ILLINOIS POLLUTION CONTROL BOARD July 18, 1974

CITIZENS FOR A BETTER ENVIRONMENT COMPLAINANT)))	
V •)))	PCB 73-245
COMMONWEALTH EDISON COMPANY RESPONDENT)))	
COMMONWEALTH EDISON COMPANY COMPLAINANT)))	
V .))	PCB 73-248
ENVIRONMENTAL PROTECTION AGENCY RESPONDENT)	

MR. SHERWOOD L. LEVIN, ATTORNEY, in behalf of CITIZENS FOR A BETTER ENVIRONMENT

MESSRS. A. DANIEL FELDMAN AND MARK H. VIRSHBO, ATTORNEYS, of ISHAM, LINCOLN & BEALE in behalf of COMMONWEALTH EDISON COMPANY MR. DELBERT HASCHEMEYER, ASSISTANT ATTORNEY GENERAL, and MESSRS. THOMAS CASPER AND ROBERT KRUG, ATTORNEYS, in behalf of the ENVIRON-MENTAL PROTECTION AGENCY

OPINION AND ORDER OF THE BOARD (by Mr. Marder)

PCB 73-245 comes to the Board on complaint of Citizens for a Better Environment (hereinafter referred to as CBE), charging Commonwealth Edison Company (hereinafter referred to as Edison) with violation of Rule 903 (a) of Chapter 3 of the Board's Rules and Regulations, alleging failure to have a valid operating permit after January 1, 1973, for its Kincaid Power Generating Station. The complaint was filed June 13, 1973.

PCB 73-248 comes to the Board on Petition of Edison, appealing the denial of an operating p_{ℓ} mit for its Kincaid Generating Station by the Illinois Environmental Protection Agency (hereinafter referred to as the Agency), filed June 14, 1974.

In its Petition, Edison alleges that a permit application was filed February 14, 1973, and that the application showed no apparent violations of the Environmental Protection Act (Ill. Rev. Stat. Chap. 110 1/2, Sec. 1001 et seq.) or the Rules and Regulations of the Pollution Control Board. The Petition further alleges that the application was

denied by letter dated May 11, 1973. The denial letter stated the application filed did not contain adequate information as to the discharges from Edison's Kincaid plant to Lake Sangchris. Edison alleges in its Petition that the effluent requirements of Chapter 3 must be met where Lake Sangchris discharges into Clear Creek, and not at the discharge to the lake, because the lake is a "treatment works."

On June 22, 1973, CBE moved to consolidate these two actions and intervene in the permit appeal case. The Board, in a 3-0 decision, allowed consolidation but denied intervention on June 28, 1973.

On July 19, 1973, CBE renewed their Motion for Intervention. This motion also was denied by the Board (4-0).

September 10, 1973, CBE again renewed their Motion to Intervene. On September 28, 1973, the Agency filed a reply agreeing intervention would be proper.

On October 18, 1973, the Board allowed intervention by CBE in 73-248, by a vote of 5-0.

The Agency filed its answer in PCB 73-248 October 9, 1973. The Agency stated in its answer that the permit was denied because the plant could not meet the effluent requirements of Rule 203 (i) (3) (thermal) at the point of discharge to the lake. There was also insufficient information for the Agency to determine if the effluent from the ash and neutralizing lagoons would meet the Chapter 3 requirements for effluent to the lake. The Agency claims that the lake is a "water" as defined in Rule 104 of Chapter 3.

Edison filed its answer in PCB 73-245 on November 27, 1973, alleging that it had made an original permit application on November 5, 1971, which it renewed in its February 14, 1973, application.

The Kincaid Generating Station is located in Christian County, near the town of Kincaid, Illinois. It is a two-unit steam boiler and turbine and generating station with a capacity of 1232 megawatts (R. 56). The station was erected in this location because of its proximity to Peabody Coal Mine #10 (R. 58). One of the important considerations for the placement of the station was its proximity to an available source of coal to supply the station (R. 58).

