



LaSalle County Station
2601 North 21st Road
Marseilles, IL 61341
815-415-2000 Telephone
www.exeloncorp.com

RA20-022

10 CFR 50.36a

April 23, 2020

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

LaSalle County Station, Unit 1 and Unit 2
Renewed Facility Operating License No. NFP-11 and NPF-18
NRC Docket No. 50-373, 50-374, and 72-70

Subject: 2019 Annual Radioactive Effluent Release Report

Enclosed is the Exelon Generation Company, LLC, 2019 Annual Radioactive Effluent Release Report for LaSalle County Station, submitted in accordance with 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors," paragraph (a)(2), and Technical Specification 5.6.3, "Radioactive Effluent Release Report."

There are no regulatory commitments contained within this letter. Should you have any questions concerning this letter, please contact Mr. Daniel Mearhoff, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "J. Washko".

John J. Washko
Site Vice President
LaSalle County Station

Enclosure: LaSalle County Nuclear Power Station Annual Radioactive Effluent Release Report (ARERR) for 2019

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

LASALLE COUNTY NUCLEAR POWER STATION
ANNUAL RADIOLOGICAL EFFLUENT RELEASE REPORT (ARERR)
2019

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
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 mRem to any organ, and
 - b) During any calendar year: Less than or equal to 15 mRem 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.

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SUPPLEMENTAL INFORMATION

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 ($\mu\text{Ci/mL}$)
Kr-85m	2.00E-04
Kr-85	5.00E-04
Kr-87	4.00E-05
Kr-88	9.00E-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
Ar-41	7.00E-05

3. Average Energy

- 1) 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) The Containment Vent and Purge System is sampled by grab sample, which is analyzed for principal gamma emitters and H-3.
- 2) The Main Vent Stack (Station Vent Stack) is sampled by grab sample, which is analyzed for principal gamma emitters and H-3.
- 3) Standby Gas Treatment (SBGT) System is sampled by grab sample, which is analyzed for principal gamma emitters.
- 4) All release types as listed in 4.a.1) and 4.a.2) above are sampled at the Station Vent Stack (SVS) Wide Range Gas Monitor (WRGM), and those listed in 4.a.3) above are sampled at the Standby Gas Treatment (SBGT) System WRGM whenever there is flow. These effluents 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, Fe-55, Sr-89 and Sr-90. Noble gases, gross beta and gamma are continuously monitored by noble gas monitors for the SVS and the SBGT System.
- 5) The LaSalle County Station estimate of 17.37 Ci/Unit/year of C-14 (as total C-14 released) is based upon a normalized C-14 production rate of 5.1 Ci/GWt-yr, a gaseous release fraction of 0.99, a reactor power rating of 3546 MWt (per Unit) and equivalent full power operation of 354 days (per Unit).

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.

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SUPPLEMENTAL INFORMATION

- 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 |
| 3) Summary of release(s): | N/A |

b. Liquid

- | | |
|-----------------------------|------|
| 1) Number of releases: | None |
| 2) Total activity released: | N/A |
| 3) Summary of release(s): | N/A |

7. Process Control Program

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
SUPPLEMENTAL INFORMATION

There were no changes to the Process Control Program processing systems or components. There was no use of a solidification agent (e.g. cement, urea formaldehyde, etc.) during the processing of solid radioactive waste.

8. Effluent Monitoring Instrumentation time clocks and sample anomalies.

a. Time clocks:

There were no effluent monitoring time clocks exceeded during 2019.

b. Sample anomalies:

There were no sampling anomalies affecting the measurement of effluents experienced during 2019.

9. Offsite Dose Calculation Manual (ODCM) Revisions.

There were no revisions to the LaSalle Station ODCM in 2019

10. Independent Spent Fuel Storage Installation (ISFSI).

During the period April 1, 2019 to April 1, 2020, no radioactive effluents were released from the LaSalle Nuclear Station Independent Spent Fuel Storage Installation (ISFSI). Also, during this period, eight (8) casks were transferred to the outdoor concrete ISFSI storage pad.

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 UNIT 1 AND UNIT 2
 DOCKET NUMBERS 50-373 AND 50-374
 GASEOUS EFFLUENTS SUMMATION OF ALL RELEASES

A. Fission & Activation Gases	Unit	Quarter 1	Quarter 2	Quarter 3	Quarter4	Est. Total Error %
1. Total Release	Ci	1.06E+02	8.09E+01	4.39E+01	6.37E+01	2.50E+01
2. Average release rate for the period	μCi/sec	1.36E+01	1.03E+01	5.52E+00	8.01E+00	
3. Percent of ODCM limit	%	*	*	*	*	

B. Iodine						
1. Total Iodine – 131	Ci	1.64E-02	1.83E-03	1.90E-03	1.74E-03	1.50E+01
2. Average release rate for the period	μCi/sec	2.11E-03	2.32E-04	2.39E-04	2.19E-04	
3. Percent of ODCM limit	%	*	*	*	*	

C. Particulates						
1. Particulates with half-lives > 8 days	Ci	3.03E-03	2.27E-03	3.68E-03	5.65E-04	3.50E+01
2. Average release rate for the period	μCi/sec	3.90E-04	2.88E-04	4.62E-04	7.10E-05	
3. Percent of ODCM limit	%	*	*	*	*	

D. Tritium						
1. Total Release	Ci	3.71E+01	1.02E+01	1.07E+01	1.35E+01	1.50E+01
2. Average release rate for the period	μCi/sec	4.78E-00	1.29E-00	1.34E-00	1.70E-00	
3. Percent of ODCM limit	%	*	*	*	*	

E. Gross Alpha						
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average release rate for the period	μCi/sec	<LLD	<LLD	<LLD	<LLD	
3. Percent of ODCM limit	%	*	*	*	*	

F. Carbon-14						
1. Total Release	Ci	8.69E+00	8.69E+00	8.69E+00	8.68E+00	
2. Average release rate for the period	μCi/sec	1.12E+00	1.11E+00	1.09E+00	1.09E+00	
3. Percent of ODCM 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 μCi/ml

