

NPDES Permit No. IL0001571
Notice No. MEL:10062309.bah

Public Notice Beginning Date: **May 11, 2011**

Public Notice Ending Date: **June 10, 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:

Dynegy Midwest Generation, Inc.
604 Pierce Blvd.
O'Fallon, Illinois 62269

Name and Address of Facility:

Dynegy Midwest Generation, Inc.
Havana Power Station
15260 North State Rte. 78
Havana, Illinois 62644
(Mason 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 indicates 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 Mark E. Liska at 217/782-0610.

The applicant is engaged in the operation of a fossil fueled steam electric generating station (SIC 4911). Waste water is generated by the combustion of fuel oil and coal, and by the cooling of the stations condensers. Plant operation results in an average discharge of 393 MGD of condenser cooling water from outfall 001, the intermittent discharge of Units 1-5 Roof Drainage from outfall B01, 15.38 MGD of North Ash Pond Discharge from outfall 002, 9.12 MGD of Cooling Tower Blowdown From outfall A02, 0.25 MGD of treated groundwater from outfall D02 the intermittent discharge of South Ash Pond Discharge from outfall 002, 0.01 MGD of treated plant effluent from outfall 004, 21.5 MGD of East Ash Pond Discharge from outfall 005, the intermittent discharge of Unit 6 Roof Drainage and circulation cooling water system head tank overflow from outfall 006, and an intermittent discharge of stormwater runoff from the northern property at outfall 007.

The following modifications are proposed: Outfall B02 (chemical metal cleaning waste treatment tank effluent) has been removed from the permit, as this wastewater is now being hauled off-site for disposal. Outfall F02 (activated carbon treatment system effluent) has been removed from the permit, as the equipment was never used and is not expected to be used. Unit 1-6 demineralizer regenerant waste has been removed from outfalls 002 and 005, as this wastewater is no longer being produced. Outfall 007 has been added to the permit. Outfall 007 is a stormwater only outfall on the north side of the property and has no significant industrial usage. Roof drainage

stormwater from a new building will discharge to a manhole to outfall 002. Sampling for pH has been changed from continuous monitoring to once per week. The following have been added to outfall 002: deep well acid cleaning wastewaters, scrubber system low-volume wastewaters (sump discharges, service water strainer backwash waters, and miscellaneous floor and storm water drains), and lime slurry overflow. The following have been added to outfall 005: lime sludge and diatomaceous earth have been added to the east ash pond due to new air pollution controls, and intermittent discharges of sulfuric acid, nonchemical metal cleaning waste, and fluorescent powder from bag house leak detection. 3 MGD of non-contact air compressor cooling water has been added as a contributory waste stream to outfall 001.

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

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Illinois River	40° 16' 47"	North	90° 04' 52"	West	General Use	Not Rated
002	Illinois River	40° 16' 30"	North	90° 05' 10"	West	General Use	Not Rated
003	Illinois River	40° 16' 23"	North	90° 05' 15"	West	General Use	Not Rated
005	Illinois River	40° 16' 23"	North	90° 05' 17"	West	General Use	Not Rated
006	Illinois River	40° 16' 47"	North	90° 04' 47"	West	General Use	Not Rated
007	Illinois River	40° 16' 49"	North	90° 04' 47"	West	General Use	Not Rated

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

The stream segment receiving the discharge from all outfalls is on the 303 (d) list of impaired waters. The following parameters have been identified as the pollutants causing impairment:

Pollutants	Potential Contributors
Mercury, PCBs, Fecal Coliform	Fish Consumption, Primary Contact - Recreation

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Flow						35 IAC 309.146
Temperature					Standard	35 IAC 302.211
Total Residual Chlorine / Total Residual Oxidant					0.05	40 CFR 125.3
Outfall: 002						
Flow						35 IAC 309.146
pH					6-9	35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423

