

NPDES Permit No. IL0002224
Notice No. LRL:11041402.bah

Public Notice Beginning Date: **May 26, 2011**

Public Notice Ending Date: **June 27, 2011**

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:

Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, Illinois 60555-5701

Name and Address of Facility:

Dresden Generating Station
6500 North Dresden Road
Morris, Illinois 60450
(Grundy 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 is engaged in operating of a nuclear power station for the generation of electrical power (SIC 4911). Plant operation results in an average discharge of 4.32 MGD of Unit 1 House Service Water from outfall 001, an intermittent discharge of Unit 1 Intake Screen Backwash from internal outfall A01, 472 MGD of Cooling Pond Blowdown from outfall 002, an intermittent discharge of Unit 2/3 Intake Screen Backwash from internal outfall A02, 0.0594 MGD of Wastewater Treatment System Effluent from internal outfall B02, and an intermittent discharge of Rad Waste Treatment System Effluent from internal outfall C02, 0.0082 MGD of Demineralizer Regenerate Filter Backwash from internal outfall D02, an intermittent discharge of Northwest Material Access Runoff from internal outfall E02, 0.0171 MGD of Sewage Treatment Plant Effluent from outfall 003, 32.316 MGD of Cooling Pond Discharge from outfall 004, an intermittent discharge of South East Area Runoff from outfall 005, and an intermittent discharge of North East Area Runoff from outfall 006.

Application is made for the existing discharges which are located in Grundy 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° 24' 00" North	88° 16' 00" West	General Use	B
002	Illinois River	41° 21' 00" North	88° 16' 15" West	General Use	B
003	Kankakee River	41° 23' 30" North	88° 16' 45" West	General Use	B
004	Kankakee River	41° 21' 15" North	88° 12' 15" West	General Use	B
005	Kankakee River	41° 23' 30" North	88° 16' 15" West	General Use	B
006	Kankakee River	41° 23' 30" North	88° 16' 15" West	General Use	B

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

The stream segment F-01 receiving the discharge from outfalls 003, 004, 005, and 006 are on the 2010 303(d) list of impaired waters and are not a biologically significant stream.

The stream segment D-10 receiving the discharge from outfalls 001 and 002 are on the 2010 303(d) list of impaired waters and are not a biologically significant stream.

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

<u>Designated Use</u>	<u>Potential Cause</u>
F-01: Fish Consumption	Mercury and Polychlorinated biphenyls
D-10: Fish Consumption	Mercury and Polychlorinated biphenyls

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					0.05	35 IAC 302.208 & 40 CFR 125.3
Total Suspended Solids				15	30	35 IAC 304.124
Oil/Grease				15	20	40 CFR 423
<u>Outfall A01:</u>						
There shall be no discharge of collected debris.						

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 002:</u>						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
Temperature						35 IAC 302.211
Total Residual Chlorine					0.05	35 IAC 302.208 & 40 CFR 125.3
<u>Outfall A02:</u>						
There shall be no discharge of collected debris.						
<u>Outfall B02:</u>						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil/Grease				10	20	40 CFR 122.44L
<u>Outfall C02:</u>						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil/Grease				15	20	40 CFR 423
<u>Outfall D02:</u>						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
<u>Outfall E02:</u>						
SWPPP						
<u>Outfall 003:</u>						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
BOD ₅	7.76	37.53		30	60	35 IAC 304.120
Total Suspended Solids	7.76	37.53		30	60	35 IAC 304.120
Fecal Coliform					400/100mL	35 IAC 304.121
Total Residual Chlorine					0.05	35 IAC 302.208 & 40 CFR 125.3

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 004:</u>						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
Temperature						35 IAC 302.211
Total Residual Chlorine					0.05	35 IAC 302.208 & 40 CFR 125.3
<u>Outfall 005:</u>						
SWPPP						
<u>Outfall 006:</u>						
SWPPP						

Load Limit Calculations:

