

**The Illinois Chapter of the  
American Fisheries Society**  
*founded 1963*



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MAY 18 2001

STATE OF ILLINOIS  
Pollution Control Board

*R01-31*  
*P.C. #1*

Illinois Pollution Control Board, Hearing Officer  
100 West Randolph, Suite 11-500  
Chicago, IL 60601

Dear Board Members,

The Illinois Chapter of the American Fisheries Society is a not for profit professional organization with over 200 members who support the conservation and stewardship of fisheries and aquatic ecosystems in Illinois. We appreciate the opportunity to provide comment on proposed new 35 Ill. Adm. Code 301.109, which would develop a process to allow provisional variances for power companies to exceed thermal limits for up to 45 days in any calendar year.

Illinois' thermal regulations were designed to provide protection to aquatic life while allowing power generating stations to provide the electricity our industries and homes demand. The cooling lakes associated with our electrical generation industry provide a vital recreational resource to the people of Illinois. In many cases these lakes are modifications of previously existing natural systems. Numerous studies have shown that elevated thermal discharges can effect the ecology of our lakes and streams. These effects are currently of brief enough duration to allow robust fish populations to occur in Illinois' cooling lakes and in our streams below thermal outfalls. Recently, in 1999, provisional variances were used in Coffeen and Newton Lakes, and these variances led directly to fish kills. We believe it is inappropriate to allow variances that will lead to fish kills or damage other natural resources.

We agree that there needs to be an opportunity for the electrical generation industry to have emergency relief from thermal standards to protect the health and welfare of Illinois citizens. This relief should not, however be extended for purely economic or competitive reasons. The request for variance should be accompanied by evidence that the need is for an emergency within the State of Illinois and is not an opportunity to sell power outside the service area. Given the high risk to Illinois' aquatic and recreational resources, any such provisional variance from thermal standards should be stringently controlled and well documented.

If the proposed code is approved, then additional measures should be required:

1) the petitioner should be required to continuously monitor temperature and dissolved oxygen at all intakes and discharges, and during the most critical periods when the variance is in effect visually inspect all effected areas of water every 3 hours throughout the day and night when the variance is in effect. A plan should be in place and steps should be taken to immediately reduce thermal discharges if any evidence of a fish kill should occur. During summertime conditions, lethal temperatures are already present in the discharges of our generating facilities. Under these conditions motile fauna like fish crowd into those portions of the cooling lake that have adequate dissolved oxygen and temperature to sustain life. Non-mobile aquatic organisms die. A small increase in discharge temperature or volume, or a decrease in dissolved oxygen content under these conditions can and has had disastrous effects.

2) the petitioner should develop and implement a response and recovery plan approved by the agency and the Illinois Department of Natural Resources to address any adverse environmental impact due to thermal conditions resulting from a provisional variance.

3) there should be a clear delineation of what Illinois waters will be subjected to provisional thermal variances. We are strongly opposed to the issuance of provisional thermal variances for direct discharges into Illinois streams, rivers or Lake Michigan. These waters contain diverse species assemblages including coolwater species that could not withstand the additional thermal loading associated with provisional thermal variances.

In addition, the Illinois Chapter of the American Fisheries Society agrees with the additional reporting requirements discussed in the Illinois EPA proposal, and asks that these requirements be mandatory to any approved provisional thermal variances.

Several new natural gas fired generating facilities are currently under construction or have just been completed which are designed to meet peak generating needs while introducing little or no thermal load to our aquatic systems. Many of these facilities are so efficient that no mixing zone is required to meet existing standards. Illinois' top 4 power companies testified recently that there is now adequate generating capacity to meet any conceivable demand this summer. This means that at present adequate capacity exists with current standards, and even more generating capacity is under construction within the State. Given the abundant supply of energy within the state of Illinois, and the risks associated with provisional variances for thermal effects, we believe that the Board should be very cautious in it's development of rules to govern them.

We appreciate the opportunity to provide our organization's comments to the Illinois Pollution Control Board. We would strongly urge the Board to act to protect Illinois' invaluable aquatic resources and insure that any action taken is in full compliance with the Clean Water Act.

Sincerely,



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