NPDES Permit No. IL0048313
Notice No. LRL:07052102.docx

Public Notice Beginning Date: **April 3, 2014**

Public Notice Ending Date: **May 5, 2014**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Modified NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
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
Environmental Department
4300 Winfield Road
Warrenville, Illinois 60555-5701

Name and Address of Facility:

Exelon Generation Company, LLC
Byron Nuclear Power Station
4450 North German Church Road
Byron, Illinois 6101
(Ogle 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 it issued. For further information, please call Leslie Lowry at 217/782-0610.

The applicant is engaged in operating a nuclear power station with a nuclear fueled steam electric generating facility. Two pressurized water nuclear fission reactors provide steam to turbine generators with a maximum generating capacity of 2240 MW (net). Plant operation in an average discharge of 20.4 MGD of cooling system blowdown from outfall 001, 0.019 MGD of reverse osmosis backwash from internal outfall A01, 0.006 MGD of sewage treatment effluent from internal outfall B01, 0.028 MGD of wastewater treatment effluent from internal outfall C01, 0.022 MGD of radwaste treatment system effluent from internal outfall D01, 0.119 MGD of stormwater runoff basin from internal outfall E01, an intermittent discharge of intake screen backwash from internal outfall F01, an intermittent discharge of stormwater runoff basin overflow from outfall 002, an intermittent discharge of east station area runoff from outfall 003, and an intermittent discharge of west station area runoff from outfall 004.

The following modification is proposed:

Removing the Demineralizer Regenerant Waste from outfalls 001 and A01 and replacing it with Reverse Osmosis Backwash.

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

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Integrity Rating
001	Rock River	42° 05’ 05”	North	89° 19’ 30”	West	General Use	C
002	Woodland Creek	42° 04’ 50”	North	89° 17’ 05”	West	General Use	Not Rated
003	Woodland Creek	42° 04’ 50”	North	89° 17’ 05”	West	General Use	Not Rated
004	Unnamed Tributary to Rock River	42° 04’ 35”	North	89° 17’ 45”	West	General Use	Not Rated

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

The stream segment P-20 receiving the discharge from outfall 001 is on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

The stream segment receiving the discharge from outfalls 002 - 004 is not on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

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

Potential Cause:	Designated Use:
Fish Kills, Unknown Impairment, Dissolved Oxygen, pH, Silver, Mercury, PCBs, Fecal Coliform, Other Flow Regime Alterations, Aquatic Algae	Natural Sources, Dam or Impoundment, Impacts from Hydrostructure Flow Regulation/Modification, Urban Runoff/Storm Sewers, and Sources Unknown

The discharges from the facility 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	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001:						
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)				0.141	0.353	35 IAC 302
Hydrazine				0.011	0.027	35 IAC 302
Copper (Total)					0.057	35 IAC 302
Chromium (Total)					0.2	40 CFR 423.13
126 Priority Pollutants				No Detectable Amount		40 CFR 423.13
Oil/Grease				15	20	40 CFR 423.12
Total Suspended Solids				Monitor Only		

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall A01:						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Chromium (Hexavalent)				0.1	0.2	35 IAC 304.124
Chromium (Total)				1	2	35 IAC 304.124
Copper				0.5	1	35 IAC 304.124
Iron (Total)					1	40 CFR 423.13
Lead				0.2	0.4	35 IAC 304.124
Nickel				1	2	35 IAC 304.124
Zinc (Total)				1	2	35 IAC 304.124
Outfall B01:						
Flow (MGD)						
pH				6 - 9 s.u.		35 IAC 304.125
Total Suspended Solids	5.3	10.5		30	60	35 IAC 304.120
BOD_5	5.3	10.5		30	60	35 IAC 304.120
Outfall C01:						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Chromium (Hexavalent)				0.1	0.2	35 IAC 304.124
Chromium (Total)				1	2	35 IAC 304.124
Copper				0.5	1	35 IAC 304.124
Iron (Total)					1	40 CFR 423.13
Lead				0.2	0.4	35 IAC 304.124
Nickel				1	2	35 IAC 304.124
Zinc (Total)				1	2	35 IAC 304.124
Outfall D01:						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall E01:						
Flow (MGD)						
Chromium (Hexavalent)				0.1	0.2	35 IAC 304.124
Chromium (Total)				1	2	35 IAC 304.124
Copper				0.5	1	35 IAC 304.124
Iron (Total)					1	40 CFR 423.13
Lead				0.2	0.4	35 IAC 304.124
Nickel				1	2	35 IAC 304.124
Zinc (Total)				1	2	35 IAC 304.124
Total Suspended Solids				15 / 30	30 / 100	35 IAC 304.124 & 40 CFR 423.12
Outfall F01:						
There shall be no intentional discharge of collected debris.						
Outfall 002:						
Flow (MGD)						
Oil/Grease				15	20	40 CFR 423.12
Chromium (Hexavalent)				0.011	0.016	35 IAC 302.208
Chromium (Total)				1	2	35 IAC 304.124
Copper				0.025	0.041	35 IAC 302.208
Iron (Total)					1	40 CFR 423.13
Lead				0.063	0.298	35 IAC 302.208
Nickel				0.011	0.176	35 IAC 302.208
Zinc (Total)				0.047	0.26	35 IAC 302.208
Total Suspended Solids				15 / 30	30 / 100	35 IAC 304.124 & 40 CFR 423.12
Outfall 003:						
SWPPP						
Outfall 004:						
SWPPP						

