BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
WATER QUALITY STANDARDS AND)	R08-9
EFFLUENT LIMITATIONS FOR THE)	(Rulemaking – Water)
CHICAGO AREA WATERWAY SYSTEM)	
AND LOWER DES PLAINES RIVER)	
PROPOSED AMENDMENTS TO 35 ILL.)	
ADM. CODE 301, 302, 303, and 304)	

NOTICE OF FILING

TO:

John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, IL 60601

Deborah J. Williams, Assistant Counsel Stefanie N. Diers, Assistant Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276 Marie Tipsord, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, IL 60601

Persons included on the attached SERVICE LIST

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board MIDWEST GENERATION'S QUESTIONS FOR THE ENVIRONMENTAL GROUPS' WITNESS DR. DAVID L. THOMAS, a copy of which is herewith served upon you.

MIDWEST GENERATION, L.L.C.

Susan M. Franzetti

Date: August 25, 2008

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CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 25th day of August, 2008, I have served electronically the attached MIDWEST GENERATION'S QUESTIONS FOR THE ENVIRONMENTAL GROUPS' WITNESS DR. DAVID L. THOMAS and NOTICE OF FILING upon the following persons:

John Therriault, Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, IL 60601 Marie Tipsord, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, IL 60601

and by U.S. Mail, first class postage prepaid, to the following persons:

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PROPOSED AMENDMENTS TO 35 III.)	
Adm. Code Parts 301, 302, 303 and 304	j	

MIDWEST GENERATION'S QUESTIONS FOR THE ENVIRONMENTAL GROUPS' WITNESS DR. DAVID L. THOMAS

Midwest Generation, L.L.C. ("Midwest Generation" or "MWGen"), by and through its attorneys, Nijman Franzetti LLP and Hunton & Williams LLP, submits the following questions based upon the Pre-filed Testimony of Dr. David L. Thomas submitted on behalf of the Environmental Groups, Environmental Law and Policy Center, Natural Resources Defense Council, Prairie Rivers Network, Sierra Club – Illinois Chapter, Friends of the Chicago River, and Openlands. Midwest Generation requests that the Hearing Officer allow follow-up questioning to be posed based on the answers provided.

QUESTIONS

- 1. Have you conducted any QHEI surveys in the Upper Dresden Pool (UDP) and/or in the Chicago Sanitary & Ship Canal (CSSC)? For any such QHEI surveys, please identify when the survey was conducted, the area in which it was conducted, the number of locations for which a QHEI score was prepared and what the results were of the QHEI survey?
- 2. Have you conducted QHEI surveys anywhere else? Please identify how many and where?
- 3. Have you ever conducted any type of aquatic life or habitat survey in the UDP or CSSC?
- 4. For the habitat studies and life history studies referenced at the bottom of the first page of your testimony, please identify which of these studies were habitat studies and which

- were life history studies. For the life history studies, what fish species was studied? Please also identify when these studies were conducted.
- 5. During the twelve-year period from May 1985 through November 1997 when you were Director of the Illinois Waste Management and Research Center, did your job responsibilities involve projects that focused on aquatic habitat quality or aquatic biology?
- 6. During the subsequent eleven-year period from December 1997 through February 2008 when you were the Chief of the Illinois Natural History Survey, did you perform any field surveys of aquatic habitat or conduct any QHEI surveys of a river?
- 7. Please describe your experience in handling projects that involved constructing improvements to the physical habitat in a river and the resulting effects on the aquatic fish community.
- 8. Have you conducted any field work that studied the effects of ambient water temperatures on aquatic species? Have you conducted any laboratory studies of such effects?
- 9. What do you mean by the statement in your testimony (Section II, 2nd page, 1st para.) that "I also understand the argument that a QHEI score of 45-60 is a range in which waterways may be able to meet the Clean Water Act goal, depending on the particular characteristics of the area." Does this mean you agree with the argument?
- 10. Regarding your testimony (Section II, 3rd page, 1st para.) that QHEI scores above 45 "seem to predominate" in the UDP, did you review the "particular characteristics of the area" of these scores, and if so, what did you conclude as to which ones may be able to meet the Clean Water Act goal?
- 11. What are "micro-habitats" (see Section II, 2nd page, 2nd para. of Pre-filed Testimony)? Describe the location and extent of the micro-habitats that exist in the Upper Dresden Pool and in the CSSC, respectively.
- 12. Your pre-filed testimony refers to "habitat improvement" in the Upper and Lower Dresden Pool that could result in improvement of fish communities (Section II, 3rd page, 1st para. and 4th page, 2nd para.) and also that physical habitat can be improved "by providing physical structure for the growth of microbial organisms and macroinvertebrates that can provide food to fish" (Section II, 4th page, 2nd para). Please explain in greater detail the nature and extent of the improvements to habitat and their location in the UDP that you are referring to in this testimony.
- 13. Do you believe the absence of sufficient food for fish is currently a limiting factor to species abundance and diversity in the UDP?