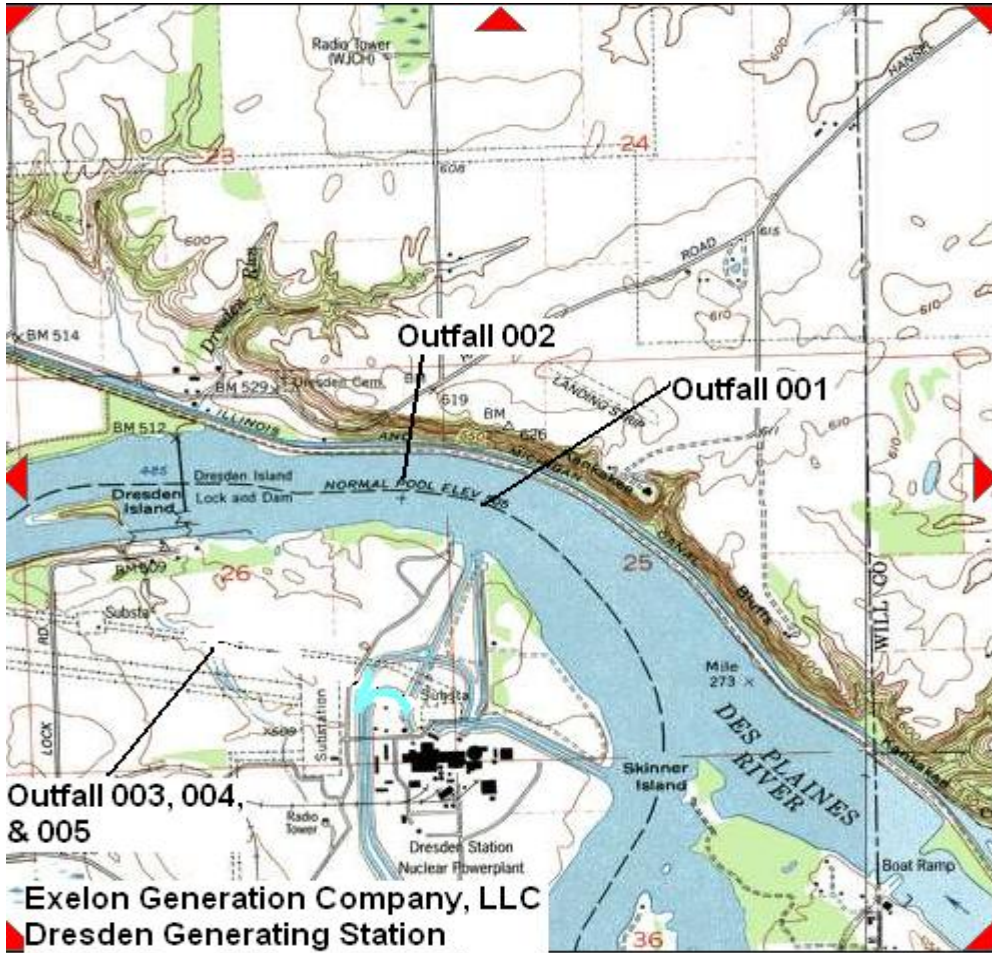
- A. Load limit calculations for the following pollutant parameters were based on a design average flow of 0.031 MGD and a design maximum flow of 0.075 MGD and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅ and Total Suspended Solids.

The following explain the conditions of the proposed permit:

The Special Conditions clarify flow, pH, temperature, monitoring location, discharge monitoring report submission, total residual chlorine, and stormwater.

The facility conducted a demonstration pursuant to Section 316(a) of the Clean Water Act and this was approved by the Illinois Pollution Control Board in PCB Order 73-359 dated January 17, 1974 and PCB Order 79-134 dated July 9, 1981.

A full demonstration pursuant to Section 316(b) of the Clean Water Act was not conducted in the past for Dresden Generation Station. Special Condition 19 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).



Outfall 003, 004,
& 005

Exelon Generation Company, LLC
Dresden Generating Station
NPDES Permit No. IL0002224



