

NPDES Permit No. IL0048151  
Notice No. LRL:12030801.daa

Public Notice Beginning Date: **May 24, 2013**

Public Notice Ending Date: **June 24, 2013**

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency  
Bureau of Water  
Division of Water Pollution Control  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-0610

Name and Address of Discharger:

Name and Address of Facility:

Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, Illinois 60555

Exelon Generation Company, LLC  
LaSalle County Generating Station  
2601 N. 21st Road  
Marseilles, Illinois 61341  
(LaSalle County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Leslie Lowry at 217/782-0610.

The applicant operates LaSalle County Station which is an existing nuclear-fueled steam electric generating facility. Two boiling water nuclear fission reactors provide steam to turbine generators with a maximum generating capacity of 2156 MW (net) electric power (SIC 4911). Plant operation results in an average discharge of 34.98 MGD of cooling pond blowdown from outfall 001, an intermittent discharge of demineralizer regenerant wastes from internal outfall A01, 0.01 MGD of sewage treatment plant effluent from internal outfall B01, 0.021 of wastewater treatment system effluent from internal outfall C01, an intermittent discharge of cooling water intake screen backwash (cooling pond) from internal outfall D01, an intermittent discharge of unit 1 and 2 radwaste treatment system effluent from internal outfall E01, an intermittent discharge of auxiliary reactor equipment cooling and flushing water from internal outfall F01, an intermittent discharge of north side stormwater runoff from internal outfall G01, an intermittent discharge of south site stormwater runoff from internal outfall H01, 0.003 MGD of reverse osmosis system reject water and greensand filter backwash from internal outfall I01, and an intermittent discharge of Illinois River make-up water intake screen backwash from outfall 002.

The following modification is proposed:

Added the following wastestreams to internal outfall C01, standby liquid control test skid flush water and groundwater.

Application is made for existing discharges which are located in LaSalle County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude</u>		<u>Longitude</u>		<u>Stream Classification</u>	<u>Integrity Rating</u>
001	Illinois River	41° 18' 38"	North	88° 39' 58"	West	General Use	Not Rated
002	Illinois River	41° 18' 40"	North	88° 39' 46"	West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The stream segment D-23 receiving the discharge from outfalls 001 and 002 is on the 2010 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of the Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The following parameters have been identified as the pollutants causing impairment:

<u>Designated Use</u>	<u>Potential Cause</u>
Fish Consumption and Primary Contact	Mercury, Polychlorinated Biphenyls, Fecal Coliform

This permit recognizes and continues the year-round disinfection exemption approved by the IEPA on June 27, 1995 and included in past NPDES permit actions since that date.

The discharges from the facility shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
<u>Outfall 001:</u>						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
Temperature						35 IAC 302.211
Total Residual Chlorine / Total Residual Oxidant					0.05	35 IAC 302.208 & 40 CFR 125.3
Zinc (Total)				Monitor Only		
<u>Outfall A01:</u>						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
<u>Outfall B01:</u>						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
CBOD <sub>5</sub>	13	42	35 IAC 304.120	25	50	35 IAC 304.120
Total Suspended Solids	15	50	35 IAC 304.120	30	60	35 IAC 304.120
<u>Outfall C01:</u>						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
Total Suspended Solids	5	17	40 CFR 423.12	15	30	35 IAC 304.124
Oil/Grease	2.5	3.34	40 CFR 423.12	15	20	40 CFR 423.12
<u>Outfall D01:</u>						
This discharge is limited to cooling water intake screen backwash free from other wastewater discharges. Adequate maintenance of the trash basket is required to prevent the discharge of floating debris collected on intake screens back to the cooling pond.						
<u>Outfall E01:</u>						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil/Grease				15	20	40 CFR 423.12
<u>Outfall F01:</u>						
This discharge is limited to auxiliary reactor equipment cooling and flushing water free from other wastewater discharges.						
<u>Outfall G01:</u>						
SWPPP						
<u>Outfall H01:</u>						

SWPPP						
	LOAD LIMITS lbs/day <u>DAF (DMF)</u>			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
<u>Outfall I01:</u>						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
<u>Outfall 002:</u>						
SWPPP						

## Load Limit Calculations:

Internal Outfall B01 load limit calculations for the following pollutant parameters were based on a design average flow of 0.06 MGD and a maximum flow of 0.1 MGD and using the formula of maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): CBOD<sub>5</sub>, and Total Suspended Solids.