In order to condense steam used in the turbine back to water, large amounts of cooling water are needed to supply the condensers in the plant. To supply this cooling water Edison built a 2660-acre lake (R. 56). Lake Sangchris is the lake in question. The lake was built by damming up Clear Creek, a tributary of the Sangamon River, about one mile south of its confluence with the Sangamon River (R. 61). The Clear Creek watershed is 73 square miles (R. 61). The impoundment began in September of 1964 and the lake was filled to its desired level in June of 1966 (R. 62). The dam was built pursuant to permit #10252 issued February 21, 1964, by the Illinois Department of Public Works and Buildings, Division of Waterways (Edison Exhibit #3).

PCB 73-245

"Sec. 903 Operating Permits: Existing Treatment Works and Wastewater Sources

(a) No person shall cause or allow the use or operation of any treatment works or wastewater sources after December 31, 1972, without an Operating Permit issued by the Agency..."

CBE presented as their opening statement and only testimony in this case the facts that: 1) Edison admitted in their answer filed November 27, 1973, that the Kincaid Generating Station operated without an operating permit after January 1, 1973 (R. 13); 2) Edison answered to a request for admission of fact filed August 29, 1973, that Edison discharged non-contact cooling water and other discharges to Lake Sangchris and that Edison had no permit issued by the Agency after January 1, 1973 (R. 16).

With this, CBE rested its case.

The question of violation of Sec. 903 of the Rules turns upon the fact of whether the Agency's denial of an operating permit to Edison for the Kincaid Station was proper.

PCB 73-248

The basic question to be decided here is if Lake Sangchris is a "water" under the definition provided in Rule 104 of Chapter 3. If Lake Sangchris is such a water, then the Agency did not err in denying the permit, as the testimony at hearing shows that Rule 203 (i) (3) would not be complied with (R. 178, 275). Also, it would appear that there was inadequate data in the application to determine if the ash lagoon and neutralizing pond effluent would comply with the Regulations.

As mentioned above, the prime reason for locating the Kincaid station at its present site was the availability of coal from Peabody Mine #10. Another consideration in site selection was the availability of sufficient water to be used for condenser cooling. Edison had the choice of damming up either Clear Creek or Horse Creek to form the lake (R. 61). Clear Creek was chosen upon the advice of Mr. Richard Bergstrom of the engineering firm of Sargent and Lundy. He considered Clear Creek to be the better site for the dam for a number of reasons. The first reason was that the damming of Clear Creek would have the least effect on the population centers in the area (R. 153). A second reason expressed was the fact that the Horse Creek drainage area had land within it that was good for agriculture and future residential development (R. 153). The Clear Creek drainage basin was noted to be in a depressed condition because of oil wells in the area, plus sinking spots from subsidence caused by the oil pumping and coal mining (R. 66, 154).

Clear Creek drains 73 square miles (R. 98). There are no actual flow monitors on Clear Creek (R. 96). Dr. William L. Ackermann of the Illinois State Water Survey computed the flow characteristics of Clear Creek,

based on similar streams in the area. He found that Clear Creek would have a zero flow on the average of 63 days per annum (R. 97). Three out of four years this zero flow would exist for seven consecutive days (R. 98).

The choice of using a cooling lake developed because, as Mr. Bergstrom testified, Central Illinois is water deficient (R. 155). This area has quite a few manmade lakes (reservoirs) just to supply drinking water to the population centers of the area (R. 155). He felt that cooling towers were not an alternate method to using the lake, because of the lack of available "makeup" water (R. 161). There are also two types of lakes that could have been used. The first is the type eventually used, a dam lake, which is formed by backing up water of a stream to form a reservoir. The other type of lake is a "perched" lake, which is formed by diverting part of a passing stream to form an impoundment (R. 162).

The lake itself is a three-channel lake with the power station at the south end of the lake (Edison Exhibit #9). Intake from the lake to the plant is from the west channel. Outfall from the plant is to a discharge canal that empties into the center finger of the lake (R. 63).