Public Notice of Draft Permit

Public Notice Number LRL:11041402.bah is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0002224 has been prepared under 40 CFR 124.6(d) for Exelon Generation Company, LLC, 4300 Winfield Road, Warrenville, Illinois 60555-5701 for discharge into Illinois and Kankakee Rivers from the Dresden Generating Station, 6500 North Dresden Road, Morris, Illinois 60450, (Grundy County). The applicant is engaged in operating of a nuclear power station for the generation of electrical power (SIC 4911). Plant operation results in an average discharge of 4.32 MGD of Unit 1 House Service Water from outfall 001, an intermittent discharge of Unit 1 Intake Screen Backwash from internal outfall A01, 472 MGD of Cooling Pond Blowdown from outfall 002, an intermittent discharge of Unit 2/3 Intake Screen Backwash from internal outfall A02, 0.0594 MGD of Wastewater Treatment System Effluent from internal outfall B02, and an intermittent discharge of Rad Waste Treatment System Effluent from internal outfall C02, 0.0082 MGD of Demineralizer Regenerate Filter Backwash from internal outfall D02, an intermittent discharge of Northwest Material Access Runoff from internal outfall E02, 0.0171 MGD of Sewage Treatment Plant Effluent from outfall 003, 32.316 MGD of Cooling Pond Discharge from outfall 004, an intermittent discharge of South East Area Runoff from outfall 005, and an intermittent discharge of North East Area Runoff from outfall 006.

The application, draft permit and other documents are available for inspection and may be copied 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.

NPDES Permit No. IL0002224

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, Illinois 60555-5701

Facility Name and Address:

Dresden Generating Station
6500 North Dresden Road
Morris, Illinois 60450
(Grundy County)

Discharge Number and Name:	Receiving Waters:
001 Unit 1 House Service Water	Illinois River
A01 Unit 1 Intake Screen Backwash	
002 Cooling Pond Blowdown	Illinois River
A02 Unit 2/3 Intake Screen Backwash	
B02 Wastewater Treatment System Effluent	
C02 Rad Waste Treatment System Effluent	
D02 Demineralizer Regenerate Filter Backwash	
E02 Northwest Material Access Runoff	
003 Sewage Treatment Plant Effluent	Kankakee River
004 Cooling Pond Discharge	Kankakee River
005 South East Area Runoff	Kankakee River
006 North East Area Runoff	Kankakee 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

SAK: LRL:11041402.bah

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) 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 – Unit 1 House Service Water</u> (Average Flow = 4.32 MGD) The discharge consists of: <ol style="list-style-type: none"> 1. Unit 1 Fire Pump & Equipment Cooling Water 2. Unit 1 Intake Screen Backwash (A01) 3. Stormwater Runoff* 						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	Continuous
pH	See Special Condition 2.				1/Month**	Grab
Temperature	See Special Condition 3.				1/Month**	Grab
Total Residual Chlorine	See Special Condition 4.			0.05	1/Month**	Grab
Total Suspended Solids			15	30	1/Month**	Grab
Oil/Grease			15	20	1/Month**	Grab
* - See Special Condition 10 and 12. ** - When Discharging						
<u>Outfall A01 – Unit 1 Intake Screen Backwash*</u> (Intermittent Discharge) * - There shall be no discharge of collected debris.						
<u>Outfall 002 – Cooling Pond Blowdown</u> (Average Flow = 472 MGD) The discharge consists of: <ol style="list-style-type: none"> 1. Unit 2 & 3 Condensate Cooling Water 2. Demineralized Regenerant Waste Filter Backwash (D02) 3. Rad Waste Treatment System Effluent (C02) 4. Wastewater Treatment System Effluent (B02) 5. Units 2 & 3 Intake Screen Backwash (A02) 6. Northwest Material Access Runoff (E02) 7. Units 2 & 3 House Service Water 						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	Continuous
pH	See Special Condition 2.				1/Month	Grab
Temperature	See Special Condition 3.				Daily	Continuous
Total Residual Chlorine	See Special Condition 4.			0.05	1/Month	Grab
<u>Outfall A02 – Unit 2/3 Intake Screen Backwash*</u> (Intermittent Discharge) * - There shall be no discharge of collected debris.						

