

Commonwealth Edison Company
LaSalle Generating Station
2601 North 21st Road
Marseilles, IL 61341-9757
Tel 815-357-6761



August 29, 1997

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

Subject: Semi-annual Radioactive Effluent Report
LaSalle County Station, Units 1 and 2
Facility Operating License NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Enclosed is the Semi-annual Radioactive Effluent Report January through June, 1997, for LaSalle County Nuclear Station.

If there are any questions or comments concerning this letter, please refer them to me at (815) 357-6761, extension 2212.

Respectfully,

Fred Dacimo
Plant General Manager
LaSalle County Station

Enclosure

NBT

cc: A. B. Beach, NRC Region III Administrator
M. P. Huber, NRC Senior Resident Inspector - LaSalle
D. M. Skay, Project Manager - NRR - LaSalle
F. Niziolek, Office of Nuclear Facility Safety - IDNS
Document Control Desk - 2 Copies
NRC Region III, Chief Reactor Support Programs Branch
Illinois Department of Nuclear Safety
American Nuclear Insurers
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LASALLE COUNTY NUCLEAR POWER STATION
 UNITS ONE AND TWO
 DOCKET NUMBERS 50-373 AND 50-374

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First</u> <u>Quarter</u>	<u>Second</u> <u>Quarter</u>	<u>Estimated</u> <u>Total</u> <u>Error %</u>
A.	Fission and Activation Gases				
1.	Total release	Ci	0.00E+00	0.00E+00	N/A
2.	Average release rate for period	uCi/sec	N/A	N/A	
B.	Iodines				
1.	Total iodine-131	Ci	0.00E+00	0.00E+00	N/A
2.	Average release rate for period	uCi/sec	N/A	N/A	
C.	Particulates				
1.	Particulates with T1/2 >8 days	Ci	1.87E-05	2.21E-05	29%
2.	Average release rate for period	uCi/sec	2.38E-06	2.81E-06	
3.	Gross alpha radioactivity (estimate)	Ci	<1.00E-11	<1.00E-11	
D.	Tritium				
1.	Total release	Ci	5.44E-01	0.00E+00	24%
2.	Average release rate for period	uCi/sec	6.92E-02	N/A	

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

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

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

Nuclides Released		January	February	March	First Quarter
1. Fission Gases					
Ar-41	Ci	<1.00E-06	<1.00E-06	<1.06E-06	<1.00E-06
Kr-85	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-85m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-87	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-88	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-133	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-133m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-135	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-135m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Total for period	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
2. Iodines					
I-131	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-132	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-133	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-135	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Total for period	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
3. Particulates					
Cr-51	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Mn-54	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Co-58	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Fe-59	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Co-60	Ci	<1.00E-11	2.17E-11	1.87E-05	1.87E-05
Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sr-89 (Estimate)	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sr-90 (Estimate)	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Nb-95	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Mo-99	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Cs-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Cs-137	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ba-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
La-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ce-141	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Total for period	Ci	<1.00E-11	2.17E-11	1.87E-05	1.87E-05

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

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

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

Nuclides Released		<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
1. Fission Gases					
Ar-41	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-85	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-85m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-87	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Kr-88	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-131m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-133	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-133m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-135	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-135m	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Xe-138	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
Total for period	Ci	<1.00E-06	<1.00E-06	<1.00E-06	<1.00E-06
2. Iodines					
I-131	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-132	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-133	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
I-135	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Total for period	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
3. Particulates					
Cr-51	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Mn-54	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Co-58	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Fe-59	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Co-60	Ci	2.18E-05	2.79E-07	<1.00E-11	2.21E-05
Zn-65	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sr-89 (Estimate)	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Sr-90 (Estimate)	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Nb-95	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Mo-99	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Cs-134	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Cs-137	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ba-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
La-140	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ce-141	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Ce-144	Ci	<1.00E-11	<1.00E-11	<1.00E-11	<1.00E-11
Total for period	Ci	2.18E-05	2.79E-07	<1.00E-11	2.21E-05

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

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

UNIT ONE

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>	<u>ESTIMATED TOTAL ERROR%</u>
A.	Fission and Activation Products				
1.	Total release (not including tritium, gases, alpha)	Ci	4.72E-02	5.11E-02	10%
2.	Average concentration released	uCi/ml	9.87E-05	6.88E-05	
3.	Maximum concentration released	uCi/ml	1.34E-04	1.29E-04	
B.	Tritium				
1.	Total release	Ci	1.16E+00	1.29E+00	12%
2.	Average concentration released	uCi/ml	2.32E-03	2.22E-03	
C.	Dissolved Noble Gases				
1.	Total release	Ci	0.00E+00	0.00E+00	N/A
2.	Average concentration released	uCi/ml	N/A	N/A	
D.	Gross Alpha Radioactivity				
1.	Total release	Ci	0.00E+00	0.00E+00	N/A
2.	Average concentration released	uCi/ml	N/A	N/A	
E.	Volume of Waste Released (prior to dilution)	liters	4.98E+05	5.90E+05	
F.	Volume of Dilution Water	liters	6.08E+08	8.21E+08	

