							0.14	
																									8.52
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
8 SU	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.05	0.03	0.00	0.00	0.00	0.11			0.11					
- N	0.86	1.26	0.65	0.65	0.39	0.51	0.38	0.42	0.66	0.57	0.70	0.91	0.97	0.72	0.69	0.70	11.04				11.04				
1 SS	0.24	0.31	0.35	0.24	0.26	0.13	0.15	0.24	0.29	0.18	0.34	0.31	0.27	0.33	0.42	0.35	4.42					4.42			
2 MS	0.14	0.07	0.05	0.00	0.06	0.10	0.23	0.25	0.22	0.24	0.25	0.17	0.23	0.15	0.18	0.10	2.43						2.43		
ES	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.08	0.08	0.02	0.10	0.08	0.09	0.05	0.69							0.69	
																									18.69
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01		0.01						
3 SU	0.00	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.02	0.05	0.01	0.06	0.00	0.00	0.24			0.24					
- N	1.02	0.61	0.87	1.27	0.48	0.51	0.29	0.43	0.61	0.63	0.78	0.96	0.99	1.33	1.04	0.80	12.60				12.60				
1 SS	0.38	0.32	0.40	0.74	0.65	0.40	0.23	0.26	0.49	0.40	0.54	0.39	0.48	0.74	0.73	0.43	7.59					7.59			
8 MS	0.16	0.13	0.13	0.03	0.22	0.25	0.21	0.23	0.38	0.46	0.45	0.29	0.33	0.33	0.33	0.14	4.04						4.04		
ES	0.03	0.01	0.00	0.00	0.00	0.00	0.06	0.18	0.21	0.23	0.18	0.17	0.18	0.15	0.14	0.09	1.63							1.63	
																									26.12

LaSalle County Nuclear Station
375 ft. Wind Speed and Direction

January-December, 2001
375Ft-33Ft Delta-T (F)

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
1 MU	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		0.01						
9 SU	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.03	0.08	0.10	0.00	0.01	0.01	0.02	0.00	0.35			0.35					
- N	0.53	0.16	0.93	0.89	0.35	0.32	0.14	0.35	0.49	0.71	0.93	0.89	1.20	1.58	1.52	0.57	11.55				11.55				
2 SS	0.24	0.03	0.32	0.32	0.29	0.37	0.30	0.23	0.51	0.54	0.54	0.41	0.64	0.93	0.66	0.25	6.57					6.57			
4 MS	0.05	0.00	0.01	0.00	0.08	0.16	0.22	0.15	0.32	0.41	0.47	0.42	0.39	0.48	0.23	0.17	3.55						3.55		
ES	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.22	0.16	0.14	0.17	0.10	0.10	0.08	0.09	1.23							1.23	
																									23.27
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.06		0.06						
SU	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.25	0.03	0.00	0.00	0.00	0.00	0.37			0.37					
> N	0.17	0.07	0.33	0.10	0.14	0.06	0.18	0.10	0.57	1.25	0.81	0.57	1.02	0.80	1.27	0.25	7.69				7.69				
2 SS	0.08	0.01	0.03	0.06	0.18	0.31	0.35	0.39	1.17	2.22	1.11	0.35	0.82	0.99	0.34	0.03	8.46					8.46			
4 MS	0.00	0.00	0.00	0.00	0.05	0.10	0.10	0.17	0.29	0.74	0.72	0.61	0.32	0.16	0.03	0.00	3.29						3.29		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.34	0.49	0.65	0.61	0.14	0.01	0.05	0.00	2.43							2.43	
																									22.29
TOT	4.71	3.75	4.94	4.92	3.52	3.61	3.38	4.22	7.63	10.24	9.65	8.18	8.81	9.49	8.43	4.51	100.00	0.00	0.08	1.07	49.05	29.31	14.35	6.14	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Extremely Unstable
0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.00	0.00	0.00	0.08	Moderately Unstable
0.02	0.03	0.08	0.00	0.06	0.00	0.00	0.00	0.05	0.18	0.38	0.13	0.06	0.07	0.02	0.00	1.07	Slightly Unstable
3.05	2.65	3.34	3.28	1.54	1.61	1.34	1.63	2.79	3.69	3.54	3.79	4.57	4.75	4.84	2.63	49.05	Neutral
1.13	0.77	1.25	1.53	1.50	1.31	1.14	1.19	2.63	3.47	2.72	1.70	2.32	3.18	2.33	1.14	29.31	Slightly Stable
0.40	0.25	0.26	0.11	0.42	0.69	0.83	0.87	1.28	1.91	1.93	1.54	1.33	1.15	0.87	0.50	14.35	Moderately Stable
0.10	0.05	0.00	0.00	0.00	0.00	0.07	0.53	0.89	0.98	1.05	0.99	0.53	0.34	0.37	0.24	6.14	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
0.09	0.08	0.07	0.13	0.02	0.06	0.05	0.07	0.08	0.06	0.06	0.09	0.08	0.05	0.07	0.06	1.10	1.0- 3.5 mph
0.64	0.63	0.71	0.49	0.30	0.33	0.50	0.43	0.66	0.70	0.51	0.69	0.47	0.50	0.54	0.42	8.52	3.6- 7.5 mph
1.26	1.69	1.05	0.89	0.71	0.74	0.75	0.95	1.26	1.09	1.37	1.46	1.61	1.28	1.38	1.20	18.69	7.6-12.5 mph
1.59	1.07	1.43	2.05	1.36	1.17	0.78	1.11	1.68	1.76	1.97	1.85	2.01	2.61	2.24	1.46	26.12	12.6-18.5 mph
0.86	0.19	1.31	1.21	0.77	0.85	0.66	0.85	1.58	1.90	2.17	1.90	2.34	3.10	2.51	1.09	23.27	18.6-24.5 mph
0.27	0.08	0.37	0.16	0.37	0.47	0.64	0.81	2.38	4.74	3.58	2.19	2.30	1.97	1.69	0.29	22.29	>24.5 mph

APPENDIX A
OFFSITE DOSE CALCULATION MANUAL

Synopsis of ODCM Changes

The proposed ODCM changes are being made as a result of the implementation of Improved Technical Specifications. Please find below a synopsis of those changes.

NOTE

For an explanation of the specific changes to the ODCM, see attached document.

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1. Many reference changes to reflect new ITS section numbers.
2. The definition of various terms is being changed to reflect ITS definitions.
3. The surveillance frequency of various instrumentation is being changed from 18 months to 24 months to reflect 24 month fuel.
4. The reporting date of the Annual Radiological Environmental Operating Report changes from May 1 to May 15.
5. Many clarifications to existing requirements.
6. Many editorial changes.
7. The most significant change to the ODCM involves a change in Chemistry sampling requirements after a change in power levels. Previously, sampling was required after a 15% power change. The proposed change requires sampling after a 20% change in power.

Changes to the ODCM to Support ITS Implementation

Section: Chapter 12
Description: Many administrative changes / editorial / reference changes.
Reason: Clarification / Reflect new ITS references.

Section: 12.0
Description: Add note stating the following, "The requirements of TSR 3.0.b apply to Chapter 12."
Reason: To be consistent with surveillance requirements of the TRM as the ODCM is now an appendix to the TRM.

Section: Table 12.0-1, 12.0-2
Description: Reference changes.
Reason: Reflect new ITS reference numbers / descriptions.

Section: 12.1.2
Description: Definition of "Channel Calibration" is changing. The "Channel Calibration" is now required to encompass the required sensor and display. Also, the following sentence is being added: Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an in-place qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel.
Reason: The definition is changing to include the definition from TSTF 205 to apply to the ODCM as well as the Improved Technical Specifications. See ITS page 1.1-1.

Section: 12.1.3
Description: Definition of "Channel Check" is changing. It is now defined to be the following: A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation ~~by operation~~. This determination shall include, where possible, comparison of the channel indication and ~~/ or~~ status ~~with~~ to other indications ~~and /~~ or status derived from independent instrument channels measuring the same parameter.
Reason: Clarification. See ITS page 1.1-1.

Section: 12.1.4
Description: Definition of "Channel Functional Test" is changing. It is now defined to be the following: A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated signal into the channel as close to the sensor as practical to verify OPERABILITY including required alarm ~~and /~~ or , interlock, display, and trip functions, and channel failure trips. The following is being deleted. ~~Biddable Channels - the injection of a simulated signal into the sensor to verify OPERABILITY including alarm and / or trip functions.~~

Reason: To be consistent with ITS definition of Channel Functional Test (See ITS page 1.1-2).

Section: 12.1.5
Description: Add reference to definition of Dose Equivalent I-131.
Reason: Clarification.

Section: 12.1.6
Description: The definition of "Frequency" is changing. It is now defined to be the following: -Table 12.1-1 provides the definitions of various frequencies for which surveillances, sampling, etc. are performed unless defined otherwise. ~~The 25% variance shall not be applied to Operability Action statements. The bases to Technical Specification 4.0.2 provide clarifications to this requirement.~~ The provisions of Technical Specification SR 3.0.2 and SR 3.0.3 are applicable to the frequencies except that they do not apply to the frequencies associated with the Radiological Environmental Monitoring Program (Section 12.5).
Reason: To be consistent with ITS definition of Frequency.

Section: 12.1.9
Description: Add definition of "Mode." It is defined to the following: A MODE shall correspond to any one of the inclusive combination of mode switch position, average temperature, and reactor pressure vessel head closure bolt tensioning specified in Table 12.1-2 with fuel in the reactor vessel.
Reason: To be consistent with Table 1.1-1 of ITS.

Section: 12.1.11
Description: The definition of "Operable" is changing. It is now defined to be the following: A system, subsystem, ~~train,~~ division, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and ~~or~~ seal water, lubrication, ~~or~~ and other auxiliary equipment that are required for the system, subsystem, ~~train,~~ division, component or device to perform its function(s) are also capable of performing their related support function(s).
Reason: To be consistent with ITS definition of Operable. (See ITS page 1.1-5).

Section: Table 12.1-1
Description: Revise frequency notation to define a refueling cycle to be 24 months.
Reason: The refueling cycle will be 24 months with the implementation of ITS.

Section: Table 12.1-1
Description: Add notation "Sesquiannually" to mean at lease once per 18 months.
Reason: New notation needed with the use of 24-month fuel.