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) 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 B02</u> – Wastewater Treatment System Effluent (DAF = 0.068 MGD)						
The discharge consists of:						
<ol style="list-style-type: none"> 1. Unit 1 and 2/3 Oil/Water Separators 2. Building Floor Drains 3. Building Roof Drains 4. Stormwater Runoff* 						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	Continuous
Total Suspended Solids			15	30	1/Month	24-Hour Composite
Oil/Grease			10	20	1/Month	Grab
* - See Special Condition 9.						
<u>Outfall C02</u> – Rad Waste Treatment System Effluent (DAF = 0.073 MGD)						
The discharge consists of:						
<ol style="list-style-type: none"> 1. Contaminated Equipment Drains 2. Contaminated Floor Drains 3. Chemistry Laboratory Drains 4. Decontamination System Drains 5. Condensate Polisher Sonic Cleaning Waste 6. Units 2 and 3 Auxiliary Boiler Blowdown 						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	Continuous
Total Suspended Solids			15	30	1/Month	Grab
Oil/Grease			15	20	1/Month	Grab
<u>Outfall D02</u> – Demineralizer Regenerate Filter Backwash (Average Flow = 0.0082 MGD)						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	
Total Suspended Solids			15	30	1/Month	8-Hour Composite
<u>Outfall E02</u> – Northwest Material Access Runoff* (Intermittent Discharge)						
* - See Special Condition 10.						

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) 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 003 – Sewage Treatment Plant Effluent</u> (DAF = 0.031 MGD)						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	Continuous
pH	See Special Condition 2.				1/Month	Grab
BOD ₅	7.76	37.53	30	60	1/Month	24-Hour Composite
Total Suspended Solids	7.76	37.53	30	60	1/Month	24-Hour Composite
Fecal Coliform	See Special Condition 17.			400/100 ml	1/Month	Grab
Total Residual Chlorine	See Special Condition 4.			0.05	1/Day*	Grab
* - When chlorinating.						
<u>Outfall 004 – Cooling Pond Discharge*</u> (Average Flow = 32.316 MGD)						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	
pH	See Special Condition 2.				1/Discharge Event	Grab
Temperature	See Special Condition 11.				1/Day When Discharging	Grab
Total Residual Chlorine	See Special Condition 4.			0.05	1/Discharge Event	Grab
* - See Special Conditions 15 and 20.						
<u>Outfall 005 – South East Area Runoff*</u>						
* - See Special Conditions 10 and 12.						
<u>Outfall 006 – North East Area Runoff*</u> (Intermittent Discharge)						
* - See Special Conditions 10 and 12.						

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 monthly 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. (For outfalls 001 and 002) 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 maximum temperature rise above natural temperatures shall not exceed 2.8° C (5° F).
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the table above during more than one (1) percent of the hours in the 12-month period end with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the table above by more than 3° F (1.7° C). Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.
- C. The permittee may discharge cooling pond blowdown using an indirect open cycle cooling mode from June 15 through September 30 in accordance with the following limitation in lieu of 35 Ill. Adm. Code 302.211(d) and 302.211(e) as written above in 3A and 3B respectively. During the period June 15 through September 30, the temperature of the plant discharge shall not exceed 32.2° C (90° F) more than 10% of the time in the period and never will exceed 33.9° C (93° F).
- D. 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.
- E. The Dresden Station shall be operated closed cycle during the period October 1 to June 15. The station may be operated in accordance with the Unit 2/3 Variable Blowdown Plan (governed by the original July 6, 1977 Thermal Compliance Plan calculations) from Jun 1 to June 15, as deemed necessary by station management.
- F. Compliance with the thermal limitations shall be determined by maintaining a continuous temperature and flow record for cooling pond blowdown to the Illinois River. If the variable blowdown plan will be used from June 1 to June 15, data acquisition and records from the parameters necessary to implement the plan shall be maintained.
- G. Additional water temperature monitoring shall be continued as follows:
1. A continuous water temperature record of water temperature at the Dresden Island Lock and Dam and the Dresden Station intake shall be maintained during the period of June 15 through September 30.
 2. Water temperature recorded at these locations shall be tabulated and submitted to the Agency, Industrial Unit, Division of Water Pollution Control by December 31, of each year.
 3. Permittee's failure to submit the temperature monitoring data from these locations due to equipment malfunction shall not be deemed a permit violation provided the permittee employs reasonable efforts to repair the malfunction. If the malfunction lasts more than 24 hours, a manual measurement shall be made at least once per day.
- H. The station may bypass the cooling pond, that is operate open cycle, only during periods when both generating units have been taken out of service.
- I. The monthly maximum value shall be reported on the DMR form.

Special Conditions

SPECIAL CONDITION 4. All samples for Total Residual Chlorine 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. 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 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 15th day of the following month, unless otherwise specified by the permitting authority.

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. 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.