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

UNIT ONE BATCH MODE

LIQUID EFFLUENTS

Nuclides Released		<u>January</u>	<u>February</u>	<u>March</u>	<u>First Quarter</u>
Cr-51	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn-54	Ci	3.04E-03	8.36E-04	0.00E+00	3.87E-03
Fe-55	Ci	1.20E-02	4.24E-03	0.00E+00	1.62E-02
Co-58	Ci	4.02E-05	0.00E+00	0.00E+00	4.02E-05
Fe-59	Ci	2.38E-04	2.33E-05	0.00E+00	2.61E-04
Co-60	Ci	1.79E-02	4.84E-03	0.00E+00	2.27E-02
Zn-65	Ci	2.51E-03	1.34E-03	0.00E+00	3.85E-03
Sr-89	Ci	6.66E-07	2.34E-07	0.00E+00	9.00E-07
Sr-90	Ci	2.07E-07	7.28E-08	0.00E+00	2.80E-07
Nb-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mo-99	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	Ci	4.05E-05	1.05E-05	0.00E+00	5.10E-05
Cs-137	Ci	1.36E-04	2.90E-05	0.00E+00	1.65E-04
Ba-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-141	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	3.59E-02	1.13E-02	0.00E+00	4.72E-02
Xe-131m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

UNIT ONE BATCH MODE

LIQUID EFFLUENTS

Nuclides Released		<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
Cr-51	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn-54	Ci	1.88E-04	1.15E-03	1.18E-03	2.52E-03
Fe-55	Ci	6.62E-03	1.14E-02	8.07E-03	2.61E-02
Fe-59	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	Ci	1.13E-03	9.45E-03	1.01E-02	2.07E-02
Zn-65	Ci	4.09E-04	6.32E-04	5.80E-04	1.62E-03
Sr-89	Ci	1.27E-06	2.04E-06	1.17E-04	1.20E-04
Sr-90	Ci	6.06E-07	9.74E-07	4.97E-06	6.55E-06
Zr-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mo-99	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	Ci	2.34E-06	0.00E+00	1.09E-06	3.43E-06
Cs-137	Ci	1.06E-05	3.13E-05	3.72E-05	7.91E-05
Ba-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-141	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	8.36E-03	2.27E-02	2.01E-02	5.11E-02
Xe-131m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

UNIT TWO

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>	<u>Estimated Total Error%</u>
A.	Fission and Activation Products				
1.	Total release (not including tritium, gases, alpha)	Ci	4.72E-02	5.11E-02	
2.	Average concentration released	uCi/ml	9.87E-05	6.88E-05	10%
3.	Maximum concentration released	uCi/ml	1.34E-04	1.29E-04	
B.	Tritium				
1.	Total release	Ci	1.16E+00	1.29E+00	
2.	Average concentration released	uCi/ml	2.32E-03	2.22E-03	12%
C.	Dissolved Noble Gases				
1.	Total release	Ci	0.00E+00	0.00E+00	N/A
2.	Average concentration released	uCi/ml	N/A	N/A	
D.	Gross Alpha Radioactivity				
1.	Total release	Ci	0.00E+00	0.00E+00	N/A
2.	Average concentration released	uCi/ml	N/A	N/A	
E.	Volume of Waste Released				
		liters	4.98E+05	5.90E+05	
F.	Volume of Dilution Water				
		liters	6.08E+08	8.21E+08	

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

UNIT TWO BATCH MODE

LIQUID EFFLUENTS

Nuclides Released		<u>January</u>	<u>February</u>	<u>March</u>	<u>First Quarter</u>
Cr-51	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn-54	Ci	3.04E-03	8.36E-04	0.00E+00	3.87E-03
Fe-55	Ci	1.20E-02	4.24E-03	0.00E+00	1.62E-02
Co-58	Ci	4.02E-05	0.00E+00	0.00E+00	4.02E-05
Fe-59	Ci	2.38E-04	2.33E-05	0.00E+00	2.61E-04
Co-60	Ci	1.79E-02	4.84E-03	0.00E+00	2.27E-02
Zn-65	Ci	2.51E-03	1.34E-03	0.00E+00	3.85E-03
Sr-89	Ci	6.66E-07	2.34E-07	0.00E+00	9.00E-07
Sr-90	Ci	2.07E-07	7.28E-08	0.00E+00	2.80E-07
Nb-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mo-99	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	Ci	4.05E-05	1.05E-05	0.00E+00	5.10E-05
Cs-137	Ci	1.36E-04	2.90E-05	0.00E+00	1.65E-04
Ba-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-141	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	3.59E-02	1.13E-02	0.00E+00	4.72E-02
Xe-131m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