Internal Outfall C01 load limit calculations for the following pollutant parameters were based on a design average flow of 0.044 MGD and a maximum flow of 0.082 MGD and using the formula of maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): Total Suspended Solids and Oil/Grease.

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The Special Conditions clarify flow, pH, temperature, total residual chlorine / total residual oxidant, monitoring locations, discharge monitoring report submission, stormwater, and additives.

The facility has not been granted additional thermal relief and must comply with existing thermal water quality standards as found in 35 IAC 302.211 at the edge of the mixing zone. See Special Condition 3 for the temperature special condition.

The facilities intake structure consists of three 3-stage vertical turbine pumps each with a capacity of approximately 30,000 gpm are used to provide cooling pond make-up. The pumps will pump up to 90,000 gpm of river water to the cooling pond through 18,000 feet of 60 inch diameter pipe. Normal operation of the station call for one or two pumps to be used to maintain proper pond levels.

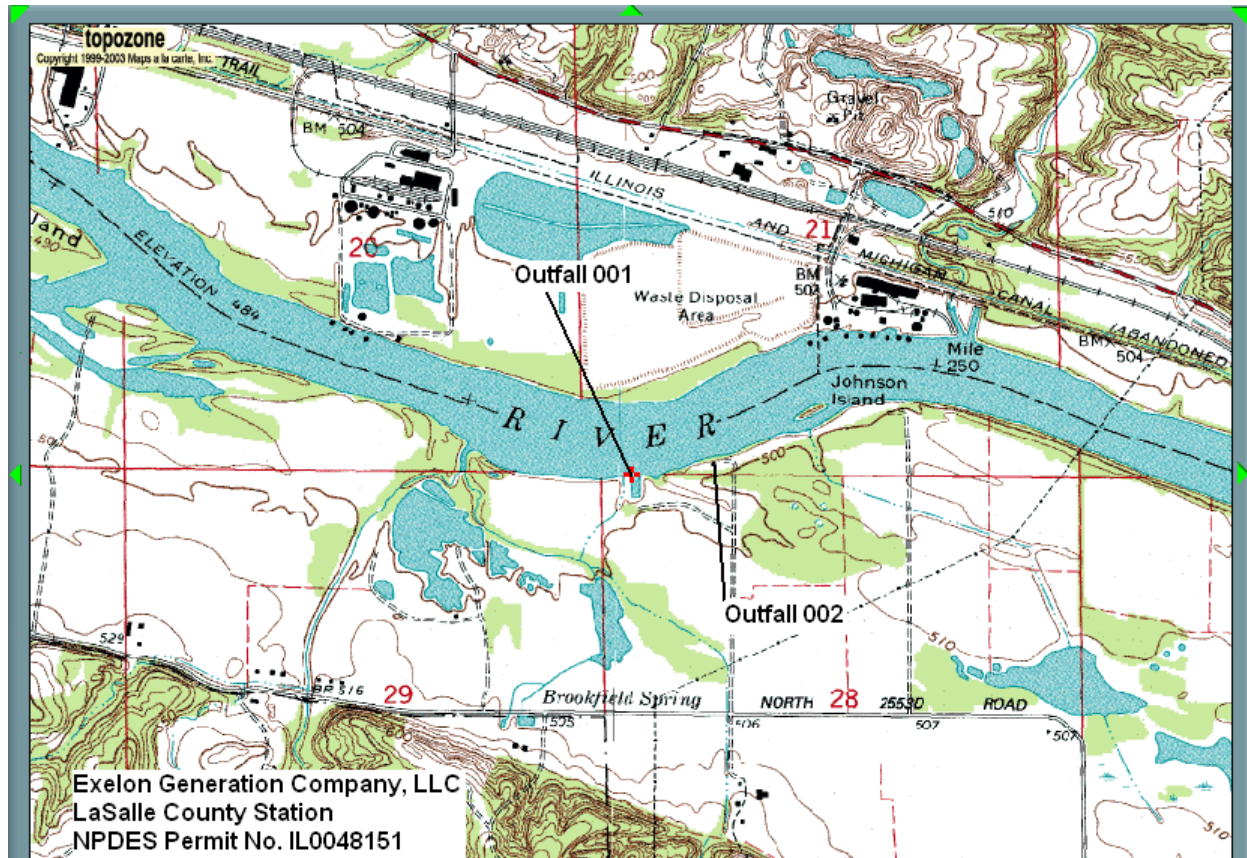
Due to evaporation, blowdown, and possible some seepage, it is expected that continuous pumping of cooling pond make-up water will be necessary to maintain the cooling pond water level. It is estimated that approximately 49,000 gpm of make-up water will continuously be required to replace 19,000 gpm of water lost due to evaporation and another 30,000 gpm of water lost due to pond blowdown.