Mercury				Monitor Only		35 IAC 309.146
	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall: 003						
Flow						35 IAC 309.146
pH					6-9	35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423
Mercury				Monitor Only		35 IAC 309.146
Outfall: 004						
Flow						35 IAC 309.146
pH					6-9	35 IAC 304.125
Total Suspended Solids	2.5	5.0	35 IAC 304.120(a)	30	60	35 IAC 304.120(a)
BOD ₅	2.5	5.0	35 IAC 304.120(a)	30	60	35 IAC 304.120(a)
Fecal Coliform					400 per 100	35 IAC 304.121(a)
Total Residual Chlorine					0.05	40 CFR 125.3
Outfall: 005						
Flow						35 IAC 309.146
pH					6-9	35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423

Mercury

Monitor Only

35 IAC 309.146

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

The following explain the conditions of the proposed permit:

The special conditions serve to clarify discharge conditions, limits, monitoring requirements, and reporting requirements. Special Condition 21 has been added to the permit to require monitoring for metals at outfalls 002 and 005.

Antidegradation Assessment for Dynegy Midwest Generation – Havana
NPDES Permit No. IL0001571 Mason County

The subject facility has applied for an NPDES permit for additional wastewaters associated with the existing coal-fired power plant. The plant is acquiring new air pollution control facilities. Outfall 001 will have 3 MGD of additional flow due to the addition of non-contact cooling water from the new air pollution control equipment. For Outfall 002, which discharges to the lined East ash pond (Outfall 005) except under abnormal circumstances, several changes are proposed: 1) Deep well acid cleaning rinse water (from water well maintenance) will be added. The deep well acid rinse water is produced by well screen mineral scale removal procedures. Approximately 15,000 gallons of mildly acid rinse water will be added to the east ash pond about every two to three years; 2) low volume, intermittent spray dryer wastewaters consisting of sump, floor and stormwater discharges; 3) low volume, intermittent absorber nozzle cleaning solution; and 4) intermittent lime slurry overflow. Outfall 005, the existing ash pond system, will receive 1) activated carbon mercury sorbent making up about 1% of the fly ash sluiced to the ash ponds; 2) spray dryer absorber residue from the new air pollution control equipment; 3) diatomaceous earth utilized to pre-coat fly ash bags; and 4) small amounts of sulfuric acid to control total suspended solids. Outfall 006 will discharge a cooling water system head tank overflow. This system contains a silt and scale inhibitor containing phosphorus.

Identification and Characterization of the Affected Water Body.

The Illinois River (segment D-31) has a 7Q10 flow of 3195 cfs and is a General Use water. The stream is listed as impaired for fish consumption uses on the Illinois Integrated Water Quality Report and Section 303(d) List – 2006. The potential causes of impairment are given as mercury and PCBs. The draft 2008 List is the same except that primary contact use impairment and fecal coliform cause has been added. The Illinois River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating. The Illinois River is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard. The IDNR WIRT system lists no threatened or endangered species as inhabiting the receiving stream.

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

All new waste streams to Outfall 002 and 005 will enter the East ash pond. Acid from the deep well rinse water will be pH adjusted. Inorganic salts resulting from the pH adjustment will persist in the ash pond, but these will constitute a very small increase and will have no impact on the quality of the discharged effluent. Mercury that has been removed from the air emissions is expected to stay in the sorbent in the settled ash in the pond. Between zero and 0.6 pounds of mercury per day is predicted to enter the pond. This is mercury that otherwise would have been deposited in the Illinois River or other water bodies by air deposition. Whatever low levels that are discharged from the ash pond represent a decrease in loading to the environment.

The facility submitted a document to substantiate theories concerning the behavior of the mercury removed from the air emissions through carbon addition and deposited in the ash pond. Activated Carbon Injection: Effect on Simulated Fly Ash Sluice Water, by the Electric Power Research Institute, March, 2007 is a report on measurements of mercury and other substances in fly ash sluice water containing added carbon. The report concludes that “mercury captured from the flue gas by the carbon is generally stable and does not leach out during simulated sluicing processes” (page 2-3). This document also cites a USEPA document Characterization of Mercury-Enriched Coal Combustion Residues from Electric Utilities Using Enhanced Sorbents for Mercury Control, February 2006, EPA-600/r-06/008 that stated that mercury is “strongly retained by the coal combustion residues and unlikely to be leached at levels of environmental concern.”