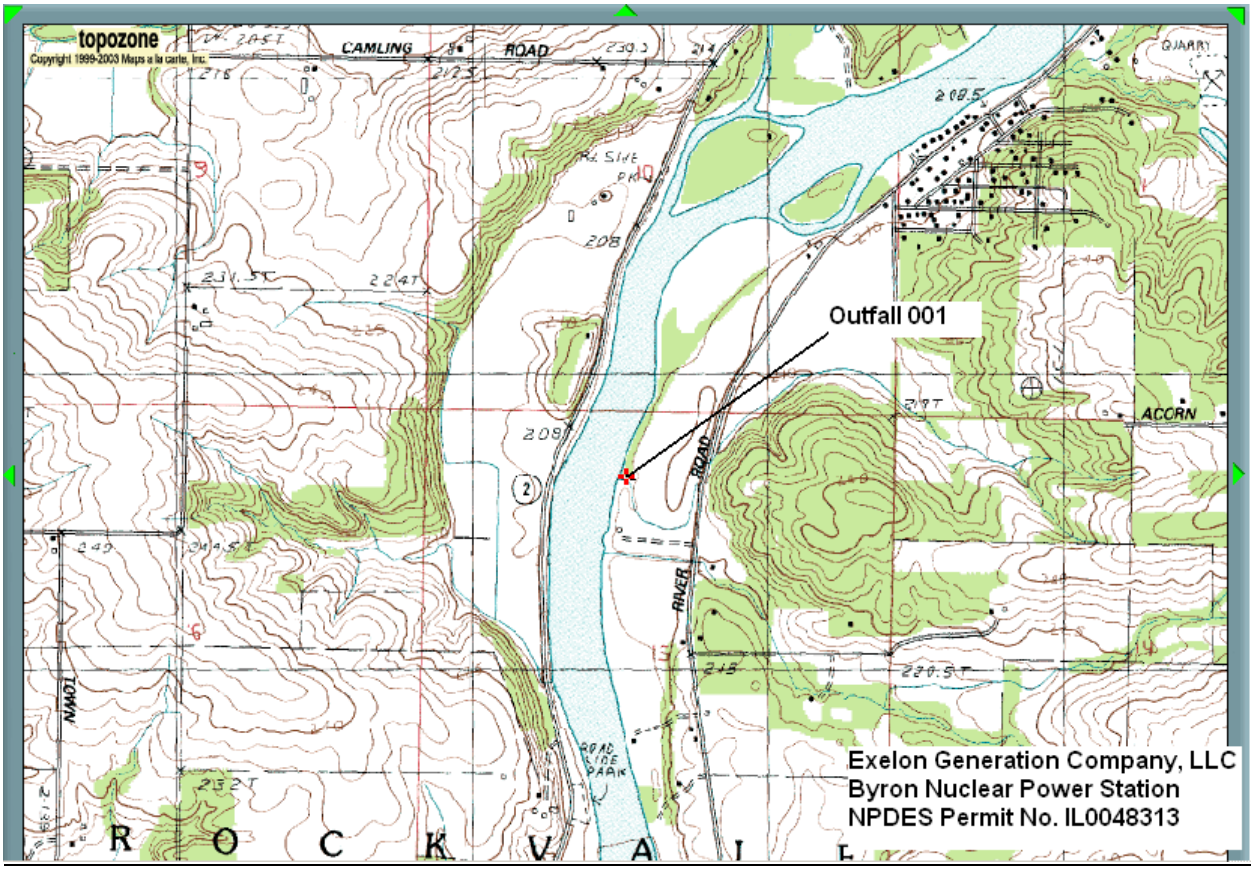
Load Limit Calculations:

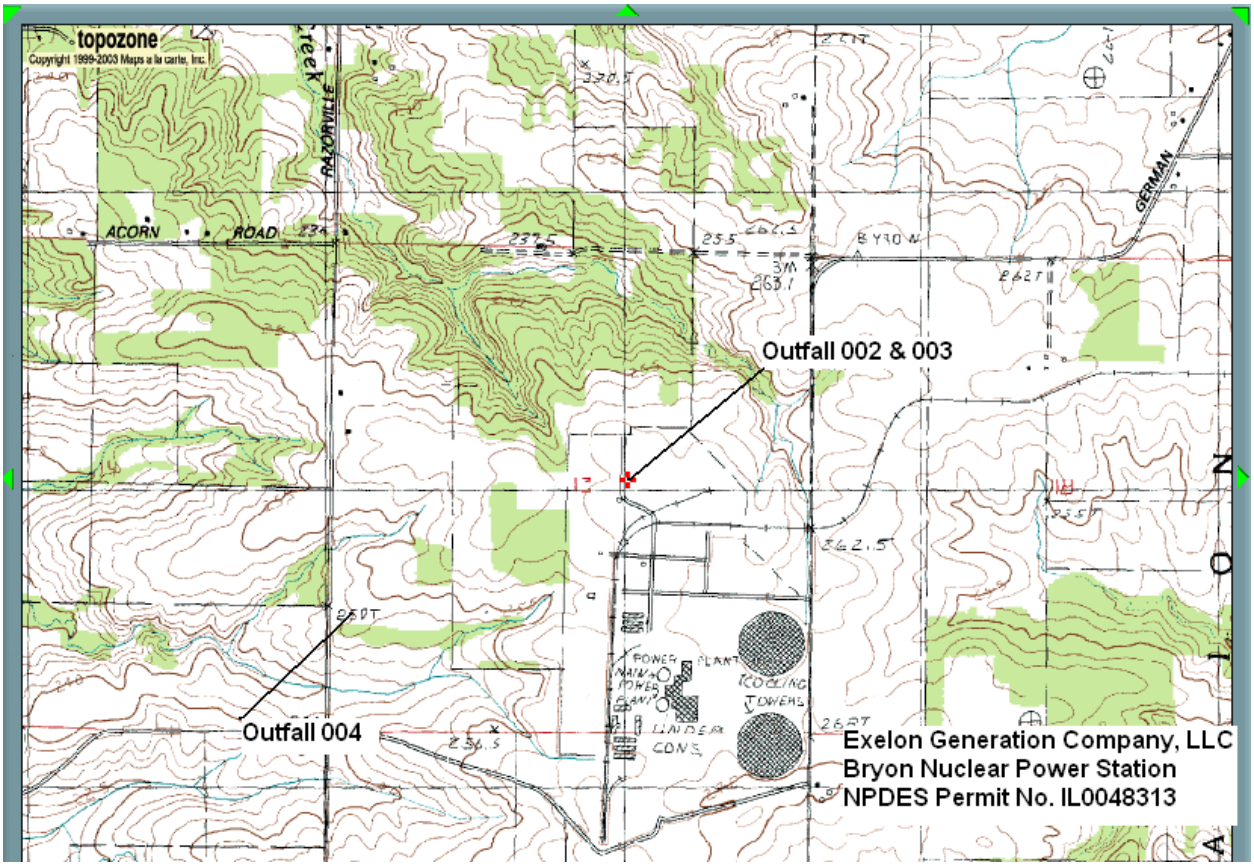
Outfall B01 load limit calculations for the following pollutant parameters were based a design maximum flow of 0.021 MGD and using the formula of average or maximum (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD_5 and Total Suspended Solids.

The following explain the conditions of the proposed permit:

The special conditions clarify flow, pH, monitoring location, total residual chlorine/oxidant, temperature, stormwater, copper, and hydrazine.

The facility conducted a demonstration pursuant to Section 316(b) of the CWA and this was approved by the Agency on May 15, 1989. There have been no changes in the operation of the intake structure or the cooling towers during the previous permit cycle. Therefore the approval of the demonstration in Special Conditions 20 and 21 shall apply to the operation of the cooling towers.