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 GASEOUS EFFLUENTS ELEVATED RELEASE UNIT 1 AND UNIT 2

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
A. Fission gases									
Kr-85m	Ci	5.01E+01	3.66E+01	3.56E+01	4.82E+01	N/A	N/A	N/A	N/A
Kr-87	Ci	2.18E+00	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Kr-88	Ci	2.10E+01	4.44E+01	3.10E+00	8.06E+00	N/A	N/A	N/A	N/A
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-133	Ci	7.48E+00	<LLD	5.18E+00	4.43E+00	N/A	N/A	N/A	N/A
Xe-135	Ci	2.48E+01	<LLD	5.45E-03	2.94E+00	N/A	N/A	N/A	N/A
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Ar-41	Ci	6.48E-03	<LLD	<LLD	1.49E-02	N/A	N/A	N/A	N/A
Total for Period	Ci	1.06E+02	8.09E+01	4.39E+01	6.37E+01	N/A	N/A	N/A	N/A
B. Iodines									
I-131	Ci	1.64E-02	1.83E-03	1.90E-03	1.74E-03	N/A	N/A	N/A	N/A
I-132	Ci	3.21E-03	6.03E-04	1.14E-03	<LLD	N/A	N/A	N/A	N/A
I-133	Ci	1.20E-02	6.17E-03	7.56E-03	5.52E-03	N/A	N/A	N/A	N/A
I-134	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
I-135	Ci	3.89E-03	<LLD	1.30E-03	<LLD	N/A	N/A	N/A	N/A
Total for Period	Ci	3.55E-02	8.60E-03	1.19E-02	7.26E-03	N/A	N/A	N/A	N/A
Tot. I-131,I-133,I-135	Ci	3.22E-02	8.00E-03	1.08E-02	7.26E-03	N/A	N/A	N/A	N/A
C. Particulates									
Na-24	Ci	4.27E-04	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Mn-54	Ci	1.93E-05	<LLD	5.85E-05	1.60E-05	N/A	N/A	N/A	N/A
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	3N/A	N/A	N/A	N/A
Co-58	Ci	2.62E-04	3.03E-04	3.26E-04	2.37E-05	N/A	N/A	N/A	N/A
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Co-60	Ci	1.15E-03	1.26E-03	1.51E-03	3.50E-04	N/A	N/A	N/A	N/A
Zn-65	Ci	4.08E-04	5.54E-04	6.68E-04	7.89E-05	N/A	N/A	N/A	N/A
Zn-69m	Ci	4.57E-04	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Sr-89	Ci	<LLD	<LLD	1.54E-04	3.85E-05	N/A	N/A	N/A	N/A
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Zr-95	Ci	<LLD	1.10E-05	<LLD	<LLD	N/A	N/A	N/A	N/A
Mo-99	Ci	2.55E-05	<LLD	8.39E-05	9.78E-07	N/A	N/A	N/A	N/A
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Ba-140	Ci	1.95E-04	9.76E-05	4.68E-04	<LLD	N/A	N/A	N/A	N/A
La-140	Ci	8.14E-05	2.87E-05	4.06E-04	5.69E-05	N/A	N/A	N/A	N/A
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Hf-181	Ci	<LLD	1.62E-05	<LLD	<LLD				
Total for Period	Ci	3.03E-03	2.27E-03	3.68E-03	5.65E-04	N/A	N/A	N/A	N/A
D. Tritium	Ci	3.71E+01	1.02E+01	1.07E+01	1.35E+01	N/A	N/A	N/A	N/A
E. Gross Alpha	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
F. Carbon-14	Ci	8.69E+00	8.69E+00	8.69E+00	8.68E+00	N/A	N/A	N/A	N/A

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 LIQUID RELEASES
 UNIT 1 AND UNIT 2
 SUMMATION OF ALL LIQUID RELEASES

A. Fission & Activation Products	Unit	Quarter 1	Quarter 2	Quarter 3	Quarter4	Est. Total Error %
1. Total Release (not including tritium, gases & alpha)	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average diluted concentration during period	μCi/mL	<LLD	<LLD	<LLD	<LLD	
3. Percent of applicable limit	%	*	*	*	*	

B. Tritium						
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average diluted concentration during period	μCi/mL	<LLD	<LLD	<LLD	<LLD	
3. Percent of applicable limit	%	*	*	*	*	

C. Dissolved & Entrained Gases						
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average diluted concentration during period	μCi/mL	<LLD	<LLD	<LLD	<LLD	
3. Percent of applicable limit	%	*	*	*	*	

D. Gross Alpha Activity						
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	N/A
2. Average release rate for the period	μCi/mL	<LLD	<LLD	<LLD	<LLD	
3. Percent of ODCM limit	%	*	*	*	*	

E. Volume of Waste Released (prior to dilution)	Liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00

F. Volume of Dilution Water Used During Period	Liters	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*** This information is contained in the Radiological Impact on Man section of the report.
 "<" Indicates activity of sample is less than LLD given in μCi/ml

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 LIQUID RELEASES
 UNIT 1 AND UNIT 2

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
A. Fission & Activation Products									
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
I-131	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Total for Period	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
B. H-3									
H-3 Total for Period	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
C. Dissolved & Entrained Gasses									
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
Total for Period	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A
D. Gross Alpha									
Gross Alpha Total for Period	Ci	<LLD	<LLD	<LLD	<LLD	N/A	N/A	N/A	N/A

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 FIRST QUARTER

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Types of Waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error (%)
a. Spent resins, filter sludges, evaporator bottoms, etc.	0.00 E+00	0.00E+00	1Q19	+/-25%
b. Dry compressible waste, contaminated equip, etc.	5.07E+02	2.45E-01	1Q19	+/-25%
c. Irradiated components, control rods, etc.	1.21E-01	1.44E+01	1Q19	+/-25%
d. Other (Oil, EHC fluid, sump waste, etc.)	9.65E+00	3.59E-03	1Q19	+/-25%

2. Estimate of major nuclide composition (by waste type)

Major Nuclide Composition	Percent Abundance (≥1%)	Shipment Type(s)
a. Spent resins, filter sludges, evaporator bottoms, etc.		
None	N/A	N/A
b. Dry compressible waste, contaminated equip, etc.		
Fe-55	3.86%	LSA
Co-60	94.69%	
c. Irradiated components, control rods, etc.		
Fe-55	44.12%	LSA
Co-60	51.51%	
Ni-63	3.18%	
d. Other (Oil, EHC fluid, sump waste etc.)		
Fe-55	3.7%	LSA
Co-60	94.56%	

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 FIRST QUARTER

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
9	Hittman Transport	Energy Solutions - Bear Creek Facility, Oak Ridge, TN
1	Hittman Transport	Energy Solutions LLC Containerized Waste Facility

B. Irradiated Fuel Shipments (disposition)

Number of Shipments	Mode of Transportation	Destination
None	N/A	N/A

C. Changes to the Process Control Program

There were no changes to the Process Control Program during this period. There was no use of a solidification agent (e.g. cement, urea formaldehyde, etc.) during the processing of solid radioactive waste.