Section: Table 12.1-1

Description: Delete note which states the following: ~~Each frequency requirement shall be performed within the specified time interval with the maximum allowable extension not to exceed 25% of the frequency interval. The 25% variance shall not be applied to Operability Action statements. The bases to TS 4.0.2 provide clarifications to this requirement. These frequency notations do not apply to the REMP (Section 12.5).~~
Reason: This information is redundant with that in ITS S.R. 3.0.2.

Section: Table 12.1-2
Description: Add Table 12.1-2 entitled "MODES." The table is shown below:

MODE	TITLE	REACTOR MODE SWITCH POSITION	AVERAGE RX COOLANT TEMP (Degrees F)
1	Power Operation	Run	N/A
2	Startup	Refuel [(a)] or Startup / Hot Standby	N/A
3	Hot Shutdown [(a)]	Shutdown	>200
4	Cold Shutdown [(a)]	Shutdown	< or = 200
5	Refueling [(b)]	Shutdown or Refuel	N/A

(a) All reactor vessel head closure bolts fully tensioned.
(b) One or more reactor vessel head closure bolts less than fully tensioned.

Reason: Conform to Table 1.1-1 in ITS.

Section: Table 12.2.1-2
Description: Change the frequency of radioactive liquid effluent monitoring instrumentation surveillance's from once every 18 months to 24 months.
Reason: The refueling cycle has been extended from 18 months to 24 months.

Section: Table 12.2.2-1
Description: Under Action 113, the word "STARTUP" is replaced with the words "MODE 2."
Reason: MODE 2 is synonymous with the word STARTUP as described in ITS Table 1.1-1.

Section: Table 12.2.2-2
Description: Change the frequency of radioactive gaseous effluent monitoring instrumentation surveillance's from once every 18 months to 24 months.
Reason: The refueling cycle has been extended from 18 months to 24 months.

Section: Table 12.2.1-2
Description: Change the frequency of radioactive liquid effluent monitoring instrumentation surveillance's from once every 18 months to 24 months.

Reason: The refueling cycle has been extended from 18 months to 24 months.
, no sample is required before venting.

Section: Table 12.4.1-1.b, 12.4.1-1.d
Description: The following sentence is being deleted.....
"Analyses shall also be performed following shutdown, startup, or a THERMAL POWER change exceeding 15% of the RTP within a 1 hour period. If there are several power transients that exceed 15%, the off gas sample may be delayed until after the last transient provided it is within 24 hours of the first transient (See Technical Specification clarification 01/87 (p. 17) signed by the Station Manager 3/23/87.)"

It is being replaced by the following statement.....
"Sampling and analyses shall also be performed following shutdown, startup, or a thermal power change exceeding 20% of rated thermal power in 1 hour unless (1) analysis shows that the dose equivalent I-131 concentration in the primary coolant has not increased more than a factor of 5, and (2) the noble gas activity monitor shows that effluent activity has not increased by more than a factor of 3."

Description: The following sentence is being deleted.....
"Sampling shall also be performed at least once per 24 hours for at least 7 days following each shutdown, startup or THERMAL POWER change exceeding 15% of RATED THERMAL POWER within a 1-hour period and analyses completed within 48 hours of changing. When samples collected for 24 hours are analyzed, the corresponding LLD's may be increased by a factor of 10. This requirement does not apply if (1) analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant has not increased more than a factor of 3; (2) the noble gas monitor shows that effluent activity has not increased more than a factor of 3."

It is being replaced by the following statement.....
"Samples shall be changed at least once per 7 days and the analyses completed within 48 hours after removal from the sampler. Sampling shall also be performed within 24 hours following each shutdown, startup, or thermal power level change exceeding 20% of rated thermal power in once hour. This requirement does not apply if 1) analysis shows that the dose equivalent I-131 concentration in the primary coolant has not increased more than a factor of 5, and 2) the noble gas activity monitor shows that effluent activity has not increased by more than a factor of 3. When samples collected for 24 hours are analyzed, the corresponding LLDs may be increased by a factor of 10."
Reason: This change was made due to the fact that CTS 3.4.8 was removed as an administrative change since it did not meet any of the 4 criteria of 10 CFR 50.36. The words in the ODCM were modified to be consistent with Dresden and Quad Cities Station.

Section : Table 12.4.1-1.c
Description: The following sentence is being moved from Table 12.4.1-1.h to Table 12.4.1-1.c. " When SBGT equipment is started and shutdown, ensure noble gas iodine and particulate samples are taken.
Reason: Clarification.

Section: Table 12.4.1-1.h
Description: A paragraph has been revised to read as follows: If the drywell is purged in accordance with the ~~Technical Specification and~~ ODCM definition~~s~~, both noble gas and tritium analyses must be completed before the purge begins. If the drywell is simply vented in accordance with the ~~Technical Specification and~~ ODCM definition~~s~~, no sample is required before venting.
Reason: Clarification.

Section: 12.4.4.C, 12.4.5.C
Description: Reference change from Section II.3 and II.0 to II.B and II.C of Appendix I, 10 CFR Part 50 for gaseous effluents.
Reason: Reflect appropriate reference in the Code of Federal Regulations.

Section: 12.4.6.B.2
Description: The term "Operational Condition" is replaced with the word "Mode."
Reason: These two terms are synonymous with each other. (See ITS Table 1.1-1)

Section: 12.4.8.A
Description: The Operability requirements for Main Condenser - Gaseous Effluents has been changed to the following:

The release rate of the sum of the activities from the noble gases measured prior to the holdup line shall be limited to less than or equal to 3.4 E5 micro~~copies~~curies / second after decay of 30 minutes.

Applicability: ~~Operational Conditions~~ MODE 1~~,2 and 3.~~
MODES 2 and 3 with any main steam line not isolated and steam jet air ejector (SJAE) not in operation.

Action:
With the release rate of the sum of the activities from the noble gases prior to the holdup line exceeding 3.4 E5 micro~~copies~~curies / second after decay of 30 minutes, restore the release rate to within its limit within 72 hours or ~~be in at least STARTUP with the main steam isolation valves closed within the next 6 hours.~~ either isolate all main steam lines or isolate the SJAEs in the next 12 hours, or be in MODE 3 in the next 12 hours and MODE 4 in the next 24 hours.

Reason: To be consistent with ITS.

Section: 12.4.8.B.2
Description: States that the determination of the release rate of the sum of the activities from noble gases prior to the holdup line shall be determined to be within the limits of spec 12.4.8.A at the following frequencies by performing an isotopic analysis of a representative sample of gases taken prior to the holdup line. The change involves the following wording regarding this statement: Not required to be performed until 31 days after any main steam line not isolated and SJAE not in operation.
Reason: To be consistent with ITS.

Section: Table 12.5-3
Description: Remove reference to footnote (1)
Reason: Footnote 1 did not exist.

Section: 12.6.1
Description: The submittal date of the Annual Radiological Environmental Operating Report changes from May 1 to May 15.
Reason: Conforms with ITS 5.6.2.

Section: 12.6.1
Description: State that the material provided in the Annual Radiological Environmental Operation Report shall be consistent with the objectives outlined in the ODCM as well as 10 CFR 50.
Reason: Clarification.

Section: 12.6.1
Description: State that the submittal of the Annual Radiological Environmental Operation Report should combine sections common to all units at the station.
Reason: Clarification.

Section: 12.6.2.a
Description: State that the Radioactive Effluent Release Report shall be submitted in accordance with 10 CFR 50.36a prior to May 1 of each year.
Reason: Conforms with ITS 5.6.3.

Section: 12.6.2.a
Description: Delete the following statement: ~~The period of the first report shall begin with the date of initial criticality.~~
Reason: LaSalle is an operational plant. This statement is no longer applicable.

Section: 12.6.2.a
Description: Add the following wording in regard to the Radioactive Effluent Release Report. The report shall include a summary of the quantities of radioactive liquid and gaseous effluent and solid waste released from the unit. The material provided shall be

consistent with the objectives outlined in the ODCM and the Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.
Reason: Clarification.

Section: 12.6.2.c
Description: Add the following wording in regard to the Radioactive Effluent Release Report. The radioactive effluent release reports shall include a description of licensee initiated major changes to the radioactive waste treatment systems (liquid, gaseous and solid), as described in Section 12.6.3.
Reason: Clarification.

Section: 12.6.2.c
Description: Delete the following statement: "however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.
Reason: LaSalle does not have separate radwaste systems. This statement is not applicable to LaSalle.

Section: 12.6.3.1
Description: Remove statement concerning the need for the ODCM to be approved by the Commission prior to implementation.
Reason: This statement is longer applicable as the ODCM has already been approved for use.

Section: 12.6.3.1
Description: Add the following wording: The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip set points, and in the conduct of the radiological environmental monitoring program.
Reason: Clarification.

Section: 12.6.3.2
Description: Add the following wording: The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating, and Radioactive Effluent Release Reports required by Technical Specifications 5.6.2 and 5.6.3.
Reason: Clarification.

Section: 12.6.3.2.a
Description: Replace the wording "Specification 6.5.B" with the wording "the Quality Assurance (QA) Manual."
Reason: Since existing Federal Code exists (10 CFR 50 App B), this no longer meets any of the criteria of 10 CFR 50.36. Therefore, the specific reference is a licensee document (ie, QA manual).

Section: 12.6.3.2.a.2.a
Description: Removed statement from procedure stating that the ODCM must be reviewed and accepted by the onsite review and investigative function, prior to implementation and to document this review.
Reason: This requirement is being relocated to the QA manual. The review activities performed are required by ANSI N18.7-1976. Thus, the provisions are not necessary to be included in the ITS to provide adequate protection of the public health and safety, given the existence of these redundant requirements. Changes to the QA manual are controlled by the provisions of 10 CFR 50.54.

LASALLE ANNEX INDEX

CHAPTER 10

Revision 3

CHAPTER 10

RADIOACTIVE EFFLUENT TREATMENT AND MONITORING

Table of Contents

CHAPTER 10

RADIOACTIVE EFFLUENT TREATMENT AND MONITORING

Table of Contents (Cont'd)

CHAPTER 10

LIST OF TABLES

LIST OF FIGURES

CHAPTER 10

RADIOACTIVE EFFLUENT TREATMENT AND MONITORING

10.1 AIRBORNE RELEASES

10.1.1 System Description

A simplified gaseous radwaste and gaseous effluent flow diagram are provided in Figure 10-1.

