

Exelon Generation Company, LLC LaSalle County Station 2601 North 21st Road Marseilles, IL 61341–9757 www.exeloncorp.com

Nuclear

August 17, 2001

10 CFR 50.72

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

LaSalle County Station, Units 1 and 2

Facility Operating License Nos. NPF-11 and NPF-18

NRC Docket Nos. 50-373 and 50-374

Subject:

Environmental Non-Routine Event Report for Exelon Generation Company, LLC - LaSalle County Station

In accordance with the 30 day notification requirements of Facility Operating Licenses NPF-11 and NPF-18, Appendix B, "Environmental Protection Plan," Sections 4.1 and 5.4.2, the attached Environmental Non-Routine Event Report on a fish kill that occurred in the LaSalle cooling lake is submitted.

# **Event Description**

On July 21, 2001 at 1528 CST, a fish kill was identified in the station cooling lake. The Illinois Department of Natural Resources (IDNR) was notified. Pursuant to 10 CFR 50.72 (b)(2)(xi), an Emergency Notification System (ENS) notification was made. Later that afternoon, an IDNR District Biologist arrived to begin a fish count. The fish count exceeded 94,000.

# Analysis and Evaluation

During the period of July 20-26, 2001, Units 1 and 2 were operating in Mode 1, Power Operation, at or near full power. Six circulating water pumps were circulating approximately 1.2 million gallons per minute in the lake. Two lake makeup pumps were providing approximately 60,000 gallons per minute of water to the lake from the Illinois River. Blowdown to the Illinois River was approximately 39,000 gallons per minute.

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A review of average circulating water inlet temperatures for the period of July 20-26, 2001 showed the following temperature peaks:

- 98.1 °F on July 21, 2001, 0121-0200 hours and 0221-0240 hours
- 97.8 °F on July 22, 2001, 1941-2030 hours
- 98.2 °F on July 24, 2001, 2001-2010 hours and 2051-2250 hours

The peaks exceeded the upper lethal temperatures for most of the fish species in the lake, with the exception of temperature-acclimated juvenile Bluegill. Based on the distribution of the species that perished, the resultant impact on the State's aquatic life resources is considered minimal.

The cooling lake is classified by the State of Illinois as a treatment facility for the dissipation of waste heat. The station's National Pollutant Discharge Elimination System (NPDES) Permit No. IL0048151 issued by the Illinois Environmental Protection Agency (IEPA) contains provisions reflecting this classification. In accordance with the Permit, no state or federal water quality standards are applicable to the lake. Effluent standards are applied only to the process streams discharging into the lake. Effluent, thermal, and chemical standards are applied to lake blowdown effluents to the Illinois River. None of these standards were violated.

#### Probable Cause of Event

The fish kill is attributed to high lake temperatures. Hot summer air, high dew points and low wind speeds combined to preclude efficient heat removal from the cooling lake, raising lake temperatures above the upper lethal temperatures for most fish species.

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### **Corrective Actions**

Dead fish were cleared from the recreation area boat launches and the blowdown structure. Timed runs were performed on the lake screen house travelling screens to ensure that they continued to remain clean and operable. Inspection of the blowdown canal to the Illinois River revealed no discharge problems with dead fish or nuisance odors.

### Actions to Prevent Recurrence

A review of IDNR fish management practices in the lake will be performed to ensure that an unreviewed environmental question does not exist. The results of this review will be reported in the LaSalle County Station Annual Environmental Operating Report for 2001.

### Agencies Notified and Preliminary Responses

IDNR was notified of the fish kill. IDNR performed a fish count to determine the extent of the kill and the species affected. The results of the count are contained in the Attachment.

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

Respectfully,

William Riffer

Regulatory Assurance Manager

LaSalle County Station

Attachment

CC:

Regional Administrator - NRC Region III

NRC Senior Resident Inspector - LaSalle County Station

ATTACHMENT

LaSalle County Station Fish Kill Count by IDNR July 21-26, 2001

Species	Size Group	Game Fish
Striped Bass Hybrid	5.0 Lb	238
Smallmouth Bass	3.0 Lb	93
Stizostedion Species (Walleye)	3.0 Lb	24
Channel Catfish	1.5 Lb	345
White Bass	0.5 Lb	12
Bluegill	0.2 Lb	13
Freshwater Drum	2.0 Lb	610
Yellow Bass	0.5 Lb	4
Yellow Bullhead	0.3 Lb	6
TOTAL		1,345

Species	Size Group	Non-Game Fish
Gizzard Shad	1.5 – 3.0 inches	90,800
	TOTAL	90,800

Species	Size Group	Commercial Fish
Carp	4 Lb	1279
Smallmouth Buffalo	10 Lb	1143
	TOTAL	2,422