ILLINOIS POLLUTION CONTROL BOARD June 5, 1997

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PCB 97-159 (Variance - Water, NPDES)

OPINION AND ORDER OF THE BOARD (by R.C. Flemal):

This matter comes before the Board on the petition for variance filed by Central Illinois Public Service Company (CIPS or petitioner) on March 17, 1997. CIPS seeks a five-year variance from the thermal standards applicable to Newton Lake which were adopted on August 21, 1980 in PCB 78-271. Newton Lake is an artificial cooling lake located at CIPS' Newton Power Station in Jasper County, Illinois. CIPS waived hearing in the petition. Accordingly no hearing was held on the petition.¹

On April 21, 1997 the Illinois Environmental Protection Agency (Agency) filed its variance recommendation. The Agency recommends that the variance be granted, subject to certain conditions despite its reservation about the lack of economic information provided by CIPS in the petition.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 *et seq.* (1994)). The Board is charged therein with the responsibility to "grant individual variances beyond the limitations prescribed in this Act, whenever it is found upon presentation of adequate proof, that compliance with any rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship." (415 ILCS 5/35(a) (1994).) The Agency is required to appear in hearings on variance petitions. (415 ILCS 5/4(f) (1994).) The Agency is also charged, among other things, with the responsibility of investigating each variance petition and making a recommendation to the Board as to the disposition of the petition. (415 ILCS 5/37(a) (1994).)

¹ On April 4, 1997, the Board received a letter of objection and request for hearing from Marvin Elmore of Wheeler, Illinois and Adolph Zumbahlen of Newton, Illinois. On April 29, 1997, the objectors filed a motion to withdraw the objection and request for hearing. The Board granted the motion to withdraw the objection on May 1, 1997.

For the following reasons, the Board finds that CIPS has presented adequate proof that immediate compliance with the thermal standards for Newton Lake would result in the imposition of an arbitrary or unreasonable hardship. Accordingly, the variance is granted, subject to conditions set forth in the attached order.

BACKGROUND

CIPS is an investor-owned electric and gas public utility, providing service to central and southern Illinois. (Pet. at 5.) Electrical service is supplied to 315,000 customers in 557 communities in a 21,000 square mile area. (Pet. at 5.) CIPS employs approximately 2350 people. (Pet. at 5.)

Newton Lake is an artificial lake constructed between 1973 and 1975 by CIPS for the purpose of providing cooling water for two 600 megawatt generating units operated at the Newton Station. (Pet. at 1.) The current thermal standards applicable to Newton Lake are as follows:

The thermal discharge to Newton Lake from Central Illinois Public Service's Newton Power Station shall not result in a temperature, measured at the outside edge of the mixing zone in Newton Lake, which exceeds 102 degrees Fahrenheit as a monthly average and 111 degrees Fahrenheit as a maximum.

CIPS is requesting that the current thermal standards applicable to Newton Lake be changed to the following:

The thermal discharge to Newton Lake from Central Illinois Public Service's Newton Power Station shall not result in a temperature, measured at the outside edge of the mixing zone in Newton Lake, which: 1) exceeds 106 degrees Fahrenheit as a monthly average and 111 degrees Fahrenheit as a maximum from June through October for more than 3% of the hours during the same period; and 2) exceeds 102 degrees Fahrenheit as a monthly average and 111 degrees Fahrenheit as a maximum from November through May.

The requested variance seeks a higher monthly average during the months of June through October.

CIPS is currently able to comply with the current thermal limits for Newton Lake. (Pet. at 6.) The requested variance would allow CIPS to operate the Newton Station at higher generation levels in the summer months when demand for electrical power is higher. (Pet. at 6.)

REGULATORY FRAMEWORK

In determining whether any variance is to be granted, the Act requires the Board to determine whether a petitioner has presented adequate proof that immediate compliance with

the Board regulations at issue would impose an arbitrary or unreasonable hardship. (415 ILCS 5/35(a) (1994).) Furthermore, the burden is upon the petitioner to show that its claimed hardship outweighs the public interest in attaining compliance with regulations designed to protect the public. (Willowbrook Motel v. IPCB, 135 Ill. App. 3d 343, 481 N.E.2d 1032, (1st Dist. 1977).) Only with such a showing can the claimed hardship rise to the level of arbitrary or unreasonable hardship.