On February 16, 1969, Edison entered into an agreement and quitclaim deed conveying the land surrounding the lake to the Illinois Department of Conservation, subject to conditions in the agreement as a fee simple determinable (R. 65). The agreement, Edison Exhibit #4, specified that the state must use the land for park and recreational purposes, or the title would revert back to Edison. Edison also maintains certain rights of entry and control of the property, in order to maintain the integrity of the property and to guarantee no uses of the property will interfere with the operation of the Kincaid Station.

Sangchris State Park, operated by the Department of Conservation, consists of the lake itself and 1500 acres of land surrounding the lake, with 100 miles of actual shoreline (R. 108). In its agreement with Edison, the state took on the responsibility of developing and maintaining the park (R. 109). One of the first improvements made by the department was stocking the lake with bass, bluegills, crappies, and channel catfish (R. 110). There has also been work done to develop a wildlife food preserve for waterfowl such as ducks and geese that stop while migrating (R. 111).

Mr. Jerry McDonald, District Land Manager for the Department of Conservation, stated that he feels Sangchris Lake is a fishing "hotspot" (R. 117). Boat landings and launch ramps have been installed (R. 117). Fishing is best at Sangchris during the colder part of the year (December, January, and February), as opposed to most lakes in the area where fishing is best in the warmer months (R. 112).

Extensive tree planting is being carried out by the department. With the cooperation of the Boy Scouts 240,000 trees are to be planted (R. 112). There are also plans for campgrounds, picnic areas, and shelters (R. 114). Plans in the future call for public drinking water supplies

throughout the park, along with sanitary facilities and wastewater treatment facilities (R. 155). Projections for use-growth figures were submitted by Mr. McDonald in Edison Exhibit #24. Mr. McDonald states that in his professional opinion Sangchris State Park is an important outdoor recreational resource that will become more so as use and demand increase (R. 117).

Frank Bender is president of the Springfield Sportsmen's Conservation Club, "a group dedicated by pledge to faithfully defend from waste the natural resources of our country, its air, its forests, waters and wildlife" (R. 125). As president of this group, he spoke for it in saying that the club would want Edison to continue its warm water discharge into Sangchris Lake (R. 126). This discharge allows the lake to be used for winter as well as warm weather fishing (R. 126). Mr. Bender used to hunt in the land that is now Sangchris Lake, and the only life he noted in Clear Creek was crayfish and crawdads (R. 127). He presently rates Sangchris as the best crappie and bass lake in the State of Illinois (R. 127). He feels that if thermal discharges were ended, there would no longer be winter fishing in the lake (R. 129). He feels that there is no "pollution in the lake (R. 129) and feels that the Board shouldleave well enough alone" (R. 129).

Michael Groppi, an engineer assigned to the Mechanical and Structural Engineering Department of Edison, testified as to alternate methods of control at the Edison plant, should such alternates be required. He listed three methods that can be used to cool the condenser cooling water: 1) mechanical draft cooling towers, 2) natural draft cooling towers, 3) a spray canal.

Each of the above methods would require approximately 30 to 44 months to complete from the time authorization is granted until operation commences. The entire station would also be required to shut down for about one month to facilitate tie-ins (R. 178).

Mechanical Wet Draft Cooling Towers:

To backfit the Kincaid Station with this type of cooling, three towers would be needed, each 60 feet high, 75 feet wide, and 360 feet long. A new booster station to bring water up to the towers would also be required. Maximum makeup water for the towers (makeup is needed because of blowdown and drift losses) would be 28.4 cfs (R. 182).

Mr. Groppi also addressed the problem of formation of sulphuric acid mist. He stated that due to the mingling of sulphur dioxide (and its oxidized form of SO₃) and water vapor from the towers, a possibility of sulphuric acid mist formation exists. Mr. Groppi felt that this problem would exist in greater or lesser degrees in all three alternates.