- 14. Your pre-filed testimony states that "[m]any structures will also provide shelter and potential breeding habitat for fish." (Id.) What fish species are you referring to, and of those species, will the suitability of the habitat still be affected at all by the presence of sediments?
- 15. Please identify the facts that support your belief that the UDP "can support a more balanced and diverse fish population" (see Section II, 3rd page, 2nd para.).
- 16. What are the temperatures in the UDP you are referring to as necessary to improve species abundance and diversity? What improvements would occur at such temperatures?
- 17. You testify that white sucker and logperch are "temperature-sensitive species" (see Section II, 4th page, last para, and 5th page, 1st para). What information did you rely upon to determine that these species are temperature-sensitive?
- 18. Will a reduction of temperatures in the UDP without improvements in dissolved oxygen levels achieve a diverse fish population?
- 19. What are the temperatures you are referring to in your statement that "[t]emperatures in the Upper Dresden Pool at times in the summer months are sufficient to cause avoidance and limit the carrying capacity of the system"? (See Section II, 3rd page, 2nd para.) What studies are you relying on to support this statement?
- 20. In your testimony, you note that you "have not seen data that demonstrates that sediment toxicity is a major factor limiting the aquatic life potential of this system." Did you consider in your review of QHEI scores to what extent sediments were present in those areas that scored greater than 45 and to what extent the presence of those sediments, separate and apart from the issue of their toxicity, would impair the quality of the location for aquatic habitat? (See Section II, 4th page, 1st para.)
- 21. Do you have an opinion as to whether sediment toxicity is a factor limiting the aquatic life potential of this system?
- 22. What type of habitat does the white sucker need in order to spawn successfully in a waterway?
- 23. What type of habitat does the logperch need in order to spawn successfully in a waterway?
- 24. Do you agree with the EA fish studies' conclusions that the fish community in the Upper Illinois Waterway (UIW) is highly stressed and habitat-limited?
- 25. Do you agree with the EA fish studies' conclusion that diversity in this system was dependent on species adapted to contaminated conditions and that because of these

inherent limitations the ichthyoplankton community was not likely to change in the UIW for the foreseeable future?

- 26. In your testimony, you indicate that "these waterways could support tolerant or intermediately tolerant species" (Section III, 5th page, 2nd para), and indicate further that this conclusion is based on your personal knowledge of the CAWS. Explain what personal knowledge you are referring to.
- 27. Please identify the boundaries of the area you are referring to at the bottom of page 4 of your testimony where you reference "Lower Dresden Pool."
- 28. What criteria do you believe should be used to identify a species as a "Representative Aquatic Species" for purposes of aquatic life use designations?
- 29. On page 5 of your testimony, in the last paragraph of Section II., you reference that in the EA 1994 Ichthyoplankton Investigation (Attachment LL) that roughly 22,000 larval and YOY fish were collected. Do you agree that the EA 1994 Investigation also stated that only six species or taxa accounted for 86% of these individuals collected? Did you review the EA finding that these six species/taxa shared early life history characteristics that allowed them to be successful in the system, namely certain adaptations that allow their eggs/larvae to tolerate low dissolved oxygen levels and have minimal contact with bottom sediments?
- 30. Have you evaluated the effect of the impounded nature of the UDP on the quality of aquatic life community that it can attain?

Respectfully submitted,

MIDWEST GENERATION, L.L.C.

One of Its Attorneys

Dated: August 25, 2008

Susan M. Franzetti NIJMAN FRANZETTI LLP 10 S. LaSalle St., Suite 3600 Chicago, IL 60610 (312) 251-5590

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