

NPDES Permit No. IL0075906
Notice No. BWC:09083101.daa

Public Notice Beginning Date: **June 11, 2015**

Public Notice Ending Date: **July 13, 2015**

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:

Union Electric Company d/b/a Ameren Missouri
P.O. Box 66149, MC 602
St. Louis, MO 63166

Name and Address of Facility:

Ameren Missouri Pinckneyville Energy Center
4646 White Walnut Road
Pinckneyville, Illinois 62274
(Perry 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 Brian W. Cox at 217/782-0610.

The applicant is engaged in the generation of electricity using natural gas-fired combustion turbine generators (SIC 4911). Waste water is generated from cooling tower blowdown, miscellaneous equipment drains (includes Phase I and Phase II combustion turbine drains, closed cooling loop wastewater, and various other wastewaters), and evaporative cooler blowdown. Plant operation results in an average discharge of 0.0034 MGD of cooling tower blowdown and miscellaneous equipment drains from outfall 001 and an intermittent discharge of approximately 0.017 MGD of evaporative cooler blowdown from outfall 002.

The cooling tower blowdown is dechlorinated prior to discharge through Outfall 001 and all other Outfall 001 discharges are treated with an oil/water separator prior to discharge. The evaporative cooler blowdown is not treated prior to discharge, but there are no water treatment additives added to this waste stream. The source of the cooling water is non-fluoridated water from the City of Pinckneyville's municipal water supply.

The following modifications are proposed:

Sulfate and Total Dissolved Solids (TDS) monitoring requirements have been removed from the permit. The IPCB eliminated the TDS standard and changed the sulfate standard. Based on these regulatory changes there is not a reasonable potential to exceed the standard for sulfate, so monitoring requirements have been removed from the permit.

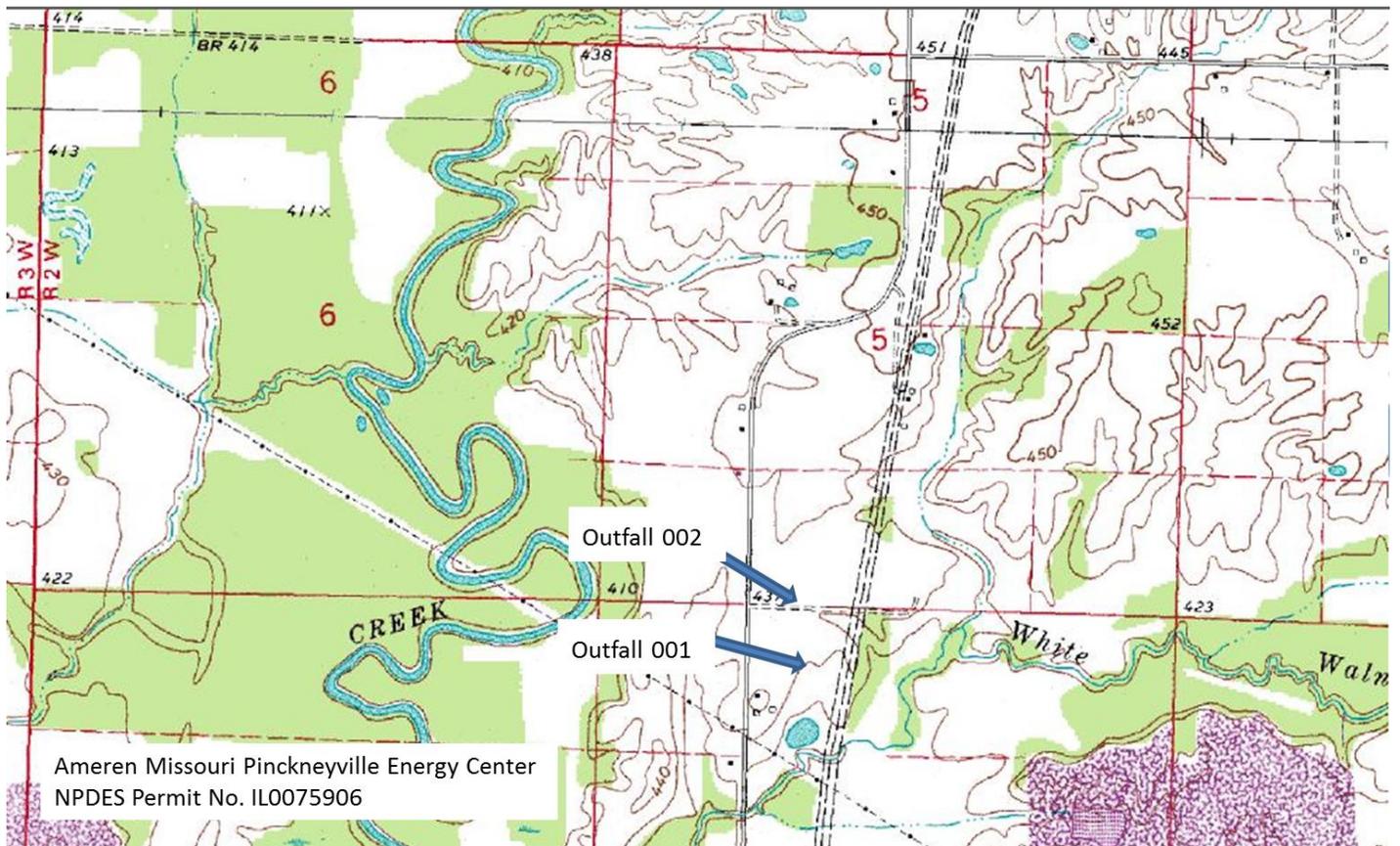
Copper and Zinc limits have been added to the permit for outfall 001 and the monitoring frequency for these parameters has been increased to monthly. A schedule of compliance has been included in the special conditions of the permit to provide Union Electric Company d/b/a Ameren Missouri with the necessary time to develop and implement a plan to achieve compliance with the proposed permit limits for zinc and copper.