The airborne release point for radioactive effluents is the ventilation stack which is classified as a stack in accordance with the definitions in Section 4.1.4 and the results in Table A-1 of Appendix A.

In addition, the standby gas treatment system effluent is released through a separate stack inside the ventilation stack. This release point has the same location and classification as the ventilation stack.

Exfiltration to the environment from the Turbine Building has been identified at times of positive pressure in the Turbine Building. Within 20 hours of the turbine building being at positive pressure continuous air sampling shall be in place in the south Turbine Building trackway to monitor releases through this pathway. The releases through the trackway door and other potential release paths contain insignificant levels of contamination when compared to the Station Vent Stack which has a 1,000,000 cfm typical stack flow compared to the Trackway flow rate of 40,000 scfm and conservatively estimated as a total of 80,000 scfm to account for pathways other than the trackway. In addition, typical releases from LaSalle Station have not exceeded 0.02% of the 10CFR50 Appendix I dose limits. Any identified release via this pathway is a ground level release and should be considered in dose calculations. See Figure 10-1 for further information.

Waste oil burning to fuel a heat recovery system is planned to begin in the Fall of 1998. Sampling and analyses of each batch of oil is required to be performed in accordance with ODCM Table 12.4.1-1. The effluent will be verified to be within the instantaneous release limits prior to each batch (assuming 100% of the activity in the waste oil is released in the gaseous effluent). The oil burning unit is located in an onsite building within the protected area. The effluent is released out the top of the building, is a ground level release, and will be quantified and considered in dose calculations.

Airborne releases to the environment may result if a fire occurs in a contaminated material warehouse. In the event of a fire in a contaminated material warehouse this pathway would be considered a ground level release and should be quantified and considered in dose calculations.

10.1.1.1 Condenser Offgas Treatment System

The condenser offgas treatment system is designed and installed to reduce radioactive gaseous effluents by collecting non- condensable off-gases from the condenser and providing for holdup to reduce the total radioactivity by radiodecay prior to release to the environment. The daughter products are retained by charcoal and HEPA filters. The system is described in Section 11.3.2.1 of the LaSalle UFSAR.

10.1.1.2 Ventilation Exhaust Treatment System

Ventilation exhaust treatment systems are designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in selected effluent streams by passing ventilation or vent exhaust gases through charcoal adsorbers and/or HEPA filters prior to release to the environment. Such a system is not considered to have any effect on noble gas effluents. The ventilation exhaust treatment systems are shown in Figure 10-1.

Engineered safety features atmospheric cleanup systems are not considered to be ventilation exhaust treatment system components.

10.1.2 Radiation Monitors

10.1.2.1 Station Vent Stack Effluent Monitor

Monitor OPLD5J (Wide Range Noble Gas Monitor) continuously monitors the final effluent from the station vent stack.

The monitor system has isokinetic sampling, gaseous grab sampling, iodine and particulate sampling, tritium sampling, and postaccident sampling capability.

In normal operation the low-range noble gas channel is on line and active. The mid-range channel replaces the low-range channel at a concentration of 0.01 μCi/cc png* and the high-range channel replaces the mid-range channel at a concentration of 10 μCi/cc png.

The low-range and mid/high-range iodine and particulate samplers operate in a similar manner. In normal operation the low-range samplers are on line. At a concentration of 0.001 μCi/cc png the mid/high-range samplers are brought on line, and at a concentration of 0.1 μCi/cc png the low-range sample pump is turned off.

No automatic isolation or control functions are performed by this monitor. Pertinent information on this monitor is provided in the LaSalle UFSAR Section 11.5.2.2.1.

10.1.2.2 Standby Gas Treatment System Effluent Monitor

Monitor OPLD2J (Wide Range Noble Gas Monitor) continuously monitors the final effluent from the standby gas treatment system (SGTS) stack.

The SGTS stack monitor has isokinetic sampling, gaseous grab sampling, particulate and iodine sampling, and post accident sampling capability.

In normal operation the low range noble gas channel is on line and active. The mid-range channel replaces the low-range channel at a concentration of 0.01 μCi/cc png and the high-range channel replaces the mid-range channel at a concentration of 10 μCi/cc png.

---

* To facilitate use of the wide range gas monitors on the Station Vent Stack and Standby Gas Treatment System Stack in post-accident dose assessment, the output of each is expressed in units of pseudo noble gas (png) activity. Pseudo noble gas is a fictitious radionuclide defined to have emission characteristics representative of a post-accident noble gas mix. Upon decay, a pseudo noble gas nuclide emits one gamma ray with energy 0.8 MeV and one beta particle with endpoint energy 1.68 MeV and average energy 0.56 MeV.

The low-range and mid/high-range iodine and particulate samples operate in a similar manner. In normal operation, the low-range samples are on-line. At a concentration of 0.001 μCi/cc png the mid/high-range samplers are brought on-line, and at a concentration of 0.1 μCi/cc png the low-range sample pump is turned off.

No automatic isolation or control functions are performed by this monitor.

Pertinent information on this monitor is provided in the LaSalle UFSAR Section 11.5.2.2.2.

10.1.2.3 Reactor Building Ventilation Monitors

Monitors 1(2)D18-NOO9 continuously monitor the effluent from the Unit 1(2) reactor building. On high alarm, the monitors automatically initiate the following actions:

A. Shutdown and isolation of the reactor building vent system

B. Startup of the standby gas treatment system

C. Isolation of primary containment purge and vent lines

Pertinent information on these monitors is provided in LaSalle UFSAR Section 11.5.2.1.1.

10.1.2.4 Condenser Air Ejector Monitors

Monitors 1(2)D18-N002/N012 (pre-treatment) and 1(2)D18-N903A/B (post-treatment) continuously monitor gross gamma activity downstream of the steam jet air ejector and prior to release to the main stack.

On "high-high-high" alarm monitor 1(2)D18-N903A/B automatically initiates closure of valve 1(2)N62-F057 thus terminating the release.

Pertinent information on these monitors is found in LaSalle UFSAR Sections 11.5.2.1.2 and 11.5.2.1.3.

10.1.2.5 Turbine Building Trackway

In order to quantify any identified releases via the Turbine Building trackway, at times of positive pressure in the Turbine Building, airborne sampling should be continuously collected using an air sampler located within the trackway. The air sampler collecting shall begin within 20 hours of the turbine building being at positive pressure, and then continuously for as long as the turbine building remains at positive pressure. The samples collected should be counted on a weekly basis. Air sampling to identify noble gas, iodine and particulate monitoring (either as a grab sample or continuous sampling) is designed to ensure evaluation of releases emanating from the Turbine Building.

The curie content of any contaminated material warehouse is maintained current by site administrative procedures. If a fire were to occur, the actual curie content of the warehouse would be used in determining the ground level release.

10.1.3 Alarm and Trip Setpoints

10.1.3.1 Setpoint Calculations

10.1.3.1.1 Reactor Building Vent Effluent Monitor

The setpoint for the reactor building vent effluent monitor is established at 10 mR/hr.

10.1.3.1.2 Condenser Air Ejector Monitors

Pre-Treatment Monitor

The high trip setpoint is established at 1.5 times the nominal nitrogen-16 (N-16) background dose rate to help ensure that effluents are maintained ALARA.

The high-high trip setpoint is established at $\leq$ 100 µCi/sec per MW-th $\equiv$ 3.4E+05 µCi/sec per Technical Specification 3.11.2.2.

Post-Treatment Monitor

The off-gas isolation setpoint is conservatively set at or below one-half the release limit calculated using the more conservative value obtained from equations 10-3 and 10-4 below.

The off gas isolation setpoint is converted into the monitor units of counts per second (cps) as follows:

(10-2)

$$P \leq Q_{SVS} \times E \times \left[R_{png} / R_{OG}\right] \div F_{OG}$$

P Off-gas Post-treatment Monitor Isolation Setpoint [cps]

The off-gas post-treatment monitor setpoint which initiates isolation of flow of off-gas to the station vent stack.

Q_{SVS} Actual Station Vent Stack High Alarm Setpoint [µCi/sec of png]

The actual high alarm setpoint of the Station Vent Stack wide range gas monitor in units of µCi/sec of png (pseudo noble gas). This is determined by using Equations 10-3 and 10-4 and then converting the result to units of µCi/sec of png.

E Efficiency of the Off-Gas Post Treatment Monitor [cps/(µCi/sec of off gas mix)]

R_{png} Response of the Station Vent Stack WRGM to Pseudo Noble Gas [cpm per µCi/cc of pseudo noble gas]

R_{OG} Response of the Station Vent Stack WRGM to Off Gas [cpm per µCi/cc of off gas]

F_{OG} Maximum Off-Gas Flow Rate [cc/sec]

10.1.3.1.3 Station Vent Stack Effluent Monitor

The high alarm setpoint for the station vent stack effluent monitor is conservatively set at or below one-half the calculated release limit calculated using the more conservative value obtained from equations 10-3 and 10-4 below. These equations yield the release limit in

units of μCi/sec of the mix specified in Section 10.1.3.3. For consistency with the monitor readout, this calculated release limit is converted to units of μCi/sec of pseudo noble gas before being entered into the monitor data base.

10.1.3.1.4 Standby Gas Treatment Stack Monitor

The high alarm setpoint for the standby gas treatment system effluent monitor is conservatively set at or below one-half the release limit calculated using the more conservative value obtained from equations 10-3 and 10-4 below. These equations yield the release limit in units of μCi/sec of the mix specified in Section 10.1.3.3. For consistency with the monitor readout, this calculated release limit is converted to units of μCi/sec of pseudo noble gas before being entered into the monitor data base.

10.1.3.2 Release Limits

Alarm and trip setpoints of gaseous effluent monitors are established to ensure that the release rate limits of RETS are not exceeded. The release limit Q_{ts} is found by solving Equations 10-3 and 10-4.

$$(1.11)\, Q_{ts} \sum \{f_i \bar{S}_i\} \leq 500 \text{ mrem/yr} \quad (10\text{-}3)$$

$$Q_{ts} \sum \{\bar{L}_i f_i (X/Q)_s \exp(-\lambda_i R / 3600\, U_s)\dagger + (1.11)(f_i) S_i\} < 3000 \ mrem / yr \quad (10\text{-}4)$$

The summations are over noble gas radionuclides i.

f_i Fractional Radionuclide Composition:

The release rate of noble gas radionuclide i divided by the total release rate of all noble gas radionuclides.