A further feature of a variance is that it is, by its nature, a temporary reprieve from compliance with the Board's regulations and compliance is to be sought regardless of the hardship which the task of eventual compliance presents an individual polluter. (Monsanto Co. <u>v. IPCB</u>), 67 Ill.2d 276, 367 N.E.2d 684, (1977).) Accordingly, except in certain special circumstances, a variance petitioner is required, as a condition to grant of variance, to commit to a plan which is reasonably calculated to achieve compliance within the term of the variance.

COMPLIANCE PLAN

No additional thermal controls are planned at the Newton Station. (Pet. at 6.) Assuming that the requested variance is granted, CIPS intends to petition the Board to have the interim variance limits established as permanent site-specific standards at the end of the variance period. (Pet. at 6.) No later than three years after the variance becomes effective, CIPS will request that the thermal standards of the variance be adopted in a site-specific rule. (Pet. at 3.) CIPS maintains that the variance is necessary prior to filing of a petition for a sitespecific rule to allow collection of data so that the Board need not rely on speculative presentations on the impact on the fishery in reviewing the site-specific rule. (Pet. at 3.) CIPS contends that the field data collected during the variance period will form the basis for a more compelling demonstration. (Pet. at 3.) In addition, CIPS observes that seeking a site-specific rule without the variance would mean that it would be at least two years before the lake could be operated at the higher temperature. (Pet. at 3.)

In recent years, CIPS has employed additional operational constraints to remain in compliance with current standards. (Pet. at 8.) These constraints include making the Newton units the last to be called upon to meet increased demands and the first to be backed-off when the demand drops. (Pet. at 8.) CIPS has also reduced the rate at which these units are brought up to, and down from, full capacity. (Pet. at 8.) The units have also been cycled off during weekends to lower average temperatures. (Pet. at 8.)

From 1993 through 1995, CIPS evaluated the thermal performance of Newton Lake and various alternatives that would allow for higher summer generation. (Pet. at 9.) Three cooling tower options and a supplemental cooling pond alternative were extensively reviewed. (Pet. at 9.) However, due to high initial capital costs and ongoing operating and maintenance expenses, all of the alternatives were rejected. (Pet. at 9.) CIPS believes that these costs were not practical considering the infrequent and unpredictable nature of when they would be needed. (Pet. at 9.)

HARDSHIP

CIPS maintains that the operational constraints employed to assure compliance results in substantial costs to ratepayers and shareholders. (Pet. at 9.) CIPS reports that for the period from August 8, 1995 through August 31, 1995, operational limitations cost CIPS approximately \$2,660,000 resulting from energy purchases, demand charges, and lost opportunities. (Pet. at 8.)

CIPS believes that continuing to comply with the thermal limits will result in periods where costly operational limits will have to be placed on the Newton Station. (Pet. at 11.) CIPS asserts that the current limits restrict its ability to market the full capacity of its Newton Station. (Pet. at 11.) CIPS argues that this poses an unreasonable economic hardship to its ratepayers and shareholders. (Pet. at 12.)

CIPS points to two crucial changes since the adoption of the thermal limits to support the granting of the variance. First, CIPS asserts that the 60% capacity factor on which the original standards were based is too conservative; the facility is now seeing capacity factors that run 80% or more during the summer months. (Pet. at. 2.) Second, CIPS now has almost twenty years of hard data on the fishery, where as at the time the thermal standards were established there was little data available. (Pet. at 2.)

CIPS maintains that there was no evidence introduced in PCB 78-271 that the temperatures of the thermal standards were the maximum temperatures that would support the ecosystem. (Pet. at 2.) CIPS asserts that in the action setting the thermal standards, CIPS started with the predicted temperatures and then demonstrated that these temperatures would support a balanced population of fish and wildlife. (Pet. at 2.) Accordingly, CIPS sees no reason why the temperature cannot be raised in this proceeding.

The Agency contends that it cannot comment on the estimated cost of compliance with the present standards because the petition fails to provide a cost analysis including the market value of operating at full capacity as compared to costs of continued compliance. (Pet. at 3.)