UNIT TWO BATCH MODE

LIQUID EFFLUENTS

Nuclides Released		<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
Cr-51	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn-54	Ci	1.88E-04	1.15E-03	1.18E-03	2.52E-03
Fe-55	Ci	6.62E-03	1.14E-02	8.07E-03	2.61E-02
Fe-59	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	Ci	1.13E-03	9.45E-03	1.01E-02	2.07E-02
Zn-65	Ci	4.09E-04	6.32E-04	5.80E-04	1.62E-03
Sr-89	Ci	1.27E-06	2.04E-06	1.17E-04	1.20E-04
Sr-90	Ci	6.06E-07	9.74E-07	4.97E-06	6.55E-06
Zr-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mo-99	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	Ci	2.34E-06	0.00E+00	1.09E-06	3.43E-06
Cs-137	Ci	1.06E-05	3.13E-05	3.72E-05	7.91E-05
Ba-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La-140	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-141	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce-144	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	8.36E-03	2.27E-02	2.01E-02	5.11E-02
Xe-131m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135m	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xe-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total for period	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

MAXIMUM DOSES RESULTING FROM RELEASES

			<u>First</u> <u>Quarter</u>	<u>Second</u> <u>Quarter</u>
A.	Gaseous Effluents (Units One and Two)			
1.	Gamma air	mrad	0.00E+00	0.00E+00
2.	Beta air	mrad	0.00E+00	0.00E+00
3.	Total body	mrem	0.00E+00	0.00E+00
4.	Skin	mrem	0.00E+00	0.00E+00
5.	Organ	mrem	1.38E-05	1.63E-05
B.	Liquid Effluents (Unit One)			
1.	Total body	mrem	1.83E-04	8.62E-05
4.	Internal organ (adult liver)	mrem	3.35E-04	2.05E-04
C.	Liquid Effluents (Unit Two)			
1.	Total body	mrem	1.83E-04	8.62E-05
4.	Internal organ	mrem	3.35E-04	2.05E-04

COMPLIANCE STATUS

A.	Gaseous Effluents (Units One and Two)				
1.	Gamma air	% of Tech. Spec. Limit	0.00	0.00	
2.	Beta air	% of Tech. Spec. Limit	0.00	0.00	
3.	Total body	% of Tech. Spec. Limit	0.00	0.00	
4.	Skin	% of Tech. Spec. Limit	0.00	0.00	
5.	Organ (adult)	% of Tech. Spec. Limit	0.00	0.00	
B.	Liquid Effluents (Unit One)				
1.	Total body	% of Tech. Spec. Limit	0.01	0.01	
2.	Internal organ (Adult Liver)	% of Tech. Spec. Limit	0.01	0.00	
C.	Liquid Effluents (Unit Two)				
1.	Total body	% of Tech. Spec. Limit	0.01	0.01	
2.	Internal organ (adult liver)	% of Tech. Spec. Limit	0.01	0.00	

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

			<u>January</u>	<u>February</u>	<u>March</u>	<u>First Quarter</u>
1.	Spent resins, filter sludges, evaporator bottoms, etc.					
a.	Quantity shipped	cu.m.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
b.	Total activity	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
c.	Major nuclides (estimate %)					
	Mn-54	%	0	0	0	
	Fe-55	%	0	0	0	
	Co-58	%	0	0	0	
	Co-60	%	0	0	0	
d.	Container type		N/A	N/A	N/A	
e.	Container volume	cu.m.	N/A	N/A	N/A	
f.	Solidification agent		N/A	N/A	N/A	
2.	Dry compressible waste, contaminated equipment, etc.					
a.	Quantity shipped	cu.m.	1.45E+02	0.00E+00	7.24E+01	2.17E+02
b.	Total activity	Ci	2.78E-01	0.00E+00	1.63E-01	4.41E-01
c.	Major nuclides (estimate %)					
	Cr-51	%	1.08	0	1.08	
	Mn-54	%	6.96	0	6.96	
	Fe-55	%	79.87	0	79.87	
	Co-60	%	10.81	0	10.81	
d.	Container type		LSA	N/A	LSA	
e.	Container volume	cu.m.	7.24E+01	N/A	7.24E+01	

