

**Tsai, Shu-Mei**

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**From:** Wells, John  
**Sent:** Thursday, April 16, 2015 7:59 AM  
**To:** Tsai, Shu-Mei  
**Subject:** Coffeen Power Station - I had no comments  
**Attachments:** img-414145907-0001.pdf

**IEPA EXHIBIT**  
No. 16

For your records...

-----Original Message-----

**From:** WorkCentre 5335 [mailto:noreply@illinois.gov]  
**Sent:** Tuesday, April 14, 2015 2:59 PM  
**To:** Wells, John  
**Subject:** Scan from a Xerox WorkCentre

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre.

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# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3829

BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

**MAJOR**

## MEMORANDUM

DATE: March 10, 2015

TO: Manager, DWPC/FOS, Springfield Region

FROM: Darin E. LeCrone, Manager, Industrial Unit *DEL*

SUBJECT: Illinois Power Holdings, LLC  
 Coffeen Power Station  
 NPDES Permit No. IL0000108  
 Draft Permit, Public Notice/Fact Sheet

Please review the attached copy of the subject documents, and notify the Industrial Unit if you take exception to the limitations, sampling frequency, sample type or other requirements therein.

If no response is received within fifteen (15) days from the date of this memorandum, we will assume that you concur in the issuance of the Public Notice.

If you have any questions, please contact Shu-Mei Tsai at 217/782-0610.

Thank you for your cooperation.

DEL:SMT:12112101.smt

Attachments: Draft Permit, Public Notice/Fact Sheet

cc: Records Unit

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SPRINGFIELD REGION

MAR 12 2015

Environmental Protection Agency  
State of Illinois

*4/14/15*  
*no comments*  
*John Wells*

4302 N. Main St., Rockford, IL 61103 (815)987-7760  
 595 S. State, Elgin, IL 60123 (847)608-3131  
 2125 S. First St., Champaign, IL 61820 (217)278-5800  
 2009 Mall St., Collinsville, IL 62234 (618)346-5120

9511 Harrison St., Des Plaines, IL 60016 (847)294-4000  
 5407 N. University St., Arbor 113, Peoria, IL 61614 (309)693-5462  
 2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200  
 100 W. Randolph, Suite 11-300, Chicago, IL 60601 (312)614-6026

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APR 20 2015

IEPA  
BOW/WPC/PERMIT SECTION

IEPA EXHIBIT  
No. 17  
DYNEGY

April 17, 2015

Mr. Darin LeCrone, P.E.  
Manager, Industrial Unit  
Bureau of Water  
Illinois Environmental Protection Agency  
1021 North Grand Avenue, East  
Springfield, IL 62794-9276

Re: **Illinois Power Generating Company  
Coffeen Energy Center  
Pre-Public Notice Draft Reissued NPDES Permit IL0000108 and  
Public Notice/Fact Sheet  
Notice No.SMT:12112101.smt**

Mr. LeCrone:

In response to the referenced documents which we received on April 7, 2015, Illinois Power Generating Company (IPGC) is pleased to submit herein our corrections and comments on the contents of both documents. Before doing so, however, we thought it advisable to review the history of our submissions related to the reissuance of this permit.

#### History

- (1) Received reissued Coffeen Power Station NPDES (IL0000108) permit from Agency – January 29, 2008
- (2) Ameren Energy Generating Company (AEGC)\* submitted a notification regarding a temporary supplemental cooling tower installation – June 5, 2008
- (3) AEGC\* submitted the limestone runoff pond construction permit application – August 20, 2008
- (4) AEGC\* IL0000108 Special Condition 9: 316(b) report – July 30, 2008  
Information provided: cooling water intake structure summary and design features, station operation and water withdrawal summary; Coffeen Lake summary; impingement mortality studies summary.
- (5) Received Gypsum Management Facility permit, 2008-EA-4661-1, from agency – September 4, 2008
- (6) IEPA letter stating that an NPDES permit (IL0000108) modification is not required for the temporary replacement of one bank of the existing supplemental cooling tower. The letter states that the installation is covered under special condition 22 of IL0000108. – December 10, 2008.
- (7) Received draft modified Coffeen Power Station NPDES permit (IL0000108) from agency – March 9, 2009  
The modification adds outfall 018 for the stormwater runoff associated with the ash landfill.
- (8) AEGC\* submitted pre-public notice draft permit (IL0000108) comments – March 19, 2009
- (9) AEGC\* submitted a modification request concerning the closed Ash Pond #2 – June 11, 2009
- (10) Received public notice Coffeen Power Station NPDES permit from agency – July 24, 2009  
Included information from #8-10 above
- (11) AEGC\* submitted public notice draft permit comments – August 25, 2009

- (12) Received Gypsum Management Facility (GMF) supplemental permit, 2008-EA-4661-1, from agency – January 15, 2010  
Allows contributory flows to the GMF from the closed Ash Pond 2, landfill leachate and landfill stormwater.
- (13) AEGC\* submitted comments from the NPDES draft permit public hearing – January 19, 2010
- (14) AEGC\* submitted a modification request for NPDES permit (IL0000108) – May 12, 2010  
Requested inclusion in the NPDES permit of the temperature changes from the IPCB ruling, Order 2009-038 (March 18, 2010).
- (15) AEGC\* submitted a moderation request for the GMF, 2008-EA-4661-1 – July 28, 2010  
Design changes to the construction and operation of the Gypsum Stack and Recycle Pond. It will be a water treatment system rather than a waste disposal system.
- (16) Received Gypsum Management Facility (GMF) supplemental permit, 2008-EA-4661-1, from agency – August 17, 2010  
To construct and operate the Gypsum Stack and Recycle Pond as a water treatment system.
- (17) Received draft modified Coffeen Power Station NPDES permit (IL0000108) from agency – October 28, 2010
- (18) AEGC\* submitted comments for the draft modified Coffeen Power Station NPDES permit (IL0000108) from agency received October 28, 2010 – November 3, 2010
- (19) Received modified Coffeen Power Station NPDES permit (IL0000108) and Landfill Stormwater Runoff Pond (2011-EB-1289) from agency – April 14, 2011
- (20) Received public notice Coffeen Power Station NPDES permit from agency – April 21, 2011  
Included information from #14 above
- (21) AEGC\* submitted public notice draft permit comments – May 25, 2011
- (22) SchiffHardin for AEGC\* submitted a letter and attachments as public comment in response to the USEPA's interim objection to the draft permit in a May 13, 2011 letter – May 25, 2011  
Request for information on the IPCB thermal ruling, see #14 above.
- (23) AEGC\* submitted NPDES permit (IL0000108) reapplication sampling requests – December 14, 2011
- (24) Received reissued Coffeen Power Station NPDES (IL0000108) permit from agency – February 9, 2012  
Primarily reflects the thermal effluent limitations contained in IPCB Order 2009-038 (March 18, 2010).
- (25) AEGC\* submitted the NPDES permit (IL0000108) renewal application – July 27, 2012  
\*Note: On December 2, 2013, the name of the company changed from Ameren Energy Generating to Illinois Power Generating Company.

**Corrections of Public Notice/Fact Sheet and Draft Permit Text:**

Various editorial corrections need to be made to the documents. These are listed as follows:

- (1) Public Notice/Fact Sheet (page 1) and Draft Permit (page 1)  
The name and address under the "Name and Address of Discharger" in the first paragraph of the Public Notice/Fact Sheet, and under the "Name and Address of Permittee" on the first page of the Draft Permit should be changed to:

Illinois Power Generating Company  
Water and Waste Permitting / Environmental Compliance  
1500 Eastport Plaza Drive  
Collinsville, IL 62234

- (2) Public Notice/Fact Sheet (page 1), fourth paragraph, first sentence and Draft Permit (cover page), second paragraph, first sentence.