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

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Unnamed Tributary to White Walnut Creek	38° 06' 39" North	89° 20' 46" West	General Use	Not Rated
002	Unnamed Tributary to White Walnut Creek	38° 06' 46" North	89° 20' 45" West	General Use	Not Rated

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

The unnamed tributary receiving the discharges from outfall(s) 001 and 002 are not on the 2014 303(d) list of impaired waters and are not biologically significant streams on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.



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

Outfall(s): 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 (MGD)				Monitor Only		
pH				Shall be within the range 6.0-9.0 s.u.		35 IAC 304.125
Temperature						35 IAC 302.211
Total Suspended Solids				15	30	35 IAC 304.124
Total Residual Chlorine				0.011	0.019	35 IAC 302.208
Oil & Grease				15	30	35 IAC 304.124
Copper (total)				0.0336	0.0547	35 IAC 302.208
Zinc (total)				0.01097	0.04195	35 IAC 302.208
Chloride					Monitor Only	
Priority Pollutant Metals					Monitor Only	

Outfall(s): 002

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/L		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Flow (MGD)				Monitor Only		
pH				Shall be within the range 6.0-9.0 s.u.		35 IAC 304.125
Temperature						35 IAC 302.211
Total Suspended Solids				15	30	35 IAC 304.124
Chloride					Monitor Only	
Priority Pollutant Metals					Monitor Only	

The following explain the conditions of the proposed permit:

The special conditions contained in the permit serve to clarify effluent limitations and monitoring requirements including submission requirements for discharge monitoring reports, sampling location restrictions, clarification of total residual chlorine limits, clarification of temperature restrictions, a schedule of compliance for the zinc and copper limits for outfall 001, and identifies the list of metals that should be monitored.

NPDES Permit No. IL0075906

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:

Union Electric Company d/b/a Ameren Missouri
P.O. Box 66149, MC 602
St. Louis, MO 63166

Facility Name and Address:

Ameren Missouri Pinckneyville Energy Center
4646 White Walnut Road
Pinckneyville, Illinois 62274
(Perry County)

Discharge Number and Name:

001 Cooling Tower Blowdown and Miscellaneous Equipment
Drains

002 Evaporative Cooler Blowdown

Receiving Waters:

Unnamed Tributary to White Walnut Creek

Unnamed Tributary to White Walnut Creek

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. IL0075906

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:

Outfall(s): 001 – Cooling Tower Blowdown and Miscellaneous Equipment Drains
(Average Flow = 0.054 MGD)

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		
Flow (MGD)	See Special Condition 1				1/Month	Measurement
pH	See Special Condition 2				1/Month	Grab
Temperature	See Special Condition 3				1/Month	Grab
Total Suspended Solids			15	30	1/Month	Grab
Total Residual Chlorine*			0.011*	0.019*	1/Month	Grab
Oil & Grease			15	30	1/Month	Grab
Copper (total)			0.0336***	0.0547***	1/Month	Grab
Zinc (total)			0.01097***	0.04195***	1/Month	Grab
Chloride				Monitor Only	2/Year	Grab
Priority Pollutant Metals**				Monitor Only	2/Year	Grab

*See Special Condition 12.