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>January</u>	<u>February</u>	<u>March</u>	<u>First Quarter</u>
3.	Other				
a.	Quantity shipped cu.m.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
b.	Total activity Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
c.	Major nuclides (estimate %)				
	Cr-51 %	0	0	0	
	Mn-54 %	0	0	0	
	Fe-55 %	0	0	0	
	Co-59 %	0	0	0	
	Co-60 %	0	0	0	
d.	Container type	N/A	N/A	N/A	
e.	Container volume cu.m.	N/A	N/A	N/A	
4.	Irradiated Components				
a.	Number of shipments	0	0	0	
b.	Mode of Transportation	N/A	N/A	N/A	
c.	Destination	N/A	N/A	N/A	
5.	Solid Waste Disposition				
a.	Number of Shipments	2	0	1	3
b.	Mode of Transportation Number	Truck 2	N/A	Truck 1	
c.	Destination Number	Barnwell 2	N/A	Barnwell 1	

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
1.	Spent resins, filter sludges, evaporator bottoms, etc.				
a.	Quantity shipped cu.m.	2.33E+01	6.88E+01	6.54E+01	1.58E+02
b.	Total activity Ci	1.94E+01	2.51E+02	3.89E+02	6.59E+02
c.	Major nuclides (estimate %)				
	Mn-54 %	6.98	6.98	6.98	
	Fe-55 %	61.23	61.23	61.23	
	Co-58 %	0.76	0.76	0.76	
	Co-60 %	30.62	30.62	30.62	
d.	Container type	LSA	LSA	LSA	
e.	Container volume cu.m.	5.82E+00	5.82E+00 3.40E+00	5.82E+00 4.83E+00 3.40E+00	
f.	Solidification agent	Cement	Cement	Cement	
2.	Dry compressible waste, contaminated equipment, etc.				
a.	Quantity shipped cu.m.	7.24E+01	5.82+00	5.82E+00	8.40E+01
b.	Total activity Ci	1.23E-01	3.29E+00	4.09E+01	4.43E+01
c.	Major nuclides (estimate %)				
	Cr-51 %	1.08	1.08	1.08	
	Mn-54 %	6.96	6.96	6.96	
	Fe-55 %	79.87	79.87	79.87	
	Co-60 %	10.81	10.81	10.81	
d.	Container type	LSA	LSA	LSA	
e.	Container volume cu.m.	7.24E+01	5.82E+00	5.82E+00	

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
3.	Other				
a.	Quantity shipped cu.m.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
b.	Total activity Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
c.	Major nuclides (estimate %)				
	Cr-51 %	0	0	0	
	Mn-54 %	0	0	0	
	Fe-55 %	0	0	0	
	Co-59 %	0	0	0	
	Co-60 %	0	0	0	
d.	Container type	N/A	N/A	N/A	
e.	Container volume cu.m.	N/A	N/A	N/A	
4.	Irradiated Components				
a.	Number of shipments	0	0	0	0
b.	Mode of Transportation	N/A	N/A	N/A	
c.	Destination	N/A	N/A	N/A	
5.	Solid Waste Disposition				
a.	Number of Shipments	5	14	13	32
b.	Mode of Transportation	Truck	Truck	Truck	
	Number	5	14	13	
c.	Destination	Barnwell	Barnwell	Barnwell	
	Number	5	14	13	
	Estimated total error % for spent resins, filter sludges, evaporator bottoms, etc. (Jan-June)				12%
	Estimated total error % for dry compressible waste, contaminated equipment, etc. (Jan-June)				15%

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:
 - 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 to 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 to 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.

Supplemental Information (continued)

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 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:

<u>Nuclide</u>	<u>DWC (μci/ml)</u>
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

- a. Not Applicable.

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.

Supplemental Information (continued)

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

b. Liquid Effluents

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

5. Batch Releases

a. Gaseous

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

b. Liquid

- | | |
|---|----------|
| 1) Number of batch releases: | 35 |
| 2) Total time period for batch releases: Min. | 2.62E+04 |
| 3) Maximum time period for a batch release: Min. | 8.33E+02 |
| 4) Average time period for batch releases: Min. | 7.49E+02 |
| 5) Minimum time period for a batch release: Min. | 3.78E+02 |
| 6) Average stream flow during periods of release of effluent into a flowing stream: gpm | 8.30E+06 |

Supplemental Information (continued)

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.

8. Effluent Monitoring Instrumentation timeclocks.

PRM Channel 1B of the RHR Service Water Effluent Line was inoperable for greater than the 30 day limit specified in ODCM (Section 12.2.1.A.) There is no safety significance since the 1B RHR WS System was out of service and drained during this period.