The applicant operates an existing 950 MW..... Please re-word this to say, "The applicant operates an existing coal fired steam electric generating station (SIC 4911) which generates approximately 1000 MW."

NOTE: MW production changes based on cooling water temperature, fuel, etc.

- (3) Public Notice/Fact Sheet (page 1), fourth paragraph, fourth sentence

Service water is used for more than just make-up to the bottom ash recycle pond and water treatment plant. Reword sentence to read: Service water is used for once through cooling, make-up to the bottom ash recycle pond (approximately 23 acres) and the water treatment plant and for other miscellaneous uses.

- (4) Public Notice/Fact Sheet (page 2); second tabulation

The draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List (also the 2014 version of the report) only list impaired designated uses and pollutants causing impairment as

<u>Designated Uses</u>	<u>Pollutants Causing Impairment</u>
Fish Consumption	Mercury

Please correct table to show the information for water body segment ROG listed in draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List.

- (5) Public Notice/Fact Sheet (pages 3 and 4) and Draft Permit (pages 3-9): Effluent limits for Total Suspended Solids in Outfalls A01, B01, C01, D01, E01, G01, J01 and 002.

Per 35 IAC 304.124, the Total Suspended Solids effluent limits are 15.0 (monthly average) and 30.0 (daily composite).....rather than 15 and 30 respectively.

The decimal needs to be added for consistency and accuracy.

- (6) Public Notice/Fact Sheet (pages 3 and 4) and Draft Permit (pages 3-9): Effluent limits for Oil & Grease in Outfalls A01, B01, C01, E01, G01, J01 and 002.

Per 40 CFR 423.12(b)(3) and 40 CFR 423.12(b)(4), the Oil and Grease effluent limits are 15.0 (30 day average) and 20.0 (daily maximum).....rather than 15 and 20 respectively.

The decimal needs to be added for consistency and accuracy.

- (7) Public Notice/Fact Sheet (page 4); Outfall 002: Regulatory reference

The oil and grease regulatory reference should be 40 CFR 423.12(b)(3)

- (8) Public Notice/Fact Sheet (page 5); Paragraph 4: Cooling water intake structure

Please change this paragraph to read, "The Coffeen Power Station cooling water intake structure (CWIS) is located on the Coffeen Lake, and has a total design CWIS flow of 890 cubic feet per second (cfs). CWIS contains six screen bays, two for Unit 1 and four for Unit 2. Trash racks with 4.5-inch clear spacing between the rack bars protect each bay from large floating debris. Within each bay there are two conventional vertical traveling screens (two for Unit 1 and four for Unit 2) that are 10 feet wide with 3/8-inch square woven wire mesh. Unit 1 has two 73,250—gpm

circulating pumps and Unit 2 has two 125,500-gpm circulating pumps, resulting in an approximate design, maximum cooling water flow capacity of 399,500-gpm.

- (9) Public Notice/Draft Permit (cover page); first paragraph  
The end of the third line of the sentence should read, ".....under 40 CFR 124.6(d) for Illinois Power Generating Company..." rather than Illinois Power Holding, LLC.
- (10) Public Notice/Draft Permit (page 2): Outfalls 001, 020, 021 and 022: Monitoring  
Outfalls 001, 020, 021 and 022 are all the same discharge water. Which outfall the water discharges from depends on the temperature of the water. To clarify this please add the following information found in the expired permit:  
Sampling point for 001, 020, 021 and 022 shall be at a point within the cooling water discharge flume."
- (11) Public Notice/Draft Permit (page 2): Outfalls 001, 020, 021 and 022: Internal outfall J01  
Need to add Treated Chemical Metal Cleaning as an intermittent contributory flow (#18) to Outfalls 001, 020, 021, and 22.
- (12) Public Notice/Draft Permit (page 14); Special Condition 10.B  
In B.4, the reference to "best available technology" is incorrect; it should be "best technology available" -- should change to "BTA", which is identified earlier in Special Condition 10, B.1.
- (13) Public Notice/Draft Permit (page 13); Special Condition 4.B header, third sentence: Ameren reference  
Please change the company name of Ameren to Illinois Power Generating Company.

**Comments on the Public Notice/Fact Sheet and Draft Permit Text**

- (1) Public Notice/Fact Sheet (pages 2 and 4) and Draft Permit (pages 1, 12 and 16); Outfall 15  
Upon further review of the outfalls at the Coffeen Energy Center, Outfall 15 is not a point source outfall for stormwater. This area is sheet flow runoff from a road that has silt fencing for sediment control.  
Please remove Outfall 15 from the permit
- (2) Public Notice/Fact Sheet (page 2 and 8); Latitudes/ Longitudes and Outfall Map  
Upon review of the outfalls and locations on the Outfall Map, it has been determined that the outfall locations were incorrectly depicted on the outfall Map; even through in some cases, the latitude and longitude were listed correctly. Therefore, the latitudes and longitudes need updated (see Table 1 below).  
Subsequently, a new outfall and stormwater map was generated (see **Attachment 1**: Coffeen Energy Center - Outfall Locations and Stormwater Outfall Locations).  
A new outfall (23 – Gypsum Management Facility's Emergency Overflow) should be added, and is listed below (see **Attachment 2**: Form 2C).

Table 1: Latitudes/ Longitudes

Outfall	Latitude	Longitude	Receiving Stream
001	39° 3' 35"	89° 23' 28"	Coffeen Lake
002	39° 3' 19"	89° 24' 20"	Coffeen Lake
003	No change		Coffeen Lake
008	39° 3' 17"	89° 23' 57"	Coffeen Lake
009	39° 3' 17"	89° 23' 56"	Coffeen Lake
010	39° 3' 13"	89° 23' 57"	Coffeen Lake
011	39° 2' 56"	89° 23' 55"	Coffeen Lake
012	39° 2' 50"	89° 23' 47"	Coffeen Lake
013	39° 2' 38"	89° 23' 40"	Coffeen Lake
014	39° 2' 32"	89° 23' 38"	Coffeen Lake
015	Remove		Coffeen Lake
016	No change		Coffeen Lake
018	39° 3' 55"	89° 24' 21"	Coffeen Lake
020	No change		Coffeen Lake
021	39° 3' 36"	89° 23' 23"	Coffeen Lake
022	No change		Coffeen Lake
023	39° 4' 46"	89° 23' 62"	Unnamed Tributary to Coffeen Lake

- (3) Public Notice/Fact Sheet (pages 1 and 4), Draft Permit (cover page, pages 1 and 9) Outfall 002 title/ID

Please change the title/ID of outfall 002 to include the emergency overflow of the pond. New title/ID: Coal Yard Settling Pond and Emergency Overflow Discharge.

- (4) Public Notice/Fact Sheet (pages 2 and 4) and Draft Permit (page 13), Special Condition 2: Effluent limits and regulatory reference for Outfall 001, 020, 021 and 022

Per the effluent standards, 35 IAC 304.125, pH effluent limits are 6 – 9 S.U. Please change the pH effluent limits and regulatory reference accordingly to read the same as Outfalls C01, D01, J01 and 002.

Note: This is how the Newton (IL0049191), Baldwin (IL0000043) and Edwards (IL0001970) draft permits / permits are written.

- (5) Public Notice/Fact Sheet (page 2) and Draft Permit (page 2); Outfalls 001, 020, 021 and 022: TRC limit.