Other air pollutants will be transferred to effluent via the spray dryer absorber residue. These include reacted lime, 5 to 15% increased mass of fly ash over existing levels, mercury sorbed to activated carbon, and sulfate. The pH of the ash pond may rise and require pH adjustment before discharge. If this occurs, additional dissolved solids from the acid used for adjustment will be present, albeit in very low concentrations. All constituents are anticipated to be reduced to below water quality standards at the end-of-pipe and no adverse impact on the receiving stream will occur.

Fate and Effect of Parameters Proposed for Increased Loading.

The slight increased loading of salts from the acid rinse, spray dryer absorber residue and pH adjustment will persist in the stream continuum. However, the amount of additional salts added is extremely small and will have no impact on aquatic life in the river. The addition of increased fly ash levels will result in some loading increase of the constituents of fly ash including metals. This increase is also anticipated to be relatively small and will have no impact on aquatic life in the river. Monitoring for metals in the final Outfall 005 effluent is required by the permit.

Purpose and Anticipated Benefits of the Proposed Activity.

Routine maintenance of the site wells necessitates the use of acid to clean intake screens. Removal of mercury from air emissions will remove an existing source of mercury from downwind water bodies. The local and regional airshed will benefit from a reduction in pollutants. Jobs will be preserved for the community as the plant will continue to operate since it will now meet new air pollution regulations.

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

Treatment of the acid rinse water in the ash pond is the most practical and least polluting method available. Hauling this waste water away for neutralization elsewhere would be a waste of resources. Disposal of the mercury containing sorbent with the fly ash is necessary given that the mercury sorbent is mixed in with the other ash. Converting the power plant to a dry ash handling system is an alternative that was considered by the applicant. However, the existing lined East ash pond system has considerable useful life remaining as an ash storage facility. Dynegy estimates that several years of capacity remains to accept sluiced ash. Abandoning this considerable existing investment is not a reasonable alternative. When the ash pond system becomes full, Dynegy will consider the alternatives for ash disposal available at that future time and dry ash landfilling will be a topic of discussion. Therefore, no feasible alternatives exist for the changes proposed.

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

The Illinois Department of Natural Resources was consulted regarding threatened and endangered species issues via the EcoCAT system on August 5, 2010. It was immediately determined that no threatened or endangered aquatic species reside in the receiving stream.

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 draft permit 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 stream 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 community at large by allowing for the continued operation of the power plant and reduction of mercury and other pollutants in the atmosphere. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

NPDES Permit No. IL0001571

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue, East

P.O. 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:

Facility Name and Address:

Dynegy Midwest Generation, Inc.
604 Pierce Blvd.
O'Fallon, Illinois 62269

Dynegy Midwest Generation, Inc.
Havana Power Station
15260 North State Rte. 78
Havana, Illinois 62644
(Mason County)

Discharge Number and Name:

Receiving Waters

001 Condenser Cooling Water
B01 Units 1-5 Roof Drainage
002 North Ash Pond Discharge
A02 Cooling Tower Blowdown
D02 Groundwater Remediation
Discharge (HAVW-104/HARW-120)
003 South Ash Pond Discharge
004 Sewage Treatment Plant Effluent
005 East Ash Pond Discharge
006 Unit 6 Roof Drainage and Service Water System
Head Tank Overflow
007 North Area Stormwater Runoff

Illinois River

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C and/or Subtitle D Rules and Regulations of the Illinois Pollution Control Board, and the Clean Water Act, 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.

