

NPDES Permit No. IL0036919

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

P.O. Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: April 1, 1995

Issue Date: July 25, 1990

Effective Date: August 24, 1990

Name and Address of Permittee:

Facility Name and Address:

Illinois Power Company
500 South 27th St.
Decatur, Illinois 62525

Clinton Nuclear Power Station
R.R. 3, Post Office Box 228
Clinton, Illinois 61727
DeWitt County

Discharge Number and Name:

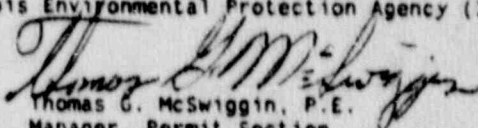
Receiving Waters

No. 002 Discharge Flume
No. 002(a) Sewage treatment plant effluent
No. 002(b) Rad waste treatment system effluent
No. 003 Water treatment wastes
No. 004 Transformer area Oil-water separator
No. 005 Diesel generator area Oil-water separator
No. 006 Screen house intake screen backwash and sump discharges
No. 007 Safe shutdown service water system

Clinton Lake

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C Rules and Regulations of the Illinois Pollution Control Board, and the FWPCA, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving waters in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.


Thomas G. McSwiggan, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:GC:ct/244D.sp

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Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE	
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.			
1. From the effective date of this permit until April 1, 1995, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:							
Outfall(s): No. 002 Discharge Flume							
This discharge consists of:					Approximate Flow		
1. Main condenser cooling water					885 MGD		
2. Station service water*					62.6 MGD		
3. Sewage treatment plant effluent					0.04 MGD		
4. Radwaste treatment system effluent					Intermittent		
Flow (MGD)						Continuous	
pH	See Special Condition No. 1				1/week	Grab	
Total Residual Chlorine	0.2				1/week	**	
Temperature	See Special Condition No. 4				Continuous	***	
Outfall(s): No. 002(a) Sewage Treatment Plant Effluent							
This discharge consists of:					Approximate Flow		
1. Extended aeration sewage treatment plant effluent					(DMF 0.0427 MGD)		
2. Contact stabilization sewage treatment plant effluent					(DMF 0.05 MGD)		
3. C&I process simulator wastewater					Intermittent		
Flow (MGD)						1/week	24hr. total
pH	See Special Condition No. 1				1/week	Grab	
BOD ₅	23.2	46.4	30	60	1/week	24 hour composite	
Total Suspended Solids	23.2	46.4	30	60	1/week	24 hour composite	

* Station service water discharge consisting of various pump and bearing cooling waters, various heat exchangers, chillers, the HVAC system and fire protection system maintenance flushwaters.

** See Special Condition No. 3 and No. 6.

*** See Special Condition No. 4(a)

NPDES Permit No. IL0036019

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	lbs/day		LIMITS mg/l			
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		

2. From the effective date of this permit until April 1, 1995, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): No. 002(b) Radwaste treatment system effluent Approximate Flow
intermittent

This discharge consists of:

1. Equipment drain subsystem
2. Floor drain subsystem
3. Laundry waste subsystem
4. Chemical waste subsystem

Flow			Continuous	-
Total Suspended Solids	15	30	1/week	8 Hour composite
Oil and Grease	15	20	1/week	Grab

Outfall(s): No. 003 Water treatment wastes

This discharge consists of:

1. Flocculator blowdown
2. Pressure filter backwash
3. Carbon column backwash
4. pH adjusted demineralizer regenerant waste
5. Auxiliary boiler blowdown
6. Standby liquid control pump surveillance operation wastewater

Maximum Flow
(0.216 MGD)

Flow			1/week	24 hour Total
pH	See Special Condition No. 1		1/week	Grab
Total Suspended Solids	15	30	1/week	24 hour composite

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Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		
3. From the effective date of this permit until April 1, 1995, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): No. 004 Transformer area Oil-water separator			Approximate Flow: intermittent			
This discharge consists of:						
1. Machine shop area floor drains						
2. Paint storage room floor drains						
3. Oil tank area and turbine oil transfer pump area drains						
4. Transformer area drains						
Flow					1/week	Estimate
Oil and Grease			15.0	20.0	1/week	Grab
Outfall(s): No. 005 Diesel generator area Oil-water separator			Approximate Flow intermittent			
This discharge consists of:						
1. Diesel generator building floor drains						
2. Diesel fuel storage area drains						
3. Fuel unloading area drains						
Flow					1/week	Estimate
Oil and Grease			15.0	20.0	1/week	Grab
Outfall(s): No. 006 Screen house intake screen backwash and screenhouse sump discharges.			See Special Condition No. 5			
			Approximate Flow (0.055 MGD)			
Outfall(s): No. 007 Safe shutdown service water system			Approximate Flow (47.5 MGD)			
This discharge consists of:						
1. Equipment cooling water						
2. Diesel generator cooling water						
3. Residual heat removal heat exchangers						
Flow					Continuous	