Per Section 35 IAC 304.222, "*The acute TRC water quality standard of 35 Ill. Adm. Code 302.208 and 302.504(a) by operation of Section 304.105 shall not apply to any discharge which contains TRC solely as the result of intermittent usage for antifouling purposes related to the operation of condensers and cooling systems.*"

The discharge from Outfalls 001, 020, 021 and 022 only contains TRC solely as the result of intermittent usage for antifouling purposes related to the operation of condensers and cooling systems. Therefore, also per 35 IAC 304.222, the TRC limit should be  $\leq 0.2$  mg/L as long as usage is restricted to a maximum of two hours per day per condenser or cooling system unit.

At the Coffeen Energy Center, gaseous chlorine is injected daily per the restrictions listed above as permitted per Special Condition 4 of their expired NPDES permit. Please change Special Condition 3 in the draft pre-public NPDES permit to read as Special Condition 4 in the expired permit.

In the draft permit, page 2, the sample frequency for TRC is whenever chlorination is being performed. Chlorination is performed 12 times per day (per each condenser), 7 days per week, morning, afternoons and evenings, therefore the frequency of testing is overly burdensome and time consuming. Chemical Technicians are not staffed to be able to handle this high frequency of testing. Please reduce the frequency to twice per month per the expired NPDES permit.

- (6) Public Notice/Fact Sheet (page 3) and Draft Permit (page 6); Outfall D01: BOD<sub>5</sub> and TSS effluent limits.

The discharge from Coffeen Energy Center's sanitary treatment system has always fallen under 35 IAC 304.120(a). We do not understand why this has changed. Please change the effluent limits as in the expired NPDES permit (BOD<sub>5</sub> and TSS both 30.0 / 60.0 30 day average and daily maximum respectively) per 35 IAC 304.120(a).

Related is the Fecal Coliform testing requirement. This was never required in the past, please remove.

- (7) Public Notice/Fact Sheet (page 4) and Draft Permit (page 9); Outfall 002

Contributory flow 3, coal crusher house sump pit discharge, was incorrectly depicted in the application. The flow is intermittent; please change approximate flow to intermittent.

- (8) Public Notice/Fact Sheet (pages 2 and 4), Draft Permit (cover page, pages 1 and 10) Outfall A02 Coal pile runoff (Intermittent Discharge)

The Coal Yard Settling Pond was designed to treat coal pile runoff per 40 CFR 423.12(b)(10) and therefore coal pile runoff should not be a separate internal outfall. Please remove Outfall A02 Coal pile runoff (Intermittent Discharge).

- (9) Public Notice/Fact Sheet (page 4) and Draft Permit (page 9); Outfall 002

- As mentioned in 40 CFR 423.12(b)(10), Outfall 002 is a facility that is designed, constructed, and operated to treat the volume of coal pile runoff. Therefore per 40 CFR 423.12(b)(9), the total suspended solids limit of 50 mg/l applies. Please change the TSS effluent limits for Outfall 002 back to the effluent limits in the expired NPDES.
- As stated in the Public Notice/Fact Sheet on page 4, the iron effluent limits are 2.0 and 4.0 (need to add the decimal) per 35 IAC 304.124. Please change the effluent limits in the draft permit on page 9 to 2.0 and 4.0 rather than the 1.0 that is currently listed.
- The Boron water quality standards are listed in 35 IAC 302.208 and should not be exceeded unless approved per 302.102 Allowed Mixing, Mixing Zones and ZIDs. These standards are 40.1 mg/l acute and 7.6 mg/l chronic. The boron concentration will not increase from the end of the pipe as it flows into the mixing zone, therefore the effluent limit should not be lower than the standard.

Even so, the historical boron results have always been below 1.6 mg/l with an average of 0.6 mg/l, (see Attachment 3), which is well below the 7.6 mg/l limit per 35 IAC 302.208. Therefore, please remove the boron testing requirement.

- Add Non-chemical metal cleaning as an intermittent contributory flow (number 14) to Outfall 002

- (10) Public Notice/Draft Permit (page 3); Outfall A01 Sample Frequency

Boiler draining occurs infrequently, and when it does occur it is not always during daylight hours.

Boiler water is made up of high purity water as seen in the historical data submitted in the DMR, outfall A01's TSS and O&G results have always been zero / <1 mg/l. This is because of the type of water discharged from this outfall. This water is used in high temperature boiler piping; it is purified through a treatment system (demineralizer and/or reverse osmosis systems) prior to inlet into the piping to keep residue from coating the pipe internals or plating out on the turbine blades when the water "boils" away from the high temperature. Due to the purification of the water, it is extremely unlikely for the water to ever have Suspended Solids or Oil and Grease.



Due to the quality of this effluent, we request the Agency return the frequency back to the expired permit requirement (1/year when discharging).

- (11) Public Notice/Draft Permit (page 5); Outfalls C01 and E01 Contributory flow  
Add Non-chemical metal cleaning as an intermittent contributory flow for both Outfalls
- (12) Public Notice/Fact Sheet (page 4) and Draft Permit (page 9); Special Conditions 4. E and F Sportfish Population Study  
EIU's 2010-2012 study, "Monitoring the Sportfish Assemblages of Coffeen Lake", stated that "forage species are extremely abundant throughout the lake in the form of bluegill, redear sunfish, gizzard shad, and golden shiner (bottom page 65)." Adding gizzard shad to the mix as the monitored forage species might require a change in sampling gear specifically for them because electrofishing is not as effective for this pelagic species.  
There is an inconsistency in the submission deadline for the 316(a) study plan which shows 30 days on page 7, last sentence of the fact sheet vs. 6 months from the page 13, Condition 4.F of the draft permit. The latter deadline is do-able, the former not.  
There should be a limit given for the required number of years of sampling, which is not in the draft permit. We suggest 3 years to be consistent with the IPCB ruling.
- (13) Public Notice/Draft Permit (page 9); Outfall 002 Iron Sample Frequency  
As seen from historical data (Attachment 3), the iron limit has never been greater than 0.6 mg/l with an average of 0.17 mg/l. Therefore, we request that the testing frequency be changed back to the expired permit's requirement (1/quarter) or the testing requirement be removed all together.  
Note: In April of 2013, a TSS result of 28.4 was mistakenly reporting for Iron.
- (14) Public Notice/Draft Permit (page 14); Special Condition 6, 4<sup>th</sup> paragraph: DMR submittal date  
IPGC objects to the proposed discharge monitoring report deadline of the 15<sup>th</sup> day of the following month. With the amount of parameters that are required to be analyzed, a large majority of the analyses are sent off-site to contract labs. Test results from contract labs can take 2-4 weeks to turn around. With this turnaround time, it's almost impossible to submit the discharge monitoring report by the 15<sup>th</sup> especially for samples pulled in the last week of the month. We request that the date be changed back to the 28<sup>th</sup> as in the expired permit.
- (15) Public Notice/Draft Permit (page 15); Special Condition 12  
Standard Conditions 13 and 14 has the exact wording in 40 CFR 122.41 (m) and (n). Adding Special Condition 12 is redundant and confusing. Please remove.
- (16) Public Notice/Draft Permit (page 14); Special Condition 19 – Semi-Annual Monitoring
- Outfalls 001, 020, 021 and 022 are all the same discharge water. The plant directs the path of the water to the lake through a combination of one or more of these outfalls in the effort to comply with the permitted thermal effluent limits. Therefore we would be sampling and testing the same water from each of these locations semi-annually. Plus the water from 022 is a sheet flow over rip rap based on the design of the cooling towers. Please group these outfalls as one sample for the semi-annual testing.
  - Outfalls 008-018 are storm water outfalls, and therefore, unless it rains for a prolonged period of time resulting in a 24-hr discharge, a 24-hr composite cannot be obtained. Change the wording for these outfalls to only require a grab sample.
  - Outfalls 008 – 014: These storm water outfalls are representative of each other since they all run along the same rail line. For this reason, we request that only one outfall be sampled and tested semi-annually per the list in Special Condition 17. Outfall 009 is a safer and more

accessible sampling location (some of these sample locations are located in wilderness areas with limited access requiring major undertaking to collect a sample).

