

NPDES Permit No. IL0000124
Notice No. LRL:11051303.bah

Public Notice Beginning Date: **August 17, 2011**

Public Notice Ending Date: **September 16, 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:

Ameren Energy Generating Company
P.O. Box 66149, MC-602
St. Louis, Missouri 63166

Name and Address of Facility:

Ameren Energy Generating Company
Grand Tower Power Station
1820 Power Plant Road
Grand Tower, Illinois 62924
(Jackson County)

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

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

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

The applicant is engaged in operation of a natural gas fired power station with a generating capacity of 599 MW (SIC 4911). Plant operation results in an average discharge of 143.78 MGD of main condenser cooling water discharge from outfall 001, an intermittent discharge of intake screen backwash from internal outfall A01, average 0.09 MGD of ash pond discharge from outfall 002, and 0.0008 MGD of sewage treatment plant effluent from outfall 003.

The following modification is proposed:

The stormwater portion of outfall 003 was removed from the permit and former internal outfall A03 has been renumbered as outfall 003.

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

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Mississippi River	37° 39' 29" North	89° 30' 48" West	General Use	----
002	Unnamed ditch tributary to the Mississippi River	37° 39' 5" North	89° 30' 47" West	General Use	----
003	Mississippi River	37° 39' 23" North	89° 30' 48" West	General Use	----

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

The stream segment I-84 receiving the discharge from outfalls 001 and 003 are on the 2010 303(d) list of impaired waters and are not a biologically significant stream.

The stream segment receiving the discharge from outfall 002 is not on the 2010 303(d) list of impaired waters and is not a biologically significant stream.

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

Designated Use	Potential Cause
Aquatic life use, Fish consumption, Public and food processing water supply use, and Primary contact recreation	Iron, Dissolved Oxygen, pH, Total Suspended Solids, Mercury, Polychlorinated Biphenyls, Manganese, and Fecal Coliform

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

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
<u>Outfall 001:</u>						
Flow (MGD)						
pH				6 – 9 s.u.		35 IAC 304.125
Temperature						35 IAC 302.211
<u>Outfall A01:</u>						
During maintenance of the intake screens or trash racks, there shall be no discharge of debris.						
<u>Outfall 002:</u>						
Flow (MGD)						
pH				6 – 9 s.u.		35 IAC 304.125
Total Suspended Solids				15	30	35 IAC 304.124
Oil/Grease				15	20	40 CFR 423
Sulfate				Monitor Only		
Mercury				Monitor Only		

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
<u>Outfall 003:</u>						
Flow (MGD)						
pH				6 – 9 s.u.		35 IAC 304.125
BOD ₅	1.25	2.5	35 IAC 304.120	30	60	35 IAC 304.120
Total Suspended Solids	1.25	2.5	35 IAC 304.120	30	60	35 IAC 304.120
Fecal Coliform					400/100 mL	35 IAC 304.121
Total Residual Chlorine					0.05	35 IAC 302.208 & 40 CFR 125.3

Load Limit Calculations:

A. Load limit calculations for the following pollutant parameters were based on a design average flow of 0.005 and a design maximum flow of 0.005 and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅ and Total Suspended Solids.

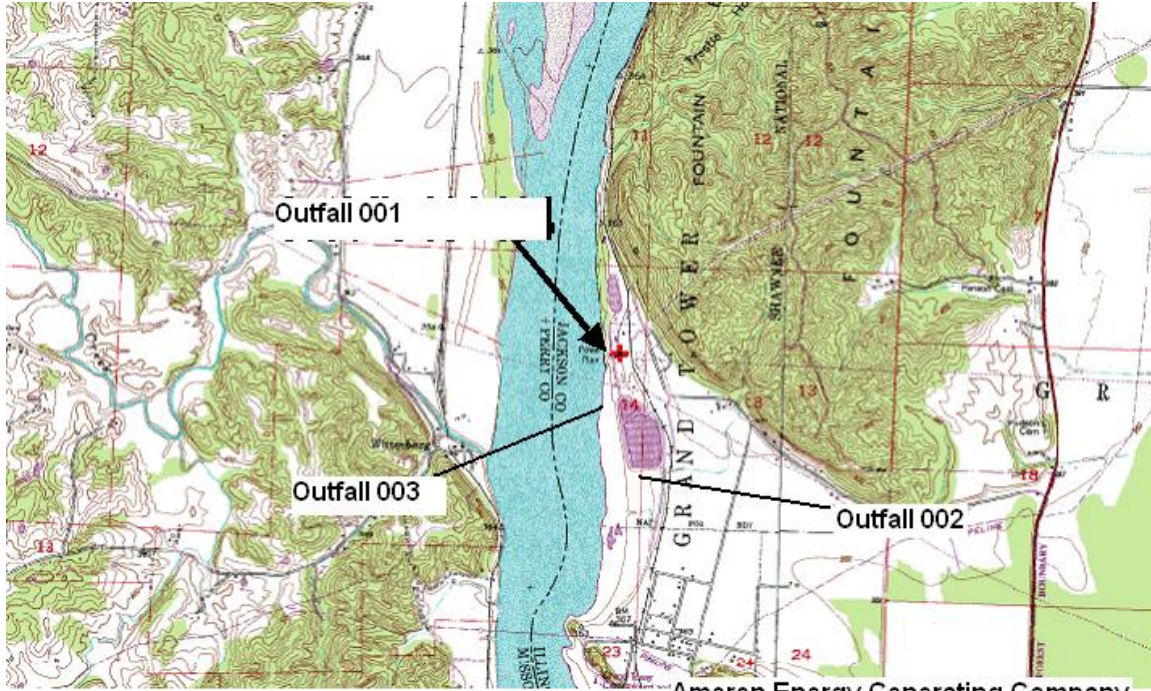
The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The Special Conditions clarify flow, pH, total residual chlorine, fecal coliform, temperature, mercury, water treatment additives, monitoring location, discharge monitoring report submission, and stormwater.