Q_{ts} Total Allowed Release Rate, Stack Release [μCi/sec of ODCM mix]

The total allowed release rate of all noble gas radionuclides released as stack releases in units of μCi/sec of the mix specified in section 10.1.3.3.

† exp ($-\lambda_i R/3600\, U_s$) is conservatively set equal to 1.0 for purposes of determining setpoints.

The remaining parameters in Equation 10-3 have the same definitions as in Equation A-8 of Appendix A. The remaining parameters in Equation 10-4 have the same definition as in Equation A-9 of Appendix A.

Equation 10-3 is based on Equation A-8 of Appendix A and the RETS restriction on whole body dose rate (500 mrem/yr) due to noble gases released in gaseous effluents (see Section A.1.3.1 of Appendix A). Equation 10-4 is based on Equation A-9 of Appendix A and the RETS restriction on skin dose rate (3000 mrem/yr) due to noble gases released in gaseous effluents (see Section A.1.3.2 of Appendix A).

The more conservative solution from Equations 10-3 and 10-4 is used as the limiting noble gas release rate.

Calibration methods and surveillance frequency for the monitors will be conducted as specified in the RETS.

10.1.3.3 Release Mixture

In the determination of alarm and trip set points, the radioactivity mixture in the exhaust air is assumed to have the radionuclide composition in Table 10-1.

10.1.3.4 Conversion Factors

The conversion factors used to establish gaseous effluent monitor setpoints are obtained as follows.

- Station vent stack effluent monitor.

  Calibrations compare the response of station detectors to that of a reference detector using NIST traceable sources. Conversion factors for the station detectors are obtained from the response to noble gas or solid sources.

- Condenser air ejector monitor.

  Pretreatment Monitor

  The value is determined using noble gas radionuclides identified in a representative sample, and the offgas release rate and monitor response at the time the sample is taken.

- Post-treatment Monitor

  The value is determined using noble gas radionuclides identified in a representative sample, and the offgas concentration and monitor response at the time the sample is taken.

- Standby gas treatment system monitor.

  Calibrations compare the response of station detectors to that of a reference detector using NIST traceable sources. Conversion factors for the station detectors are obtained from the response to noble gas or solid sources.

10.1.3.5 HVAC Flow Rates

The main stack flow rate is obtained from either the process computer or Monitor RM-23.

The SGTS flow rate is obtained from either the process computer or chart recorders in the main control room.

10.1.4 Allocation of Effluents from Common Release Points

Radioactive gaseous effluents released from the main chimney are comprised of contributions from both units. Under normal operating conditions, it is difficult to allocate the radioactivity between units due to fuel performance, in-plant leakage, power history, and other variables. Consequently, no allocation is normally made between the units. Instead, the entire release is treated as a single source.

10.1.5 Dose Projections

Because the gaseous releases are continuous, the doses are routinely calculated in accordance with the RETS.

10.2 LIQUID RELEASES

10.2.1 System Description

A simplified liquid radwaste and liquid effluent flow diagram are provided in Figures 10-2 and 10-3.

The liquid radwaste treatment system is designed and installed to reduce radioactive liquid effluents by collecting the liquids, providing for retention or holdup, and providing for treatment by filter, demineralizer, or evaporator for the purpose of reducing the total radioactivity prior to release to the environment. The system is described in Section 11.2.2 of the LaSalle UFSAR.

10.2.1.1 Radwaste Discharge Tanks

There are two discharge tanks (1(2)WF05T, 25,000 gallons each) which receive water for discharge to the Illinois River via the cooling lake blowdown.

10.2.1.2 Cooling Pond Blowdown

Cooling Pond Blowdown is the liquid discharge line to the Illinois River. The Cooling Pond Blowdown has a flow monitoring device as well as a compositor to meet the sampling requirements of ODCM Table 12.3.1-2.

10.2.2 Radiation Monitors

10.2.2.1 Liquid Radwaste Effluent Monitor

Monitor 0D18-K907 monitors all releases from the release tanks. On hi-hi alarm the monitor automatically initiates closure of valves 0WL067 and trips the radwaste discharge pump to terminate the release.

Pertinent information on the monitor and associated control devices is provided in LaSalle UFSAR Section 11.5.2.3.3.

10.2.2.2 Service Water Effluent Monitors

Monitors 1/(2)D18-K912 continuously monitor the service water effluent. On high alarm service water discharge may be terminated manually. No control device is initiated by these monitors.

Pertinent information on these monitors is provided in LaSalle UFSAR 11.5.2.3.2.

10.2.2.3 RHR Heat Exchanger Cooling Water Effluent Monitors

Instrument channels 1/(2)D18-N906/8 continuously monitor the RHR heat exchanger cooling water effluent. On high alarm the operating loop may be terminated manually and the redundant loop brought on line. No control device is initiated by these monitors.

Pertinent information on these monitors is provided in LaSalle UFSAR Section 11.5.2.3.4.

10.2.3 Alarm and Trip Setpoints

10.2.3.1 Setpoint Calculations

Alarm and trip setpoints of liquid effluent monitors at the principal release points are established to ensure that the limits of RETS are not exceeded in the unrestricted area.

10.2.3.1.1 Liquid Radwaste Effluent Monitor

The monitor setpoint is found by solving equation 10-5 for the total isotopic activity.

$$P \leq K \times [\Sigma C_i^T / \Sigma (C_i^T / 10 \times DWC_i)] \times [(F^d + F^r_{max})/F^r_{max}] \quad (10\text{-}5)$$

P	Release Setpoint	[cpm]
K	$[\Sigma (K_i \times C_i \times W_i)/ \Sigma C^T_i]$	[cpm/μCi/ml]
K_i	Counting efficiency for radionuclide i	[cpm/μCi/ml]
W_i	Weighting Factor	
C_i^T	Concentration of radionuclide i in the release tank.	[μCi/ml]
F^r_{max}	Maximum Release Tank Discharge Flow Rate The maximum flow rate is 45 gpm.	[gpm]
DWC	Derived Water Concentration of radionuclide i The concentration of radionuclide i given in Appendix B, Table 2, Column 2 to 10CFR20.1001-2402.	[μCi/ml]
10	Multiplier associated with the limits specified in 12.3.1.A.	
F^d	Dilution Flow	[gpm]

10.2.3.1.2 Service Water Effluent Monitors

The monitor setpoint is established at two times the background count rate (not to exceed 10000 cpm).

10.2.3.1.3 RHR Heat Exchanger Cooling Water Monitors

The monitor setpoint is established at two times the background count rate (not to exceed 10000 cpm).

10.2.3.2 Discharge Flow Rates

10.2.3.2.1 Release Tank Discharge Flow Rate

Prior to each batch release, a grab sample is obtained.

The results of the analysis of the sample determine the discharge rate of each batch as follows:

$$F^r_{max} = 0.1 \times [F^d / \Sigma (C_i / 10xDWC_i)] \quad (10\text{-}6)$$

The summation is over radionuclides i.

0.1 Reduction factor for conservatism.

F^r_{max} Maximum Permitted Discharge Flow Rate [gpm]

The maximum permitted flow rate from the radwaste discharge tank.

F^d Dilution Flow [gpm]

C_i Concentration of Radionuclide i in the Release Tank [µCi/mL]

The concentration of radioactivity in the radwaste discharge tank based on measurements of a sample drawn from the tank.

DWC_i Maximum Permissible Concentration of Radionuclide i [µCi/ml]

The concentration of radionuclide i given in Appendix B, Table 2, Column 2 to 10CFR20.1001-2402.

10 Multiplier associated with the limits specified in 12.3.1.A.

MF Multiplication Factor

$F^r_{max} < 0.5$; MF = 3

$0.5 < F^r_{max} < 5$; MF = 5

$5 < F^r_{max}$; MF = 7.5

10.2.3.2.2 Recommended Release Tank Flow Rate.

$$F^r_{rec} = F^r \text{ max } X \text{ MF} \quad (10\text{-}7)$$

F^r_{rec} recommended discharge flow rate (gpm)

F^r_{max} maximum permitted discharge flow rate (gpm)

MF multiplication factor.

10.2.3.3 Release Limits

Release limits are determined from RETS. Calculated maximum permissible discharge rates are divided by 10 for conservatism and to ensure that release concentrations are well below applicable derived water concentrations (DWC).

10.2.3.4 Release Mixture

For the liquid radwaste effluent monitor the release mixture used for the setpoint determination is the radionuclide mix identified in the grab sample isotopic analysis plus four additional radionuclides. The additional radionuclides are H-3, Fe-59, Sr-89, and Sr-90. The quantities to be added are obtained from the most current analysis for these four radionuclides.

For all other liquid effluent monitors no release mixture is used because the setpoint is established at "two times background."

10.2.3.5 Conversion Factors

The readout for the liquid radwaste effluent monitor is in CPM. The calibration constant is based on the detector sensitivity to Cs-137/Ba-137 and an energy response curve.

10.2.3.6 Liquid Dilution Flow Rates

A conservative maximum blowdown flowrate of 20,000 gpm is used for all radwaste discharge calculations unless actual blowdown flow is determined to be less.

10.2.4 Allocation of Effluents from Common Release Points

Liquid releases from the Station will be allocated one half to Unit 1 and one half to Unit 2. Other potential pathways (i.e., RHR) are allocated to their respective unit.

10.2.5 Projected Doses for Releases

Doses are not calculated prior to release. Dose contributions from liquid effluents are determined in accordance with the RETS and station procedures.