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 SECOND QUARTER

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Types of Waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error (%)
a. Spent resins, filter sludges, evaporator bottoms, etc.	4.47E+01	1.14E+02	2Q19	+/-25%
b. Dry compressible waste, contaminated equip, etc.	7.25E+01	4.24E-02	2Q19	+/-25%
c. Irradiated components, control rods, etc.	None	None	2Q19	N/A
d. Other (Oil, EHC fluid, sump waste, etc.)	9.94E+00	9.12E-3	2Q19	+/-25%

2. Estimate of major nuclide composition (by waste type)

Major Nuclide Composition	Percent Abundance (≥1%)	Shipment Type(s)
a. Spent resins, filter sludges, evaporator bottoms, etc.		
Fe-55	21.41%	LSA
Co-60	73.15%	
Ni-63	1.1%	
C-14	3.2%	
b. Dry compressible waste, contaminated equip, etc.		
Fe-55	3.8%	LSA
Co-60	94.9%	
c. Irradiated components, control rods, etc.		
None	N/A	N/A
d. Other (Oil, EHC fluid, sump waste etc.)		
Fe-55	2.09%	N/A
Co-60	51.19%	
H-3	45.97%	

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 SECOND QUARTER

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
3	Hittman Transport	Energy Solutions - Bear Creek Facility, Oak Ridge, TN
8	Hittman Transport	Energy Solutions, LLC. Containerized Waste Facility
1	Hittman Transport	Waste Control Specialist LLC. Compact Waste Disposal Facility
1	Landstar	Energy Solutions - Bear Creek Facility, Oak Ridge, TN

B. Irradiated Fuel Shipments (disposition)

Number of Shipments	Mode of Transportation	Destination
None	N/A	N/A

C. Changes to the Process Control Program

There were no changes to the Process Control Program during this period. There was no use of a solidification agent (e.g. cement, urea formaldehyde, etc.) during the processing of solid radioactive waste.

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 THIRD QUARTER

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Types of Waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error (%)
a. Spent resins, filter sludges, evaporator bottoms, etc.	2.22E+01	5.99E+02	3Q19	+/-25%
b. Dry compressible waste, contaminated equip, etc.	8.02E+01	2.26E+00	3Q19	+/-25%
d. Other (Oil, EHC fluid, sump waste, etc.)	None	None	3Q19	N/A
d. Other (Oil, EHC fluid, sump waste, etc.)	5.78E+00	1.40E-02	3Q19	+/-25%

2. Estimate of major nuclide composition (by waste type)

Major Nuclide Composition	Percent Abundance (≥1%)	Shipment Type(s)
a. Spent resins, filter sludges, evaporator bottoms, etc.		
Fe-55	13.96%	LSA
Co-60	80.9%	
Mn-54	1.36%	
Zn-65	1.8%	
b. Dry compressible waste, contaminated equip, etc.		
Fe-55	4.28%	LSA
Co-60	94.2%	
c. Irradiated components, control rods, etc.		
None	N/A	N/A
d. Other (Oil, EHC fluid, sump waste, etc.)		
H-3	80.1%	LSA
Co-60	18.89%	

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 THIRD QUARTER

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
9	Hittman Transport	Energy Solutions - Bear Creek Facility, Oak Ridge, TN
2	Hittman Transport	Energy Solutions, LLC. Containerized Waste Facility
3	Interstate Ventures	Waste Control Specialist LLC. Compact Waste Disposal Facility

B. Irradiated Fuel Shipments (disposition)

Number of Shipments	Mode of Transportation	Destination
None	N/A	N/A

C. Changes to the Process Control Program

There were no changes to the Process Control Program processing systems or components. There was no use of a solidification agent (e.g. cement, urea formaldehyde, etc.) during the processing of solid radioactive waste.

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 FOURTH QUARTER

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Types of Waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc.	8.27E+00	1.99E+01	4Q19	+/-25%
b. Dry compressible waste, contaminated equip, etc.	None	None	4Q19	N/A
c. Irradiated components, control rods, etc.	None	None	4Q19	N/A
d. Other (Oil, EHC fluid, sump waste, etc.)	None	None	4Q19	N/A

2. Estimate of major nuclide composition (by waste type)

Major Nuclide Composition	Percent Abundance (≥1%)	Shipment Type(s)
a. Spent resins, filter sludges, evaporator bottoms, etc.		
	Fe-55 40.29%	LSA
	Co-60 56.14%	
b. Dry compressible waste, contaminated equip, etc.		
	None N/A	N/A
c. Irradiated components, control rods, etc.		
	None N/A	N/A
d. Other (Oil, EHC fluid, sump waste, etc.)		
	None N/A	N/A

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
FOURTH QUARTER

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
2	Hittman Transport	Energy Solutions, LLC. Containerized Waste Facility

B. Irradiated Fuel Shipments (disposition)

Number of Shipments	Mode of Transportation	Destination
None	N/A	N/A

C. Changes to the Process Control Program

There were no changes to the Process Control Program during this period. There was no use of a solidification agent (e.g. cement, urea formaldehyde, etc.) during the processing of solid radioactive waste.

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
RADIOLOGICAL IMPACT ON MAN

MAXIMUM DOSES RESULTING FROM GASEOUS RELEASES AND COMPLIANCE STATUS

Infant Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
Gamma Air	5.00E+00	mRad	8.91E-04	0.018	1.27E-03	0.025	1.71E-04	0.003	3.66E-04	0.007	1.00E+01	0.027
Beta Air	1.00E+01	mRad	6.74E-05	0.001	5.22E-05	0.001	2.27E-05	0.000	3.50E-05	0.000	2.00E+01	0.001
NG Total Body	2.50E+00	mRem	5.95E-04	0.024	8.46E-04	0.034	1.14E-04	0.005	2.45E-04	0.010	5.00E+00	0.036
NG Skin	7.50E+00	mRem	1.02E-03	0.014	1.42E-03	0.019	2.00E-04	0.003	4.22E-04	0.056	1.50E+01	0.020
NNG Organ	7.50E+00	mRem	7.94E-02	1.059	1.05E-02	0.140	1.09E-02	0.146	1.00E-02	0.133	1.50E+01	0.739
Child Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
Gamma Air	5.00E+00	mRad	8.91E-04	0.018	1.27E-03	0.025	1.71E-04	0.003	3.66E-04	0.007	1.00E+01	0.027
Beta Air	1.00E+01	mRad	6.74E-05	0.001	5.22E-05	0.001	2.27E-05	0.000	3.50E-05	0.000	2.00E+01	0.001
NG Total Body	2.50E+00	mRem	5.95E-04	0.024	8.46E-04	0.034	1.14E-04	0.005	2.45E-04	0.010	5.00E+00	0.036
NG Skin	7.50E+00	mRem	1.02E-03	0.014	1.42E-03	0.019	2.00E-04	0.003	4.22E-04	0.056	1.50E+01	0.020
NNG Organ	7.50E+00	mRem	3.29E-02	0.439	4.52E-03	0.060	4.71E-03	0.063	4.25E-03	0.057	1.50E+01	0.309
Teenager Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
Gamma Air	5.00E+00	mRad	8.91E-04	0.018	1.27E-03	0.025	1.71E-04	0.003	3.66E-04	0.007	1.00E+01	0.027
Beta Air	1.00E+01	mRad	6.74E-05	0.001	5.22E-05	0.001	2.27E-05	0.000	3.50E-05	0.000	2.00E+01	0.001
NG Total Body	2.50E+00	mRem	5.95E-04	0.024	8.46E-04	0.034	1.14E-04	0.005	2.45E-04	0.010	5.00E+00	0.036
NG Skin	7.50E+00	mRem	1.02E-03	0.014	1.42E-03	0.019	2.00E-04	0.003	4.22E-04	0.056	1.50E+01	0.020
NNG Organ	7.50E+00	mRem	1.09E-02	0.146	4.71E-03	0.063	2.39E-03	0.032	1.54E-03	0.021	1.50E+01	0.130
Adult Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
Gamma Air	5.00E+00	mRad	8.91E-04	0.018	1.27E-03	0.025	1.71E-04	0.003	3.66E-04	0.007	1.00E+01	0.027
Beta Air	1.00E+01	mRad	6.74E-05	0.001	5.22E-05	0.001	2.27E-05	0.000	3.50E-05	0.000	2.00E+01	0.001
NG Total Body	2.50E+00	mRem	5.95E-04	0.024	8.46E-04	0.034	1.14E-04	0.005	2.45E-04	0.010	5.00E+00	0.036
NG Skin	7.50E+00	mRem	1.02E-03	0.014	1.42E-03	0.019	2.00E-04	0.003	4.22E-04	0.056	1.50E+01	0.020
NNG Organ	7.50E+00	mRem	1.00E-02	0.133	4.25E-03	0.057	2.10E-03	0.028	1.32E-03	0.018	1.50E+01	0.118