**See Special Condition 10 for the list of parameters associated with the priority pollutant metals.

*** See Special Condition 14 for a schedule of compliance.

Outfall(s): 002 – Evaporative Cooler Blowdown
(Average Flow = 0.017 MGD)

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		
Flow (MGD)	See Special Condition 1				1/Month	Measurement
pH	See Special Condition 2				1/Month	Grab
Temperature	See Special Condition 3				1/Month	Grab
Total Suspended Solids			15	30	1/Month	Grab
Chloride				Monitor Only	2/Year	Grab
Priority Pollutant Metals*				Monitor Only	2/Year	Grab

**See Special Condition 10 for the list of parameters associated with the priority pollutant metals.

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. In the event that no flow occurs during a given month, a statement of ANO discharge@ shall be reported on the DMR submitted for that month.

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 is not allowed any mixing with the receiving stream in order to meet applicable water quality thermal limitations. Therefore, discharge of wastewater from this facility must meet the following thermal limitations prior to discharge into the receiving stream.

- A. The discharge must not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature of the discharge exceed the maximum limits in the following table by more the 1.7° C (3° F).

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

- B. In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
- C. The discharge shall not cause the maximum temperature rise above natural temperatures to exceed 2.8° C (5° F).
- D. The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 4. There shall be no discharge of polychlorinated biphenyl compounds (PCB's)

SPECIAL CONDITION 5. The use or operation of this facility shall be by or under the supervision of a Certified Class K Operator.

SPECIAL CONDITION 6. 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 7. 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 8. 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 15th 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
 1021 North Grand Avenue East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

Special Conditions

SPECIAL CONDITION 9. Construction of treatment facilities which may be necessary to meet the requirements of this permit may not be started until a construction permit has been issued by this Agency.

SPECIAL CONDITION 10. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Parameters noted on page 2 of this permit that are also noted below are only shown to clarify the minimum reporting level. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STORET CODE	PARAMETER	Minimum reporting limit
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 (grab (available *** or amenable to chlorination))	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
71900	Mercury (grab)**	1.0 ng/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
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.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

***USEPA Method OIA-1677.

SPECIAL CONDITION 11. There shall be no discharge of turbine cleaning wastewater to waters of the State.

SPECIAL CONDITION 12. All samples for total residual chlorine (TRC) 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 water quality standards for TRC (0.011 mg/L ave. and 0.019 mg/L max.) are below the method detection level (0.05 mg/L) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level shall be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/L reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

SPECIAL CONDITION 13. In the event that the permittee shall require the use of water treatment additives other than those previously approved of, the permittee must request a change in this permit in accordance with the Standard Conditions - Attachment H.

SPECIAL CONDITION 14. A copper (total) limit of 0.0336 mg/L (monthly average) and 0.0547 mg/L (daily maximum) for discharge number(s) Outfall 001 shall become effective two years from the effective date of this Permit. A copper (total) limit of 0.5 mg/L (monthly average) and 1.0 mg/l (daily maximum) shall be in effect until the 0.0336 mg/L (monthly average) and 0.0547 mg/L (daily maximum) limits become effective.

Special Conditions

A zinc (total) limit of 0.01097 mg/L (monthly average) and 0.04195 mg/L (daily maximum) for discharge number(s) Outfall 001 shall become effective two years from the effective date of this Permit. A zinc (total) limit of 1.0 mg/L (monthly average) and 2.0 mg/l (daily maximum) shall be in effect until the 0.01097 mg/L (monthly average) and 0.04195 mg/L (daily maximum) limits 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 alternate means of disposal, modify facility operations or install treatment equipment in accordance with the following schedule:

- | | | |
|----|--------------------------|--|
| 1. | Plans and specifications | 6 months from the effective date of this Permit |
| 2. | Arrange financing | 9 months from the effective date of this Permit |
| 3. | Commence construction | 10 months from the effective date of this Permit |
| 4. | Interim report | 16 months from the effective date of this Permit |
| 5. | Complete construction | 22 months from the effective date of this Permit |
| 6. | Obtain operational level | 24 months from the effective date of this Permit |

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

The Permittee shall operate the facilities in a manner to ensure continuous compliance with the copper (total) and zinc (total) limits, and not to the extent that will result in violations of other permitted effluent characteristics, or water quality standards.

REPORTING

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