

ILLINOIS POLLUTION CONTROL BOARD
May 25, 1978

COMMONWEALTH EDISON COMPANY,)
)
Petitioner,)
)
v.) PCB 78-79
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

OPINION AND ORDER OF THE BOARD (By Mr. Dumelle):

Petitioner (Edison) has requested a variance from the Board's thermal water quality standards for the lower Des Plaines River (the Five Mile Stretch). The Agency has recommended that Edison's request be denied because this is not the proper proceeding to adjudicate this matter. No hearing was held.

The cooling water discharges from Edison's steam-electric generating facility outside Joliet (Joliet Station) have been the subject of prior Board proceedings. Rule 203(i)(4) of Chapter 3: Water Pollution of the Board's Rules and Regulations was amended on June 28, 1973 to provide a specific thermal standard for the Five-Mile Stretch. The amendments were adopted pursuant to a request by Edison. They were based on the conclusion that since temperature was not the limiting factor in the Five-Mile Stretch and extensive improvement in water quality was expected by mid-1977, a temporary thermal standard would be adopted. Based on the data available in 1973, the Board concluded that by July, 1978 temperature would be the limiting factor and that the general use "Other Waters" standard should take effect at that time. Edison's concern in 1973 and in this proceeding centers on the fact that the cooling water discharges from its Joliet station have continued to cause violations of the "Other Waters" temperature standard in the Five Mile-Stretch.

The Joliet Station has thermal discharge points which are located approximately seven miles upstream from the beginning of the Five Mile Stretch. Although these discharges conform with the less stringent secondary contact standards at the point of discharge, they do not cool enough to

meet the "Other Waters" standard at the point those standards take effect on July 1, 1978. In Appendix 2 attached to its Petition, Edison concludes that the "Other Waters" temperature standard would have been violated at the beginning of the Five Mile Stretch on 2.6 percent of the days from 1973-1977 and that the three degree excursion limit would have been violated twice during March, 1977 and once during August, 1973.

Additionally, Edison points out that the more important indicators of water pollution (ammonia, dissolved oxygen, BOD and COD) have not improved since 1973 as expected. Edison's conclusion is that since water quality has not improved, its thermal discharge is not the limiting factor it was expected to be.

Edison contends that the only technically feasible ways to control its thermal discharge in a way that would result in compliance with the "Other Waters" standard would be by the installation of natural or mechanical draft towers or by derating the Joliet Station. Draft Towers are discounted because of their cost (at least \$21,750,000 in 1975 dollars), their effect on generating capability (a reduction of 2.5 to 3 percent), occasional local fogging, and a reduction in stream flow in the Des Plaines River. Derating is discouraged because it would have to occur during the summer months when maximum power is needed and would result in additional generation costs of \$3.6-7.6 million per year depending on where the lost electricity would be recovered. Rather than incorporate either of these compliance methods, Edison feels that a general revision of the water quality standards for the Five Mile Stretch constitutes a more appropriate forum for this problem. In the meantime, Edison needs a variance so that its existing discharge can remain lawful after July 1, 1978.

In its Recommendation the Agency does not challenge any of Edison's conclusions concerning the existing water quality of the Des Plaines River or Edison's temperature data. The Agency's opposition is based on its feeling that a variance proceeding is simply not the proper forum for Edison to obtain relief.

The Agency quotes from the Board's Opinion which supported the adoption of Rule 203(i)(4). That Opinion states at 10 PCB 77 that the proper method for evaluation of the effect of Edison's thermal discharge should be by a hearing conducted pursuant to Rule 203(i)(5) and held between March, 1977 and March, 1978. The Agency contends that a 203(i)(5) hearing would have resulted in findings by the Board that either corrective action was necessary, in which case a variance may

may have been warranted, or a regulatory amendment would have been in order. No such hearing was requested by the Petitioner.

The Agency feels that a variance from present standards would provide Edison with an unjustified "shield from enforcement" which could place other dischargers in jeopardy. Additionally, the Agency rebuts Edison's conclusion that forthcoming regulatory proceedings could provide relief with the statement that the Agency is not aware of any pending proceeding concerning this discharge.

Edison's contention that a hearing conducted pursuant to Rule 203(i)(5) of Chapter 3 is not appropriate in this case is misplaced. Even though the Joliet Station discharges into waters which are covered by Rule 205, the impact of this discharge on Rule 203 waters is obvious. The Board noted this impact when it stated:

Edison is required by Sec. 203(i)(5) to conduct a program to monitor the effects of their discharges of heated water from the Joliet Plant and present the results of that program to the Board at a hearing to be held between March, 1977 and March, 1978. If, at that time, the Board is convinced that Edison's discharge has not caused, or is not reasonably expected to cause significant ecological damage to the Des Plaines River, the Board would not require Edison to construct cooling facilities. Edison could then either ask the Board to amend its regulation to extend to the termination date to reflect water quality as would then be present in the "Five-Mile Stretch," or seek a variance from the standard. But if the Board is convinced that Edison has caused or is reasonably expected to cause significant ecological damage in the future, then the Board is required by Section 203(i)(5) to order Edison to carry out appropriate measures to correct ecological damage. Edison, because it had relied upon existing Board regulations, would have the variance procedure available to seek time to correct the problem. (11 PCB 77, 78.)

The fact that Edison's discharge points are located in Rule 205 waters was known when the Board made the above quoted statement. There is nothing in the record of this case which would persuade the Board to deviate from its prior position.

The Agency's contention that a variance in this case would provide Edison with a "shield from enforcement" is well stated. This is precisely the purpose behind the inclusion of Section 35 in the Act. If this "shield"

causes undue hardship or jeopardy on any other discharger, that problem can be adjudicated in a separate proceeding.

A regulatory proceeding involving all of the thermal dischargers into the Des Plaines River system may be the most appropriate way to resolve this matter. The Board will make that decision after a hearing has been conducted pursuant to Part VI of the Board's Procedural Rules.

Edison has shown that it would suffer significant hardship if it was forced to comply with the "Other Waters" standard in Rule 203(i)(4). That hardship is embodied in the significant construction costs or economic dislocation in Edison's delivery system which would be incurred. The hardship becomes unreasonable when it is weighed against the marginal improvement in water quality which would result from compliance.

Five years ago (June 28, 1973) the Board expected that water quality would be vastly improved in the Five Mile Stretch. The Metropolitan Sanitary District of Greater Chicago was to bring into being in-stream aeration and complete the Tunnel and Reservoir System. Neither has been done and more time is needed for these programs to be completed.

In order to enable the Board to entertain a request for a 203(i)(5) hearing after the date mandated by that section, Edison shall be granted a variance until April 2, 1981, to submit a petition which complies with the requirements of Part VI of the Procedural Rules.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

It is the Order of the Pollution Control Board that Edison be granted a variance until April 2, 1981 from the requirement in Rule 203(i)(5) of Chapter 3 which mandates a demonstration of the environmental effect of the thermal discharge from the Joliet Station and until July 1, 1981 from the "Other Waters" requirement of Rule 203(i)(4) of Chapter 3 subject to the following conditions:

1. During the term of this variance Edison shall comply with the thermal standards contained in Rule 203(i)(4) pertaining to the Five Mile Stretch.

2. Within 45 days of the date of this Order, Edison shall execute and forward to the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706, a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. The 45-day period shall be held in abeyance during any period this matter is being appealed. The form of the Certification shall be as follows:

CERTIFICATION

I (We), _____ having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 78-79, hereby accept that Order and agree to be bound by all of its terms and conditions.

Signed _____

Title _____

Date _____

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 25th day of May, 1978 by a vote of 5-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board