The LaSalle County Nuclear Power Station maximum expected annual dose from Carbon-14 has been calculated using the maximum gross thermal capacity at full power operation. The resultant bounding doses are based upon site specific assumptions of source term.

LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
RADIOLOGICAL IMPACT ON MAN
MAXIMUM DOSES RESULTING FROM LIQUID RELEASES AND COMPLIANCE STATUS

Infant Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
10CFR50 Appendix I compliance												
Total Body	1.50E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	3.00E+00	0.00
Organ	5.00E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	1.00E+01	0.00
40CFR141 compliance (nearest public drinking water)												
Total Body		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Organ		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Child Receptor												
Child Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
10CFR50 Appendix I compliance												
Total Body	1.50E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	3.00E+00	0.00
Organ	5.00E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	1.00E+01	0.00
40CFR141 compliance (nearest public drinking water)												
Total Body		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Organ		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Teenager Receptor												
Teenager Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
10CFR50 Appendix I compliance												
Total Body	1.50E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	3.00E+00	0.00
Organ	5.00E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	1.00E+01	0.00
40CFR141 compliance (nearest public drinking water)												
Total Body		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Organ		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Adult Receptor												
Adult Receptor	Quarterly Limit	Units	1st Quarter	% of Limit	2nd Quarter	% of Limit	3rd Quarter	% of Limit	4th Quarter	% of Limit	Annual Limit	% of Limit
10CFR50 Appendix I compliance												
Total Body	1.50E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	3.00E+00	0.00
Organ	5.00E+00	mRem	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	0.00E+00	0.00	1.00E+01	0.00
40CFR141 compliance (nearest public drinking water)												
Total Body		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00
Organ		mRem	0.00E+00		0.00E+00		0.00E+00		0.00E+00		4.00E+00	0.00

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 RADIOLOGICAL IMPACT ON MAN
 MAXIMUM DOSES RESULTING FROM RELEASES AND COMPLIANCE STATUS

10CFR20 / 40CFR190 Compliance

	1 st Quarter Dose (mRem)	2 nd Quarter Dose (mRem)	3 rd Quarter Dose (mRem)	4 th Quarter Dose (mRem)	Annual Dose (mRem)	Annual Limit (mRem/yr)	% Annual Limit
Unit 1							
40CFR190 Compliance							
U1 D ^{Ex}	1.04E-01	1.07E-01	9.74E-02	9.74E-02	4.05E-01	25	1.62
10CFR20 Compliance							
U1 D ^{Tot}	1.83E-01	1.17E-01	1.08E-01	1.07E-01	5.16E-01	100	0.52
40CFR190 Compliance							
Bone	7.33E-03	7.17E-03	7.21E-03	7.07E-03	2.88E-02	25	0.12
Liver	1.90E-03	1.70E-03	1.74E-03	1.57E-03	6.91E-03	25	0.03
Thyroid	7.94E-02	1.05E-02	1.09E-02	1.00E-02	1.11E-01	75	0.15
Kidney	1.92E-03	1.68E-03	1.71E-03	1.57E-03	6.88E-03	25	0.03
Lung	1.63E-03	1.63E-03	1.65E-03	1.54E-03	6.44E-03	25	0.03
GI-LLI	1.67E-03	1.67E-03	1.70E-03	1.54E-03	6.58E-03	25	0.03
Unit 2							
40CFR190 Compliance							
U2 D ^{Ex}	7.09E-02	9.73E-02	9.62E-02	9.90E-02	3.63E-01	25	1.45
10CFR20 Compliance							
U2 D ^{Tot}	7.09E-02	9.73E-02	9.62E-02	9.90E-02	3.63E-01	100	0.36
40CFR190 Compliance							
Bone	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	25	0.00
Liver	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	25	0.00
Thyroid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	75	0.00
Kidney	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	25	0.00
Lung	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	25	0.00
GI-LLI	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	25	0.00

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	2	0	0	2
SSW	0	0	0	1	0	0	1
SW	0	0	0	0	0	0	0
WSW	0	0	0	1	0	0	1
W	0	0	0	1	0	0	1
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	5	0	0	5

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019

Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	3	1	0	0	4
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	1	1	0	0	2
ESE	0	0	2	0	0	0	2
SE	0	1	0	0	0	0	1
SSE	0	1	1	0	0	0	2
S	0	0	1	1	0	0	2
SSW	0	0	1	2	0	0	3
SW	0	0	0	0	0	0	0
WSW	0	0	0	4	0	0	4
W	0	0	1	3	0	0	4
WNW	0	0	0	1	0	0	1
NW	0	0	0	1	0	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	2	10	14	0	0	26

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	1	0	0	3
NNE	0	0	1	1	0	0	2
NE	0	0	0	1	0	0	1
ENE	0	0	0	1	0	0	1
E	0	0	3	1	0	0	4
ESE	0	0	5	0	0	0	5
SE	0	0	0	0	0	0	0
SSE	0	0	3	0	0	0	3
S	0	0	1	0	0	0	1
SSW	0	2	1	0	0	0	3
SW	0	1	0	0	0	0	1
WSW	0	0	0	2	1	0	3
W	0	0	2	5	0	2	9
WNW	0	0	11	4	3	0	18
NW	0	0	1	1	0	0	2
NNW	0	0	0	2	0	0	2
Variable	0	0	0	0	0	0	0
Total	0	3	30	19	4	2	58

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	20	14	8	3	0	47
NNE	1	19	19	12	2	0	53
NE	0	11	14	9	0	0	34
ENE	0	3	31	27	4	0	65
E	0	10	42	39	10	1	102
ESE	0	10	17	15	6	0	48
SE	0	6	4	3	0	0	13
SSE	1	7	4	5	0	0	17
S	1	1	4	2	1	0	9
SSW	1	2	4	0	1	0	8
SW	0	5	12	3	0	1	21
WSW	0	6	10	18	7	3	44
W	0	6	26	32	16	6	86
WNW	0	10	48	40	27	3	128
NW	1	4	24	14	6	0	49
NNW	1	22	65	45	4	0	137
Variable	0	0	0	0	0	0	0
Total	8	142	338	272	87	14	861