Radwaste Discharge Blowdown Flow Line Inaccurate Flow Indications

In February of 1997, during maintenance on the blowdown flow line, it was noted that the blowdown flow indication did not indicate zero with no flow in the blowdown line. Vortex Technologies was called out to perform an electronic verification. It was determined that the only sure way of resolving the flow issue was to perform an actual flow test. The probe and electronics box were sent to Vortex Technologie's facility for recertification. The recertification information revealed that the zero and full scale adjustments for the device were sent incorrectly. The zero adjustment was set for a 6.5% positive factor (at 0 flow, the reading would be 6.5% high). The full scale adjustment was set for 95,000 GPM rather than 100,000 GPM.

The Station has reviewed the calculations for the 18 discharges performed in December 96 and January 97 using the known errors discussed above and verified that the discharges did not exceed 10CFR20 limits.

Radwaste discharge flow and alarm limits are calculated based upon a given lake blowdown flow rate such that as long as the actual blowdown flow is equal to or greater than this baseline value, the discharge can be performed up to the maximum calculated discharge rate (Fmax). The effluent radiation monitor alarm/trip setpoint is also calculated based on this baseline blowdown flow value. The calibration for the blowdown flow indicator was found to be off, with the actual flowrate being approx. 6300 gpm lower than indicated.

Of the 18 discharged batches, there were 7 that had the indicated blowdown flowrate during discharge greater than the minimum calculated blowdown flowrate by 7000 gpm or more. Therefore, even with a 6300gpm offset, these 7 batches were discharged with actual blowdown dilution flow greater than or equal to the minimum required flow, and therefore do not require any further review. Of the remaining 11 discharged batches, a 7000 gpm offset in blowdown flow would affect the revised maximum allowed discharge rate vs. the actual discharge rate, and the revised rad monitor alarm/trip setpoint vs. the actual setpoint used during the discharge.

After reducing blowdown flow by 7,000 gpm a revised Fmax (maximum calculated discharge rate) 13,000 gpm blowdown flow, the revised Fmax is 730 gpm. The authorized max discharge flow would still have been 45 gpm. Actual discharge flow was 30 gpm, well within the revised limit. No 10CFR20 limits were exceeded.

Errata for 1995 and 1996 Semi-Annual Effluent Reports

During preparation of a Corporate Report comparing LaSalle Gaseous Effluents for 1995 vs. 1996, it was noted that two of the Semi-Annual Effluent Reports contained errors.

For the July through December 1995 Report the value supplied for tritium in the third quarter only includes the gaseous effluent for the month of July. The tritium total for the third quarter should be 76.85 curies instead of 21.7 curies. The Annual Gaseous Effluent total should be 176.09 curies instead of 120.9 curies.

For the January through June 1996 Report the value supplied for the fission and activation gases in the second quarter is incorrect. A mistake was made converting the value for Xe-133m from microcuries to curies when the quarterly total was calculated. The fission and activation gases total for the second quarter should be 79.3 curies instead of 524.6 curies. The Annual Gaseous Effluent total should be 770.3 curies instead of 1222 curies.

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1997)

METEOROLOGICAL DATA

ComEd LASALLE STATION
375 ft. WIND SPEED and WIND DIRECTION

January-March 1997
375-33 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2107
VALUES ARE PERCENT OCCURRENCE

SPEED CLASS	WIND DIRECTION CLASSES														TOTAL	STABILITY CLASSES							TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW		WN	NNW	EU	MU	SU	N	SS		MS
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00																								
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
- N	.00	.19	.14	.19	.00	.00	.00	.00	.05	.05	.14	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3 SS	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00
MS	.00	.00	.00	.00	.05	.05	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1.23																								
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
4 SU	.00	.05	.09	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
- N	.28	.71	.76	.52	.47	.19	.14	.09	.14	.38	.24	.05	.24	.24	.14	.19	4.79	.19	4.79	.90	.14	.19	.00	.00
7 SS	.09	.09	.09	.14	.05	.09	.09	.14	.00	.05	.14	.09	.05	.05	.09	.00	1.28	.14	1.28	.00	.00	.00	.00	.00
MS	.00	.09	.00	.00	.05	.00	.00	.00	.00	.00	.05	.09	.09	.00	.00	.05	.43	.00	.00	.00	.00	.00	.00	.00
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00
6.83																								
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MU	.00	.05	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.24	.00	.24	.00	.00	.00	.00	.00	.00
8 SU	.09	.09	.14	.00	.00	.00	.00	.00	.00	.00	.00	.05	.09	.05	.00	.52	.00	.52	.00	.00	.00	.00	.00	.00
- N	1.00	.76	.62	.33	.57	.28	.19	.28	.14	.33	.24	.71	.66	.85	.47	7.93	7.93	7.93	7.93	7.93	2.66	1.14	.19	.00
1 SS	.05	.05	.09	.09	.00	.38	.24	.14	.19	.09	.24	.19	.19	.19	.33	2.66	.00	2.66	.00	.00	.00	.00	.00	.00
2 MS	.00	.00	.05	.05	.00	.09	.05	.00	.09	.09	.09	.09	.14	.24	.09	1.14	.00	1.14	.00	.00	.00	.00	.00	.00
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.05	.19	.00	.00	.00	.00	.00	.00	.00	.00
12.67																								
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1 MU	.05	.09	.05	.00	.05	.00	.00	.00	.00	.00	.14	.00	.00	.05	.00	.43	.00	.43	.00	.00	.00	.00	.00	.00
3 SU	.14	.05	.00	.00	.14	.00	.00	.00	.14	.00	.05	.33	.09	.43	.09	1.57	.00	1.57	.00	.00	.00	.00	.00	.00
- N	.71	.33	.90	.28	1.14	.38	.52	.24	.24	.19	.38	.81	1.19	2.85	2.18	13.57	13.57	13.57	13.57	13.57	6.55	1.38	.19	.00
1 SS	.24	.14	.38	.43	.71	.85	.19	.28	.52	.05	.33	.33	.47	.66	.62	6.55	.00	6.55	.00	.00	.00	.00	.00	.00
8 MS	.00	.05	.00	.05	.09	.00	.09	.00	.05	.14	.09	.05	.05	.33	.24	1.38	.00	1.38	.00	.00	.00	.00	.00	.00
ES	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.05	.00	.05	.00	.00	.19	.00	.00	.00	.00	.00	.00	.00	.00
23.68																								

