

ILLINOIS POLLUTION CONTROL BOARD  
March 19, 1982

CENTRAL ILLINOIS PUBLIC SERVICE	)	
COMPANY,	)	
	)	
Petitioner,	)	
	)	PCB 77-158
v.	)	PCB 78-100
	)	CONSOLIDATED
ILLINOIS ENVIRONMENTAL PROTECTION	)	
AGENCY,	)	
	)	
Respondent.	)	

MR. T. KENT COCHRAN, SORLING, NORTHRUP, HANNA, CULLEN AND COCHRAN, LTD., APPEARED ON BEHALF OF PETITIONER.

MR. DAVID L. RIESER, ATTORNEY, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by I. Goodman):

This matter is before the Board upon a consolidation of two petitions filed by Central Illinois Public Service Company (CIPS) with respect to a cooling lake adjacent to CIPS' Coffeen power station known as Coffeen Lake. PCB 77-158 is a petition filed by CIPS pursuant to Rule 203(i)(10) of Chapter 3: Water Pollution of the Board's Regulations and PCB 78-100 is a petition pursuant to Rule 203(i)(5) of the same Chapter. Rule 203(i)(10) concerns the application by the Board of individual thermal standards for cooling lakes and Rule 203(i)(5) requires a one-time showing by a power station that it has not caused nor can reasonably be expected to cause significant ecological harm to its cooling lake. Hearings were held in these matters; no citizens testified nor did the Board receive any public comment.

On May 31, 1977, CIPS filed its petition pursuant to Rule 203(i)(10) requesting that the Board establish specific thermal standards for Coffeen Lake. Hearings were held on the petition at which CIPS presented evidence supporting the specific thermal standards for Coffeen Lake including a thermal demonstration pursuant to Rule 203(i)(10)(dd). The Illinois Environmental Protection Agency (Agency) appeared as Respondent at the hearings. On April 27, 1978, the Board entered its Order in PCB 77-158 which, in effect, gave CIPS their requested specific discharge limitation on an interim basis. At the end of three years, CIPS was ordered to present additional evidence pursuant to Rule 203(i)(10) at which time the Board would determine whether or not to make the specific limitations permanent.

Subsequent to the hearings noted above, but prior to the entry of the Board Order, CIPS filed its petition for hearing under Rule 203(i)(5), PCB 78-100, to demonstrate that CIPS, as an owner of a source of heated effluent, has not and could not reasonably be expected to cause significant ecological damage to the receiving waters. On August 3, 1978, the Board entered an Order consolidating PCB 77-158 and PCB 78-100. On April 22, 1981, CIPS filed its Motion to Open Hearing and take additional testimony and documentary evidence pursuant to the Board's Order and requesting the interim thermal limits set by the Board's Order be extended until final resolution of CIPS's Rule 203(i)(10) petition.

Having determined that, based upon historical data, a modification of the interim limitations would be required, CIPS filed an amended petition under Rule 203(i)(10) on November 17, 1981. The amended petition requested specific thermal standards significantly higher than those interim limitations previously granted by the Board. On November 30, 1981, an additional hearing was held at which a number of individuals testified and additional documents were submitted. The Agency, while generally agreeing that CIPS had carried its burden under Rules 203(i)(5) and 203(i)(10), expressed some reservations concerning the precise language of the proposed specific thermal limitations and questioning their year-round application. In addition, the Agency requested that the Board require CIPS to report the generating levels of Coffeen Power Station. Following discussions between CIPS and the Agency concerning the latter's reservations, CIPS, on February 5, 1982, filed a Motion to Amend Petition in which a slightly modified version of the previously requested specific thermal limitations was proposed in response to the Agency's express reservations.

Pursuant to the April 27, 1978 Board Order in PCB 77-158, CIPS hired the Illinois Natural History Survey to perform a study of whether Coffeen Lake is capable of supporting a viable fishery, the only major issue left to be resolved under the Board's previous Order. The evidence indicates that Coffeen Lake supports a diverse fishery consisting of a total of twenty-two species and which is comparable to other central Illinois reservoirs. Coffeen Lake supports an abundance of fish second only to Lake Shelbyville in a group of 200 Midwestern and Mid-southern reservoirs studied. The Coffeen Lake fishery appears to be in good condition with the exception of the stunted condition of blue gills, a condition common to reservoirs and probably caused by too great a population for the existing food supply.

The lack of significant fish kills over the years at Coffeen Lake indicates that adequate moderate temperature refuge areas exist to enable the fish population to survive the short-term, high-temperature conditions that exist during late summer months.

Since the installation of wastewater treatment facilities and practices in 1979, the aquatic environment of Coffeen Lake has experienced a significant improvement. Cadmium, chromium, copper, mercury and nickel have showed moderate to strong decreasing trends, and no measurable lead was detected in the final year of the study.

In its brief, the Agency agreed that Coffeen Lake continues to sustain a viable fishery.

The testimony and the evidence adduced at the hearing indicates that CIPS has carried its burden with respect to Rule 203(i)(5). The study addresses the criteria of Rule 203(i)(5) and both the author of the study and the Agency agree that Coffeen Power Station has not caused nor can be reasonably expected to cause significant ecological harm to Coffeen Lake. After considering the records in both PCB 77-158 and PCB 78-100, the Board concludes that CIPS has met its burden under both Rules 203(i)(5) and 203(i)(10). It remains now for the Board to determine the specific thermal limitations to be associated with the thermal discharge to Coffeen Lake.

The Agency's reservations with regard to the specific thermal limitations requested by CIPS address a concern by the Agency that CIPS might increase its operating levels so that the proposed limitations would be a year-round situation instead of the "worst case" type scenario they purport to address. CIPS responds that this concern ignores the basic principles of the operation of a power station, but nevertheless has agreed to modify its proposed limitations to address the Agency's reservations. CIPS latest proposal requests that thermal discharges to Coffeen Lake be limited so as to not result in a temperature measured at the outside edge of the mixing zone in Coffeen Lake which exceeds 105 degrees Fahrenheit as a monthly average for June through September, and 112 degrees Fahrenheit as a maximum for more than three percent of the hours in that period and exceeds 89 degrees Fahrenheit with a monthly average for October through May, and 94 degrees Fahrenheit as a maximum for more than two percent of the hours during that period. The Board finds that although the requested specific thermal limitations may be more specific than required for a cooling lake, there is nothing fundamentally wrong with the limitations as requested and that the record fully supports the allegation that the limits will result in compliance with Rule 203(i)(10). The Board shall therefore grant the limitations requested by CIPS for Coffeen Lake contained in the February 5, 1982 amended petition.


This Opinion constitutes a finding of facts and conclusions of the law of the Board in this matter.

ORDER

It is the Order of the Pollution Control Board that Central Illinois Public Service Company is in compliance with Rule 203(i)(5) of Chapter 3: Water Pollution for its facility at Coffeen Power Station. The thermal discharge to Coffeen Lake from the Central Illinois Public Service Company's Coffeen Power Station shall not result in a temperature, measured at the outside edge of the mixing zone in Coffeen Lake, which:

1. Exceeds 105 degrees Fahrenheit as a monthly average from June through September, and 112 degrees Fahrenheit as a maximum for more than three percent of the hours during that same period.
2. Exceeds 89 degrees Fahrenheit as a monthly average from October through May, and 94 degrees Fahrenheit as a maximum for more than two percent of the hours during that same period.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 19<sup>th</sup> day of March, 1982 by a vote of 4-0.

  
 Christan L. Moffett, Clerk  
 Illinois Pollution Control Board