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019

Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	32	16	0	0	0	49
NNE	0	12	8	5	0	0	25
NE	1	3	10	8	2	0	24
ENE	0	13	16	9	13	0	51
E	1	14	33	19	2	0	69
ESE	1	13	17	5	8	1	45
SE	4	8	14	11	11	1	49
SSE	1	9	10	14	6	5	45
S	2	6	7	12	10	1	38
SSW	2	4	2	11	5	0	24
SW	2	7	14	11	1	0	35
WSW	0	7	15	37	8	10	77
W	1	8	27	24	37	48	145
WNW	1	18	36	29	15	18	117
NW	1	5	10	4	0	0	20
NNW	0	14	9	3	0	0	26
Variable	0	0	0	0	0	0	0
Total	18	173	244	202	118	84	839

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019
Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	8	1	0	0	0	10
NNE	0	0	1	0	0	0	1
NE	0	1	2	0	0	0	3
ENE	1	4	5	3	0	0	13
E	1	4	12	2	0	0	19
ESE	1	4	0	1	0	0	6
SE	0	7	2	4	0	0	13
SSE	0	6	9	4	0	0	19
S	2	5	9	5	0	0	21
SSW	0	6	6	7	0	0	19
SW	0	3	10	11	0	0	24
WSW	2	1	9	4	1	0	17
W	1	11	9	7	4	1	33
WNW	0	12	5	1	1	4	23
NW	1	4	2	0	0	0	7
NNW	1	4	1	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	11	80	83	49	6	5	234

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 7

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	4	0	0	0	0	4
SE	0	12	3	0	0	0	15
SSE	0	14	7	0	0	0	21
S	0	5	12	5	0	0	22
SSW	0	2	12	14	0	0	28
SW	0	6	2	2	0	0	10
WSW	0	4	1	0	0	0	5
W	0	5	7	0	0	0	12
WNW	2	3	1	0	0	0	6
NW	1	3	0	0	0	0	4
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	4	60	45	21	0	0	130

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 * Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	1	0	1
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 7

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	4	1	0	5
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	4	0	0	0	4
SE	0	0	0	1	0	0	1
SSE	0	0	3	0	0	0	3
S	0	0	0	1	0	0	1
SSW	0	0	0	2	0	0	2
SW	0	0	0	0	0	0	0
WSW	0	0	0	2	2	0	4
W	0	0	0	0	2	0	2
WNW	0	0	0	1	0	1	2
NW	0	0	0	2	0	0	2
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	7	13	5	1	26

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 4
 Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Neutral - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	12	30	43	18	13	116
NNE	2	13	18	10	6	10	59
NE	0	7	15	20	17	9	68
ENE	0	5	26	27	27	19	104
E	1	8	23	40	37	12	121
ESE	0	12	33	35	22	17	119
SE	1	3	12	11	1	5	33
SSE	0	5	6	11	4	4	30
S	2	2	3	4	5	7	23
SSW	1	5	5	4	2	3	20
SW	1	7	11	8	6	2	35
WSW	0	2	7	22	22	19	72
W	0	0	13	17	37	59	126
WNW	1	6	23	55	51	60	196
NW	2	11	26	43	29	28	139
NNW	0	10	18	53	23	4	108
Variable	0	0	0	0	0	0	0
Total	11	108	269	403	307	271	1369

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 40
 Hours of missing stability measurements in all stability classes: 7

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: January - March 2019
Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	3	4	2	0	11
NNE	0	2	9	8	2	0	21
NE	0	3	7	3	9	0	22
ENE	1	4	4	5	3	0	17
E	0	1	3	11	8	6	29
ESE	1	0	8	7	4	6	26
SE	0	5	15	3	0	10	33
SSE	0	0	5	2	3	20	30
S	0	1	7	17	6	21	52
SSW	0	2	2	3	3	11	21
SW	0	0	4	4	2	16	26
WSW	0	0	3	3	16	8	30
W	2	1	9	9	12	18	51
WNW	0	1	7	23	9	54	94
NW	1	2	11	14	6	4	38
NNW	0	1	3	1	2	0	7
Variable	0	0	0	0	0	0	0
Total	5	25	100	117	87	174	508

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 14
Hours of missing stability measurements in all stability classes: 7

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: January - March 2019
 Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	0	0	0	2
NNE	0	0	0	0	2	0	2
NE	0	0	0	0	1	0	1
ENE	1	0	3	0	0	0	4
E	0	1	0	0	0	0	1
ESE	1	1	0	2	3	0	7
SE	1	1	1	9	1	0	13
SSE	0	0	2	14	0	2	18
S	0	0	4	4	2	0	10
SSW	0	1	3	5	11	12	32
SW	0	0	2	3	8	16	29
WSW	0	0	9	2	2	0	13
W	0	0	3	1	3	0	7
WNW	1	1	1	3	5	0	11
NW	0	0	0	9	2	0	11
NNW	1	0	0	2	1	0	4
Variable	0	0	0	0	0	0	0
Total	5	6	29	54	41	30	165

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: January - March 2019

Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	1	0	0	1
S	0	0	0	4	4	2	10
SSW	0	0	0	0	0	10	10
SW	0	0	0	0	0	2	2
WSW	0	0	0	1	0	0	1
W	0	0	0	0	1	0	1
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	6	5	14	25

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 7

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: April - June 2019
 Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	1	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	1	3	2	0	6
SSW	0	0	0	4	3	0	7
SW	0	0	0	0	7	5	12
WSW	0	0	0	0	0	1	1
W	0	0	0	1	0	0	1
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	1	9	12	6	28

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	1	0	0	1
NNE	0	0	0	1	3	0	4
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	4	3	0	7
SE	0	0	0	0	0	0	0
SSE	0	0	1	2	0	0	3
S	0	0	1	1	2	0	4
SSW	0	0	2	7	1	0	10
SW	0	0	1	3	1	0	5
WSW	0	0	3	5	0	1	9
W	0	1	2	5	0	0	8
WNW	0	0	2	3	1	0	6
NW	0	0	0	1	0	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	1	12	33	11	1	58

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019
 Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	6	0	0	9
NNE	0	0	0	2	0	0	2
NE	0	2	2	1	0	0	5
ENE	0	0	2	2	0	0	4
E	0	0	2	12	1	0	15
ESE	0	0	1	1	2	0	4
SE	0	0	0	1	0	0	1
SSE	0	0	1	1	0	0	2
S	0	1	3	3	2	0	9
SSW	0	5	5	5	4	0	19
SW	0	6	7	7	3	1	24
WSW	0	7	5	6	1	0	19
W	0	7	6	6	1	0	20
WNW	0	3	4	1	1	0	9
NW	0	1	4	4	3	0	12
NNW	0	0	2	6	4	0	12
Variable	0	0	0	0	0	0	0
Total	0	32	47	64	22	1	166