ComEd LASALLE STATION
375 ft. WIND SPEED and WIND DIRECTION

January-March 1997
375-33 ft. DIFFERENTIAL TEMPERATURE

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	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
1 MU	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.05	.00	.28	.05	.05	.52		.52							
9 SU	.00	.00	.00	.00	.09	.00	.00	.05	.05	.05	.14	.33	.14	.33	.00	.14	1.33		1.33						
- N	.14	.05	.85	.43	.90	.66	.57	.24	.28	.24	.33	.66	.90	2.37	1.76	.66	11.06			11.06					
2 SS	.05	.05	.38	.43	.38	.28	.24	.24	.33	.28	.38	.52	.28	1.80	.81	.19	6.64				6.64				
4 MS	.00	.00	.00	.05	.05	.33	.33	.24	.24	.05	.19	.14	.33	.28	.14	.00	2.37					2.37			
ES	.00	.00	.00	.00	.00	.00	.05	.00	.00	.14	.05	.00	.05	.05	.00	.00	.33							.33	
																									22.26
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
6 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.00	.00	.19		.19							
T SU	.00	.00	.00	.00	.00	.00	.00	.09	.00	.05	.00	.05	.14	.00	.05	.38			.38						
N	.19	.19	.00	.33	.85	.71	.14	.00	.71	.28	.52	.19	3.08	5.41	1.90	.33	14.86			14.86					
2 SS	.00	.00	.00	.00	.19	.57	.47	.38	1.04	1.71	1.71	.66	.71	2.85	.81	.00	11.11				11.11				
4 MS	.00	.00	.00	.05	.09	.24	.43	.33	.90	.95	1.85	.62	.57	.24	.00	.00	6.26					6.26			
ES	.00	.00	.00	.00	.00	.00	.00	.00	.05	.19	.00	.24	.05	.00	.00	.52								.52	
																									33.32
TOT	3.04	3.04	4.65	3.37	5.89	5.13	3.84	2.85	5.22	5.13	7.83	6.03	9.73	20.17	9.87	4.22	100.00	.00	1.42	3.99	53.11	28.38	11.77	1.33	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-
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	Extremely Unstable
	.05	.14	.09	.00	.05	.00	.00	.09	.00	.00	.24	.00	.00	.66	.05	.05	1.42	Moderately Unstable
	.24	.19	.24	.00	.24	.00	.00	.05	.28	.05	.28	.66	.33	1.00	.14	.28	3.99	Slightly Unstable
	2.33	2.23	3.27	2.09	3.94	2.23	1.57	.85	1.57	1.47	1.85	2.56	6.07	11.72	6.45	2.90	53.11	Neutral
	.43	.33	1.00	1.09	1.33	2.18	1.23	1.19	2.09	2.18	2.85	1.80	1.71	5.55	2.71	.71	28.38	Slightly Stable
	.00	.14	.05	.19	.33	.71	.95	.62	1.28	1.23	2.28	1.00	1.19	1.09	.47	.24	11.77	Moderately Stable
	.00	.00	.00	.00	.00	.00	.09	.05	.00	.19	.33	.00	.43	.14	.05	.05	1.33	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-
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	CALM
	.00	.19	.19	.19	.05	.05	.05	.05	.05	.05	.19	.14	.00	.00	.05	.00	1.23	0.8 - 3.5 mph
	.38	.95	.95	.66	.57	.28	.24	.24	.14	.43	.52	.24	.47	.28	.24	.24	6.83	3.6 - 7.5 mph
	1.14	.95	.95	.47	.57	.76	.47	.43	.43	.52	.62	1.00	1.09	1.52	1.00	.76	12.67	7.6 - 12.5 mph
	1.14	.66	1.33	.76	2.14	1.23	.85	.57	.95	.38	1.04	1.52	1.80	4.37	3.13	1.80	23.68	12.6 - 18.5 mph
	.19	.09	1.23	.90	1.42	1.28	1.19	.85	.90	.76	1.14	1.66	1.71	5.13	2.75	1.04	22.26	18.6 - 24.5 mph
	.19	.19	.00	.38	1.14	1.52	1.04	.71	2.75	2.99	4.32	1.47	4.65	8.88	2.71	.38	33.32	> 24.5 mph