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

SAK:MEL:10062309.bah

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Effluent Limitations and Monitoring

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

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:

Outfall(s): 001 Condenser Cooling Water

This discharge consists of:

Approximate Flow

1. Units 1-5 Condenser Cooling Water	365.2 MGD
2. Units 1-5 Turbine Oil Coolers	20.0 MGD
3. Units 1-5 Roof Drainage	Intermittent
4. Unit 6 Auxiliary Heat Exchangers	4.5 MGD
5. Intake Screen Backwash*	0.3 MGD
6. Non-Contact Air Compressor Cooling Water	3.0 MGD

Flow	See Special Condition 1	Daily	Continuous
Temperature	See Special Condition 3	Daily	Continuous
Total Residual Chlorine / Total Residual Oxidant***	0.05**	1/Week	*

* The permittee shall only sample when chlorination occurs. See Special Condition 10.

*** See Special Condition 22.

Outfall(s): B01 Units 1-5 Roof Drainage

Approximate Flow
Intermittent

See Special Condition 19 for SWPPP

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Effluent Limitations and Monitoring

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

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:

Outfall(s): 002 North Ash Pond Discharge*

This discharge consists of:

Approximate Flow

1. Units 1-6 Ash Hopper Overflow**	2.8 MGD
2. Units 1-6 Boiler Blowdown**	1.08 MGD
3. Unit 6 Condensate Polisher Wastes	0.29 MGD
4. Units 1-6 Floor and Sump Drainage**	0.28 MGD
5. Units 1-6 Water Sampling and System Drains	0.006 MGD
6. Units 1-5 Miscellaneous Heat Exchangers**	0.1 MGD
7. Units 1-5 Ash Handling Equipment Drainage	0.06 MGD
8. Unit 6 Coal Pile Runoff	Intermittent
9. Unit 6 Transformer Drains**	0.28 MGD
11. Yard Area Runoff***	Intermittent
12. Water Softener Backwash	0.01 MGD
13. Service Water Strainer Backwash	0.72 MGD
14. Units 1-6 Nonchemical Metal Cleaning Wastes	Intermittent
16. Unit 6 Cooling Tower Blowdown	9.12 MGD
17. Winter Low Point Drain Line	Intermittent
18. Accumulated Coal Barge Stormwater	Intermittent
19. Reverse Osmosis Unit Concentrate	0.122 MGD
20. Reverse Osmosis Unit Maintenance Waste	Intermittent
22. Production Support Building Roof Drainage***	Intermittent
23. Deep Well Acid Cleaning Wastewater	0.01 MGD - Once Every 2 Years
24. Scrubber System Low -Volume Wastewaters (sump discharges, service water strainer backwash watersrs, and misc. Floor and storm water drains)	0.5 MGD
25. Scrubber Nozzle Cleaning Solutions	Intermittent
26. Lime Slurry Overflow	Intermittent

Flow	See Special Condition 1	1/Week****	Continuous
pH	See Special Condition 2	1/Week****	Grab
Total Suspended Solids	15	30	1/Week**** 8-Hr Composite
Oil and Grease	15	20	1/Week**** Grab
Mercury****	Monitor Only	1/Quarter	Grab

*Effluents from the North Ash Pond are normally discharged to the South Ash Pond and/or the Eash Ash Pond via transfer pumps.

**These waste streams are routed through oil/water separators prior to discharge into the North Ash Pond.

***See Special Condition 20.

**** See also Special Conditions 8 and 9.

***** When discharging

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Effluent Limitations and Monitoring

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

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:

Outfall(s): A02 Cooling Tower Blowdown

Approximate Flow
9.12 MGD

See Special Condition No. 16

Outfall(s): D02 Groundwater Remediation Discharge (HAVW-104/HARW-120)*

This discharge consists of:
Groundwater resulting from the Diesel
Fuel Storage Tank Remediation Project