ENVIRONMENTAL IMPACT

According to the latest Department of Natural Resources Lake Status Report, the condition of fish in Newton Lake is good-to-excellent for all species. (Pet. at 6.) CIPS observes that the high temperature limits of the variance will only come into play in the summer months so the primary spring spawning months will not be affected. (Pet. at 7.)

CIPS conducted a study during the summer of 1995 to assess how well fish were coping with high discharge temperatures. (Pet. at 7.) The study revealed that fish were utilizing thermal refuges in the lake; at the thermoclines; in large coves outside the cooling path; and at areas where cooler waters enter the lake. (Pet. at 7.) CIPS expects that, during the variance, the fish will continue to utilize the thermal refuges which will be largely unaffected by an increase within the cooling loop of the lake. (Pet. at 7.)

During the variance period, a monitoring plan will be in place to evaluate any effects of higher thermal limits. (Pet. at 9.) Frequent field inspections will be conducted during the summer months to evaluate any short-term impact. (Pet. at 9.) CIPS agrees to revert back to the current limits if the conditions show that the thermal standards of the variance are causing a significant adverse impact. (Pet. at 9.)

The Agency does not believe that any adverse environmental impact will result from the variance. (Ag. Rec. at 3.) The Agency notes that it considers any fishkill to be "significant" at any one time, not for sustained periods and would consider any fishkill an adverse environmental impact. (Ag. Rec. at 3.)

CONSISTENCY WITH FEDERAL LAW

CIPS maintains that the Board has the authority to grant the requested relief consistent with the Clean Water Act (33 U.S.C. 1251 *et seq.* (1972), United States Environmental Protection Agency (USEPA) effluent guidelines and standards, and all other Federal regulations or USEPA approved management plans. (Pet. at 12.) Under Section 316(a) of the Clean Water Act, Illinois is authorized to set thermal limits to protect shellfish, fish and wildlife. (Pet. at 12.)

The Agency concurs that there are no applicable federal laws or regulations that preclude the granting of this variance. (Ag. Rec. at 3.)

DISCUSSION

The party requesting the variance has the burden of establishing that the hardship resulting from denial of a variance outweighs any injury to the public or the environment from a grant of the variance. (Caterpillar Tractor Co. v. IPCB, 48 Ill.App.3d 655, 363 N.E. 2d 419 (3rd Dist. 1977).) The petitioner must go further and show that the hardship it will encounter from the denial of the variance will outweigh any injury to the public or environment from the grant of the variance. (City of Geneva v. IEPA (March 22, 1990), PCB 89-107.)

In <u>Marathon Oil Company v. IEPA</u>, 241 Ill. App. 3d 200, 610 N.E. 2d 789 (5th Dist. 1993), the appellate court found that Section 35(a) of the Act does not require that petitioner demonstrate that it is out of compliance with the rule or regulation prior to seeking a variance. It found that "evidence presented was 'adequate proof' that continued compliance with the current water-quality standards will impose an arbitrary or unreasonable hardship". In so finding the appellate court stated that when the petitioner presents "unrefuted" evidence that it will violate the Board's rule in conducting or increasing its normal business, a hardship is established requiring the Board to determine if such hardship outweighs any injury to the environment. (<u>Marathon Oil, 242 Ill. App. 3d 200, 610 N.E. 2d 789 at 794.</u>) When deciding whether to grant or deny a variance request, the Board is required to balance the hardship of

continued compliance on the business against the adverse impact the variance will have on the environment.

The Board agrees with the Agency that the record could have contained more economic information, but nonetheless finds that CIPS has presented adequate proof of the existence of a hardship. Such economic information would have quantified the alleged hardship that CIPS asserts it would encounter were it required to continue to comply with the current thermal standard. However, the Board will not require CIPS to supplement the record with additional economic information at this point in the proceeding. The Board finds the record sufficient to support CIPS' assertion that continued compliance with the thermal standards prohibits CIPS from fully utilizing the station's capacity and limits CIPS from increasing its business.

Having determined that CIPS has presented adequate proof of a hardship, the Board must weigh that hardship against the environmental impact of the variance. The record demonstrates that the grant of the variance should not result in any adverse environmental impact. The variance only affects the thermal standards for the summer months. Throughout the period of the variance, CIPS, along with the Agency and the Department of Natural Resources, will monitor the fishery for any impact from the variance. If any impact is noticed, CIPS will be required as a condition of the variance to revert to the thermal standards as established in PCB 78-271.