ComEd LASALLE STATION
375 ft. WIND SPEED and WIND DIRECTION

April-June 1997
375-33 ft. DIFFERENTIAL TEMPERATURE

NUMBER OF OBSERVATIONS = 2184
VALUES ARE PERCENT OCCURRENCE

SPEED CLASS	WIND DIRECTION CLASSES																TOTAL	STABILITY CLASSES							TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		EU	MU	SU	N	SS	MS	ES	
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00						
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00					
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00				
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00			
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00		
																							.00		
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05			.05						
- N	.00	.18	.18	.09	.00	.09	.00	.00	.00	.00	.05	.05	.09	.00	.09	.82				.82					
3 SS	.05	.00	.05	.09	.00	.00	.05	.00	.00	.00	.05	.00	.05	.05	.14	.50					.50				
MS	.00	.05	.05	.05	.00	.00	.00	.14	.00	.00	.00	.09	.00	.00	.00	.37						.37			
ES	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.09							.09		
																							.09		
																								.83	
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
MU	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.00	.00	.09	.09								
4 SU	.05	.00	.18	.09	.00	.05	.00	.00	.00	.05	.27	.09	.00	.00	.00	.78			.78						
- N	.14	.05	.32	.37	.37	.14	.23	.32	.23	.18	.32	.27	.23	.32	.05	.18	3.71			3.71					
7 SS	.14	.18	.14	.05	.14	.05	.05	.27	.23	.14	.09	.05	.27	.18	.09	.05	2.11				2.11				
MS	.00	.00	.05	.00	.00	.14	.14	.05	.09	.09	.18	.14	.05	.00	.05	.14	1.10					1.10			
ES	.00	.00	.00	.00	.00	.00	.05	.05	.09	.09	.09	.05	.00	.00	.00	.32							.32		
																							.32		
																								8.10	
EU	.00	.14	.27	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.46	.46								
MU	.09	.14	.73	.18	.05	.00	.14	.32	.64	.05	.00	.00	.00	.00	.09	2.43	2.43								
8 SU	.18	.09	.14	.23	.00	.05	.09	.09	.18	.05	.37	.23	.00	.05	.05	.27	2.06			2.06					
- N	.55	.50	1.10	.60	.92	.78	.73	.41	.41	.37	.18	.60	.78	.69	.50	.46	9.57			9.57					
1 SS	.23	.14	.69	.32	.41	.46	.69	.23	.18	.23	.27	.23	.14	.18	.14	.05	4.58				4.58				
2 MS	.05	.00	.00	.00	.05	.05	.14	.14	.23	.05	.14	.09	.46	.18	.27	.05	1.88					1.88			
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.09	.05	.05	.00	.23							.23		
																							.23		
																								21.20	
EU	.00	.00	.14	.05	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.23	.23								
1 MU	.00	.00	.14	.14	.18	.00	.00	.09	.23	.32	.05	.00	.05	.00	.00	1.19	1.19								
3 SU	.27	.09	.27	.23	.05	.14	.09	.27	.14	.23	.14	.37	.05	.27	.27	.00	2.88			2.88					
- N	.78	.23	2.38	1.92	.96	.69	.18	.27	.37	.37	.27	.64	.55	.46	.78	1.28	12.13				12.13				
1 SS	.46	.37	1.24	.55	.37	.92	.50	.09	.32	.46	.41	.32	.37	.14	.46	.41	7.37				7.37				
8 MS	.14	.00	.05	.05	.09	.27	.55	.55	.55	.09	.14	.09	.27	.23	.32	.27	3.66					3.66			
ES	.05	.00	.00	.00	.00	.14	.14	.27	.41	.14	.05	.00	.05	.18	.00	1.42							1.42		
																							1.42		
																								28.89	