The facility conducted a demonstration pursuant to 35 Ill. Adm. Code 302.211(f) and this was approved by the Illinois Pollution Control Board in PCB Order 78-90 dated August 24, 1978.

The facility conducted a demonstration pursuant to Section 316(b) of the CWA which was determined to meet Best Technology Available (BTA) at the time of the demonstration, and was approved by the Agency on January 25, 1979. Special Condition 17 recognizes the submittal of updated cooling water intake structure operational information. This submittal is currently under review so that the Agency can evaluate the potential impacts of the cooling water intake structure operations pursuant to 40 CFR 125.90(b).



Ameren Energy Generating Company
Grand Tower Power Station
NPDES Permit No. IL0000124

Public Notice of Draft Permit

Public Notice Number LRL:11051303.bah is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0000124 has been prepared under 40 CFR 124.6(d) for Ameren Energy Generating Company, P.O. Box 66149, MC-602, St. Louis, Missouri 63166 for discharge into Mississippi River from the Ameren Energy Generating Company, Grand Tower Power Station, 1820 Power Plant Road, Grand Tower, Illinois (Jackson County). The applicant is engaged in operation of a natural gas fired power station with a generating capacity of 599 MW (SIC 4911). Plant operation results in an average discharge of 143.78 MGD of main condenser cooling water discharge from outfall 001, an intermittent discharge of intake screen backwash from internal outfall A01, 0.09 MGD of ash pond discharge from outfall 002, and 0.0008 MGD of sewage treatment plant effluent from outfall 003.

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

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

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

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

NPDES Permit No. IL0000124
Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

Ameren Energy Generating Company
P.O. Box 66149, MC-602
St. Louis, Missouri 63166

Facility Name and Address:

Ameren Energy Generating Company
Grand Tower Power Station
1820 Power Plant Road
Grand Tower, Illinois 62924
(Jackson County)

Discharge Number and Name:

001 Main Condenser Cooling Water Discharge
A01 Intake Screen Backwash
002 Ash Pond Discharge
003 Sewage Treatment Plant Effluent

Receiving Waters:

Mississippi River
Unnamed Ditch Tributary to the Mississippi River
Mississippi River

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

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

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

SAK: LRL:11051303.bah

Effluent Limitations and Monitoring

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

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Outfall 001 – Main Condenser Cooling Water Discharge (Average Flow = 143.8 MGD) The discharge consists of: <ol style="list-style-type: none"> 1. Condenser Cooling Water 2. Miscellaneous Cooling Water 3. Intake Screen Backwash (A01) 						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	24-Hour Total
pH	See Special Condition 2.				1/Month	Grab
Temperature	See Special Condition 4.				1/Day	Continuous
Outfall A01 – Intake Screen Backwash* (Intermittent Discharge)						
* - During maintenance of the intake screens or trash racks, there shall be no discharge of debris.						
Outfall 002 – Ash Pond Discharge (Maximum Flow = 0.61 MGD) The discharge consists of: <ol style="list-style-type: none"> 1. Plant Floor Drains and Sumps** 2. Miscellaneous Cooling Water Discharges 3. Units 3 & 4 Bearing Cooling Water 4. Water Treatment Filter Backwash and Water Softener Backwash 5. Demineralizer Regenerant Waste 6. Boiler Blowdown 7. HRSG Sample Coolers 8. Evaporative Cooler Blowdown 9. Oil/Water Separator Discharge 10. Treated/Filtered Water Use 11. Offline CTG Wash Wastewater 12. Stormwater Runoff* 						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	
pH	See Special Condition 2.				1/Week	Grab
Total Suspended Solids			15	30	1/Week	8-Hour Composite
Oil/Grease			15	20	1/Month	Grab
Sulfate			Monitor Only		1/Month	Grab
Mercury	See Special Condition 3.		Monitor Only		1/Quarter	Grab

* - See Special Condition 14. Includes runoff from scrap iron storage areas access roads and industrial plant yard areas.