Approximate Flow
0.25 MGD

Flow	2/Year	24 Hour Total
Naphthalene	2/Year	Composite
Acenaphthylene	2/Year	Composite
Acenaphthene	2/Year	Composite
Fluorene	2/Year	Composite
Phenanthrene	2/Year	Composite
Anthracene	2/Year	Composite
Fluoranthene	2/Year	Composite
Pyrene	2/Year	Composite
Benzo(A)Anthracene	2/Year	Composite
Chrysene	2/Year	Composite
Benzo(B)Fluoranthene	2/Year	Composite
Benzo(K)Fluoranthene	2/Year	Composite
Benzo(A)Pyrene	2/Year	Composite
Dibenzo(A, H)Anthracene	2/Year	Composite
Benzo(G, H, I)Perylene	2/Year	Composite
Indeno(1, 2, 3-CD)Pyrene	2/Year	Composite
Benzene	2/Year	Grab
Toluene	2/Year	Grab
Ethyl Benzene	2/Year	Grab
Xylenes (total)	2/Year	Grab

*See Special Condition 5.

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	DAF (DMF)		LIMITS mg/l			
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		
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:						
Outfall(s): 003 South Ash Pond Discharge						
	This discharge consists of:			Approximate Flow		
	1. Dredged Material			Intermittent		
	2. Stormwater			Intermittent		
Flow	See Special Condition 1				1/Week	24 Hour Total
pH	See Special Condition 2				1/Week	Grab
Total Suspended Solids			15	30	1/Week	24 Hour* Composite
Oil and Grease			15	20	2/Month	Grab
Mercury**			Monitor Only		1/Quarter	Grab

*See Special Condition 18.

** See also Special Conditions 8 and 9.

Outfall: 004 - Sewage Treatment Plant Effluent (Discharge = 0.01 MGD)

Flow	See Special Condition 1				1/Week	Continuous
pH	See Special Condition 2				1/Month	Grab
Total Suspended Solids	2.5	5.0	30	60	1/Month	24 Hour Composite
BOD	2.5	5.0	30	60	1/Month	Grab
Fecal Coliform	See Special Condition 23				1/Month	Grab
Total Residual Chlorine				0.05	1/Week***	Grab

***See Special Condition 10.

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Effluent Limitations and Monitoring

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

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:

Outfall(s): 005 East Ash Pond Discharge

	This discharge consists of:	Approximate Flow			
Pollution Control System House Leak Detection) Waste	1. Unit 6 Bottom Ash Sluice Water	4.32 MGD			
	2. Unit 6 Fly Ash				
	3. Unit 6 Dry Fly Ash Handling Area Drainage	1.5 MGD			
	4. Dredged Material	Intermittent			
	6. Unit 6 Condensate Polisher Wastes	0.29 MGD			
	7. North Ash Pond Discharge	4.75 MGD			
	8. Mercury Sorbent Residue Discharge	Intermittent			
	9. Spray Dryer Absorber Residue from Air				
	10. Diatomaceous Earth from Bag House	Intermittent			
	11. Fluorescent Powder (Bag	Intermittent			
	12. Sulfuric Acid (pH adjustment)	Intermittent			
	13. Non-Chemical Metal Cleaning	Intermittent			
	Flow	See Special Condition 1		1/Week	24 Hour Total
pH	See Special Condition 2		1/Week	Grab	
Total Suspended Solids		15	30	1/Week	24 Hour* Composite
Oil and Grease		15	20	2/Month	Grab
Mercury**		Monitor Only		1/Quarter	Grab

*See Special Condition 18

**See also Special Conditions 8 and 9

Outfall(s): 006 Unit 6 Roof Drainage - Approximate Flow Intermittent
Service Water System Head Tank Overflow - Intermittent

007 North Area Stormwater Runoff - Approximate Flow Intermittent

See Special Condition 19 for SWPPP.

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Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day and reported as a monthly average and a daily maximum on the monthly discharge monitoring report.

SPECIAL CONDITION 2. pH shall be in the range 6.0 to 9.0 and shall be reported as a daily maximum and a daily minimum.

SPECIAL CONDITION 3. This facility meets the allowed mixing criteria for thermal discharges at the edge of the mixing zone in the Illinois River, pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to cause exceedances of the thermal water quality standards in the Illinois River. This determination is based a design average flow of 390 MGD and a maximum reported temperature of 102.8°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 to 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 4. 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 5. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using on e 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 jmailing paper DMRs to the IEPA. More information, including registraton information for the eDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/edmr/index.html>.