The intake system consists of an intake flume channeled into the bottom of the Illinois River and extending approximately 50 feet out from the shoreline. Recessed 24 feet from the shoreline is a 72 foot wide funnel inlet. At the mouth of the inlet, a floating boom has been installed to divert floating debris. The funneled inlet leads to two adjacent bar racks which precede two traveling screens, with 3/8 inch screen openings, located in the river screen house. River water then flows to compartments in the lower bay area of the screenhouse where the enclosed impellers of the three vertical turbine pumps are located.

During normal make-up periods, the cooling pond make-up rate will be 30,000 gpm with one pumps operating. River intake velocities at the approach inlet of the canal near the shoreline have been calculated to range from 0.4 fps to 0.6 fps, depending on river pool elevations. The 0.4 fps velocity corresponds to the high river elevation and the 0.6 fps velocity to the low river elevation. At normal river pool elevation, river intake velocities of approximately 0.5 fps will occur.

The facility utilizes a closed-cycle recirculating cooling system, a 2058 acre cooling pond, for cooling of plant condensers and is determined to be the equivalent of Best Technology Available (BTA) for cooling water intake structures to prevent/minimize impingement mortality in accordance with the Best Professional Judgment (BPJ) provisions of 40 CFR 125.3 because it allows the

facility to only withdraw the amount of water necessary to maintain the cooling pond level rather than the entire volume used for cooling of the plant condensers. Special Condition 15 requires additional information to be submitted to the Agency pursuant to 316(b), so that the Agency can evaluate the potential impacts of the cooling water intake structure operations pursuant to 40 CFR 125.90(b).



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Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Facility Name and Address:

Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, Illinois 60555

Exelon Generation Company, LLC  
LaSalle County Generating Station  
2601 N. 21st Street  
Marseilles, Illinois 61341  
(LaSalle County)

Discharge Number and Name:

Receiving Waters:

001	Cooling Pond Blowdown
A01	Demineralizer Regenerant Wastes
B01	Sewage Treatment Plant Effluent
C01	Wastewater Treatment System Effluent
D01	Cooling Water Intake Screen Backwash
E01	Unit 1 and 2 Radwaste Treatment System Effluent
F01	Auxiliary Reactor Equipment Cooling and Flushing Water
G01	North Site Stormwater Runoff
H01	South Site Stormwater Runoff
I01	Reverse Osmosis System Reject Water and Greensand Filter Backwash
002	Illinois River Make-Up Water Intake Screen Backwash

Illinois River

Illinois River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream 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.

Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

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## Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
<u>Outfall 001</u> – Cooling Pond Blowdown* (Average Flow = 34.9 MGD)						
This discharge consists of: <ol style="list-style-type: none"> <li>1. Main Condenser Cooling Water</li> <li>2. Clean Condensate System Flushing and Maintenance (Alternate Route)</li> <li>3. House Service Water</li> <li>4. Demineralizer Regenerant Wastes (Outfall A01)</li> <li>5. Sewage Treatment Plant Effluent (Outfall B01)</li> <li>6. Wastewater Treatment System Effluent (Outfall C01)</li> <li>7. Cooling Pond Intake Screen Backwash (Outfall D01)</li> <li>8. Unit 1 and 2 Radwaste Treatment System Effluent (Outfall E01)</li> <li>9. Auxiliary Reactor Equipment Cooling and Flushing Water (Outfall F01)</li> <li>10. North Site Stormwater Runoff (Outfall G01)**</li> <li>11. South Site Stormwater Runoff (Outfall H01)**</li> <li>12. Reverse Osmosis System Reject Water and Greensand Filter Backwash (Outfall I01)</li> <li>13. Water Softener Regenerant Waste</li> <li>14. North Inlet Canal Stormwater Runoff**</li> <li>15. South Inlet Canal Stormwater Runoff**</li> <li>16. IDNR Fish Hatchery Effluents</li> </ol>						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
pH	See Special Condition 2.				2/Month	Grab
Temperature	See Special Condition 3.				Daily	Continuous
Total Residual Chlorine / Total Residual Oxidant	See Special Condition 4 and 16.			0.05	2/Month	Grab
Zinc (Total)			Monitor Only		1/Quarter	Grab
* - See Special Condition 13.						
** - See Special Condition 8.						