- For the storm water outfalls (008-018):

Coffeen Energy Center performed quarterly low level mercury monitoring required by Special Condition No. 20 in the expired permit from March 2008 to October 2014. There are also historical results from Outfall 008. These results are tabulated in Attachment 3.

Mercury concentrations at Outfall 002 ranged from 1.1 ng/L to 10.4 ng/L and averaged 4.2 ng/L, Outfall 008 ranged from 0.5 ng/L to 4.9 ng/L and averaged 2.0 and Outfall 018 ranged from 0.7ng/L to 7.7 ng/L and averaged 1.8. Based upon these results, relief was requested from this monitoring requirement and granted by the Agency.

A storm event does not always occur during daylight hours as required for visual observations in Special Condition 15, plus storm water discharge/outfall locations are not safe to access at night since lighting is not available in some of these remote locations. If a storm does occur in the daylight hours, the odds are still good that it will not meet all the requirements for a storm event to perform visual observations or sample collection.

Therefore, storm water auto samplers are used by many industries for sample collection of storm water. These auto samplers can be set up prior to a suspected storm event (days/weeks), and then when a storm even occurs, the auto sampler activates and collects the sample per advanced programming.

Auto samplers cannot be used for mercury low level sampling (does not meet EPA method 1631E which references EPA method 1669 for sampling methods).

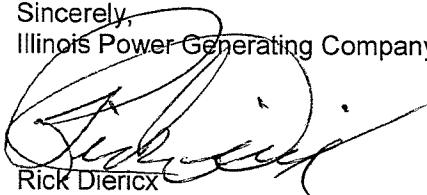
NOTE: Performing low level mercury sampling, per EPA method 1631E, as required by Special Condition 17 on storm water samples, requires two samplers (clean hands/dirty hands).

For all the reasons listed above, please remove the mercury monitoring requirements for the storm water outfalls 008-018.

- Outfall 018 was tested twice a month for 5 months for all the constituents listed Special Condition 19 per Special Condition 24 of the expired permit. The results from this data should show that the results were well within the effluent standards, so further testing is not needed. Please remove outfall 018 from Special Condition 19.

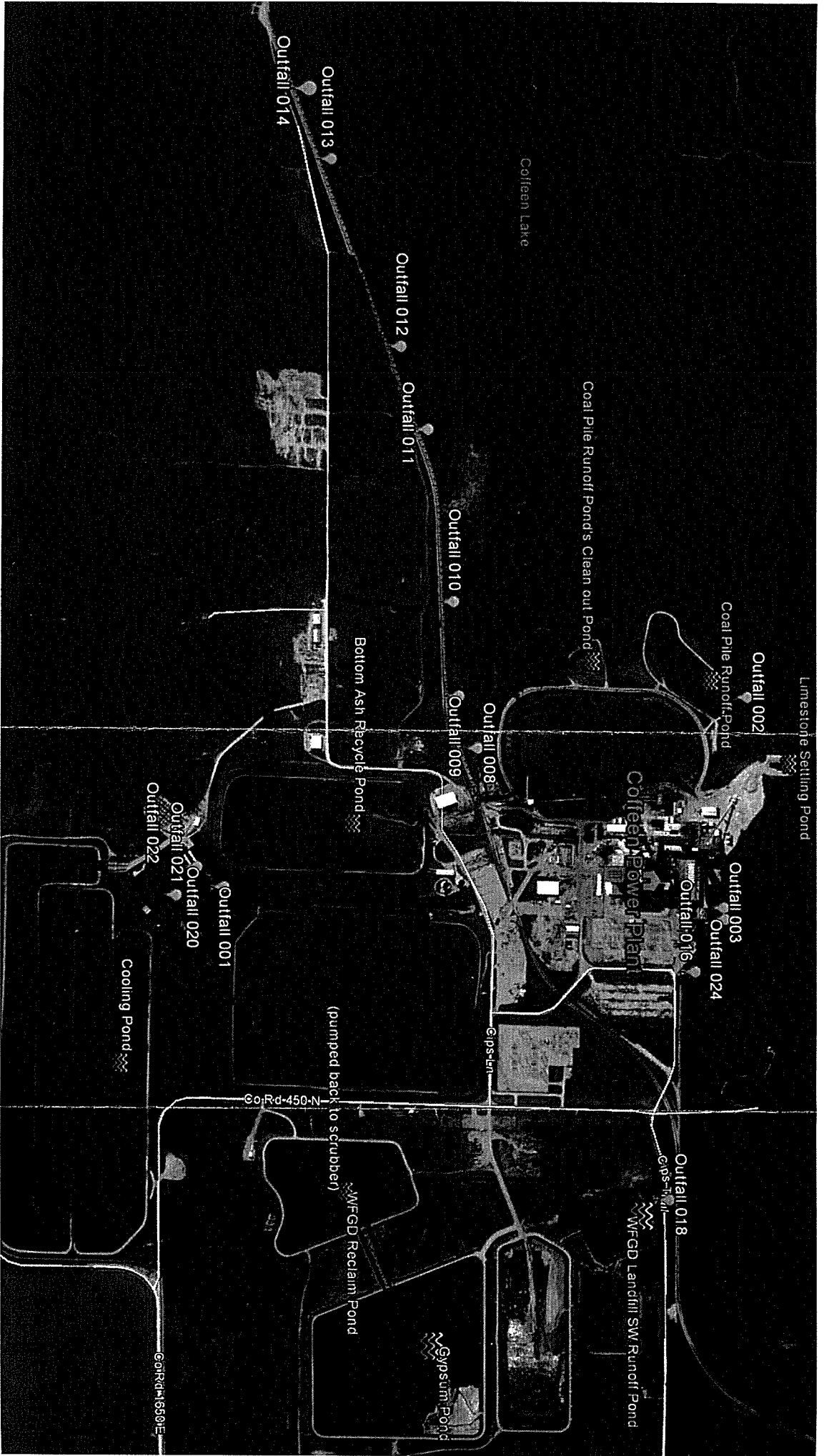
IPGC appreciates this opportunity to review and comment upon the draft reissued NPDES permit for the Coffeen Energy Center. If you should have any questions regarding the enclosed information, please contact me at 618-343-7761.

Sincerely,  
Illinois Power Generating Company



Rick Diercx  
Managing Director – Environmental Compliance


Enclosures



EPA I.D. NUMBER (copy from Item 1 of Form 1)

Form Approved.  
OMB No. 2040-0086.  
Approval expires 3-31-98.

Please print or type in the unshaded areas only.

<b>FORM 2C NPDES</b>		U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER <b>EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS</b> <i>Consolidated Permits Program</i>
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**I. OUTFALL LOCATION**

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER <i>(list)</i>	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER <i>(name)</i>
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
023	39.00	4.00	46.00	89.00	23.00	62.00	Unnamed Tributary to Coffeen Lake

**II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES**

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION <i>(list)</i>	b. AVERAGE FLOW <i>(include units)</i>	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
023	WFGD Reclaim Pond Emergency Overflow	Intermittent	Discharge to surface water	4-A, 4-C, 4-U

**RECEIVED**  
APR 20 2015

OFFICIAL USE ONLY (effluent guidelines sub-categories)

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

YES (complete the following table)

NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
023	WFGD Reclaim Pond Emergency Overflow							

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

YES (complete Item III-B)

NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

YES (complete Item III-C)

NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

YES (complete the following table)

NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

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APR 20 2015

CONTINUED FROM PAGE 2

**V. INTAKE AND EFFLUENT CHARACTERISTICS**

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.  
 NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
<p><b>Various metals including strontium, uranium and vanadium may be present in coal ash in trace amounts.</b></p> <p><b>Asbestos is present in insulating material at the Energy Center. Note that all asbestos removal and disposal activities are conducted in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants) and OSHA Standard 29 CFR 19101001 and 19261101</b></p> <p><b>The Energy Center's intake water, Coffeen Lake, may also contain pollutants listed in Table B. Therefore any pollutants in the intake water would also be present in service water used at the Energy Center.</b></p>			

**VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS**

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?  
 YES (list all such pollutants below )       NO (go to Item VI-B)

Empty space for listing pollutants not covered by analysis.