The completed Dischareg Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless specified by the permitting authority. Permittees not using eDMRs shall mail Dischareg 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

Monitoring Reports for Outfall D02 shall be submitted in June and December

SPECIAL CONDITION 6. Standard Condition 11(a) of Attachment H is rewritten as follows:

An application submitted by a corporation shall be signed by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application form originates. In the case of a partnership or a sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively. In the case of a publicly owned facility, the application shall be signed by either the principal executive officer, ranking elected official, or other duly authorized employee.

SPECIAL CONDITION 7. Standard Condition 11(b) of Attachment H is rewritten as follows:

Pursuant to 40 CFR 122.22(b) all reports required by permits, other information requested by the Director, and all permit applications submitted for Group II storm water discharges under 122.2(b)(3) shall be signed by a person described in 40 CFR 122.22(a), or by a duly authorized representative of that person. A person is duly authorized representative only if:

NPDES Permit No. IL0001571

Special Conditions

1. The authorization is made in writing by a person described in paragraph (a) of this section;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and
3. The written authorization is submitted to the Director.

SPECIAL CONDITION 8. Outfalls 002, 003, and 005 shall be monitored for mercury on a quarterly basis until twelve samples have been collected. 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.

SPECIAL CONDITION 9. All samples for mercury must be analyzed by EPA Method 1631E using the digestion procedure described in Section 11.1.1.2 of 1631E, which dictates that samples must be heated at 50°C for 6 hours in a bromine chloride (BrCl) solution in closed vessels.

SPECIAL CONDITION 10. 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 11. There shall be no discharge of polychlorinated biphenyl compounds.

SPECIAL CONDITION 12. Dynegy Midwest Generation (formerly Illinois Power Company) has complied with Section 302.211(f) of Title 35, Chapter 1, Subtitle C: Water Pollution Regulations by demonstrating that thermal discharge from Havana Power Plant has not caused and cannot reasonably be expected to cause significant ecological damage to the Illinois River as approved by the IPCB in PCB 78-12 on October 19, 1978. Pursuant to 35 Ill. Adm. Code 302.211(g) no additional monitoring or modification is being required for reissuance of this NPDES permit.

SPECIAL CONDITION 13. Dynegy Midwest Generation (formerly Illinois Power Company) demonstration for the Havana Power Plant in accordance with Section 316(b) of the CWA was determined to meet BTA at the time of the demonstration, and was approved by this Agency by letter dated December 29, 1978.

SPECIAL CONDITION 14. 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, or other information as necessary.

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

Upon the receipt and review of this information, the permit may be modified to require the submittal of additional information based on a Best Professional Judgement 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 15. The discharge of priority toxic pollutants (40 CFR 423, Appendix A) in detectable amounts from cooling tower discharges is prohibited if the pollutants come from cooling tower maintenance chemicals. The use of cooling tower maintenance chemicals containing chromium or zinc is prohibited unless this permit has been modified to include the use and discharge of these chemicals.

SPECIAL CONDITION 16. There shall be no discharge of collected man-made debris from the cleaning of the outer bar rack of the screen house.

SPECIAL CONDITION 17. 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.

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SPECIAL CONDITION 18. If inclement weather or low flow conditions in the discharge prohibit the collection of a 24-hour composite sample, sampling shall consist of a grab sample.

SPECIAL CONDITION 19. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (Outfalls B01, 006 and 007 only)

- A. A storm water pollution prevention plan shall be maintained by the permittee for the facility covered by this permit. 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.
- B. The owner or operator of the facility shall make a copy of the plan available to the Agency 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 G 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 objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, 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 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.
 - 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.