** - This wastestream includes station flood pumps, which discharge to the ash pond during flooding caused by high river stage and precipitation.

Effluent Limitations and Monitoring

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

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
<u>Outfall 003 – Sewage Treatment Plant Effluent*</u> (DMF = 0.005 MGD)						
Flow (MGD)	See Special Condition 1.				Measure When Monitoring	
pH	See Special Condition 2.				1/Month	Grab
BOD ₅	1.25	2.5	30	60	1/Month	8-Hour Composite
Total Suspended Solids	1.25	2.5	30	60	1/Month	8-Hour Composite
Fecal Coliform	See Special Condition 7.			400/100 mL	1/Month	Grab
Total Residual Chlorine	See Special Condition 6 and 19.			0.05	1/Month	Grab
* - The discharge must be sampled prior to mixing with stormwater.						

Special Conditions

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

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

SPECIAL CONDITION 3. 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.

Mercury shall be monitored 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. Based on the sampling results, the Agency may modify the permit to include effluent limitations or to require continued sampling at some frequency.

SPECIAL CONDITION 4. 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 an approximate flow of 144.0 MGD and a maximum temperature of 106.2 °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 5. The discharge of a reportable quantity is not subject to the reporting requirements of Section 311 of the Clean Water Act, if such a discharge is in compliance with this permit and such activity was reviewed and made part of the public record in accordance with the issuance of this permit. The permittee is exempt from Section 311 reporting for discharges meeting the terms and conditions as found at 40 CFR 117.12

SPECIAL CONDITION 6. 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. The Total Residual Chlorine limit of 0.05 mg/l and monitoring requirements apply year round. If chlorine is not used during the non-swimming season (November 1 through April 30) the permittee shall report this fact on the monthly DMR form.

SPECIAL CONDITION 7. The daily maximum fecal coliform count shall not exceed 400 per 100 ml during the recreational season (May 1 through October 31). During the non-swimming season (November 1 through April 30) fecal coliform effluent limitations and monitoring requirements are not applicable.

SPECIAL CONDITION 8. 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 9. 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 10. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 11. In the event the permittee shall require the use of water treatment additives other than those previously approved by this Agency, or if the permittee increases the feed rate or quantity of the additives used beyond what has previously been approved by this Agency, the permittee shall request a modification of this permit in accordance with the Standard Conditions – Attachment H.

SPECIAL CONDITION 12. There shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transforming fluid.

Special Conditions

SPECIAL CONDITION 13. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

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

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

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

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

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

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 14. 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 15. Ameren Energy Generating Company (formerly Central Illinois Public Service Company) has complied with Section 302.211(f) of Title 35, Subtitle C: Water Pollution Regulations demonstrating that its thermal discharges from its Grand Tower Power Station have not caused and cannot be reasonably expected to cause significant ecological damage to receiving waters as approved by PCB Order No. 78-90 dated August 24, 1978. Pursuant to 35 Ill. Adm. Code 302.211g no additional monitoring or modification is now being required for reissuance of this NPDES Permit.

SPECIAL CONDITION 16. Ameren Energy Generating Company (formerly Central Illinois Public Service Company) demonstration for the Grand Tower Power Station in accordance with Section 316(b) of the CWA was determined to meet Best Technology Available (BTA) at the time of the demonstration, and was approved by this Agency by letter dated January 25, 1979.

SPECIAL CONDITION 17. The permittee has submitted updated information on the cooling water intake structure operation in accordance with Section 316(b) of the Clean Water Act. This permit may be modified following the review of this 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 18. Molluscicidal Treatment

Molluscicide treatment per the procedure submitted November 4, 2004 has been approved by the Agency. Any proposed modification from the procedure approved shall be subject to Agency review and permittee shall submit notice 30 days prior to modification to procedure.

The applicant shall notify the field office 24-hours prior to molluscicidal treatment. All treatment sample results shall be kept on-site.

Special Conditions

SPECIAL CONDITION 19. A Total Residual Chlorine limit of 0.05 mg/l (daily maximum) shall become effective two years from the effective date of this Permit. The Total Residual Chlorine limit of 0.75 mg/l (daily maximum) shall be in effect until the 0.05 mg/l (daily maximum) become effective. Reporting shall be submitted on the DMR's on a monthly basis.

In order for the Permittee to achieve the above limit, it will be necessary to construct either 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 | 12 months from the effective date |
| 3. Complete Construction | 22 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.