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	47	22	19	0	0	92
NNE	3	36	39	10	2	0	90
NE	0	12	48	36	1	1	98
ENE	1	24	31	57	17	15	145
E	1	10	24	37	19	2	93
ESE	1	5	11	4	3	0	24
SE	2	2	10	9	1	0	24
SSE	0	2	4	4	0	1	11
S	1	3	6	5	3	0	18
SSW	2	9	11	25	6	0	53
SW	1	14	26	17	7	1	66
WSW	0	11	17	16	1	1	46
W	2	14	19	23	5	0	63
WNW	2	19	23	21	2	0	67
NW	0	13	26	17	3	0	59
NNW	1	14	42	24	16	2	99
Variable	0	0	0	0	0	0	0
Total	21	235	359	324	86	23	1048

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019
 Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	13	4	7	0	0	28
NNE	0	8	3	2	0	0	13
NE	3	8	6	0	0	0	17
ENE	1	6	31	7	0	0	45
E	0	22	30	5	1	1	59
ESE	1	9	15	4	2	0	31
SE	0	8	8	4	0	0	20
SSE	5	5	9	7	1	0	27
S	1	4	13	20	1	0	39
SSW	0	10	14	23	1	0	48
SW	0	4	15	20	0	0	39
WSW	1	7	23	23	1	0	55
W	4	6	8	8	0	0	26
WNW	2	8	11	5	0	0	26
NW	1	8	6	1	0	0	16
NNW	3	8	2	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	26	134	198	136	7	1	502

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	0	0	0	0	3
NNE	0	1	0	0	0	0	1
NE	3	0	0	0	0	0	3
ENE	1	2	1	0	0	0	4
E	0	18	4	0	0	0	22
ESE	7	17	2	0	0	0	26
SE	3	10	4	0	0	0	17
SSE	4	5	9	6	0	0	24
S	1	6	10	8	0	0	25
SSW	0	9	16	10	0	0	35
SW	1	8	15	4	0	0	28
WSW	1	7	20	7	0	0	35
W	1	9	11	0	0	0	21
WNW	1	10	4	0	0	0	15
NW	2	1	0	0	0	0	3
NNW	1	2	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	27	107	96	35	0	0	265

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	1	0	0	0	0	1
ESE	2	8	0	0	0	0	10
SE	0	5	6	0	0	0	11
SSE	0	3	5	3	0	0	11
S	4	10	3	1	0	0	18
SSW	0	3	15	0	0	0	18
SW	0	9	7	2	0	0	18
WSW	2	9	1	1	0	0	13
W	0	6	1	1	0	0	8
WNW	0	4	1	0	0	0	5
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	8	58	39	8	0	0	113

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

• Hours of missing stability measurements in all stability classes: 4

LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)

Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	2	1	3
SW	0	0	0	0	1	6	7
WSW	0	0	0	0	0	2	2
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	1	1
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	3	10	13

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	1	5	0	6
NNE	0	0	0	0	0	4	4
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	1	0	1
ESE	0	0	0	2	0	1	3
SE	0	0	0	0	0	0	0
SSE	0	0	1	0	0	0	1
S	0	0	0	4	1	2	7
SSW	0	0	1	0	7	0	8
SW	0	0	0	0	0	4	4
WSW	0	0	0	2	0	1	3
W	0	0	0	2	0	0	2
WNW	0	0	0	1	0	0	1
NW	0	0	0	0	0	0	0
NNW	0	0	0	1	0	1	2
Variable	0	0	0	0	0	0	0
Total	0	0	2	13	14	13	42

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Neutral - 375Ft-33Ft Delta-T (F)

Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	19	27	30	17	7	102
NNE	1	16	35	17	11	7	87
NE	0	12	29	45	36	4	126
ENE	1	14	16	40	62	28	161
E	1	0	11	20	24	38	94
ESE	1	6	7	17	11	11	53
SE	0	2	1	10	5	1	19
SSE	1	1	2	6	3	3	16
S	0	5	6	9	12	7	39
SSW	2	7	17	16	20	19	81
SW	2	9	30	21	21	9	92
WSW	1	10	14	23	18	8	74
W	0	10	20	24	20	8	82
WNW	1	12	19	22	16	5	75
NW	0	13	15	33	17	16	94
NNW	0	9	24	19	16	20	88
Variable	0	0	0	0	0	0	0
Total	13	145	273	352	309	191	1283

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)

Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	8	2	7	4	24
NNE	1	3	9	3	4	0	20
NE	1	6	8	3	0	1	19
ENE	0	3	14	10	9	0	36
E	1	1	11	36	9	7	65
ESE	0	1	5	23	9	1	39
SE	4	3	5	17	4	5	38
SSE	0	3	6	2	4	2	17
S	1	3	2	12	12	23	53
SSW	0	4	4	9	18	35	70
SW	2	0	7	13	20	14	56
WSW	0	2	7	17	31	13	70
W	1	2	4	13	18	9	47
WNW	1	1	6	7	10	3	28
NW	1	1	6	19	4	2	33
NNW	0	5	4	5	1	0	15
Variable	0	0	0	0	0	0	0
Total	14	40	106	191	160	119	630

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	2	0	0	3
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	0	0	1	0	0	1
ESE	1	3	7	3	0	0	14
SE	1	2	8	7	1	0	19
SSE	3	0	5	4	8	3	23
S	1	3	3	2	4	12	25
SSW	1	2	1	6	0	1	11
SW	0	0	6	11	7	0	24
WSW	0	3	3	2	1	4	13
W	1	3	3	10	2	7	26
WNW	0	1	5	5	0	0	11
NW	0	0	5	5	5	0	15
NNW	0	1	0	2	0	0	3
Variable	0	0	0	0	0	0	0
Total	8	20	47	60	28	27	190

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: April - June 2019

Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	1	0	0	0	1
SSE	0	0	0	0	2	0	2
S	0	0	1	1	0	0	2
SSW	0	0	2	2	1	0	5
SW	0	2	4	1	1	3	11
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	1	0	0	0	0	1
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	3	8	4	4	3	22

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	1	0	0	0	1
ENE	0	0	1	0	0	0	1
E	0	0	3	0	0	0	3
ESE	0	0	1	1	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	1	0	0	0	1
SSW	0	0	3	1	0	0	4
SW	0	0	5	9	1	0	15
WSW	0	0	4	1	0	0	5
W	0	0	13	3	1	0	17
WNW	0	0	3	3	0	0	6
NW	0	0	2	0	0	0	2
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	37	18	2	0	57

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019
 Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	0	0	0	1
NNE	0	0	1	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	3	0	0	0	3
E	0	0	3	2	0	0	5
ESE	0	0	1	1	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	0	0	1	0	0	1
S	0	1	2	1	0	0	4
SSW	0	0	6	1	1	0	8
SW	0	0	6	13	0	0	19
WSW	0	5	10	5	2	0	22
W	0	3	22	5	2	0	32
WNW	0	4	10	0	0	0	14
NW	0	2	2	0	0	0	4
NNW	0	0	1	2	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	15	68	31	5	0	119