**VII. BIOLOGICAL TOXICITY TESTING DATA**

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

**VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
PDC Laboratories, Incorporated	2231 West Altorfer Drive Peoria, IL 61615	309-692-9688	All

**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print) Managing Director - Environmental Compliance	B. PHONE NO. (area code & no.) (618) 343-7761
C. SIGNATURE	D. DATE SIGNED APR 20 2015

**RECEIVED**  
APR 20 2015

ATTACHMENT 2: New Stormwater Outfall 023, Form 2C

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)  
 IL0000108

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C) OUTFALL NO. 023

PART A -- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)			4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Biochemical Oxygen Demand (BOD)	<b>Please see table attached.</b>									
b. Chemical Oxygen Demand (COD)										
c. Total Organic Carbon (TOC)										
d. Total Suspended Solids (TSS)										
e. Ammonia (as N)										
f. Flow	VALUE	VALUE	VALUE	MAXIMUM	VALUE				VALUE	
g. Temperature (winter)	VALUE	VALUE	VALUE	MINIMUM	VALUE				VALUE	
h. Temperature (summer)	VALUE	VALUE	VALUE	MINIMUM	VALUE				VALUE	
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	VALUE				VALUE	

PART B -- Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"				3. EFFLUENT				4. UNITS				5. INTAKE (optional)	
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual														
c. Color														
Fecal Coliform														
Fluoride (16984-48-8)														
Nitrate-Nitrite (as N)														



**Coffeen Energy Center - Gypsum Management Facility (GMF)  
NPDES Permit: IL0000108**

CONSTITUENT	Influent to Gypsum Management Facility (wastewater from WFGDS)	Effluent from Gypsum Management Facility (reclaim water to WFGDS)
Ammonia Nitrogen (as N)	1600	1500
Arsenic (total)	0.080	0.083
Barium	0.15	0.15
Boron	21	21
BOD5	<4.0	<4.0
Cadmium	0.013	0.013
Carbon Chloroform Extract		
Chloride	950	950
Chromium (total hexavalent)	<0.005	<0.005
Chromium (total trivalent)	0.034	0.007
Copper	0.028	0.028
Cyanide (total)	<0.005	<0.005
Cyanide (readily released @ 150 °F & pH 4.5)	<0.005	<0.005
Dissolved Oxygen		
Fecal Coliform		
Fluoride	29.3	29.2
Hardness (as CaCO3)	3500	3600
Iron (total)	18	18
Lead	0.006	0.005
Manganese	9.5	9.4
MBAS		
Mercury	0.00156	0.00054
Nickel	0.17	0.17
Nitrates (as N)	50	59
Oil & Grease (hexane solubles or equivalent)	<5.0	<5.3
Organic Nitrogen (as N)	1400	1500
pH	6.09	6.00
phenols	<0.005	<0.005
Phosphorous (as P)	0.52	0.54
Radioactivity		
Selenium	0.95	0.92
Silver	<0.005	<0.005
Sulfate	8400	8200
Suspended Solids	86	91
Total Dissolved Solids	9000	9300
Zinc	0.20	0.20
Total Nitrogen, as N	1500	1500
Total Kjeldahl Nitrogen	120	100
Total Calcium	400	410

Coffeen Energy Center: NPDES IL0000108

Boron	
Outfall 002	
Date	mg/l
1/1/2008	1.1
2/5/2008	1
3/3/2008	0.99
4/1/2008	0.95
5/5/2008	0.82
6/2/2008	1.3
7/1/2008	1.1
8/5/2008	0.92
9/1/2008	0.71
10/1/2008	0.5
11/3/2008	1
12/1/2008	0.6
1/5/2009	0.44
2/2/2009	0.77
3/2/2009	0.72
4/1/2009	0.59
5/4/2009	0.47
6/1/2009	<1
7/1/2009	1.2
8/3/2009	0.56
9/1/2009	1.6
10/5/2009	0.42
11/2/2009	0.52
12/1/2009	0.57
1/4/2010	0.89
2/2/2010	0.43
3/1/2010	0.27
4/12/2010	0.24
5/10/2010	0.57
6/8/2010	0.58
7/6/2010	0.48
8/2/2010	1
9/1/2010	0.26
10/4/2010	0.44
11/1/2010	0.23
12/1/2010	0.71
1/3/2011	0.57
2/1/2011	0.34
3/1/2011	0.37
4/3/2011	0.66
5/9/2011	1.1
6/2/2011	0.35
7/5/2011	0.23
8/1/2011	0.31
9/5/2011	0.25
10/3/2011	1.1

Iron	
Outfall 002	
Date	mg/l
1/1/2008	0.28
5/5/2008	0.038
8/5/2008	0.041
11/3/2008	0.048
2/2/2009	0.26
5/4/2009	0.24
8/3/2009	0.082
11/2/2009	0.43
2/2/2010	0.42
5/10/2010	0.061
8/2/2010	0.062
11/1/2010	0.011
2/1/2011	0.13
5/9/2011	0.07
8/1/2011	0.1
11/1/2011	0.068
2/1/2012	0.37
5/3/2012	0.28
8/6/2012	0.031
11/5/2012	0.14
2/4/2013	0.57
5/1/2013	0.28
8/5/2013	0.2
11/4/2013	0.072
12/2/2013	0.26
2/3/2014	0.28
5/6/2014	0.1
6/9/2014	0.11
8/4/2014	0.12
9/8/2014	0.15
11/3/2014	0.18
12/10/2014	0.21
Min	0.01
Ave	0.17
Max	0.57

Mercury ng/l				
Date	Outfall 002	Outfall 008 Duplicates		Outfall 018
		1 <sup>st</sup>	2 <sup>nd</sup>	
		n/l	n/l	
3/11/2008	8.21	35.2*	ND*	
5/9/2008	9.78	1.4	ND	
8/28/2008	4.11	4.89	4	
10/28/2008	10.4	4.58	ND	
1/20/2009	2.06	1.49	<1.0	
4/23/2009	3.18	1.57	ND	
7/13/2009	2.33	1.78	1.8	
10/12/2009	4.23	0.83	ND	
1/25/2010	2.77	1.01	ND	
4/13/2010	1.08	0.54	ND	
7/23/2010	1.51	1.38	ND	
11/1/2010	1.09			
11/30/2011				0.98
2/7/2012				1.3
5/7/2012				1.14
8/13/2012				0.717
11/14/2012				0.897
2/4/2013				2.29
5/7/2013				2.26
8/5/2013				1.61
12/18/2013				0.67
3/17/2014				2
5/6/2014				1.35
8/7/2014				0.72
10/2/2014				7.69
Min	1.1	0.5		0.7
Ave	4.2	2.0		1.8
Max	10.4	4.9		7.7

\*This result was not used in the average since the duplicate showed non-detect.