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Outfall 002 & 003
Outfall 004
Exelon Generation Company, LLC
Bryon Nuclear Power Station
NPDES Permit No. IL0048313

Antidegradation Assessment for Exelon Generation Company, LLC Byron Nuclear Power Station
NPDES Permit No. IL0048313 Ogle County

The subject facility has requested a permit modification in order to replace their Make-Up Demineralizer (MUD) system with trailer-mounted reverse osmosis (RO) units. The RO system to be installed represents current technology and would serve the same purpose of providing purified well water for use within the plant. The system configuration would continue to route well water through existing sand filters but would then send water through granular activated carbon units prior to being received by the RO units and then a deionized water system. The current system requires sand filter backwash discharge (Outfall C01) and demineralizer regenerant waste discharges (Outfall A01), which are both ultimately discharged from Outfall 001 along with cooling tower blowdown. Operation of the new RO system would increase the volume of discharges from Outfall 001 from the currently permitted rate of 20.3 MGD to 20.4 MGD. However, the current MUD system requires addition of high amounts of sulfuric acid (168,343 lb/year) and sodium hydroxide (61,249 lb/year) to recharge the system. Installation of the RO systems would result in a drastic reduction in the amount of chemical addition required for finished water treatment, as approximately 2,214 gallons per year of water treatment additives would be required to produce the same amount of finished water the MUD system currently provides.

Identification and Characterization of the Affected Water Body.

Segment P-20 of the Rock River is a General Use water with 1159 cfs of 7Q10 flow. It is listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use (potential causes = fish kills and ethanol) and fish consumption (potential causes = mercury and polychlorinated biphenyls). It is not listed as a biologically significant stream but has been given a C integrity rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The stream is enhanced in regards to the dissolved oxygen water quality standard.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

Operation of the RO systems would result in a marginal increase in Outfall 001 flow. Also, despite a reduction in total chemical usage at the facility, operation of the RO systems would introduce new water treatment additives that would increase loading of pollutants that aren't offset by the reduction of acids/caustics from MUD system. Sodium hypochlorite (2 GPD) would be added into the RO for antifouling purposes, an aluminum/chloride based coagulant (Klaraid IC1172, dosed at 1.7 GPD) would be added to aid in settling of solids, and a phosphorus based anti-scalant (Hypersperse MDC714, dosed at 0.5 GPD) would be added to maintain the structural integrity of the RO system.

Fate and Effect of Parameters Proposed for Increased Loading.

The slight increase in flow from Outfall 001 and the use of new water treatment additives would have no appreciable effect on effluent quality. Chlorine residuals from sodium hypochlorite addition would be dechlorinated with sodium bisulfite prior to discharge. Coagulant usage would contribute insignificant amounts of aluminum and chloride additions to Outfall 001 effluent and the product as a whole would be discharged at <0.1 mg/L, a non-toxic concentration based on the product's toxicity estimates (chronic LOEC = 3.1 mg/L). Anti-scalant addition would contribute <0.1 lb/day of phosphorus and the product as a whole would be discharged at <0.1 mg/L, a non-toxic concentration based on the product's toxicity estimates (acute NOEC = 1,000 mg/L). Any slight increases in pollutant loading from the proposed RO system would have no adverse effect on designated uses of the receiving water.

Purpose and Social & Economic Benefits of the Proposed Activity.

The RO system reflects current technology. Operational and system reliability would be substantially improved. Compared to the MUD system, the use of water treatment chemicals would be substantially reduced.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

Operation of the facility requires a constant, reliable supply of ultrapure water. The proposed installation of RO system technology is an improvement over the existing MUDs system. The small increase in discharge due to the reject stream and the addition of new water treatment additives is necessary in order to operate and maintain this technology. Collection and discharge of RO reject off-site is not a practical alternative given water quality standards would be attained and disposal of the reject would necessitate an additional cost, all while still resulting in disposal into the environment. There are no viable alternatives to using water treatment additives, as they are necessary in order to prevent fouling and corrosion of the system. The proposed water treatment additive residuals in Outfall 001 effluent would be benign and would not constitute a substantial increase in pollutant loading to the receiving water.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

The IDNR EcoCAT system was consulted on March 14, 2014 in regards to the proposed activities. The Illinois Natural Heritage Database identified the Black Sandshell (*Ligumia recta*), a protected resource, as potentially inhabiting the project area. IDNR reviewed these potential impacts and determined that xxxxxxxxx. Consultation was terminated in the xxxx letter from IDNR.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the assessment was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving water will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the facility and the community at large by reducing the amount of acids and caustics used on site and subsequently discharged into the receiving water. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

Public Notice of Draft Permit

Public Notice Number LRL:07052102.docx 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 IL0048313 has been prepared under 40 CFR 124.6(d) for Exelon Generation Company, LLC, Environmental Department, 4300 Winfield Road, Warrenville, Illinois 60555-5701 for discharge into Rock River and Woodland Creek from the Exelon Generation Company, LLC, Byron Nuclear Power Station, 4450 North German Church Road, Byron, Illinois 61010 (Ogle County).