10.3 SOLIDIFICATION OF WASTE/PROCESS CONTROL PROGRAM

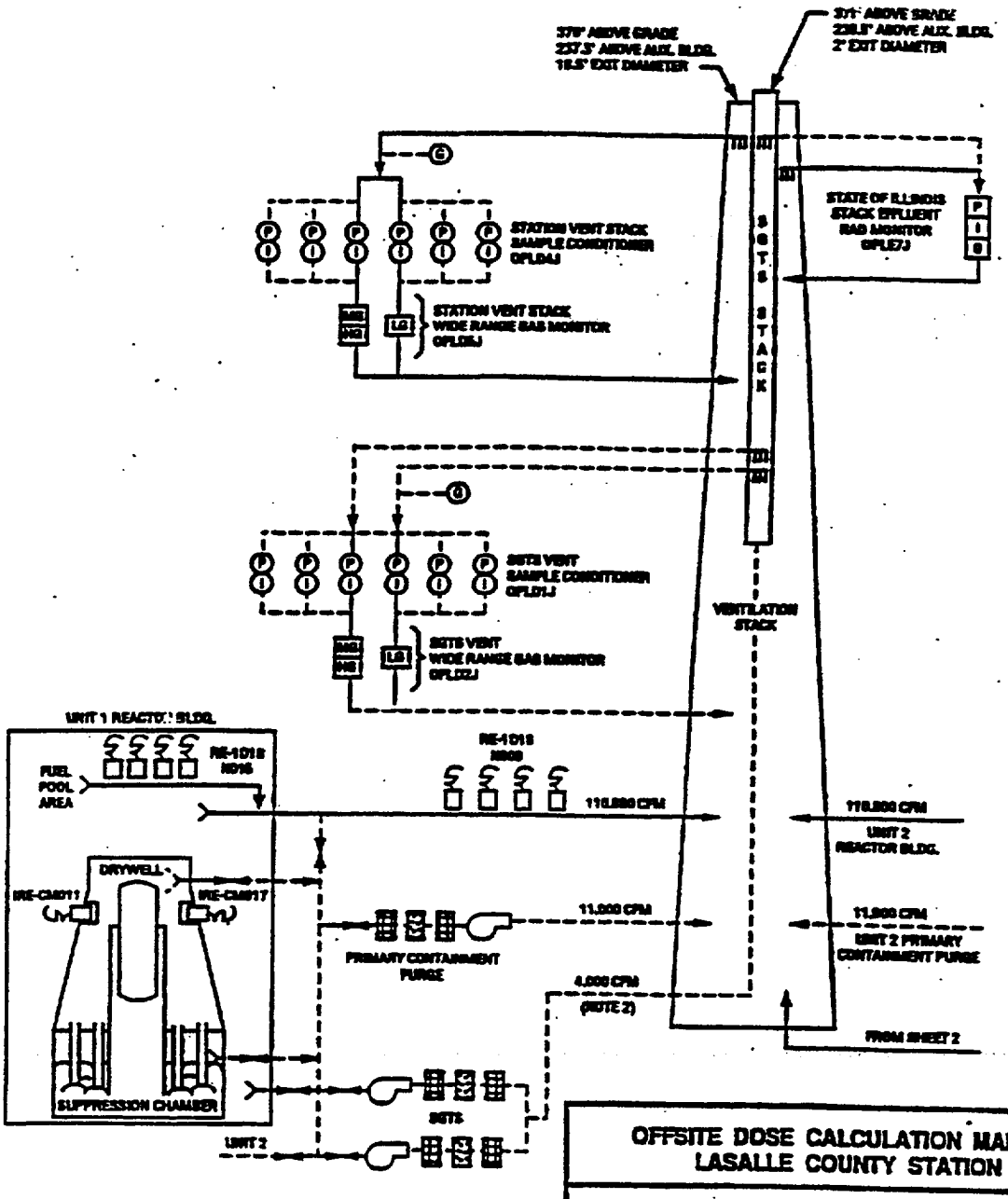
The process control program (PCP) contains the sampling, analysis, and formulation determination by which solidification of radioactive wastes from liquid systems is ensured.

Figure 10-4 is a simplified diagram of solid radwaste processing.

TABLE 10-1

Assumed Composition of the LaSalle Station Noble Gas Effluent

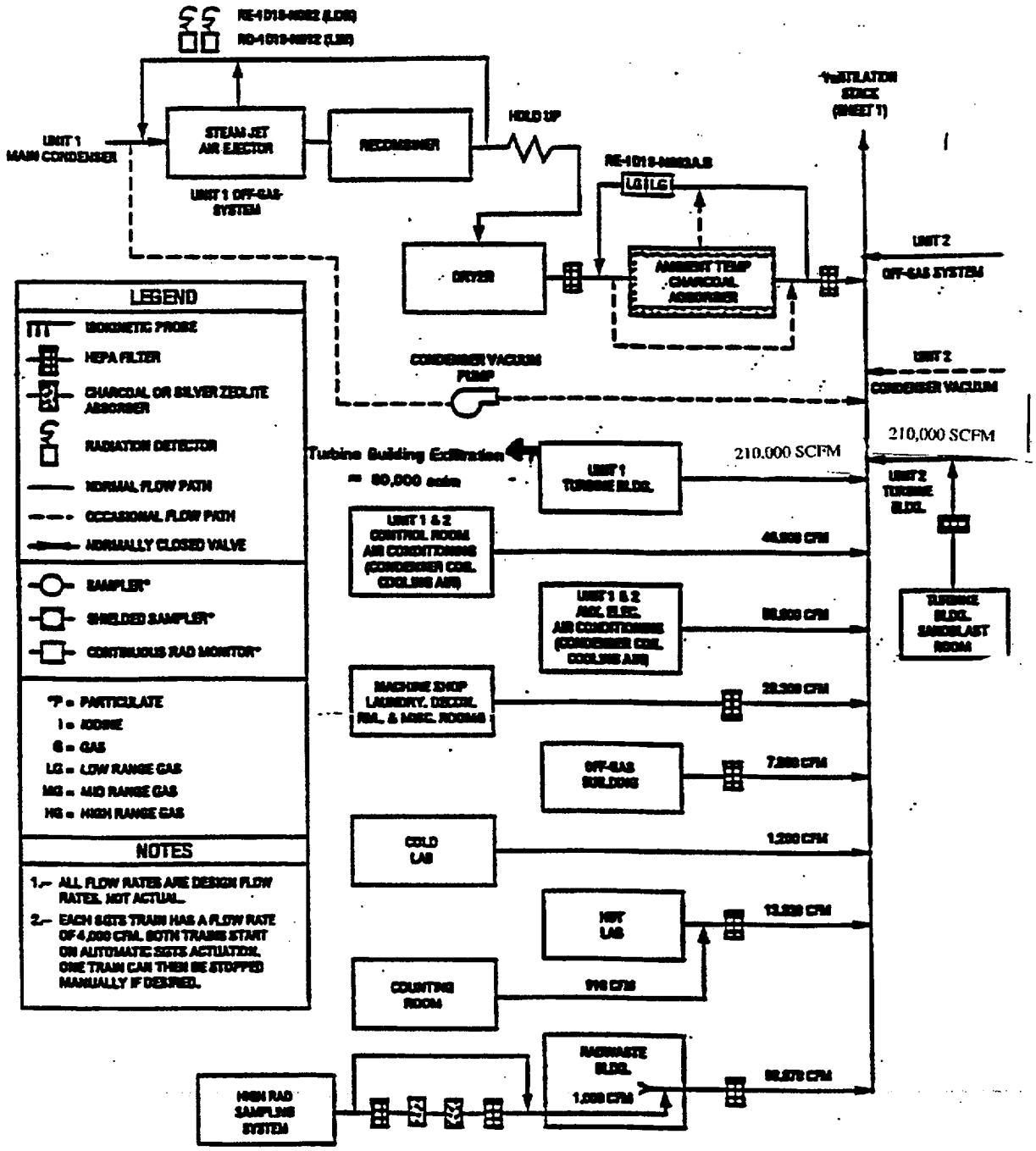
Isotope	Percent of Total Annual Release
Kr-83m	4.5E-3
Kr-85m	8.0E-3
Kr-85	2.6E-5
Kr-87	2.6E-2
Kr-88	2.6E-2
Kr-89	1.7E-1
Kr-90	3.7E-1
Xe-131m	2.0E-5
Xe-133m	3.8E-4
Xe-133	1.1E-2
Xe-135m	3.4E-2
Xe-135	2.9E-2
Xe-137	2.0E-1
Xe-138	1.2E-1



OFFSITE DOSE CALCULATION MANUAL
LASALLE COUNTY STATION

FIGURE 10-1

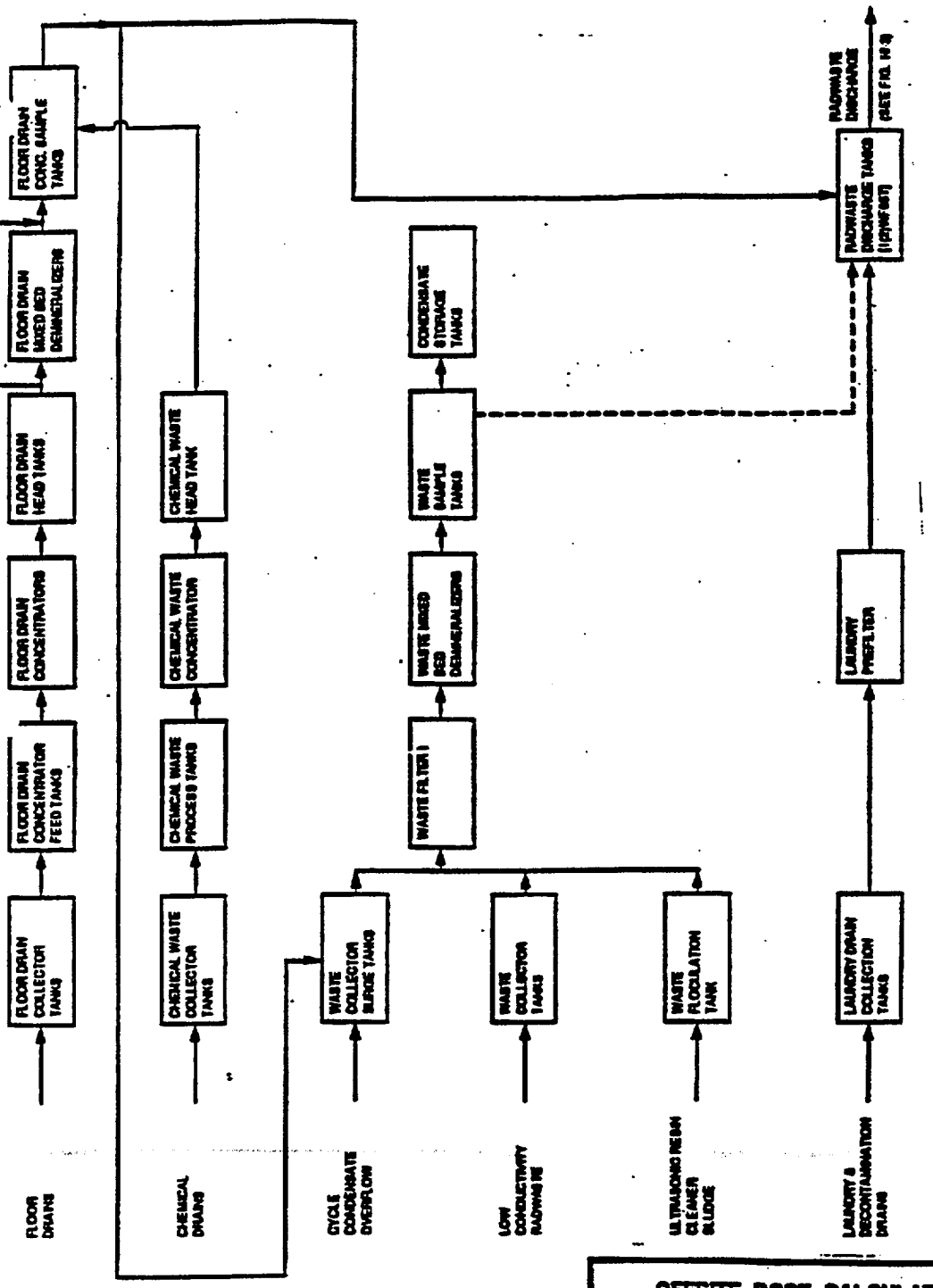
SIMPLIFIED GASEOUS RADWASTE AND GASEOUS EFFLUENT FLOW DIAGRAM
(SHEET 1 OF 2)