**Tsai, Shu-Mei**

**From:** LeCrone, Darin  
**Sent:** Thursday, April 30, 2015 8:49 AM  
**To:** Lowry, Leslie; Rabins, Jaime; Tsai, Shu-Mei; Cox, Brian; Liska, Mark  
**Cc:** Cowles, Jamie; Keller, Al  
**Subject:** FW: Permittee Names and Permittee Address for Dynegy Illinois facilities

Below is a list of new official permittee and facility names for all of the Dynegy owned power plants in Illinois. Also, please note that the permittee address for ALL of them, regardless of the name on the permit is:

1500 Eastport Plaza Drive  
Collinsville, IL 62234-6135

Darin E. LeCrone, P.E.  
Manager, Industrial Unit  
Division of Water Pollution Control  
Illinois Environmental Protection Agency

217/782-0610

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**From:** Davis, Thomas L [mailto:Thomas.L.Davis@dynegy.com]  
**Sent:** Thursday, April 30, 2015 8:42 AM  
**To:** LeCrone, Darin  
**Subject:** Permittee Names and Permittee Address for Dynegy Illinois facilities

Darin,

Yes, the Collinsville address is the "Permittee Address" for all our Illinois facilities.

The "Permittee Name" is Dynegy Midwest Generation, LLC for the following:

- (1) Baldwin Energy Complex
- (2) Havana Power Station
- (3) Hennepin Power Station
- (4) Vermilion Power Station (retired)
- (5) Wood River Power Station

The "Permittee Name" is Illinois Power Generating Company for the following:

- (6) Coffeen Energy Center
- (7) Newton Energy Center

The "Permittee Name" is Illinois Power Resources Generating, LLC for the following:

- (8) Duck Creek Energy Center
- (9) E.D. Edwards Energy Center

The "Permittee Name" is Electric Energy, Inc. for the:

(10) Joppa Energy Center

The "Permittee Names" are Electric Energy, Inc., Met-South, Inc. for the:

(11) Met-South Energy Center

The "Permittee Name" is Kincaid Generation, LLC for the:

(12) Kincaid Generation Station

Tom

Thomas L. Davis, P.E.  
Director, Environmental – Water and Waste Permitting  
Environmental Compliance Group  
Dynegy Operating Company  
1500 Eastport Plaza Drive  
Collinsville, IL 62234-6135  
Tel. No. 618-343-7757

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**From:** LeCrone, Darin [<mailto:Darin.LeCrone@Illinois.gov>]  
**Sent:** Thursday, April 30, 2015 8:21 AM  
**To:** Davis, Thomas L  
**Cc:** Gradeless, Rex  
**Subject:** RE: Coffeen, Duck Creek, Edwards, and Newton Stations

Tom,

Is the Collinsville address the correct address for all Dynegy permits? The reason I ask, is that we had issued the Baldwin permit with the O'Fallon address, and we just recently sent out a 15-day notice draft modified permit for Baldwin related to the appeal.

I heard via the Attorney General's Office and our Division of Legal Counsel that you guys may not have received the 15-day draft. I pulled the file out and noticed that it had the O'Fallon Address.

Darin E. LeCrone, P.E.  
Manager, Industrial Unit  
Division of Water Pollution Control  
Illinois Environmental Protection Agency

217/782-0610

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**From:** Davis, Thomas L [<mailto:Thomas.L.Davis@dynegy.com>]  
**Sent:** Tuesday, April 28, 2015 1:08 PM  
**To:** LeCrone, Darin  
**Subject:** RE: Coffeen, Duck Creek, Edwards, and Newton Stations

Darin

The Permittee Address will be:

Kincaid Generation, LLC  
1500 Eastport Plaza Drive  
Collinsville, IL 62234

The Facility Name and Address are as you listed them in the Public Notice Draft Permit

Tom

Thomas L. Davis, P.E.  
Director, Environmental – Water and Waste Permitting  
Environmental Compliance Group  
Dynergy Operating Company  
1500 Eastport Plaza Drive  
Collinsville, IL 62234-6135  
Tel. No. 618-343-7757

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**From:** LeCrone, Darin [<mailto:Darin.LeCrone@Illinois.gov>]  
**Sent:** Tuesday, April 28, 2015 8:20 AM  
**To:** Davis, Thomas L  
**Subject:** RE: Coffeen, Duck Creek, Edwards, and Newton Stations

Tom, I'll check on that again. Permit Section doesn't send out the invoices, so I'll have to check with Fiscal.

One other thing..... We are getting ready to issue the permit for Kincaid Station, and I want to make sure we have the correct name and addresses. I understand that for this station the name is staying the same, but what about the permittee address? Should we continue to list: Kincaid Generation, LLC, Post Office Box 260, Kincaid Illinois 62540?

Darin E. LeCrone, P.E.  
Manager, Industrial Unit  
Division of Water Pollution Control  
Illinois Environmental Protection Agency

217/782-0610

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**From:** Davis, Thomas L [<mailto:Thomas.L.Davis@dynergy.com>]  
**Sent:** Tuesday, April 28, 2015 7:25 AM  
**To:** LeCrone, Darin  
**Cc:** Diericx, Rick  
**Subject:** FW: Coffeen, Duck Creek, Edwards, and Newton Stations

Darin,

We never received corrected invoices for the 2014 NPDES Permit fees for the Coffeen, Duck Creek, Edwards, and Newton Stations.

Tom

Thomas L. Davis, P.E.  
Director, Environmental – Water and Waste Permitting

Environmental Compliance Group  
Dynergy Operating Company  
1500 Eastport Plaza Drive  
Collinsville, IL 62234-6135  
Tel. No. 618-343-7757

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**From:** LeCrone, Darin [<mailto:Darin.LeCrone@Illinois.gov>]  
**Sent:** Friday, June 27, 2014 11:44 AM  
**To:** Davis, Thomas L  
**Cc:** Diericx, Rick; Leskovsek, Andreas H  
**Subject:** RE: Coffeen, Duck Creek, Edwards, and Newton Stations

Tom,  
The change in ownership of the facilities has been recognized by the Agency, so I will see if I can get a revised invoice sent out.

Darin E. LeCrone, P.E.  
Manager, Industrial Unit  
Division of Water Pollution Control  
Illinois Environmental Protection Agency

217/782-0610

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**From:** Davis, Thomas L [<mailto:Thomas.L.Davis@dynergy.com>]  
**Sent:** Friday, June 27, 2014 11:33 AM  
**To:** LeCrone, Darin  
**Cc:** Diericx, Rick; Leskovsek, Andreas H  
**Subject:** Coffeen, Duck Creek, Edwards, and Newton Stations

Darin,

Good morning!

Ameren Corporation received the 2014-2015 annual NPDES permit fees for the referenced stations. They have mailed the invoices to us. However, we are unable to pay an invoice that is not directed to us. What would you suggest be done?

Thanks.

Tom

Thomas L. Davis, P.E.  
Director – Water and Waste Permitting  
Environmental Compliance Group  
Dynergy Operating Company  
1500 Eastport Plaza Drive  
Collinsville, IL 62234  
Tel. No. 618-343-7757

**Tsai, Shu-Mei**

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**From:** Tsai, Shu-Mei  
**Sent:** Wednesday, May 06, 2015 9:25 AM  
**To:** Ramach, Sean  
**Cc:** LeCrone, Darin  
**Subject:** RE: IPH Coffeen  
**Attachments:** Coffeen Lower Trophic Level Impacts Study.pdf; Review Notes.pdf; Water Quality Standards Unit Memo.pdf

**IEPA EXHIBIT**  
**No. 19**

Sean:

See attachments. Please let me know if you need more information. Thanks

Shu-Mei

From: Ramach, Sean [<mailto:Ramach.Sean@epa.gov>]  
Sent: Wednesday, April 08, 2015 4:13 PM  
To: Tsai, Shu-Mei; LeCrone, Darin  
Cc: Ireland, Scott; Pierard, Kevin  
Subject: IPH Coffeen

Hi Shu-Mei and Darin,

I am starting to review the documents and wanted to request the permit writer review notes and any additional thermal documents/studies that IEPA may have.