The applicant is engaged in operating a nuclear power station with a nuclear fueled steam electric generating facility. Two pressurized water nuclear fission reactors provide steam to turbine generators with a maximum generating capacity of 2240 MW (net). Plant operation in an average discharge of 20.4 MGD of cooling system blowdown from outfall 001, 0.019 MGD of reverse osmosis backwash from internal outfall A01, 0.006 MGD of sewage treatment effluent from internal outfall B01, 0.028 MGD of wastewater treatment effluent from internal outfall C01, 0.022 MGD of radwaste treatment system effluent from internal outfall D01, 0.119 MGD of stormwater runoff basin from internal outfall E01, an intermittent discharge of intake screen backwash from internal outfall F01, an intermittent discharge of stormwater runoff basin overflow from outfall 002, an intermittent discharge of east station area runoff from outfall 003, and an intermittent discharge of west station area runoff from outfall 004.

The following modification is proposed:

Removing the Demineralizer Regenerant Waste from outfalls 001 and A01 and replacing it with Reverse Osmosis Backwash.

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.

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. IL0048313

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

Modified (NPDES) Permit

Expiration Date: December 31, 2015		Issue Date: January 24, 2011
		Effective Date: January 24, 2011 Modification Date:
Name and Address of Permittee:		Facility Name and Address:
Exelon Generation Company, LLC Environmental Department 4300 Winfield Road Warrenville, Illinois 60555-5701		Exelon Generation Company, LLC Byron Nuclear Power Station 4450 North German Church Road Byron, Illinois 61010
		Ogle County
Discharge Number and Name:		Receiving Waters:
001 Cooling System Blowdown		Rock River
A01 Reverse Osmosis Backwash		
B01 Sewage Treatment Plant Effluent		
C01 Wastewater Treatment Plant Effluent		
D01 Radwaste Treatment System Effluent		
E01 Stormwater Runoff Basin		
F01 Intake Screen Backwash		
002 Stormwater Runoff Basin Overflow		Woodland Creek
003 East Station Area Runoff		Woodland Creek
004 West Station Area Runoff		Unnamed Tributary to Rock 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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NPDES Permit No. IL0048313

Effluent Limitations and Monitoring

1. From the modification 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 001 – Cooling System Blowdown* (Average Flow = 20.4 MGD) The discharge consist of: 1. Cooling Tower Blowdown 2. Non-Essential Service Water Blowdown & Strainer Backwash 3. Essential Service Water Blowdown & Strainer Backwash 4. Reverse Osmosis Backwash (A01) 5. Sewage Treatment Plant Effluent (B01) 6. Wastewater Treatment Plant Effluent (C01) 7. Radwaste Treatment Plant Effluent (D01) 8. Stormwater Runoff Basin (E01) 9. Intake Screen Backwash 10. Secondary Steam System (Non-Radioactive) Process Water 11. Condenser Drain Discharge 12. Circulating Water Make-Up 13. Miscellaneous Drain Water a. Chiller Condensate b. Fire Protection System Drain Water c. Service Water Drains d. Closed Cooling System Drain Water						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
pH	See Special Condition 2.				1/Week	Grab
Temperature	See Special Condition 3 & 12.				Daily	Continuous*****
Total Residual Chlorine/ Total Residual Oxidant**				0.05	1/Week	Grab
Zinc (Total)			0.213	0.433	1/Week	Grab
Hydrazine***			0.011	0.027	1/Day When Discharging	Grab
Copper (Total)****				0.071	1/Week	Grab
Chromium (Total)				0.2	1/Week	Grab
Oil/Grease			15	20	1/Week	Grab
126 Priority Pollutants	See Special Condition 8 & 15.					
Total Suspended Solids	See Special Condition 24.		Monitor Only		1/Month	Grab

* - See Special Condition 17.
** - See Special Condition 22.
*** - See Special Condition 13.
**** - See Special Condition 14.
***** - During periods of inoperability of the inline temperature instrument temperature can be measured once per day.