OFFSITE DOSE CALCULATION MANUAL
LASALLE COUNTY STATION

FIGURE 10-1

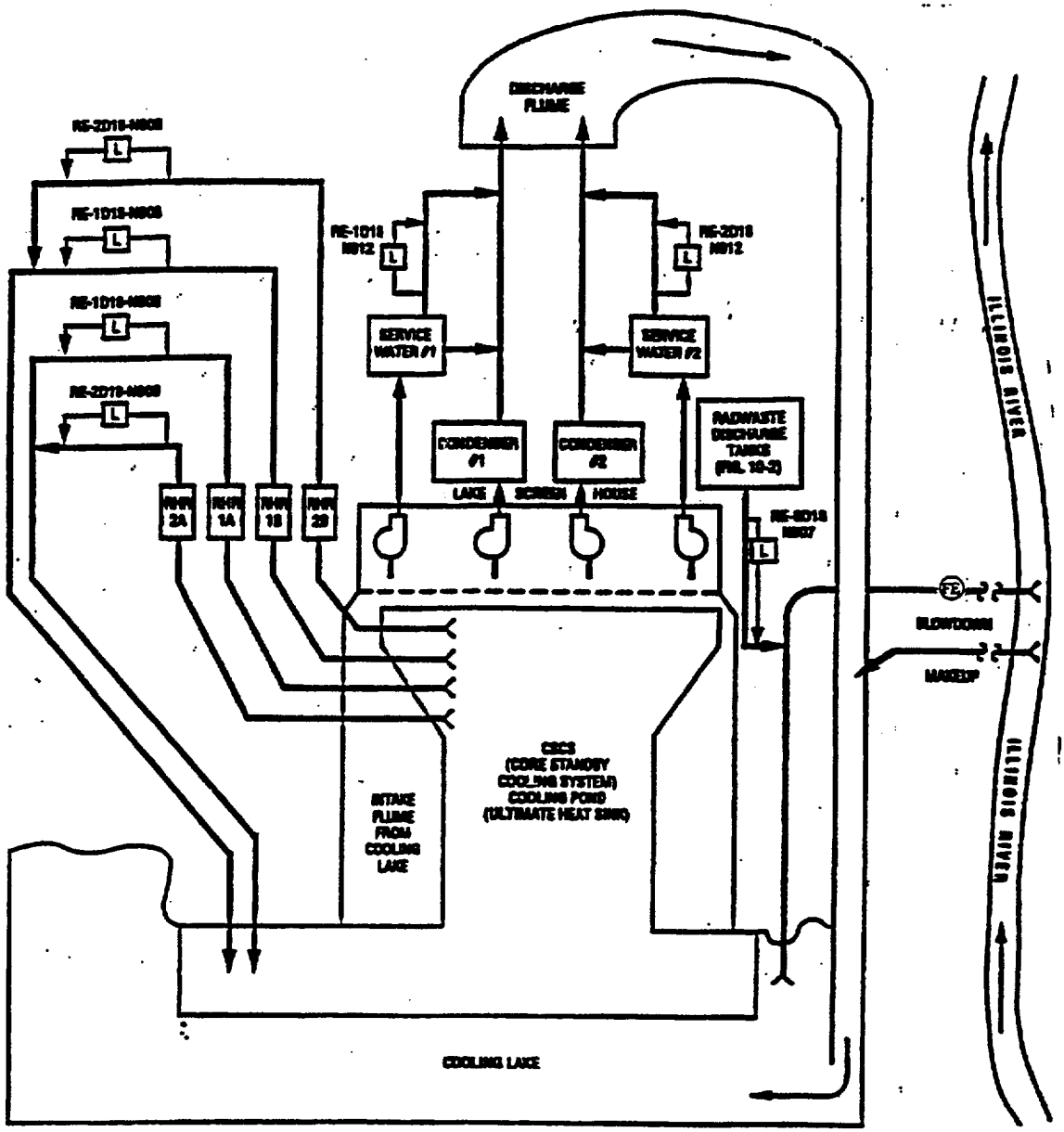
SIMPLIFIED GASEOUS RADWASTE AND GASEOUS EFFLUENT FLOW DIAGRAM
(SHEET 2 OF 2)



OFFSITE DOSE CALCULATION MANUAL
LASALLE COUNTY STATION

FIGURE 10-2

SIMPLIFIED LIQUID RADWASTE PROCESSING DIAGRAM

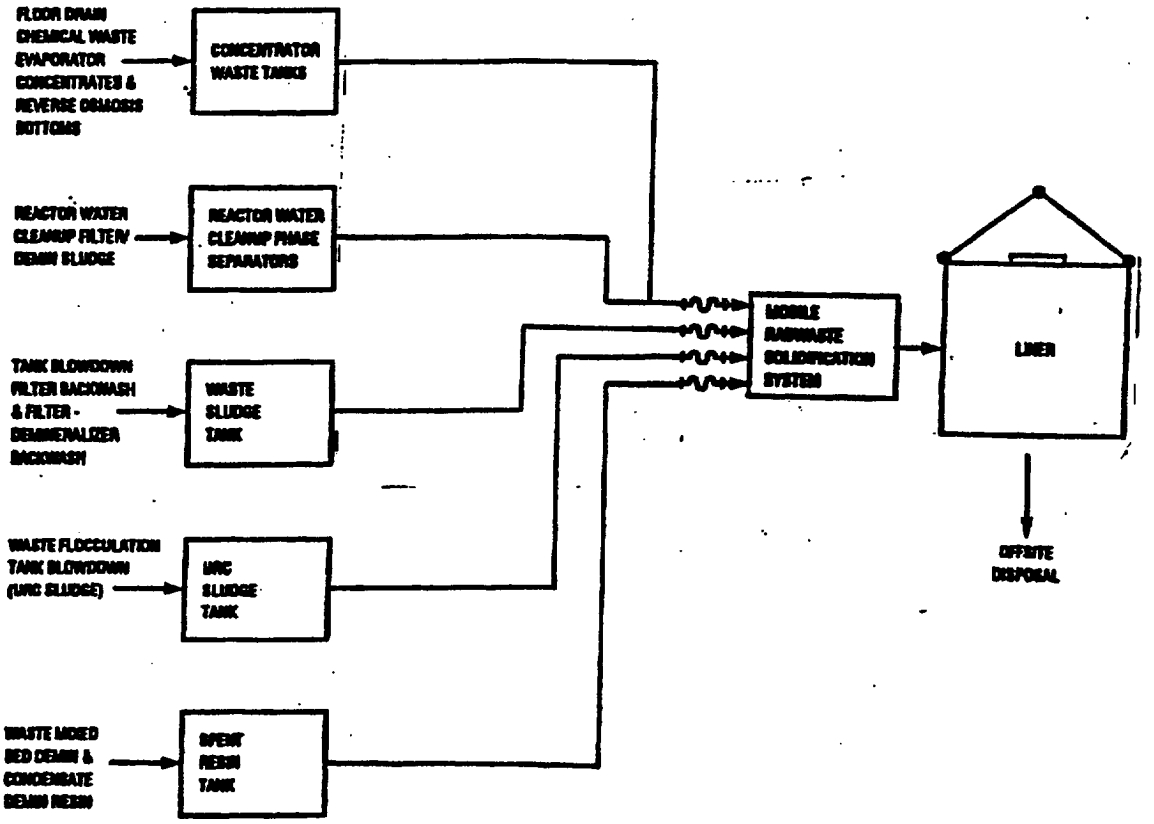


LEGEND AND NOTES
L LIQUID RADIATION MONITOR
FE FLOW ELEMENT

OFFSITE DOSE CALCULATION MANUAL
LASALLE COUNTY STATION

FIGURE 10-3

SIMPLIFIED LIQUID EFFLUENT FLOW DIAGRAM



LEGEND AND NOTES

FLEXIBLE HOSE

URC = Ultrasonic Resin Cleaner

OFFSITE DOSE CALCULATION MANUAL
LASALLE COUNTY STATION

FIGURE 10-4

SIMPLIFIED SOLID RADWASTE PROCESSING DIAGRAM

CHAPTER 11

LaSalle Annex Index

Revision 3

CHAPTER 11
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM
TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 11
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

The Radiological Environmental Monitoring Program for the environs around LaSalle Station is given in Table 11-1.

Figures 11-1 through 11-3 show sampling and monitoring locations.