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## Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall A01 – Demineralizer Regenerant Wastes* (Intermittent Discharge)						
This discharge consists of:  1. Make-Up Demineralizer Regenerant Wastes 2. Off-Specification Demineralized Water 3. Make-Up Demineralizer Maintenance Wastewater 4. Unit Waterbox Vacuum Pump Condensate 5. Radwaste Treatment Acid/Caustic System Drains						
Flow (MGD)	See Special Condition 1.				1/Week	24 Hour Total
Total Suspended Solids			15	30	1/Week	Grab
* - Also discharge to the Wastewater Treatment System (Outfall C01) as an alternate route.						
Outfall B01 – Sewage Treatment Plant Effluent (DAF = 0.06 MGD)						
This discharge consists of:  1. Sanitary Wastewater 2. Eyewash Station Wastewater						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
pH	See Special Condition 2.				2/Month	Grab
CBOD <sub>5</sub>	13	42	25	50	2/Month	24 Hour Composite
Total Suspended Solids	15	50	30	60	2/Month	24 Hour Composite



## NPDES Permit No. IL0048151

## Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

[illegible]

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## Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
<u>Outfall E01</u> – Unit 1 and 2 Radwaste Treatment System Effluent (Intermittent Discharge)						
This discharge consists of:						
<ol style="list-style-type: none"> <li>1. Equipment Drains in the Turbine, Auxiliary, and Reactor Buildings</li> <li>2. Floor Drains in the Turbine, Auxiliary, and Reactor Buildings</li> <li>3. Condensate Polisher Waste from the Turbine Building</li> <li>4. Decontamination and Laundry Waste</li> </ol>						
Flow (MGD)	See Special Condition 1.				1/Week	Estimate
Total Suspended Solids			15	30	1/Week	Grab
Oil & Grease			15	20	1/Week	Grab
<u>Outfall F01</u> – Auxiliary Reactor Equipment Cooling and Flushing Water* (Intermittent Discharge)						
* - This discharge is limited to auxiliary reactor equipment cooling and flushing water free from other wastewater discharges.						
<u>Outfall G01</u> – North Site Stormwater Runoff* (Intermittent Discharge)						
This discharge consists of:						
<ol style="list-style-type: none"> <li>1. Fire Protection System Flushing and Maintenance (Alternate Route)</li> <li>2. Service Water System Flushing and Maintenance (Alternate Route)</li> <li>3. Domestic Water System Flushing and Maintenance (Alternate Route)</li> <li>4. Clean Condensate System Flushing and Maintenance (Alternate Route)</li> <li>5. North Site Uncontaminated Stormwater Runoff</li> </ol>						
* - See Special Condition 8.						

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## Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
<u>Outfall H01</u> – South Site Stormwater Runoff* (Intermittent Discharge)						
This discharge consists of:						
1. Fire Protection System Flushing and Maintenance (Alternate Route) 2. Service Water System Flushing and Maintenance (Alternate Route) 3. Domestic Water System Flushing and Maintenance (Alternate Route) 4. Clean Condensate System Flushing and Maintenance (Alternate Route) 5. South Site Uncontaminated Stormwater Runoff						
* - See Special Condition 8.						
<u>Outfall I01</u> – Reverse Osmosis System Reject Water and Greensand Filter Backwash (Average Flow = 0.003 MGD)						
Flow (MGD)	See Special Condition 1.				1/Week	24 Hour Total
Total Suspended Solids			15	30	1/Month	Grab
<u>Outfall 002</u> – Illinois River Makeup Water Intake Screen Backwash* (Intermittent Discharge)						
This discharge consists of:						
1. River Intake Screen Backwash 2. Trench Wash Water 3. Process Sampling Discharge 4. Lake Make-Up Pump Gland Leakoff, Coolers, Reliefs, and Min Flow 5. Lake Make-Up Pump Strainer Backwash 6. Air Compressor Receiver and Prefilter Drainage 7. Dewatering Pump Discharge 8. Fire Protection Water 9. River Screen House Switchyard Stormwater Runoff** 10. River Screen House Floor Drains and Roof Drains						

\* - Adequate maintenance of the intake screen system is required to prevent the discharge of floating debris collected on intake screens back to the Illinois River.

