

ILLINOIS POLLUTION CONTROL BOARD
December 20, 1990

COMMONWEALTH EDISON COMPANY,)
ZION POWER STATION,)
)
Petitioner,)
)
v.) PCB 90-223
) (Provisional Variance)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

SUPPLEMENTAL OPINION OF THE BOARD (by J. Marlin):

At its last meeting, the Board issued its customary short order granting Commonwealth Edison the provisional variance as recommended by the Illinois Environmental Protection Agency (Agency). The Board customarily does not describe the facts in these cases, as the Illinois Environmental Protection Act (Act) requires the Board to grant any provisional variance lawfully recommended by the Agency as necessary to prevent "arbitrary or unreasonable hardship".

However, some public confusion has arisen as to the nature and environmental effects of the Board's action. The Board accordingly is taking the unusual step of issuing this clarifying Opinion.

What is a provisional variance?

The Environmental Protection Act now provides for two types of variances "regular" variances and provisional variances (Sections 35-38), although it originally provided only for the "regular" variance. Regular variances can last up to 5 years. Provisional variances can last no longer than 45 days, renewable for a total of only 90 days in any calendar year. The purpose of variances is to allow a source to lawfully operate during a period in which it is, for example, upgrading equipment to meet pollution control standards. The "price" to the source of receiving a variance is commitment to conditions of operation to minimize pollution during that period.

The Board has up to 120 days to process and to decide requests for "regular variances". The "regular" variance, procedures require the publication of newspaper notice that a variance request has been filed, and the holding of a public

hearing if a timely request for a hearing is made.

The provisional variance procedure was created by the legislature in 1980 to solve a problem that was created by the very procedures designed to maximize public input into the variance process. Simply, on some occasions sources are faced with temporary and unexpected situations which would be long over before the "regular" variance procedures could be completed. Under these circumstances, a source could not receive Board review and approval of measures it might wish to take to minimize pollution, and by the same token the state could not require that specific steps be taken during the period of non-compliance.

So provisional variances were created to bypass the more complicated variance procedures for use in short term and emergency situations. The provisional variance request is made to the Agency, and not the Board. The Agency investigates the situation, determines whether an "arbitrary or unreasonable hardship" exists, and decides what conditions are needed to minimize environmental damage. The Agency has 30 day to process the request. If it decides that a provisional variance should be granted, the Agency, and not the Board, in a formal finding states that grant of variance is warranted. The Agency then sends the Recommendation to the Board, which has 2 days to act upon the Agency recommendation.

The Board reads the provisional variance portions of the statute as limiting its review to legal questions as the shortness of the two day review period indicates legislative intent that the Board defer to the Agency's technical expertise in these limited timeframe areas.

The facts of this case

In summary, the purpose of Commonwealth Edison's provisional variance request was to allow time to do needed maintenance work on its waste water treatment plant (WWTP) Outfall 001(a) at its nuclear fueled steam electric generating facility located on Lake Michigan at Zion, Illinois. The variance allows Commonwealth Edison to remove this Outfall for a maximum of 45 days from service and to reroute the water normally treated there to Outfall 001(e) (Unit 1 oil/water separator). A direct comparison of "before and after" the grant of variance discharge limits is not at present physically possible; direct comparison of numbers produces an "apples and oranges" result.

The discharge from Outfall 001(a) is normally permitted to allow a monthly average discharge, measured at the "end of the pipe" of 15.0 mg/l of oil and grease and 15.0 mg/l of total suspended solids. Due to the configuration of existing equipment, the oil and grease TSS concentrations of existing equipment, the rerouted wastewater cannot be measured at the "end

of the pipe" where it leaves the oil/water separator. Instead, under the variance, it is being measured at a fire sump prior to entry into the oil/water separator. At this point, prior to entry into the separator which is expected to remove approximately 80% of oil present in wastewaters (Agency Rec. Par.6), the maximum allowable monthly average concentrations of oil and grease and TSS under the variance are 75 mg/l.

In summary, if the oil/water separation works as intended, the actual discharge to the Lake will not exceed 15 mg/l during the pendency of the variance. As mentioned earlier, the current permit allows a discharge of 15 mg/l.

The variance Order provides that Commonwealth Edison is required to maintain use of the oil water separator, and to:

perform all work as to return its Outfall 001(a) to service as soon as possible to minimize the period of time that the facility is out of service and operate its plant during the term of this provisional variance in a manner that assures the best effluent practicable; (Board Order of November 29, 1990, Conditions 3,4).

As part of the "best effluent practicable" condition

The [Commonwealth Edison Zion] station is committed to taking the following actions to reduce the generation of wastewaters and minimize any environmental impact while repairs to the WWTF are performed:

1. The station has minimized demineralizer regenerative wastewaters because its permanent demineralizers are not being used. The station is making demineralized water with a mobile package system which has its resin beds regenerated off site. However, these mobile demineralizer require occasional flushing.
2. Instructions will be given to all station personnel to reduce wastewaters resulting from station activities.
3. Temporary oil collection devices, i.e., oil booms, will be used throughout the station to contain oil from getting into the wastewaters.

4. The wastewaters will be temporarily routed to the Unit 1 oil/water separator for treatment prior to discharge. (October 3, 1990, Commonwealth Edison letter, p. 3).

This variance was granted by the Board based on statements made by the Agency, after its analysis of information supplied by Commonwealth Edison and after its two inspection of the Commonwealth Edison facility, that:

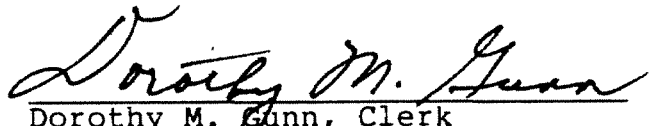
1) Outfall 001(a) of the wastewater treatment plant was "in critical need of some maintenance repair work" (Agency Rec, Par. 3);

2) "the Agency agrees that the environmental impact on Lake Michigan should be minimal", based on its agreement with Commonwealth Edison's statement that it expects the environmental impact to Lake Michigan to be negligible due to the relatively small wastewater discharges involved, and because Unit 1 oil/water separator will provide treatment for oil" (October 3, 1990, letter, p. 2); and

3) "the Agency believes that the petitioner has chosen the best alternative for correcting the problem and preventing catastrophic tank failure" (Agency Rec. Par. 8).

J.D. Dumelle dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Supplemental Opinion was adopted on the 20th day of December, 1990, by a vote of 6-1.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board