ComEd LASALLE STATION
375 ft. WIND SPEED and WIND DIRECTION

April-June 1997
375-33 ft. DIFFERENTIAL TEMPERATURE

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	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
1 MU	.00	.00	.18	.27	.05	.00	.00	.00	.00	.50	.18	.05	.00	.18	.00	.00	1.42	1.42							
9 SU	.00	.00	.05	.05	.14	.05	.00	.00	.00	.18	.09	.00	.05	.18	.27	.14	1.19	1.19							
- N	.14	.00	.87	1.01	1.05	.37	.09	.00	.18	.18	.18	.46	.09	.27	.73	.87	6.50			6.50					
2 SS	.14	.27	.09	.87	.87	.46	.18	.09	.00	.32	.78	.09	.14	.37	.27	.37	5.31					5.31			
4 MS	.37	.00	.00	.23	.09	.23	.27	.09	.14	.23	.14	.05	.09	.41	.00	.23	2.56						2.56		
ES	.00	.00	.00	.00	.00	.00	.27	.27	.50	.14	.09	.00	.05	.00	.00	1.33							1.33		
																									18.32
EU	.00	.00	.00	.05	.09	.00	.00	.00	.00	.00	.00	.05	.14	.00	.00	.32	.32								
6 MU	.00	.00	.09	.09	.09	.00	.00	.00	.09	.00	.05	.09	.41	.14	.00	1.05	1.05								
T SU	.00	.00	.05	.00	.18	.00	.00	.00	.05	.18	.05	.05	.00	.32	.23	.05	1.14	1.14							
N	.14	.00	.27	.46	.82	.09	.14	.41	.41	.92	.69	.46	.69	1.88	1.14	.55	9.07			9.07					
2 SS	.00	.00	.00	.14	.23	.18	.23	.50	.60	1.60	1.37	.23	.32	.82	.32	.05	6.59					6.59			
4 MS	.00	.00	.00	.05	.00	.00	.00	.18	.73	.37	.09	.05	.14	.05	.00	1.65	1.65						1.65		
ES	.00	.00	.00	.00	.00	.00	.14	.27	.82	.41	.00	.00	.18	.00	.00	1.83							1.83		
																									21.66
TOT	3.94	2.43	9.71	8.20	7.19	5.31	4.90	5.13	6.73	8.88	7.42	4.76	5.04	8.24	6.41	5.72	100.00	1.01	6.18	8.10	41.80	26.47	11.22	5.22	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-
.00	.14	.41	.09	.09	.00	.00	.05	.05	.00	.00	.00	.05	.14	.00	.00	1.01	Extremely Unstable
.09	.14	1.14	.69	.37	.00	.14	.41	.92	.96	.27	.09	.14	.60	.14	.09	6.18	Moderately Unstable
.50	.18	.69	.60	.37	.27	.18	.37	.41	.69	.92	.73	.09	.82	.82	.46	8.10	Slightly Unstable
1.74	.96	5.13	4.44	4.12	2.15	1.37	1.42	1.60	2.01	1.65	2.47	2.38	3.71	3.21	3.43	41.80	Neutral
1.01	.96	2.20	2.01	2.01	2.06	1.69	1.19	1.33	2.75	2.98	.92	1.28	1.69	1.33	1.05	26.47	Slightly Stable
.55	.05	.14	.37	.23	.69	1.10	.96	1.19	1.19	.96	.46	1.01	.96	.69	.69	11.22	Moderately Stable
.05	.00	.00	.00	.00	.14	.41	.73	1.24	1.28	.64	.09	.09	.32	.23	.00	5.22	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-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	CALM
.05	.23	.27	.23	.00	.09	.05	.14	.05	.09	.05	.05	.18	.09	.05	.23	1.83	0.8 - 3.5 mph
.32	.23	.69	.50	.50	.37	.41	.69	.64	.55	1.01	.60	.55	.50	.18	.37	8.10	3.6 - 7.5 mph
1.10	1.01	2.93	1.33	1.42	1.33	1.79	1.19	1.69	.73	.96	1.19	1.47	1.14	1.01	.92	21.20	7.6 - 12.5 mph
1.69	.69	4.21	2.93	1.65	2.15	1.47	1.60	2.01	1.60	1.05	1.42	1.28	1.14	2.01	1.97	28.89	12.6 - 18.5 mph
.64	.27	1.19	2.43	2.20	1.10	.82	.46	.82	1.56	1.47	.64	.37	1.47	1.28	1.60	18.32	18.6 - 24.5 mph
.14	.00	.41	.78	1.42	.27	.37	1.05	1.51	4.35	2.88	.87	1.19	3.89	1.88	.64	21.66	> 24.5 mph