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	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 – Reverse Osmosis Backwash* (Average Flow = 0.019 MGD) The discharge consist of: 1. Reverse Osmosis Backwash 2. Condensate Polisher Sump Discharge 3. Reverse Osmosis Area Drains 4. Well Water Sand Filter Backwash (Alternative Route) 5. Steam Generators Cleaning Process Waste (Once Every 5 – 10 Years) 6. Temporary Demineralizer Regenerant Waste 7. Secondary Steam System (Non-Radioactive) Discharge (Alternative Route)						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
Total Suspended Solids			15	30	1/Month	8-hour Composite**
The following metal parameter limitations and monitoring are to apply during steam generator(s) cleaning process periods:						
Chromium (Hexavalent)			0.1	0.2	Daily	Grab
Chromium (Total)			1	2	Daily	Grab
Copper			0.5	1	Daily	Grab
Iron (Total)				1	Daily	Grab
Lead			0.2	0.4	Daily	Grab
Nickel			1	2	Daily	Grab
Zinc (Total)			1	2	Daily	Grab
* - See Special Condition 9. ** - Permittee may follow the sampling procedure identified as Byron Station procedure BCP-300-40 or equivalent for determination of total suspended solids by calculation from individual composites.						
Outfall B01 – Sewage Treatment Plant Effluent* (DAF = 0.008 MGD)						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
pH	See Special Condition 2.				2/Month	Grab
Total Suspended Solids	5.3	10.5	30	60	2/Month	24-hour Composite
BOD_5	5.3	10.5	30	60	2/Month	24-hour Composite
* - See Special Condition 6.						

NPDES Permit No. IL0048313

Effluent Limitations and Monitoring

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	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 C01 – Wastewater Treatment Plant Effluent * (Average Flow = 0.028 MGD) The discharge consist of: 1. Turbine Building Floor Drain Sumps** 2. Turbine Building Fire & Oil Sump** 3. Turbine Building Equipment Drains** 4. Essential Service Water Drain Sumps** 5. Units 1 & 2 Tendon Tunnel Sumps 6. Reactor Building Roof Drains 7. Auxiliary Boiler Blowdown 8. Units 1 & 2 Diesel Fuel Storage Tank Sumps 9. Wastewater Treatment System Sand Filter Backwash 10. Well Water Sand filter Backwash 11. Steam Generator Cleaning Process Waste (Once Every 5 – 10 Years) 12. Condenser Drain Discharge (Alternative Route) 13. Secondary Steam System (Non-Radioactive) Discharge (Alternative Route) 14. Generic Metal Cleaning Activities 15. Waste Treatment Plant Oil Separator 16. Miscellaneous Non-Contaminated Drain Water a. Chiller Condensate b. Fire Protection System Drain Water c. Service Water Drains d. Closed Cooling System Drain Water						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
Total Suspended Solids			15	30	2/Month	24-hour Composite
The following metal parameter limitations and monitoring are to apply during steam generator(s) cleaning process periods:						
Chromium (Hexavalent)			0.1	0.2	Daily	Grab
Chromium (Total)			1	2	Daily	Grab
Copper			0.5	1	Daily	Grab
Iron (Total)				1	Daily	Grab
Lead			0.2	0.4	Daily	Grab
Nickel			1	2	Daily	Grab
Zinc (Total)			1	2	Daily	Grab
* - See Special Condition 6 and Special Condition 9. ** - These waste streams may be directed to the radwaste treatment system depending on the results of the process radiation monitors.						

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Effluent Limitations and Monitoring

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	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 D01 – Radwaste Treatment System Effluent (Average Flow = 0.022 MGD) The discharge consist of: 1. Steam Generator Condensate Blowdown 2. Cooling Jacket Blowdown 3. Auxiliary Building Floor Drains 4. Laundry Waste Treatment System Drains 5. Auxiliary Building Equipment Drains 6. Radwaste Demineralizer Filter Backwash 7. Evaporator Wastewater 8. Turbine Building Floor Drain Sumps (Alternative Route) 9. Turbine Building Fire & Oil Sump (Alternative Route) 10. Turbine Building Equipment Drains (Alternative Route) 11. Essential Service Water Drain Sumps (Alternative Route) 12. Boron Recycle System Blowdown 13. Condensate Polisher Sump Discharge (Alternative Route) 14. Generic Non-Chemical Metal Cleaning Activities 15. Portable Demineralizer Discharge 16. Reactor Coolant Letdown 17. Laboratory Drains, Decon Showers, & Sample Sinks 18. Miscellaneous Drain Water a. Chiller Condensate b. Fire Protection System Drain Water c. Service Water Drains d. Closed Cooling System Drain Water						
Flow (MGD)	See Special Condition 1.				Daily	Continuous
Total Suspended Solids			15	30	2/Month	Discharge Tank Composite