\*\* - See Special Condition 8.

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Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility meets the criteria for establishment of a formal mixing zone for thermal discharges pursuant to 35 IAC 302.102. The following mixing zone defines the area and volume of the receiving water body in which mixing is allowed to occur. Water quality standards for temperature listed in table below must be met at every point outside of the mixing zone.

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
° F	60	60	60	90	90	90	90	90	90	90	90	60
° C	16	16	16	32	32	32	32	32	32	32	32	16

- A. The temperature at the edge of the mixing zone should be calculated using the mass balance equation below:

$$T_{EDGE} = [0.25 \times (Q_{US} \times T_{US}) + Q_E \times T_E] / (0.25 \times Q_{US} + Q_E)$$

Where:

$T_{EDGE}$  = Temperature at the edge of the mixing zone.

$Q_{US}$  = Upstream Flow

$T_{US}$  = Upstream Temperature

$Q_E$  = Effluent Flow

$T_E$  = Temperature of the effluent.

- B. There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions. The normal daily and seasonal temperature fluctuations which existed before the addition of heat due to other than natural causes shall be maintained.
- C. The maximum temperature rise above natural temperatures shall not exceed 2.8° C (5° F).
- D. The water temperature at the edge of the mixing zone defined above shall not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature at the edge of the mixing zone exceed the maximum limits in the following table by more than 1.7° C (3° F).
- E. The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 4. All samples for Total Residual Chlorine / Total Residual Oxidant shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

SPECIAL CONDITION 5. There shall be no discharge of complexed metal bearing wastestreams and associated rinses from chemical metal cleaning unless this permit has been modified to include the new discharge.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/edmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 28<sup>th</sup> day of the following month, unless otherwise specified by the permitting authority.

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Permittees not using eDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 7. The upset defense provisions as defined in 40 CFR 122.41(n) are hereby incorporated by reference.

SPECIAL CONDITION 8.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.

1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act.

For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.

E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.

2. A site map showing:

i. The storm water conveyance and discharge structures;

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Special Conditions

- ii. An outline of the storm water drainage areas for each storm water discharge point;
  - iii. Paved areas and buildings;
  - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
  - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
  - vi. Surface water locations and/or municipal storm drain locations
  - vii. Areas of existing and potential soil erosion;
  - viii. Vehicle service areas;
  - ix. Material loading, unloading, and access areas.
  - x. Areas under items iv and ix above may be withheld from the site for security reasons.
3. A narrative description of the following:
    - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
    - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
    - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
    - iv. Industrial storm water discharge treatment facilities;
    - v. Methods of onsite storage and disposal of significant materials.
  4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
  5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
  6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
  2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
  3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
  4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill cleanup equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
  5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention

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basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:

- i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.
  - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.
  - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
  - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
  - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
  - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
  - vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspire runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.
6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.
  7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
  8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges - The requirements and procedures for quarterly visual observations are applicable to all outfalls covered by this condition.
1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
  2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil

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sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.

3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
- J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated there under, and Best Management Programs under 40 CFR 125.100.
- K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
- L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
- M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights there under.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).



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- R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.
- S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency  
Bureau of Water  
Compliance Assurance Section  
Annual Inspection Report  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

- V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

SPECIAL CONDITION 9. This permit authorizes the use of water treatment additives that were requested as part of this renewal. The use of any new additives, or change in those previously approved by the Agency, or if the permittee increases the feed rate or quantity of the additives used beyond what has been approved by the Agency, the permittee shall request a modification of this permit in accordance with the Standard Conditions - Attachment H.

The permittee shall submit to the Agency on a yearly basis a report summarizing their efforts with water treatment suppliers to find a suitable alternative to phosphorus based additives.

SPECIAL CONDITION 10. This permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice the permit modification.

SPECIAL CONDITION 11. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 12. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 13. There shall be no discharge of polychlorinated biphenyl compounds (PCBs).

SPECIAL CONDITION 14. 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 stream.

SPECIAL CONDITION 15. The facility utilizes a closed-cycle recirculating cooling system, a 2058 acre cooling pond, for cooling of plant condensers and is determined to be the equivalent of Best Technology Available (BTA) for cooling water intake structures to prevent/minimize impingement mortality in accordance with the Best Professional Judgment (BPJ) provisions of 40 CFR 125.3 because it allows the facility to only withdraw the amount of water necessary to maintain the cooling pond level rather than the entire volume used for cooling of the plant condensers.