I have a number of studies from our last review in 2011, but it appears that the facility was specifically required to conduct 3 years of studies starting in 2010.

The major issue that we raised in our comment letter for the permit modification in 2011 was that the method of and basis for the thermal relief was not clearly consistent with Clean Water Act Section 316(a).

We note that the document provided that assesses the thermal impacts to the lower trophic levels is not the equivalent of a 316(a) demonstration. An identified issue from the 2011 review was that the facility had a breadth of studies, but no clear compilation of the studies that was equivalent to the document EPA believes is necessary to support a request for alternate thermal limits. It does not appear that the deficiency has been corrected for this renewal.

From a quick review of the draft permit, the language still indicates that the relief is based upon the IPCB order authorizing alternate standards under 302.211(j). Any standards established under this regulation would need to be submitted to EPA for approval as site specific WQS prior to incorporation into a NPDEs permit. EPA identified this issue in its 2011 letter and recommended that it be resolved prior to the reissuance of the permit to prevent a potential objection.

EPA recognizes that the Illinois regulations allowing for a facility to petition the IPCB for a 316(a) were adopted last year and the facility may not have had time to complete the process. However, it is not clear that the process has begun and the permit is silent on any requirements to submit such an application under the new regulations to ensure that future permits will incorporate the thermal relief in a manner consistent with the CWA.

We look forward to discussing these matter with you, but wanted to bring them to your attention as significant issues in the permit review.

Cheers,

Sean Ramach

Environmental Scientist | P:312-886-5284 F:312-692-2502 | [ramach.sean@epa.gov](mailto:ramach.sean@epa.gov)<mailto:kamerath.marcy@epa.gov>  
U.S. EPA, Region 5, Water Division, NPDES Programs Branch | 77 W. Jackson Blvd., WN-16J | Chicago, IL 60604

P Please consider the environment before printing this e-mail.



STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

NO. 8-31-15  
CAS 9-16-16

Permittee: Illinois Power Generating Company – Coffeen Energy Center Page 1 of 6  
Permit: IL0000108  
Reviewed By: Shu-Mei Tsai Date: Wednesday, May 6, 2015

15-Day Notice Review Notes:

The Agency received the following comments from Dynegy on April 20, 2015:

**IEPA EXHIBIT**  
No. 20

**Corrections to PNFS and Draft Permit**

1. Change name and address of permittee to:

Illinois Power Generating Company  
Water and Waste Permitting / Environmental Compliance  
1500 Eastport Plaza Drive  
Collinsville, IL 62234

Response: Change will be made as requested. Also see April 30, 2015 email from Darin LeCrone.

2. Page 1 PNFS, 4<sup>th</sup> paragraph. The applicant operates an existing 950 MW ... should be reworded to say “The applicant operates an existing coal fired steam electric generating station (SIC 4911) which generates approximately 1000 MW.”

Response: Change will be made as requested.

3. Page 1 PNF, 4<sup>th</sup> paragraph, 4<sup>th</sup> sentence: Reword “Service water is used for more than just make-up to the bottom ash recycle pond and water treatment plant” instead of “Service water is used for once through cooling, make-up to the bottom ash recycle pond (approximately 23 acres) and the water treatment plant and for other miscellaneous uses.

Response: Change will be made as requested.

4. The draft 2010 and 2014 303(d) report only lists Fish Consumption as the impaired designated use and Mercury as the cause of impairment for segment ROG.

Response: Per the October 30, 2012 WQBEL memo from Bob Mosher the 2010 303(d) lists Fish Consumption and Aesthetic Quality as impaired designated uses and in the draft 2012 list Aesthetic Quality use impairment is removed.

Response: The Aesthetic Quality use impairment will be removed from the table on page 2 of the PNFS as requested.

5. Per 304.124 TSS limits are 15.0/30.0 not 15/30. Revise A01, B01, C01, D01, E01, G01, J01, and 002.

Response: Change will be made as requested.

STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

Permittee: Illinois Power Generating Company – Coffeen Energy Center Page 2 of 6

Permit: IL0000108

Reviewed By: Shu-Mei Tsai

Date: Wednesday, May 6, 2015

6. Per 40 CFR 423.12(b)(3) and (4) the Oil and Grease TSS limits are 15.0/20.0 not 15/20. Revise A01, B01, C01, E01, G01, J01, and 002.

Response: Change will be made as requested.

7. The regulatory reference of oil and grease should be corrected to read 40 CFR 423.12(b)(3) on page 4 of PNFS.

Response: 40 CFR 423.12(b)(3) is correct. The change will be made as requested.

8. Revise the Cooling Water Intake Structure description on page 5, paragraph 4 of the PNFS.

Response: The change will be made as requested.

9. Illinois Power Holding, LLC should be revised to read Illinois Power Generating Company in the first paragraph of the Newspaper Notice.

Response: Change will be made as requested.

10. Outfalls 001, 020, 021, and 022 are the same water. Add the statement “Sampling point for 001, 020, 021, and 022 shall be at a point within the cooling water discharge flume.” As found in our current permit.

Response: As long as sampling is conducted prior to discharge into the receiving water. The statement will be added as requested.

11. Need to add Treated Chemical Metal Cleaning as an intermittent contributory flow #18 to Outfalls 001, 020, 021, and 022.

Response:

SC 11 of the current permit allowed chemical metal cleaning wastes to either be placed on the active area of the coal pile or discharged to the recycle pond. Normally the recycle pond does not discharge. If an overflow event occurs the water discharges to the discharge flume tributary to outfalls 001, 020, 021, and 022. The permittee is asking that the permit recognize the possibility of a discharge of chemical metal cleaning wastes from 001, 020, 021, and 022. Since the discharge to the recycle pond is currently authorized, chemical metal cleaning wastes discharged from 001, 020, 021, and 022 is not a new discharge and will be added as contributory wastestream #18 to page 2 as requested.

12. In SC10(B)(4) the reference to “best available technology” should read “best technology available”.

Response: Best technology available is correct. The change will be made as requested.

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13. SC4(B) 3<sup>rd</sup> sentence the reference to Ameren should be changed to Illinois Power Generating Company.

Response: The change will be made as requested.

**Comments on the PNFS and Draft Permit**

1. Outfall 015 is not a point source outfall for stormwater and it is sheet flow runoff from a road that has silt fencing for sediment control.

Response: The outfall will be removed as requested.

2. The latitudes, longitudes and map should be updated, and Outfall 023 Gypsum Management Facility's Emergency Overflow should be added.

Response:

The coordinates will be updated as requested. The request to add Outfall 023 Gypsum Management Facility's Emergency Overflow was forwarded to Standards. Received the antidegradation memo from the Standards Unit dated August 18, 2015. Added new outfall as requested.

3. Outfall 002 Coal Yard Settling Pond Discharge should be changed to read Coal Yard Settling Pond and Emergency Overflow Discharge.

Response: Change will be made as requested.

4. Per 35 IAC 304.125, the pH effluent limits should be 6-9 s.u. for Outfalls 001, 020, 021, 022 the same as C01, D01, J01, and 002.

Response: Coffeen Lake has a 7Q10 of 0 cfs therefore pH is limited to 6.5 to 9.0 to ensure compliance with 302.204. C01, D01, and J01 are limited to 6.0 to 9.0 per 304.125 as they are internal outfalls and thus not subject to WQS. 002 is already limited to 6.5 to 9.0 s.u.