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019
 Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	4	0	0	0	5
NNE	0	2	4	0	0	0	6
NE	0	4	4	0	0	0	8
ENE	0	1	1	0	0	0	2
E	0	4	5	2	0	0	11
ESE	0	7	4	0	0	0	11
SE	0	6	1	0	0	0	7
SSE	0	3	0	0	0	0	3
S	0	3	1	0	1	0	5
SSW	0	1	6	2	1	0	10
SW	0	3	7	18	0	0	28
WSW	0	5	11	1	0	0	17
W	0	7	11	4	2	0	24
WNW	0	7	10	0	0	0	17
NW	0	6	4	3	0	0	13
NNW	0	2	3	2	0	0	7
Variable	0	0	0	0	0	0	0
Total	0	62	76	32	4	0	174

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	28	19	2	0	0	51
NNE	5	27	16	0	0	0	48
NE	2	23	29	7	0	0	61
ENE	1	16	22	12	0	0	51
E	1	11	37	3	0	0	52
ESE	2	12	14	0	0	0	28
SE	3	11	12	0	0	0	26
SSE	1	12	12	1	0	0	26
S	1	6	15	6	0	0	28
SSW	1	10	20	18	2	0	51
SW	1	10	23	23	0	0	57
WSW	0	8	23	10	0	0	41
W	5	15	12	5	1	0	38
WNW	1	12	23	2	0	0	38
NW	4	14	18	1	0	0	37
NNW	2	23	32	6	1	0	64
Variable	0	0	0	0	0	0	0
Total	32	238	327	96	4	0	697

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019
 Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	41	2	0	0	0	46
NNE	3	24	4	0	0	0	31
NE	2	9	14	0	0	0	25
ENE	3	11	22	0	0	0	36
E	0	29	32	3	0	0	64
ESE	2	8	4	0	0	0	14
SE	4	7	5	1	0	0	17
SSE	2	13	10	5	0	0	30
S	6	10	31	9	0	0	56
SSW	1	15	46	10	0	0	72
SW	5	5	40	9	0	0	59
WSW	5	16	21	0	0	0	42
W	0	16	9	2	0	0	27
WNW	2	13	21	1	0	0	37
NW	4	17	7	0	0	0	28
NNW	4	24	3	1	0	0	32
Variable	0	0	0	0	0	0	0
Total	46	258	271	41	0	0	616

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019
 Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	17	0	0	0	0	17
NNE	2	5	0	0	0	0	7
NE	0	2	0	0	0	0	2
ENE	3	1	0	0	0	0	4
E	1	26	6	0	0	0	33
ESE	0	10	0	0	0	0	10
SE	1	13	1	0	0	0	15
SSE	2	9	1	0	0	0	12
S	1	25	19	0	0	0	45
SSW	3	22	17	0	0	0	42
SW	1	12	10	0	0	0	23
WSW	4	17	17	0	0	0	38
W	5	16	10	0	0	0	31
WNW	2	19	1	0	0	0	22
NW	0	2	0	0	0	0	2
NNW	4	12	0	0	0	0	16
Variable	0	0	0	0	0	0	0
Total	29	208	82	0	0	0	319

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	10	2	0	0	0	12
ESE	0	25	0	0	0	0	25
SE	0	30	0	0	0	0	30
SSE	0	13	2	0	0	0	15
S	1	33	6	0	0	0	40
SSW	1	30	7	0	0	0	38
SW	0	22	5	0	0	0	27
WSW	0	9	5	0	0	0	14
W	2	11	0	0	0	0	13
WNW	3	9	0	0	0	0	12
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	7	192	27	0	0	0	226

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	1	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	1	0	1
W	0	0	0	1	0	0	1
WNW	0	0	0	1	0	0	1
NW	0	0	0	1	0	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	4	1	0	5

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	2	0	0	2
NNE	0	0	0	1	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	2	0	0	2
E	0	0	2	2	0	0	4
ESE	0	0	0	3	1	0	4
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	1	0	1
SSW	0	0	1	2	1	0	4
SW	0	0	0	7	5	2	14
WSW	0	0	1	4	0	0	5
W	0	1	8	8	1	1	19
WNW	0	1	6	8	1	0	16
NW	0	0	5	3	0	0	8
NNW	0	0	0	0	2	0	2
Variable	0	0	0	0	0	0	0
Total	0	2	23	42	12	3	82

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Neutral - 375Ft-33Ft Delta-T (F)

Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	12	39	21	3	0	77
NNE	1	14	20	9	1	0	45
NE	0	14	19	26	13	0	72
ENE	0	12	19	26	11	0	68
E	3	6	27	24	5	0	65
ESE	1	16	19	7	1	0	44
SE	1	12	9	4	1	0	27
SSE	3	12	15	3	2	0	35
S	1	4	13	12	4	1	35
SSW	0	6	18	19	13	8	64
SW	1	6	7	50	36	3	103
WSW	2	8	25	39	9	0	83
W	0	13	23	32	11	7	86
WNW	2	17	20	15	1	0	55
NW	2	12	37	17	8	0	76
NNW	2	11	20	7	6	0	46
Variable	0	0	0	0	0	0	0
Total	21	175	330	311	125	19	981

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	4	9	18	8	0	40
NNE	0	3	13	22	0	0	38
NE	0	6	20	14	3	0	43
ENE	2	4	13	24	2	0	45
E	0	5	17	26	13	0	61
ESE	3	4	6	21	7	0	41
SE	0	2	9	5	2	0	18
SSE	0	3	5	6	2	1	17
S	2	3	11	7	7	15	45
SSW	2	5	12	29	40	23	111
SW	2	3	6	30	49	2	92
WSW	0	4	14	17	21	0	56
W	3	4	7	18	11	1	44
WNW	3	10	9	16	5	0	43
NW	2	5	7	9	10	0	33
NNW	0	6	12	11	9	0	38
Variable	0	0	0	0	0	0	0
Total	20	71	170	273	189	42	765

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019

Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)

Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	5	5	1	0	13
NNE	2	0	0	2	0	0	4
NE	2	1	1	0	0	0	4
ENE	1	2	3	2	0	0	8
E	0	1	0	1	1	0	3
ESE	0	0	2	12	10	0	24
SE	0	1	6	19	5	0	31
SSE	0	1	10	11	3	1	26
S	0	5	8	18	3	2	36
SSW	0	3	11	21	13	5	53
SW	1	1	7	13	9	0	31
WSW	0	3	6	14	3	0	26
W	0	4	6	17	8	4	39
WNW	1	2	5	6	1	0	15
NW	1	0	8	2	0	0	11
NNW	1	0	8	3	1	0	13
Variable	0	0	0	0	0	0	0
Total	9	26	86	146	58	12	337

