

ILLINOIS POLLUTION CONTROL BOARD  
March 5, 2009

AMEREN ENERGY GENERATING CO.,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 09-38
	)	(Thermal Demonstration-Water)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

**HEARING OFFICER ORDER**

The parties are advised that this matter has been assigned to the hearing officer identified below. From this date forward, any pleading filed with the Clerk of the Board in this matter must also be served individually on the hearing officer.

The hearing officer directs petitioner to address the pre-hearing questions set forth in Attachment A to this order. Written responses, as well as any pre-hearing testimony, must be filed at least 14 days before the hearing. A hearing date will be set at the initial status conference. Respondent's deadline for filing its recommendation is April 6, 2009.

The parties are directed to participate in a telephone status conference with the hearing officer at 10:30 a.m. on March 16, 2009. The status conference shall be initiated by the petitioner.

IT IS SO ORDERED.




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Carol Webb  
Hearing Officer  
Illinois Pollution Control Board  
1021 North Grand Avenue East  
P.O. Box 19274  
Springfield, Illinois 62794-9274  
217/524-8509  
[webbc@ipcb.state.il.us](mailto:webbc@ipcb.state.il.us)

## Attachment A.

## Board Questions to Be Addressed:

1. 35 Ill. Adm. Code 302.211(j)(4) provides:

The required showing in subsection (j)(3) may take the form of an acceptable final environmental impact statement or pertinent provisions of environmental assessments used in the preparation of the final environmental impact statement, or may take the form of showing pursuant to Section 316(a) of the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), which addresses the requirements of subsection (j)(3). 35 Ill. Adm. Code 302.211(j)(4).

The United States Environmental Protection Agency (USEPA) has issued an “Interagency 316(a) Technical Guidance Manual and Guide for Thermal Effects Sections of Nuclear Facilities Environmental Impact Statements (DRAFT)” dated May 1, 1977 (Section 316(a) Manual) (available at <http://www.epa.gov/npdespub/pubs/owm0001.pdf>). The Section 316(a) Manual states that a Type II Demonstration would involve:

- 3.5.1** Development of Biotic Category Rationales
- 3.5.2** Development of Representative Important Species Rationale
- 3.5.3** Engineering and Hydrological Data for Type II Demonstration
- 3.5.4** Synthesis of All Information into Master Ecosystem Rationale (Section 316(a) Manual at pp. 34-52.)

- a. Exhibit 11 to the petition is a report prepared by ASA Analysis and Communications, Inc. entitled “Evaluation of Potential Adverse Impacts from Revised Site-Specific Thermal Standards in May and October for Coffeen Lake” dated March 2008 (ASA Report). The ASA Report indicates three fish species were selected as “representative important species” (RIS) based on previous studies. The three RIS selected were largemouth bass, bluegill, and channel catfish. Exh. 11 at 3-1. In this regard, the ASA Report references Tranquilli and Larimore (INHS) 1981 and Heidinger *et al.* 2000. Please explain more clearly at what point and how the three RIS were selected from among the other life forms observed in the reports by Tranquilli and Larimore 1981 and Heidinger *et al.* 2000, providing additional documentation if necessary. Please comment on how the selection of the three RIS satisfies the criteria under Section 3.5.2 of the Section 316(a) Manual or the definition of RIS at pp. 78-79.
- b. The ASA Report finds and forms part of its basis in the Tranquilli and Larimore 1981 Final Report by the Illinois Natural History Survey (INHS) (INHS 1981 Final Report) that was completed under the previous thermal

demonstration for Coffeen Lake in CIPS V. IEPA, PCB 77-158, PCB 78-100 (cons.)(Mar. 19, 1982)(CIPS). Please review this 1981 INHS Report and briefly comment on the validity of the development of the RIS Rationale in light of current conditions. (For the convenience of the parties in referencing the older CIPS documents, the Clerk's Office has scanned the contents of pertinent microfiche into COOL; these are available on the Board's Website in the PCB 77-158, PCB 78-100 docket.)

- c. Please describe any consideration that was given to threatened and endangered species as well as other vertebrate wildlife as set out in the Section 316(a) Manual. On this note, the INHS Final Report mentions that Great Blue Herons were occasionally observed in the lake. INHS 1981 Final Report at p.18.5.
  - d. Exhibit 15 to the petition is a report prepared by Sargent & Lundy entitled "Coffeen Units 1 and 2 Coffeen Cooling System Thermal Study", Report SL-009346, Revision 0 prepared June 2008 2008 (S & L 2008 Report). The S & L 2008 Report states that it utilizes "S&L's thermal lake modeling software program." S & L 2008 Report, Exh. 15 at p. 4. Please provide additional information on the model, such as when it was developed, if it has a particular name, and why this particular model was used. *See* Section 316(a) Manual at p. 46.
  - e. The Section 316(a) Manual sets out criteria for development of a "Master Rationale, Demonstration as a Whole". Section 316(a) Manual at pp. 70-71. Please develop and provide this information in support of the requested modifications.
2. Exhibit 4 to the petition is a "Coffeen Lake Diagram":
    - a. Please provide a copy with more easily readable site numbers for the Lake Temperature Monitor Locations.
    - b. Please visually indicate the "Edge of Mixing Zone", as the label for "Edge of Mixing Zone" is not pinpointed to a particular location on the diagram.
    - c. Please describe and comment on any effect of the "Sewage Treatment Plant Discharge 001D" on thermal standards in Coffeen Lake.
    - d. Please visually indicate, and specify the depth of, the deepest point in Lake Coffeen, and indicate whether Ameren monitors at this point.
  3. Exhibit 2 to the petition is a provisional variance issued by IEPA in Ameren Energy Generating Company Coffeen Power Station v. IEPA, IEPA-08-14 (Oct. 24, 2007). This provisional variance recites that Ameren was "operating four solar-powered aeration pumps in the lake to draw water from the bottom to the top in an attempt to cool the water." Exh. 2 at 3. The S & L 2008 Report (Exh. 15) does not list the solar-powered pumps as part of the existing cooling system. Please explain whether use of the solar-powered pumps to cool the lake water is intended under the proposed modification, and if not why not.

4. Please specify whether Ameren has measured the water temperature and dissolved oxygen profiles during May and October in 2007 and 2008 (*i.e.* since completion of the Southern Illinois University-Carbondale (SIUC) fishery studies of 1997-2006 referenced in the ASA Report). Please state whether the same locations were used in any 2007 and 2008 measurements as were used in the SIUC studies.
  
5. The ASA Report states “Coffeen Lake has had an abundance of submerged macrophytes”. ASA Report at. 3.7. If possible, please quantify, in terms of percent coverage, the abundance of macrophytes and relate that to amounts considered beneficial to aquatic life.

CERTIFICATE OF SERVICE

It is hereby certified that true copies of the foregoing order were mailed, first class, on March 5, 2009, to each of the persons on the attached service list.

It is hereby certified that a true copy of the foregoing order was hand delivered to the following on March 5, 2009:

John T. Therriault  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph St., Ste. 11-500  
Chicago, Illinois 60601



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PCB 2009-038

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