5. The discharge from outfall 001, 020, 021, and 022 only contain TRC as the result of intermittent usage for antifouling purposes related to the operation of the condensers and thus should be limited to  $\leq 0.2$  mg/l no more than 2 hours per day per unit per 35 IAC 304.222. Change SC3 in the draft permit to read as SC4 of the current permit. The draft permit requires sampling during chlorination but the facility chlorinates 12 times a day 7 days a week therefore the sampling is too burdensome. The sample frequency should be changed back to twice per month as in the current permit.

Response:

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35 IAC 304.222 does exempt discharges from the acute TRC limits of 35 IAC 302.208 if TRC is used solely as the result of intermittent usage for antifouling purposes related to the operation of condensers restricted to a maximum of 2 hours per day per unit. The existing TRC limits will be reinstated.

6. BOD<sub>5</sub> and TSS effluent limits should be limited to 30.0/60.0 mg/L per 35 IAC 304.120(a) as required by the current permit.

Response: Outfall D01 is an internal outfall and receives dilution from the rest of the flow at 001. The dilution ratio is greater than five to one. Changed as requested.

7. The Fecal Coliform testing is required and it should be removed from Outfall D01

Response: The exemption was issued on March 24, 1993. The monitoring frequency of Fecal coliform still remain, but the limit will be removed.

8. Coal Crusher House Sump Pit Discharge was incorrectly listed in the application and should be listed as intermittent discharge.

Response: The discharge rate will be specified for plant generated discharges. Intermittent is reserved for stormwater discharges. The depicted flow rate will remain.

9. The Coal Yard Settling Pond was designed to treat coal pile runoff per 40 CFR 423.12(b)(10) and therefor coal pile runoff should not be a separate internal outfall.

Response: While 40 CFR 423.12(b)(9) limits discharges of coal pile runoff to 50mg/L TSS, TSS is limited to 15/30 at 002 thus A02 is unnecessary and will be removed.

10. (a) Outfall 002 is designed, constructed, and operated to treat coal pile runoff and thus the 50 mg/l TSS limit applies per 40 CFR 423.12(b)(9). (b) the iron limits should read the same as the fact sheet 2/4. Add the decimal 2.0/4.0 to be consistent with 304.124. (c) Boron was granted a mixing zone and should be removed. (d) add non-chemical metal cleaning wastes as a contributory flow to 002.

Response: (a) The 50 mg/l TSS limit of 40 CFR 423.12(b)(9) applies only to coal pile runoff all of the other wastestreams are subject to the TSS limits of 15/30 per 304.124. (b) the iron limits of 1.0/1.0 are in error and will be changed to 2.0/4.0 to match the PNFS as requested. (c) Boron limits were changed by the IPCB. Boron will be removed per October 30, 2010 WQBEL Memo and July 2, 2015 email from Bob Mosher. SC16 will be removed. (d) a permit mod is required to add non-chemical metal cleaning wastes which is regulated wastestream per 40 CFR 423.

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11. Boiler water is high quality water with TSS and Oil and Grease at zero/<1 mg/l. The sampling frequency for these parameters should be 1/year when discharging as in the current permit.

Response: The flow rate is intermittent discharge and boiler water is high quality water with TSS and Oil and Grease at zero/<1 mg/l. Changed as requested.

12. Add non-chemical metal cleaning wastes to C01 and E01.

Response: Non chemical metal cleaning wastes are a regulated wastestream under 40 CFR 423 and require a permit modification.

13. (a) SC4(E) Adding gizzard shad to the mix as the monitored species might require change in sampling gear specifically for them because electrofishing is not as effective for this pelagic species. (b) last sentence of page 7 of the PNFS requires a study plan within 60 days of the effective date while SC4(F) allows 6 months. The latter is doable the former not. (c) there should be a limit given for the required number of years of sampling. We suggest 3 years consistent with the IPCB ruling.

Response: (a) gizzard shad is an organism commonly studied by industries that conduct 316(a) Demonstrations. While electrofishing may not be the preferred gear other facilities have successfully completed 316(a) demonstrations utilizing this type of gear. See July 2, 2015 email from Brian Koch. (b) six months is correct per Standards Unit (c) The current language is correct per Standards Unit.

14. Iron has never been greater than 0.6 mg/l at 002 and averages 0.17 mg/l. The sample frequency should be changed back to 1/ quarter as in the current permit.

Response: Change will be made as requested.

15. The DMR submittal date should be changed from the 15<sup>th</sup> to the 28<sup>th</sup> as in the current permit.

Response: Change will be made as requested.

16. Standard Condition 13 and 14 has the exact wording in 40 CFR 122.41(m) and (n). Special condition 12 is unnecessary and should be removed.

Response: SC12 will be removed as requested.

17. (a) outfalls 001, 020, 021, and 022 are all the same discharge water. Group these outfalls as one sample for the semi-annual testing. (b) outfalls 008 – 018 are stormwater therefore unless it rains for a prolonged period of time resulting in a 24-hour discharge, a 24-hour composite cannot be obtained. Sampling should be a grab. (c) outfalls 008 – 014 are representative of each other since they are all run along the same rail line. Only one outfall should be required

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to be sampled. Outfall 009 is safer and more accessible, some of the other locations are located in wilderness areas with limited access. (d) mercury data was generated for 008 and 002 with a max of 10.4 ng/l and 4.9 ng/l respectively. Storm events do not always occur at daylight hours therefore industries use auto samplers but they cannot be used for mercury monitoring. For these reasons mercury monitoring should be removed from 008 – 018. (e) outfall 018 was tested twice a month for 5 months for all of the constituents in SC19. The data shows the results were well within effluent limits so further testing should not be required.

Response: (a) Change will be made as requested. (b) 008 thru 018 will be changed to a grab sample. (c) While 008 – 018 are along the same rail the sampling results may be different based on housekeeping and drainage areas thus sampling is necessary at each outfall to ensure compliance with effluent and WQS. (d) Standards recommends reducing monitoring to annually but not removing the monitoring. See October 30, 2012 WQBEL from Bob Mosher (e) Standards recommends reducing monitoring to annually but not removing the monitoring. See October 30, 2012 WQBEL from Bob Mosher.

The Agency received the email from Region 5 - Sean Ramach dated April 08, 2015

1. Sean requested the permit writer review notes and any thermal documents / studies that IEPA may have.

Response:

I emailed the Study of Coffeen lower Trophic Level Impacts, Review Notes, and Water Quality Standards Unit Memo to Sean Ramach on May 06, 2015.

2. The method of and basis for the thermal relief was not clearly consistent with Clean Water Act Section 316(a) in modification permit in 2011.

Response:

The Agency revised Special Condition 4, limitations are incorporated pursuant to Section 316(a) of the Clean Water Act, and relief granted by the Illinois Pollution Control Board, the permittee has to monitor the fish mortality during May through October, all discharge and the heated effluent discharges from Coffeen Lake to other waters of the State must comply with 35 Ill. Adm. Code 302.211(b), The Permittee shall continue to study Coffeen Lake annually from May through October using the methods and study designs from the 2010-2012 Eastern Illinois University studies, to monitor the health of sportfish populations and potentially detect any population level changes in age/growth, condition, density, and mortality of the Representative Important Species (RIS) study organisms, the permittee shall submit a revised 316(a) Demonstration study plan 60 days from the effective date, and the permittee shall comply with 35 Ill. Adm. Code Part 106.1180 when filling the renewal application.

Action: Issue Draft Permit/Fact Sheet for 30-day Public Notice.