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	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 E01 – Stormwater Runoff Basin* (Average Flow = 0.119 MGD) The discharge consist of: 1. Parking Lot Runoff 2. Transformer Area Runoff 3. Station Area Runoff 4. Turbine Building Fire & Oil Sump 5. Steam Generators Cleaning Process Waste (Once Every 5 – 10 Years) 6. Generic Non-Chemical Metal Cleaning Activities 7. Chiller Condensate 8. Fire Protection System Drains 9. Service Water Drains 10. Closed Cooling System Drain Water						
Flow (MGD)	See Special Condition 1.				2/Month	Continuous
The following metal parameters limitations and monitoring are to apply during steam generator(s) cleaning process periods:						
Chromium (Hexavalent)			0.1	0.2	Daily	Grab
Chromium (Total)			1	2	Daily	Grab
Copper			0.5	1	Daily	Grab
Iron (Total)				1	Daily	Grab
Lead			0.2	0.4	Daily	Grab
Nickel			1	2	Daily	Grab
Zinc (Total)			1	2	Daily	Grab
For each week in which a discharge occurs from numbers 4 – 6 listed above to the stormwater runoff basin, outfall E01 shall be monitored and limited for the following additional parameters:						
Total Suspended Solids			15	30	1/Week	Grab
For each week in which a discharge occurs from numbers 8 – 10 listed above to the stormwater runoff basin, outfall E01 shall be monitored and limited for the following additional parameters:						
Total Suspended Solids			30	100	1/Week	Grab
* - See Special Condition 9 and 17.						
Outfall F01 – Intake Screen Backwash (Intermittent Discharge)						
There shall be no intentional discharge of collected debris.						

NPDES Permit No. IL0048313

Effluent Limitations and Monitoring

1. From the modification 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 002 – Stormwater Runoff Basin Overflow* (Intermittent Discharge) The discharge consist of: 1. Parking Lot Runoff 2. Transformer Area Runoff 3. Station Area Runoff 4. Turbine Building Fire & Oil Sump 5. Steam Generator Cleaning Process Waste (Once Every 5 – 10 Years) 6. Generic Non-Chemical Metal Cleaning Activities 7. Chiller Condensate 8. Fire Protection System Drain Water 9. Service Water Drains 10. Closed Cooling System Drain Water						
Flow (MGD)	See Special Condition 1.				1/Day when Discharging	Estimate
Oil/Grease			15	20	1/Day When Discharging	Grab
The following metal parameters limitations and monitoring are to apply during steam generator(s) cleaning process periods:						
Chromium (Hexavalent)			0.011	0.016	Daily	Grab
Chromium (Total)			1	2	Daily	Grab
Copper			0.025	0.041	Daily	Grab
Iron (Total)				1	Daily	Grab
Lead			0.063	0.298	Daily	Grab
Nickel			0.011	0.176	Daily	Grab
Zinc (Total)			0.047	0.26	Daily	Grab
For each week in which a discharge occurs from numbers 4 – 6 listed above to the stormwater runoff basin, outfall 002 shall be monitored and limited for the following parameters:						
Total Suspended Solids			15	30	1/Week	Grab
For each week in which a discharge occurs from numbers 8 – 10 listed above to the stormwater runoff basin, outfall 002 shall be monitored and limited for the following parameters:						
Total Suspended Solids			30	100	1/Week	Grab
* - See Special Condition 9 and 17.						

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Effluent Limitations and Monitoring

1. From the modification 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 003 – East Station Area Runoff* (Intermittent Discharge) * - See Special Condition 16.						
Outfall 004 – West Station Area Runoff* (Intermittent Discharge) * - See Special Condition 16.						

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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 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 maximum temperature of 120˚F. 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.

The monthly maximum value shall be reported on the DMR form

SPECIAL CONDITION 4. 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 (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

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

Permittees not using NetDMRs 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
Attention: Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

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

SPECIAL CONDITION 7. 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 8. 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. In connection with any such modification, the permittee must also submit a new letter to the Agency certifying that the facility is not using any additives containing any of the 126 priority pollutants.

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 9. The samples taken in compliance with the steam generator(s) cleaning process monitoring requirements shall be taken at a point representative of the discharge, but prior to mixing with any other wastewater and stormwater runoff. If the permittee requires further treatment within the station's wastewater treatment system in order to comply with limits, the steam

generator(s) cleaning wastes shall not be co-treated with other wastewater (except for incidental amounts) unless this permit has been modified to allow for such co-treatment.

SPECIAL CONDITION 10. There shall be no discharge of polychlorinated biphenyl compounds.

SPECIAL CONDITION 11. The "Upset" defense provisions listed under 40 CFR 122.41(n) are hereby incorporated by reference.