In order for the Agency to evaluate the potential impacts of cooling water intake structure operations pursuant to 40 CFR 125.90(b), the permittee shall prepare and submit information to the Agency outlining current intake structure conditions at this facility, including a detailed description of the current intake structure operation and design, description of any operational or structural modifications from

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original design parameters, source waterbody flow information as necessary.

The information shall also include a summary of historical 316(b) related intake impingement and/or entrainment studies, if any, as well as current impingement mortality and/or entrainment characterization data; and shall be submitted to the Agency within six (6) months of the permit's effective date.

Upon the receipt and review of this information, the permit may be modified to require the submittal of additional information based on a Best Professional Judgment review by the Agency. This permit may also be revised or modified in accordance with any laws, regulations, or judicial orders pursuant to Section 316(b) of the Clean Water Act.

SPECIAL CONDITION 16. For a period of 18 months following the effective date of this permit during times when the condenser cooling water is chlorinated intermittently, TRC may not be discharged from the station for more than 3 hours per day or from any single generation units main cooling condensers for more than 2 hours per day. The discharge limit during this period is 0.2 mg/l, measured as an instantaneous maximum.

A Total Residual Chlorine limit of 0.05 mg/l (Daily Maximum) for outfall 001 shall become effective 18 months from the effective date of this Permit.

The Permittee shall construct a dechlorination system or some alternative means of compliance in accordance with the following schedule:

- |                           |                                   |
|---------------------------|-----------------------------------|
| 1. Status Report          | 4 months from the effective date  |
| 2. Commence Construction  | 10 months from the effective date |
| 3. Status Report          | 14 months from the effective date |
| 4. Complete Construction  | 16 months from the effective date |
| 5. Obtain Operation Level | 18 months from the effective date |

Compliance dates set out in this Permit may be superseded or supplemented by compliance dates in judicial orders, or Pollution Control Board orders. This Permit may be modified, with Public Notice, to include such revised compliance dates.

The Permittee shall operate the dechlorination system or an alternative means of compliance in a manner to ensure continuous compliance with the Total Residual Chlorine limit, not to the extent that will result in violations of other permitted effluent characteristic, or water quality standards.

REPORTING

The Permittee shall submit a report no later than fourteen (14) days following the completion dates indicated above for each numbered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed, the reason for non-completion, and the anticipated completion date.

### Public Notice of Draft Permit

Public Notice Number LRL:12030801.daa is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft modified National Pollutant Discharge Elimination System (NPDES) Permit Number IL0048151 has been prepared under 40 CFR 124.6(d) for Exelon Generation Company, LLC, 4300 Winfield Road, Warrenville, Illinois, 60555 for discharge into the Illinois River from the Exelon Generation Company, LLC, LaSalle County Generating Station, 2601 N. 21st Road, Marseilles, Illinois, LaSalle County. The applicant operates LaSalle County Station which is an existing nuclear-fueled steam electric generating facility. Two boiling water nuclear fission reactors provide steam to turbine generators with a maximum generating capacity of 2156 MW (net) electric power (SIC 4911). Plant operation results in an average discharge of 34.98 MGD of cooling pond blowdown from outfall 001, 0.102 MGD of demineralizer regenerant wastes from internal outfall A01, 0.020 MGD of sewage treatment plant effluent from internal outfall B01, 0.021 of wastewater treatment system effluent from internal outfall C01, an intermittent discharge of cooling water intake screen backwash (cooling pond) from internal outfall D01, 0.011 MGD of unit 1 and 2 radwaste treatment system effluent from internal outfall E01, an intermittent discharge of auxiliary reactor equipment cooling and flushing water from internal outfall F01, an intermittent discharge of north side stormwater runoff from internal outfall G01, an intermittent discharge of south site stormwater runoff from internal outfall H01, 0.003 MGD of reverse osmosis system reject water and greensand filter backwash from internal outfall I01, and an intermittent discharge of Illinois River makeup water intake from outfall 002.

The application, draft permit and other documents are available for inspection and may be copied at a cost of 25 cents per page at the Agency between 9:30 A.M. and 3:30 P.M. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft permit, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 30 days from the date of this publication.

If written comments and/or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing.

SAK:LRL:12030801.daa