Table 11-1
Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sample or Monitoring Location		Sampling or Collection Frequency	Type and Frequency of Analysis
1. Airborne			Continuous sampler operation with particulate sample collection weekly, or more frequently if required by dust loading, and radioiodine canister collection biweekly.	Radioiodine Canisters:
Radioiodine and Particulates	a. Indicators-Near Field			I-131 analysis biweekly on near field and control samples[1].
	L-01, Nearsite No. 1, 1.5 mi NNW	(2.4 km R)		Particulate Sampler:
	L-03, Onsite No. 3, 1.0 mi ENE	(1.6 km D)		Gross beta analysis following weekly filter change[2] and gamma isotopic analysis[3] quarterly on composite filters by location on near field and control samples.[1]
	L-05, Onsite No. 5, 0.3 mi ESE	(0.5 km F)		
	L-06, Nearsite No. 6, 0.4 mi WSW	(0.6 km M)		
	b. Indicators-Far Field			
	L-04, Rte 170, 3.2 mi E	(5.1 km E)		
	L-07, Seneca, 5.2 mi NNE	(8.4 km B)		
	L-08, Marseilles, 6.0 mi NNW	(9.7 km R)		
	L-11, Ransom, 6.0 mi S	(9.7 km J)		
	c. Controls			
	L-10, Streator, 13.5 mi SW	(21.7 km L)		

Table 11-1 (Cont'd)
Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sample or Monitoring Location		Sampling or Collection Frequency	Type and Frequency of Analysis
2. Direct Radiation	a. Indicators-Inner Ring		Quarterly	Gamma dose on each TLD quarterly.
	L-101-1, 0.5 mi N	(0.8 km A)		
	L-101-2, 0.5 mi N	(0.8 km A)		
	L-102-1, 0.6 mi NNE	(1.0 km B)		
	L-102-2, 0.6 mi NNE	(1.0 km B)		
	L-103-1, 0.7 mi NE	(1.1 km C)		
	L-103-2, 0.7 mi NE	(1.1 km C)		
	L-104-1, 0.8 mi ENE	(1.3 km D)		
	L-104-2, 0.8 mi ENE	(1.3 km D)		
	L-105-1, 0.7 mi E	(1.1 km E)		
	L-105-2, 0.7 mi E	(1.1 km E)		
	L-106-1, 1.4 mi ESE	(2.2 km F)		
	L-106-2, 1.4 mi ESE	(2.2 km F)		
	L-107-1, 0.8 mi SE	(1.3 km G)		
	L-107-2, 0.8 mi SE	(1.3 km G)		
	L-108-1, 0.5 mi SSE	(0.8 km H)		
	L-108-2, 0.5 mi SSE	(0.8 km H)		
	L-109-1, 0.6 mi S	(1.0 km J)		
	L-109-2, 0.6 mi S	(1.0 km J)		
	L-110-1, 0.6 mi SSW	(1.0 km K)		
	L-110-2, 0.6 mi SSW	(1.0 km K)		
	L-111b-1, 0.8 mi SW	(1.3 km L)		
	L-111b-2, 0.8 mi SW	(1.3 km L)		
	L-112-1, 0.9 mi WSW	(1.4 km M)		
	L-112-2, 0.9 mi WSW	(1.4 km M)		
	L-113a-1, 0.8 mi W	(1.3 km N)		
	L-113a-2, 0.8 mi W	(1.3 km N)		
	L-114-1, 0.9 mi WNW	(1.4 km P)		
	L-114-2, 0.9 mi WNW	(1.4 km P)		
	L-115-1, 0.7 mi NW	(1.1 km Q)		
	L-115-2, 0.7 mi NW	(1.1 km Q)		
	L-116-1, 0.6 mi NNW	(1.0 km R)		
	L-116-2, 0.6 mi NNW	(1.0 km R)		

Table 11-1 (Cont'd)
Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sample or Monitoring Location	Sampling or Collection Frequency	Type and Frequency of Analysis
2. Direct Radiation (Cont'd)	b. Indicators-Outer Ring		
	L-201-3, 4.0 mi N (6.4 km A)		
	L-201-4, 4.0 mi N (6.4 km A)		
	L-202-3, 3.6 mi NNE (5.8 km B)		
	L-202-4, 3.6 mi NNE (5.8 km B)		
	L-203-1, 4.0 mi NE (6.4 km C)		
	L-203-2, 4.0 mi NE (6.4 km C)		
	L-204-1, 3.2 mi ENE (5.2 km D)		
	L-204-2, 3.2 mi ENE (5.2 km D)		
	L-205-1, 3.2 mi ESE (5.2 km F)		
	L-205-2, 3.2 mi ESE (5.2 km F)		
	L-205-3, 5.1 mi E (8.2 km E)		
	L-205-4, 5.1 mi E (8.2 km E)		
	L-206-1, 4.3 mi SE (6.9 km G)		
	L-206-2, 4.3 mi SE (6.9 km G)		
	L-207-1, 4.5 mi SSE (7.2 km H)		
	L-207-2, 4.5 mi SSE (7.2 km H)		
	L-208-1, 4.5 mi S (7.2 km J)		
	L-208-2, 4.5 mi S (7.2 km J)		
	L-209-1, 4.0 mi SSW (6.4 km K)		
	L-209-2, 4.0 mi SSW (6.4 km K)		
	L-210-1, 3.3 mi SW (5.3 km L)		
	L-210-2, 3.3 mi SW (5.3 km L)		
	L-211-1, 4.5 mi WSW (7.2 km M)		
	L-211-2, 4.5 mi WSW (7.2 km M)		
	L-212-1, 4.0 mi WSW (6.4 km M)		
	L-212-2, 4.0 mi WSW (6.4 km M)		
	L-213-3, 4.9 mi W (7.9 km N)		
	L-213-4, 4.9 mi W (7.9 km N)		
	L-214-3, 5.1 mi WNW (8.2 km P)		
	L-214-4, 5.1 mi WNW (8.2 km P)		
	L-215-3, 5.0 mi NW (8.0 km Q)		
	L-215-4, 5.0 mi NW (8.0 km Q)		
	L-216-3, 5.0 mi NNW (8.0 km R)		
	L-216-4, 5.0 mi NNW (8.0 km R)		

Table 11-1 (Cont'd)
Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sample or Monitoring Location	Sampling or Collection Frequency	Type and Frequency of Analysis
2. Direct Radiation (Cont'd)	c. Other Indicators One at each of the airborne location given in part 1.a and 1.b. d. Controls One at each airborne control location given in part 1.c.		

Table 11-1 (Cont'd)
Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sample or Monitoring Location	Sampling or Collection Frequency	Type and Frequency of Analysis
3. Waterborne			
a.. Ground/Well	a. Indicators L-27, LSCS Onsite Well at Station L-28, Marseilles Well, 7.0 mi NW (11.3 km Q)	Quarterly	Gamma isotopic[3] and tritium analysis quarterly.
b. Drinking Water	There is no drinking water pathway within 6.2 mi (10 km) downstream of station.		
c. Surface Water	a. Indicator L-40, Illinois River downstream, 5.2 mi NNW (8.4 km R)	Weekly grab sample	Gross beta and gamma isotopic analysis[3] on monthly composite; tritium analysis on quarterly composite.
d. Control	a. Control L-21, Illinois River at Seneca, 4.0 mi NE (6.4 km C)	Weekly grab sample	Gross beta and gamma isotopic analysis[3] on monthly composite; tritium analysis on quarterly composite.
e. Sediments	a. Indicators L-40, Illinois River downstream, 5.2 mi NNW (8.4 km R) L-41, Illinois River downstream 4.6 mi NNW (7.4 km A)	Semiannually	Gamma isotopic analysis[3] semiannually.

Table 11-1 (Cont'd)
Radiological Environmental Monitoring Program

Exposure Pathway and/or Sample	Sample or Monitoring Location	Sampling or Collection Frequency	Type and Frequency of Analysis
4. Ingestion			
a. Milk	a. Indicators At the time of this revision, there are no dairies within 6.2 miles which consistently produce milk. b. Controls L-42, Biros Dairy, 14.2 mi E (22.9 km E)	Biweekly: May through October; monthly: November through April	Gamma isotopic[3] and I-131 analysis[4] biweekly May through October, monthly November through April.
b. Fish	a. Indicator L-35, Marseilles Pool of Illinois River, 6.5 mi NW (10.5 km Q) b. Control L-36, Illinois River upstream of discharge, 4.3 mi NNE (6.9 km B)	Two times annually	Gamma isotopic analysis[3] on edible portions of each
c. Food Products	a. Indicators Two samples from each of the four major quadrants within 6.2 miles of the station, if available. Sample locations for food products may vary based on availability and therefore are not required to be identified here but shall be taken. b. Controls Two samples within 9.3 to 18.6 miles of the station, if available.	Annually	Gamma isotopic analysis[3] each sample.

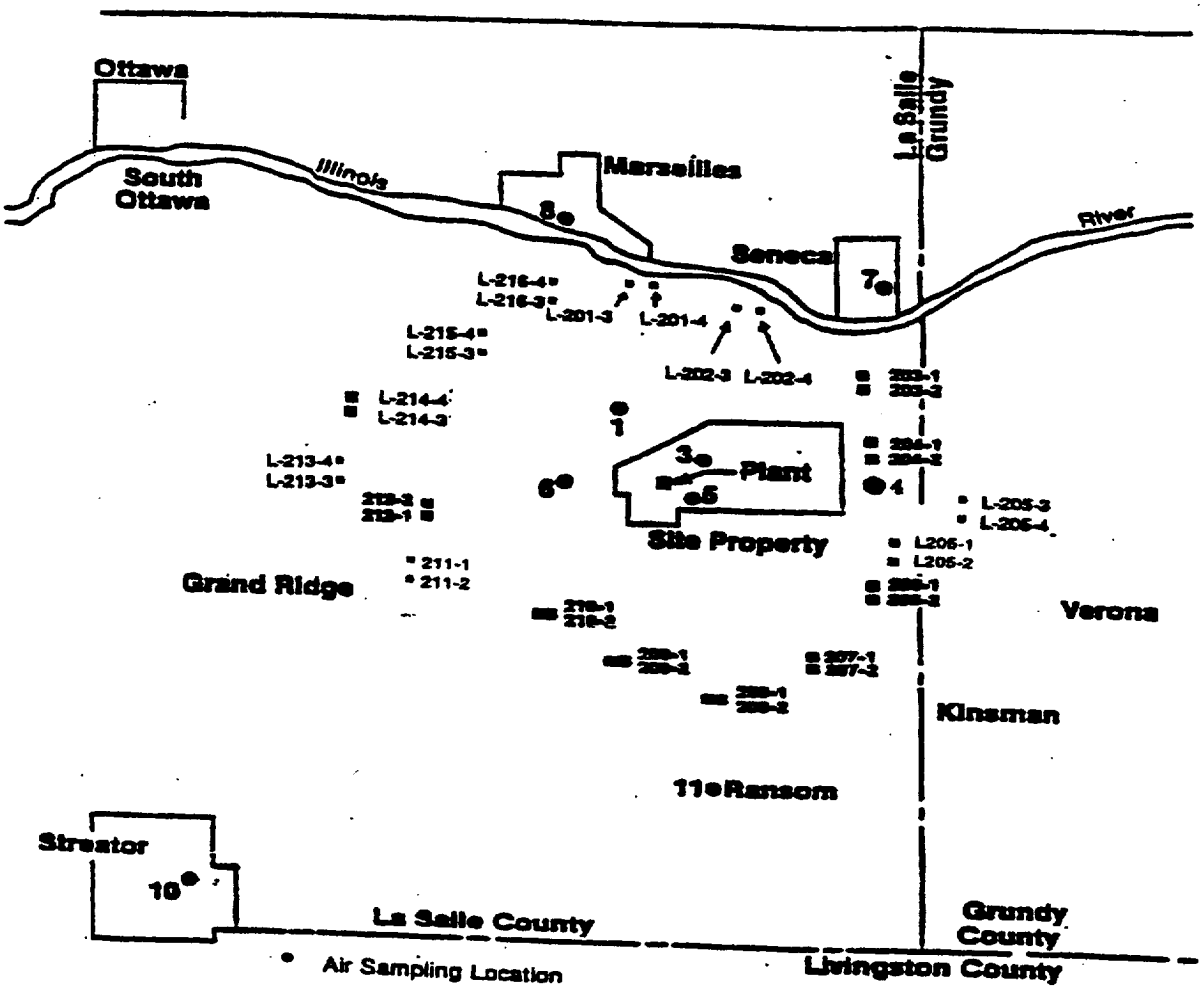
Table 11-1 (Cont'd)
Radiological Environmental Monitoring Program