SPECIAL CONDITION 12. In the event that the Rock River is less than 2,400 cfs and/or the temperature differential between the main river temperatures and the water quality standard is less than 3˚F, daily calculations will be undertaken to demonstrate compliance with the water quality standard. Calculations shall be based upon hourly measurements, averaged over a 24-hour calendar day for river flow, main river temperature (measured as Circ Water Makeup Temperature), blowdown flow, and blowdown temperature values. In the event that a data or points are unavailable due to technical issues, the missing value shall be estimated. Results of the calculations shall be reported with the DMR on a monthly basis.

SPECIAL CONDITION 13. Outfall 001 shall be monitored for hydrazine when there is a discharge of the steam generator chemical cleaning solution and associated rinses containing hydrazine into the cooling water system. On those occasions monitoring shall be performed at outfall 001 on a daily basis using a minimum of three grab samples taken at periodic intervals during the discharge of steam generator chemical cleaning solution and associated rinses containing hydrazine. Sample collection and analysis procedures shall be in accordance with station practice for measuring hydrazine and standard methods. The quantity of hydrazine discharged in steam generator chemical cleaning solution and associated rinses to the cooling water system, the duration of this discharge to the cooling water system, and the analytical results shall be submitted with the Discharge Monitoring Report. The permittee shall submit a letter to the Agency requesting a modification to this permit, if the use of hydrazine during normal steam generator lay-up is at a higher feed rate or quantity than what has been previously approved by the Agency.

SPECIAL CONDITION 14. Copper monitoring of outfall 001 shall be performed during periods when the station's copper ion system is being utilized for Zebra Mussel infestation control. In addition to monitoring the discharge from outfall 001 for copper (Total) the permittee shall measure the total mass of copper used during Zebra Mussel dosing and include that value with the Discharge Monitoring Report filed the month following the cessation of copper ion system discharge. This permit must be modified to accommodate use of the copper ion system for purposes other than Zebra Mussel control.

SPECIAL CONDITION 15. The discharge of 126 priority pollutants except for chromium and zinc (40 CFR 423, Appendix A) is prohibited in detectable amounts from cooling tower discharges if the pollutants come from cooling tower maintenance chemicals.

SPECIAL CONDITION 16.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) – for outfalls 003 & 004

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;

   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 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 evapotranspirate 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).

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

NPDES Permit No. IL0048313

Special Conditions

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 at epa.npdes.inspection@illinois.gov. 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 17. 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 Conditions

SPECIAL CONDITION 18. Discharge of chemical metal cleaning agents EDTA, Elimin-Ox and/or hydrazine, and associated rinses are allowed once every 5 - 10 years per unit at outfalls A01, C01, and E01.

SPECIAL CONDITION 19. Except as allowed in Special Condition No. 18 of this permit, there shall be no discharge of complexed metal bearing waste streams or associated rinses from chemical metal cleaning unless this permit has been modified to include the new discharge.

SPECIAL CONDITION 20. Exelon Generation Company's demonstration for the Byron Nuclear Power Station in accordance with Section 316(b) of the Clean Water Act was approved by IEPA by a letter dated May 15, 1989. It is determined that no additional intake monitoring or modification is being required for reissuance of this NPDES Permit.

SPECIAL CONDITION 21. Exelon Generation Company's Byron Nuclear Power Station has been deemed to have met the applicable national performance standards and will not be required to demonstrate further that the Rock River Intake Structure meets the specified impingement mortality and entrainment performance standards pursuant to 40 CFR 125.94(a)(1)(i). This determination was made because of the use and operation of the cooling towers. The Permittee shall request and receive a modification to this permit prior to changing the use or operation of the cooling towers. This determination does not relieve the Permittee of submitting pertinent information regarding the Rock River intake structure and cooling towers operation with the renewal application for this permit as required under 40 CFR 122.21(r)(2), (3), and (5).

SPECIAL CONDITION 22. 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.

Discharge Monitoring Reports shall indicate whether chlorine or bromine compounds were used during the month.

SPECIAL CONDITION 23. For copper, zinc, and hydrazine a zone of initial dilution (ZID) is recognized with dimensions of 15.6 feet across the width of the river from the end-of-pipe and 15.5 feet downstream from this point. Within the ZID, 1.42:1 dilution is afforded. A mixing zone is recognized with dimensions extending 148 feet across the width of the river and 229 feet downstream. Within the mixing zone 6.1:1 dilution is afforded.

SPECIAL CONDITION 24. The influent from the Rock River and effluent from Outfall 001 shall be monitored for Total Suspended Solids on a monthly basis for two years from the effective date of this permit. After collection of all required samples, and upon written notification to the Agency the sampling may cease, unless the Agency modifies the permit to require continued sampling at some frequency.