SPECIAL CONDITION 8. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 9. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 10STORM 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.

Special Conditions

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;
- 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:

Special Conditions

- 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 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

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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 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).

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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).

REPORTING

- 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.

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- 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 11. (For outfall 004) This facility meets the allowed mixing criteria for thermal discharges pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to exceed thermal water quality standards. This determination is based on a temperature range of 60° F to 77° F and a flow of 50 cfs. The permittee shall monitor the flow and temperature of the discharge prior to entry into the receiving water body. Monitoring results shall be reported on the monthly Discharge Monitoring Report. This permit may be modified to include formal temperature limitations should the results of the monitoring show that there is reasonable potential to exceed a thermal water quality standard. Modification of this permit shall follow public notice and opportunity for comment.

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.

SPECIAL CONDITION 12. The North East Area Runoff discharges to the Unit 1 intake canal. When the Unit 1 service water system is in use, the discharge will be drawn into the intake and eventually discharged at outfall 001. During those times when the Unit 1 service water system is out of service, this discharge will remain in the intake canal and eventually flow into the Kankakee River through outfalls 005 and 006.

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

SPECIAL CONDITION 14. The "Upset" defense provisions listed under 40 CFR 122.41(N) are hereby incorporated by reference.

SPECIAL CONDITION 15. The responsibility for outfall 004, Cooling Pond Discharge, will be transferred to the Will County Emergency Management Agency upon issuance of a separate NPDES permit for operation of the Dresden Station siphon Ice Melt system. Upon issuance of a permit to Will County EMA, Exelon Generation Company shall submit a request to terminate the monitoring and reporting requirements associated with outfall 004, in writing to the Agency.

SPECIAL CONDITION 16. 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 17. For outfall 003, the daily maximum fecal coliform count shall not exceed 400/100 ml. Fecal Coliform limits for Outfall 003 are effective May through October. Sampling of Fecal Coliform concentrations are only required during this time period.

SPECIAL CONDITION 18. Exelon Generation Company, LLC formerly known as Commonwealth Edison Company has complied with 35 Ill. Adm. Code 302.211(f) and Section 316(a) of the Clean Water Act in demonstrating that the thermal discharge from its Dresden Nuclear Power Station has not caused and cannot be reasonably expected to cause significant ecological damage to receiving waters as approved by the Illinois Pollution Control Board in PCB Order 73-359 dated January 17, 1974 and PCB Order 79-134 dated July 9, 1981. Pursuant to 35 Ill. Adm. Code 302.211(g), no additional monitoring or modification is now being required for reissuance of this NPDES Permit

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SPECIAL CONDITION 19. Pursuant to Section 316(b) of the Clean Water Act, a past determination for the Dresden Nuclear Power Station was not made. Data was submitted at that time by Exelon Generation Company, LLC formerly known as Commonwealth Edison Company pursuant to Section 316(b) of the CWA for the Dresden Nuclear Power Station. This data was reviewed by the Illinois Environmental Protection Agency and the review determination was: That where as additional intake monitoring is not being required at this time, further monitoring is not precluded if determined necessary at the time of any modification or reissuance of NPDES Permit No. IL0002224.

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 original design parameters, source waterbody flow information as necessary. The information submitted should be in accordance with the previously submitted information collection proposal received by Agency on May 23, 2005.

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 20. The permittee shall minimize make-up water requirements to the cooling pond system during cooling pond water diversion to the Kankakee River in order to minimize fish impingement losses. This should be accomplished by eliminating to the extent feasible normal closed cycle blowdown flows of 50,000 gpm to the Illinois River except during a discharge from the Rad Waste Treatment System and/or other water conservation measures. Such measures and operations taken by the station to minimize make-up water requirements during diversion shall be documented and reported with monthly discharge monitoring reports.

A. Operating requirements:

1. The siphon will be operated for only two runs during the winter, each run lasting no more than 14 days.
2. Thermal monitoring at established transects and narrative observations will be recorded during operations in accordance with the siphon Operations Plan dated November, 1993 and a report of findings made available to this Agency in late spring.
3. The maximum amount of heat that will be placed in the Kankakee River shall be <0.5 billion BTUs per hour.
4. A fish barrier net must be in place around the siphon inlet before the siphon is operated, and must remain intact throughout the run.