Based upon the record, the Board finds that immediate compliance with the current thermal standards at the Newton Station is an arbitrary and unreasonable hardship. Further, the Board finds that CIPS hardship outweighs any anticipated impact on the environment from the variance. Therefore, the Board grants the requested variance with conditions.

Finally, the Board notes that the conclusions it reaches based upon the record of this variance proceeding do not prejudge merits of any petition for site-specific rulemaking that CIPS may file in the future. The burdens of proof and the standards of review in a rulemaking (a quasi-legislative action) and a variance proceeding (a quasi-judicial action) are distinctly different. (#<u>Cf.</u> Titles VII and IX of the Act; see also <u>Willowbrook Development v. Pollution</u> <u>Control Board</u>), 92 Ill. App. 3d 1074, 416 N.E.2d 385, (2nd Dist. 1981.) The Board cannot lawfully prejudge the outcome of a regulatory proposal in considering a petition for variance. (<u>City of Casey v. IEPA</u> (May 14, 1981), PCB 81-16, 41 PCB 427, 428.)

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

ORDER

Central Illinois Public Services Company is hereby granted a variance from the thermal standards applicable to Newton Lake as established on August 21, 1980 in PCB 78-271 subject to the following conditions:

(A) The variance commences on June 5, 1997 and terminates on June 5, 2002.

- (B) During the period of the variance, the thermal discharges to Newton Lake from the Newton Power Station may not result in a temperature, measured at the outside edge of the mixing zone in Newton Lake, which:
 - 1. Exceeds 106 degrees Fahrenheit as a monthly average and 111 degrees Fahrenheit as a daily maximum form June through October for more than three percent of the hours during the same period.
 - 2. Exceeds 102 degrees Fahrenheit as a monthly average and 111 degrees Fahrenheit as a daily maximum from November through March.
- (C) CIPS shall petition the Board for permanent site-specific relief for thermal limits within three (3) years of the granting of this variance. The petition must include a comprehensive study on what effect, if any, the higher thermal effluent limits have on Newton Lake's fishery. If a petition for site-specific relief is not filed within three (3) years or if site-specific relief is denied, CIPS must revert back to complying with the thermal limits in PCB 78-271.
- (D) If the Illinois Environmental Protection Agency or Department of Natural Resources determine that higher thermal limits have an adverse effect on the fishery, or adverse conditions such as a fishkill result, CIPS is required to revert to complying with the thermal limits as set out by the Board in PCB 78-271.
- (E) Within sixty (60) days after the variance is granted, CIPS shall submit a plan to the Illinois Environmental Protection Agency that describes the methodology which CIPS will continue to study the thermal effects on the fishery in Newton Lake with conjunction with the Illinois Department of Resources. If the Illinois Department of Natural Resources cannot conduct the study, then CIPS shall provide a contingency plan demonstrating how the study of the fishery will continue.
- (F) During the variance period, CIPS shall continue to operate its facility so as to produce the best effluent practicable.

CERTIFICATION

If CIPS chooses to accept this variance subject to the above conditions, within fortyfive days of the date of this order, CIPS shall execute and forward to:

Margaret P. Howard Illinois Environmental Protection Agency Division of Legal Counsel 2200 Churchill Road, P.O. Box 19276 Springfield, Illinois 62794-9276

a Certificate of Acceptance and agreement to be bound to all terms and conditions of the granted variance. The 45-day period shall be held in abeyance during any period that this matter is appealed. Failure to execute and forward the certificate within 45-days renders this variance void and of no force and effect as a shield against enforcement of rules from which this variance is granted. The form of the certificate is as follows.

I (We), ______, hereby accept and agree to be bound by all terms and conditions of the order of the Illinois Pollution Control Board in PCB 97-159, June 5, 1997.

Petitioner

Authorized Agent

Title

Date

IT IS SO ORDERED.

Board Member K.M. Hennessey abstained.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1994)) provides for the appeal of final Board orders to the Illinois Appellate Court within 35 days of the date of service of this order. The Rules of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill. Adm. Code 101.246 "Motions for Reconsideration.")

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 5th day of June, 1997, by a vote of 6-0.

Dorothy M. Jun

Dorothy M. Gunn, Clerk Illinois Pollution Control Board