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Special Conditions

SPECIAL CONDITION 1. The pH shall be in the range of 6.0 to 9.0.

SPECIAL CONDITION 2. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving waters.

SPECIAL CONDITION 3. Continuous monitoring throughout a representative chlorination period shall be performed once per week above the second drop structure in the discharge flume during the respective chlorination period allowing for lag time between the initiation of chlorination and the point of sampling. If continuous monitoring cannot be performed, grab samples shall be taken in the discharge flume at five minute intervals or less during the respective chlorination period to develop a chlorine concentration curve allowing for lag time between the initiation of chlorination and the point of sampling before the first grab sample is taken. The individual values and average (mean) values for each set of grab samples shall be reported including the time samples were collected, the time and duration of the chlorine dosing period plus the amount (lbs/day) of chlorine applied. For continuous chlorine monitoring, analytical data from only one representative monitoring period each week need be reported on the monthly discharge monitoring report. For continuous monitoring, the chlorine concentration curve, the time of sampling, the time and duration of the chlorine dosing period plus the amount (lbs/day) of chlorine applied shall be reported.

SPECIAL CONDITION 4. Discharges to Lake Clinton shall not exceed an effluent temperature of 96°F, except that during such time as only one generating unit is in operation at the Clinton Nuclear Power Station, the daily average discharge temperature shall not exceed 99°F during more than 12 percent of the hours in twelve-month periods ending with any month and shall at no time exceed 108.3°F.

- (a) Compliance with the water temperature monitoring requirements shall be determined by reporting the daily average and daily maximum water temperature of the discharge. The number of hours the discharge temperature exceeds 99.0°F during each month shall also be reported.
- (b) During the effective period of PCB Order 89-213 the temperature at the second drop structure of the discharge flume shall be limited to a daily average temperature not exceeding 99° F during more than 90 days per year running from January 1st through December 31 and at no time shall the temperature of the discharge exceed 110.7° F.

SPECIAL CONDITION 5. The intake structure shall be operated and maintained in a professional manner so as to minimize the possible adverse impact on water quality which might result from the discharge of any collected debris or fish. So as to minimize possible adverse impacts, for purposes of this permit, the intake structure operation and maintenance shall include, but not be limited to, the following:

- a. Outer bar racks shall be routinely cleaned and collected debris properly disposed.

SPECIAL CONDITION 6. Chlorine may not be discharged from each unit's main cooling condensers for more than two hours in any one day.

SPECIAL CONDITION 7. There shall be no discharge of polychlorinated biphenyl compounds (PCBs).

SPECIAL CONDITION 8. The permittee shall continue to conduct the Operational Environmental Monitoring Program on Clinton Lake (Operational Environmental Monitoring Program approved by IEPA on July 1, 1986) until the Illinois Pollution Control Board rules on Illinois Power Company's upcoming site specific thermal standard request pursuant to 35 Ill. Adm. Code 302.211(f). The environmental monitoring program report for the 1989-1990 period does not have to be submitted to IEPA in 1991 but must be submitted to IEPA during 1992 covering the period 1989 through 1991.

SPECIAL CONDITION 9. Illinois Power Company's thermal demonstration pursuant to 35 Ill. Adm. Code 302.211(f) is scheduled for 1992. Final action on any adjusted thermal standards will be taken at that time and incorporated into this permit.

SPECIAL CONDITION 10. Illinois Power Company's demonstration for the Clinton Nuclear Power Station regarding water intake structure operations in accordance with Section 316(b) of the Clean Water Act is pending before this Agency. Final action on this matter is scheduled for 1992.

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Special Conditions

SPECIAL CONDITION 11. The permittee shall record monitoring results on Discharge Monitoring Report forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be mailed and received by the IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority. Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706
Attention: Compliance Assurance Section