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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.
 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 clean up 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;
 - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;

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- 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;
 - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
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 and 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. 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.
- H. 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 thereunder, and Best Management Programs under 40 CFR 125.100.
- I. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.
- J. 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.
- K. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part G of the Storm Water Pollution Prevention Plan of this permit. 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).
- L. The first report shall contain information gathered during the one year time period beginning with the modification date of 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.
- M. Annual inspection reports shall be mailed to the following address:
Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Annual Inspection Report
1021 North Grand Avenue, East

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P.O. Box 19276
Springfield, Illinois 62794-9276

- N. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

SPECIAL CONDITION 20. (Outfall 002 only) 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 21. The Permittee shall monitor the effluent from Outfalls 002 and 005 for the following parameters on a 2/year basis. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the DMR's to IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
10197	Antimony	5.0 ug/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (weak acid dissociable) (grab)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
10159	Thallium	5.0 ug/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

SPECIAL CONDITION 22. Any use of biocides other than chlorine (such as bromine) shall be subject to a limit of 0.05 mg/L total residual oxidant at all times. For a period of 2 years following the effective date of this permit during times when the condenser cooling water is chlorinated intermittently, TRC may not be discharged from the station for more than 3 hours per day or from any single generation units main cooling condensers for more than 2 hours per day. The discharge limit during this period is 0.2 mg/l, measured as an instantaneous maximum.

A Total Residual Chlorine limit of 0.05 mg/l (Daily Maximum) for outfalls 001 shall become effective 2 years from the effective date of this Permit.

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

- | | |
|---------------------------|-----------------------------------|
| 1. Status Report | 6 months from the effective date |
| 2. Commence Construction | 18 months from the effective date |
| 3. Complete Construction | 23 months from the effective date |
| 4. Obtain Operation Level | 24 months from the effective date |

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

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

REPORTING

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

SPECIAL CONDITION 23. The daily maximum fecal coliform count shall not exceed 400 per 100 ml.

Public Notice of Draft Permit

Public Notice Number SAK:10062309.bah is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue, East, P.O. Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft modified National Pollutant Discharge Elimination System (NPDES) Permit Number IL0001571 has been prepared under 40 CFR 124.6(d) for Dynegy Midwest Generation, Inc., Attn: Manager, Environmental Resources, 2828 North Monroe Street, Decatur, Illinois 62526 for discharge into Illinois River from the Dynegy Midwest Generation, Inc., Havana Power Station, 15260 North State Rte. 78, Havana, Illinois 62644, (Mason County). The applicant is engaged in the operation of a fossil fueled steam electric generating station (SIC 4911). Waste water is generated by the combustion of fuel oil and coal, and by the cooling of the stations condensers. Plant operation results in an average discharge of 390 MGD of condenser cooling water from outfall 001, the intermittent discharge of Units 1-5 Roof Drainage from outfall B01, 15.38 MGD of North Ash Pond Discharge from outfall 002, 9.12 MGD of Cooling Tower Blowdown From outfall A02, 0.5 MGD of Groundwater Remediation South Project Discharge from outfall D02, the intermittent discharge of Activated Carbon Treatment System Effluent from outfall F02, the intermittent discharge of South Ash Pond Discharge from outfall 002, 21.5 MGD of East Ash Pond Discharge from outfall 005, the intermittent discharge of Unit 6 Roof Drainage from outfall 006 and stormwater from the north area property from outfall 007.

The following modifications are proposed: Outfall B02 (chemical metal cleaning waste treatment tank effluent) has been removed from the permit, as this wastewater is now being hauled off-site for disposal. Unit 1-6 demineralizer regenerant waste has been removed from outfalls 002 and 005, as this wastewater is no longer being produced. Outfall 007 has been added to the permit. Outfall 007 is a stormwater only outfall on the north side of the property and has no significant industrial usage. Roof drainage stormwater from a new building will discharge to a manhole to outfall 002. Sampling for pH has been changed from continuous monitoring to once per week. Deep well acid cleaning wastewaters have been added to outfall 002. Lime Sludge and diatomaceous earth have been added to the east ash pond at outfall 005 due to new air pollution controls. Metals and mercury monitoring has been added to the ash ponds discharges.

The application, draft modified 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 modified 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 modified 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 modified permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing.

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