[1] Far field samples are analyzed when near field results are inconsistent with previous measurements and radioactivity is confirmed as having its origin in airborne effluents released from the station, or at the discretion of the Radiation Protection Director.

[2] Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than 10 times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.

[3] Gamma isotopic analysis means the identification and quantification of gamma emitting radionuclides that may be attributable to the effluents from the station.

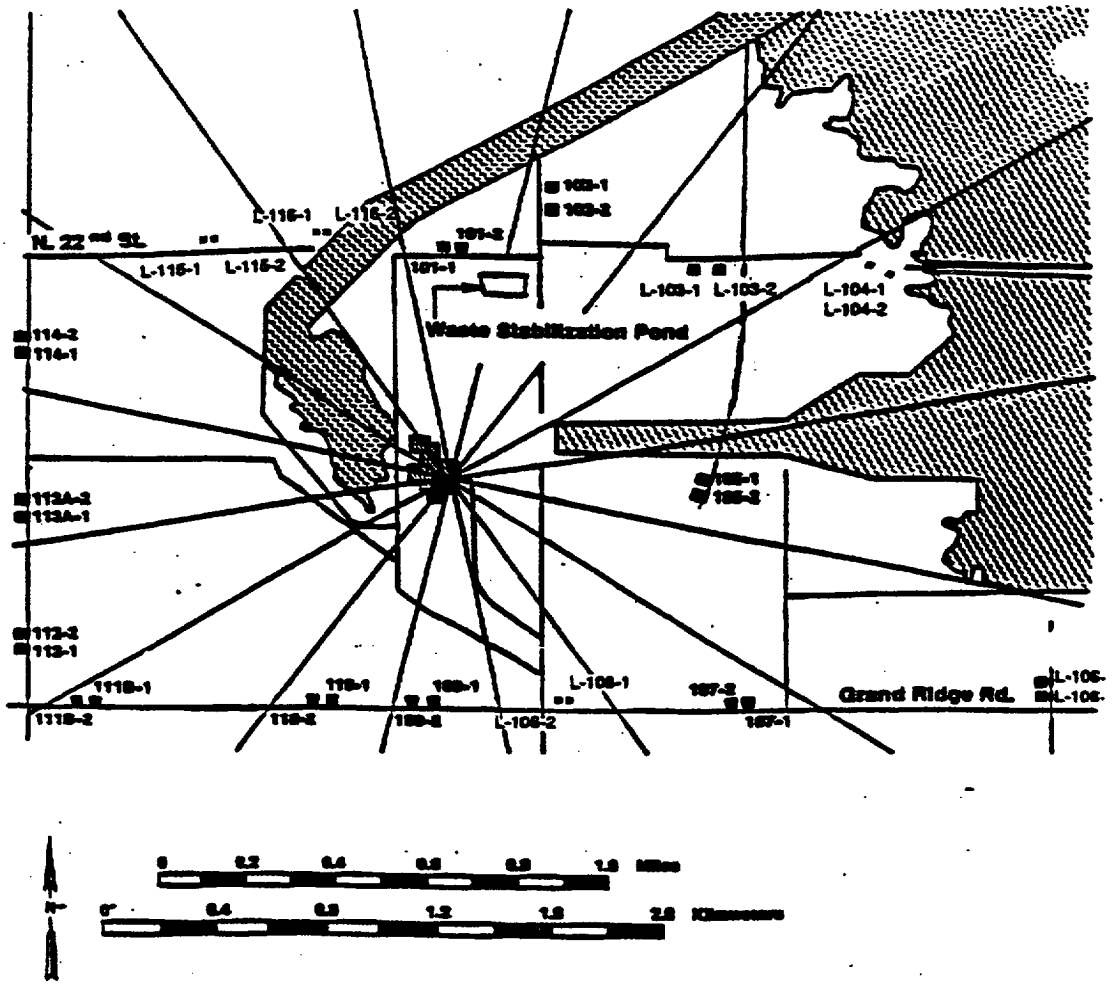
[4] I-131 analysis means the analytical separation and counting procedure are specific for this radionuclide.



OFFSITE DOSE CALCULATION MANUAL
LA SALLE COUNTY STATION

FIGURE 11-1

FIXED AIR SAMPLING SITES AND OUTER RING TLD LOCATIONS

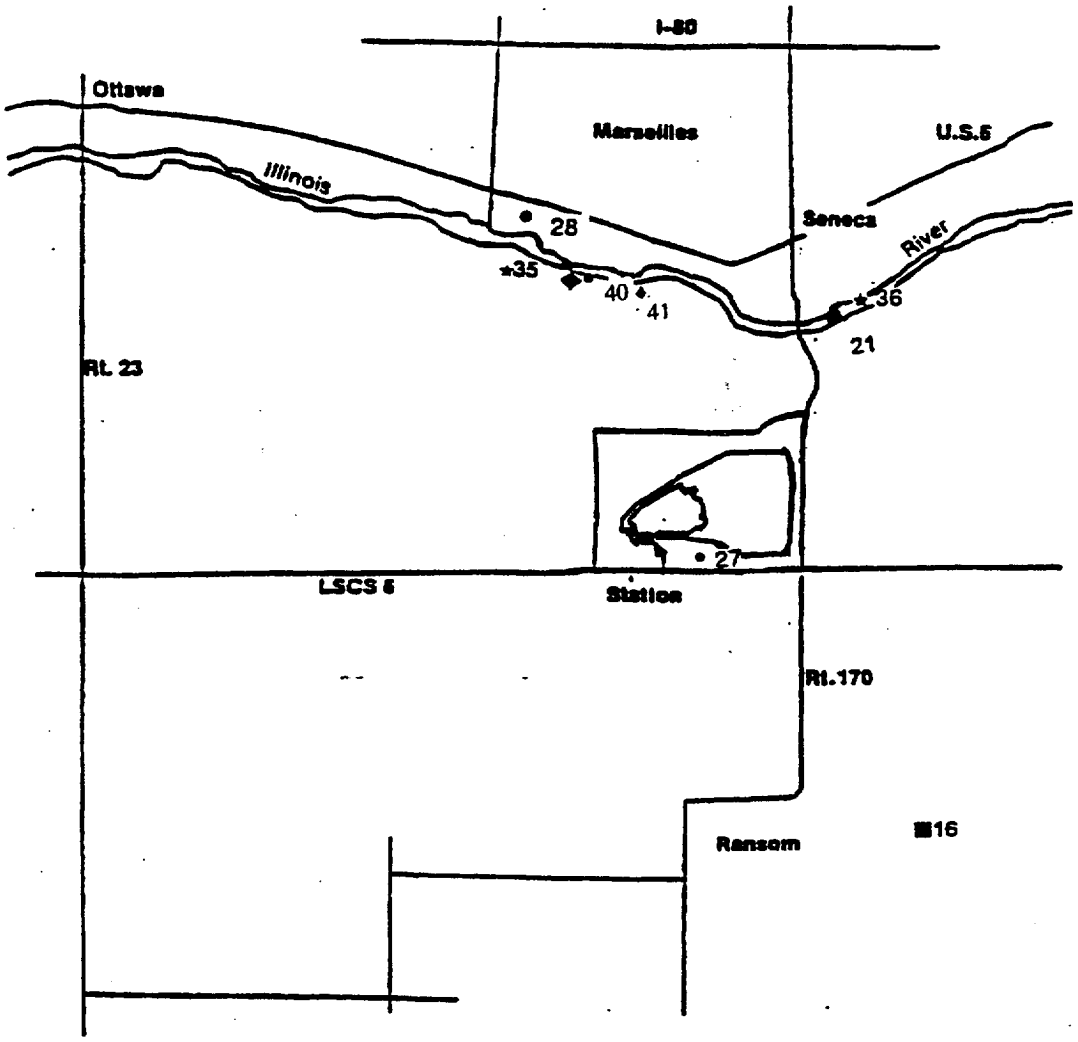


■ TLD Location

OFFSITE DOSE CALCULATION MANUAL
LA SALLE COUNTY STATION

FIGURE 11-2

INNER RING TLD LOCATIONS



OFFSITE DOSE CALCULATION MANUAL
LA SALLE COUNTY STATION

FIGURE 11-3

INGESTION AND WATERBORNE EXPOSURE PATHWAY SAMPLE LOCATIONS

LASALLE ANNEX INDEX

CHAPTER 12

Revision 3

SPECIAL NOTE

The transfer of the Radiological Effluent Technical Specifications (RETS) to the ODCM has been approved by the Nuclear Regulatory Commission in Amendments 85/69.

CHAPTER 12

RADIOACTIVE EFFLUENT TECHNICAL STANDARDS (RETS) TABLE OF CONTENTS

CHAPTER 12

RADIOACTIVE EFFLUENT TECHNICAL STANDARDS (RETS) LIST OF TABLES