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: July - September 2019
Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	1	0	0	1
SSE	0	0	0	9	0	0	9
S	0	0	0	2	4	0	6
SSW	0	0	0	1	0	0	1
SW	0	0	0	4	3	0	7
WSW	0	1	2	4	0	0	7
W	0	0	0	4	0	0	4
WNW	0	0	0	1	0	0	1
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	2	0	2
Variable	0	0	0	0	0	0	0
Total	0	1	2	26	9	0	38

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 0

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019

Stability Class - Extremely Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Moderately Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	1	0	0	1
SSW	0	0	0	0	0	0	0
SW	0	0	0	1	4	0	5
WSW	0	0	0	1	0	0	1
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	3	4	0	7

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Slightly Unstable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	1	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	1	1	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	0	2	1	0	0	3
S	0	1	3	0	0	0	4
SSW	0	0	0	2	0	0	2
SW	0	0	1	5	2	0	8
WSW	0	1	3	3	2	0	9
W	0	0	0	0	1	0	1
WNW	0	0	0	1	0	0	1
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	2	11	13	5	0	31

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
 Stability Class - Neutral - 200Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	31	48	30	0	0	109
NNE	1	13	16	7	0	0	37
NE	1	3	2	2	0	0	8
ENE	0	5	10	11	0	0	26
E	0	12	15	10	3	1	41
ESE	0	6	7	7	5	1	26
SE	1	4	11	3	0	0	19
SSE	2	5	16	9	0	0	32
S	2	7	22	15	4	0	50
SSW	1	9	26	15	6	1	58
SW	0	11	32	24	4	1	72
WSW	0	14	10	27	15	16	82
W	3	20	34	46	19	1	123
WNW	2	29	47	65	27	0	170
NW	2	21	31	29	4	0	87
NNW	1	24	37	56	15	0	133
Variable	0	0	0	0	0	0	0
Total	16	214	364	356	102	21	1073

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Slightly Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	17	2	0	0	0	21
NNE	0	1	0	0	0	0	1
NE	3	3	0	0	0	0	6
ENE	2	2	10	0	0	0	14
E	2	8	14	4	0	0	28
ESE	1	5	8	8	3	0	25
SE	4	5	9	5	5	0	28
SSE	2	6	12	6	5	0	31
S	1	10	23	25	4	0	63
SSW	0	11	26	31	8	0	76
SW	4	4	27	15	7	1	58
WSW	2	17	28	14	3	1	65
W	1	14	18	19	2	11	65
WNW	8	11	14	3	3	2	41
NW	0	5	3	3	0	0	11
NNW	0	9	11	1	0	0	21
Variable	0	0	0	0	0	0	0
Total	32	128	205	134	40	15	554

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Moderately Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	0	0	0	0	2
NNE	1	1	0	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	1	3	0	0	0	0	4
E	1	19	15	0	0	0	35
ESE	1	17	5	0	0	0	23
SE	2	18	6	0	0	0	26
SSE	1	5	12	3	0	0	21
S	1	7	24	5	0	0	37
SSW	1	7	25	6	0	0	39
SW	1	5	24	3	0	0	33
WSW	1	7	26	6	0	0	40
W	3	20	17	1	0	0	41
WNW	1	11	6	0	0	0	18
NW	0	1	1	0	0	0	2
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	15	124	161	24	0	0	324

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Extremely Stable - 200Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	0	9	7	0	0	0	16
ESE	0	15	3	0	0	0	18
SE	3	27	4	0	0	0	34
SSE	1	19	9	0	0	0	29
S	0	8	11	2	0	0	21
SSW	0	18	31	4	0	0	53
SW	0	8	12	4	0	0	24
WSW	1	7	5	1	0	0	14
W	0	2	1	0	0	0	3
WNW	0	2	0	0	0	0	2
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	6	115	83	11	0	0	215

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4*

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Extremely Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Moderately Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019

Stability Class - Slightly Unstable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	1	2	3
WSW	0	0	0	0	1	0	1
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	0	0	2	2	4

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Neutral - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	13	23	25	31	7	99
NNE	1	8	29	15	1	4	58
NE	0	3	8	5	2	2	20
ENE	0	1	7	9	10	0	27
E	1	8	5	5	9	6	34
ESE	0	5	5	10	8	7	35
SE	0	5	2	11	4	0	22
SSE	1	3	5	17	2	2	30
S	1	2	18	19	16	8	64
SSW	0	5	13	18	19	11	66
SW	0	3	21	39	17	18	98
WSW	1	9	14	20	20	24	88
W	1	2	16	23	41	32	115
WNW	0	17	29	46	44	27	163
NW	0	10	36	41	47	10	144
NNW	0	22	18	34	27	13	114
Variable	0	0	0	0	0	0	0
Total	6	116	249	337	298	171	1177

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Slightly Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	6	5	7	0	19
NNE	0	4	9	4	0	0	17
NE	0	6	6	2	0	0	14
ENE	1	1	2	5	1	0	10
E	1	3	4	7	15	0	30
ESE	2	3	3	7	9	4	28
SE	0	3	2	7	8	11	31
SSE	0	3	1	7	6	10	27
S	0	2	10	8	16	14	50
SSW	4	3	6	19	22	43	97
SW	0	6	5	11	29	19	70
WSW	0	4	3	20	19	15	61
W	0	7	8	23	24	13	75
WNW	1	6	13	12	11	28	71
NW	3	2	7	19	7	1	39
NNW	1	1	8	8	6	0	24
Variable	0	0	0	0	0	0	0
Total	13	55	93	164	180	158	663

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
 EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
 METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
 Stability Class - Moderately Stable - 375Ft-33Ft Delta-T (F)
 Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	1	1	0	0	0	0	2
ENE	0	1	0	0	0	0	1
E	1	3	3	3	1	0	11
ESE	0	1	3	6	4	1	15
SE	0	0	10	12	10	1	33
SSE	0	3	3	9	6	3	24
S	0	3	7	12	11	13	46
SSW	0	3	2	7	7	11	30
SW	0	3	1	9	24	17	54
WSW	0	0	6	15	3	8	32
W	0	1	4	8	6	1	20
WNW	2	0	1	15	1	0	19
NW	0	1	0	2	1	0	4
NNW	0	0	0	1	0	0	1
Variable	0	0	0	0	0	0	0
Total	4	21	41	99	74	55	294

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 4

**LASALLE COUNTY NUCLEAR POWER STATION
EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT (2019)
METEOROLOGICAL DATA**

LaSalle County Generating Station

Period of Record: October - December 2019
Stability Class - Extremely Stable - 375Ft-33Ft Delta-T (F)
Winds Measured at 375 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	1
SE	0	0	3	3	2	0	8
SSE	0	0	3	12	3	3	21
S	0	0	0	3	1	1	5
SSW	0	0	2	0	0	1	3
SW	0	0	7	6	3	8	24
WSW	0	0	0	1	0	1	2
W	0	0	0	0	0	0	0
WNW	0	0	0	1	0	0	1
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	1	0	16	26	9	14	66

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 4