The costs for backfitting of the Kincaid Generating Station with Mechanical Draft Towers were alleged to be as follows:

Actual capital investment \$17.6 million

Loss of capacity (because of back pressure and power needed to run new equipment) in equivalent investment dollars

6.4 million

Operating expenses in equivalent investment dollars

1.2 million \$25.2 million

(R. 184)

Natural Wet Draft Cooling Towers

Backfitting the station with this type of cooling device would require one tower 460 feet in diameter with a height of 500 feet. A booster pump station would be needed to pump water to the tower. Also, it is alleged that makeup water for this type of tower would be the same as for the mechanical draft tower. It is also alleged that the sulphuric acid mist problem could exist with this type of tower, and because of the tower's height, the possibility of the plumes merging would be increased. The alleged costs are as follows:

> Actual capital investment \$21.2 million

Loss of capacity (due to back pressure and power needed to operate equipment) in equivalent investment dollars

9.3 million

Operating costs in equivalent investment dollars

1.1 million \$31.6 million

(R. 185-187)

Spray Canal

The third method discussed was a spray canal, which would have to be 7600 feet long and contain 130 spray modules. Makeup water would be the same as for the other two devices. There would only be a marginal problem of sulphuric acid mist developing from the use of the spray canal.

The alleged costs are as follows:

Actual capital investment \$31.8 million

Loss of capacity (due to back pressure and power needed to operate equipment) in equivalent investment dollars

5.9 million

Operating costs in equivalent investment dollars

.7 million \$38.4 million

(R. 188-190)

Mr. Groppi went on to state that Edison does not advocate the use of any of these control methods for thermal discharges, but puts them forth only to show that the alternatives have been considered and what problems and expense backfitting of the station would entail (R. 191).

Edison also offered testimony that it is technically impossible for it to monitor effluent from its ash lagoon and neutralizing pond because of their intermittent flow and because of the way they discharge into the cooling water discharge canal, and because of the difficulty in treating these streams before discharge to the lake (R. 214-215, 222). It is alleged by Edison that should these streams be pretreated, it would be 48 months before completion of the project and would cost Edison \$14 million (R. 218).

Upon the start of the lake's operation, Edison began monitoring the lake (R. 242). Edison retained Limnetics, Inc., of Milwaukee, Wisconsin, to conduct a study of the lake and gather base line data of the lake for future studies (R. 242). Concurrent with this study, the Illinois Department of Conservation is doing a creel census on the number of fish taken in the lake (R. 244).

In May of 1973, Edison retained the Illinois Natural History Survey to do an extensive four-year research program at the lake (R. 246-247). Along with this research, the Survey conducted a literature search and comparative study of Sangchris Lake, along with Lake Decatur, Evergreen Lake, Lake Lou Yaeger, Lake Springfield, and Lake Taylorville (R. 246, Edison Exhibit #21).

Edward Juracek, staff biologist with Edison, stated that it is concluded from the report that Sangchris Lake is on or above par with the rest of the reservoirs surveyed (R. 246).

According to Mr. John Tranquilla of the Natural History Survey, the extensive study of the lake will consist of bi-weekly monitoring of a full range of chemical, physical, and biological parameters, and monthly monitoring of benthic organisms and fish (R. 247, 303).

The survey will provide Edison with quarterly raw data reports, semi-annual reports with some interpretation, and annual reports with full analysis to date (R. 313).

Concurrent with this study the Department of Conservation will be running limited fish management experiments (R. 249).

The Limnetics study cost Edison \$125,000, and the Natural History Survey will cost about \$625,000 (R. 250).

The Limnetics survey was conducted under the supervision of Rodney Harmsworth (R. 258). Mr. Harmsworth was not able to testify in person at the hearing, as he was out of the country, but a prepared statement was introduced and admitted into the record without any cross-examination.

He states that sedimentation in the lake has been normal for a lake the age of Sangchris, and poses no threat to the longevity of the lake $(\mathbb{R}, 260)$.

The maximum lake temperature measured was 100.4°F. (R. 260). Dissolved oxygen in the water is sufficient to support an extensive and diverse aquatic biota (R. 261). A lack of dissolved oxygen in the lower levels of the lake during the summer months was noted. This was caused by temperature gradients in the water that stop the normal movement of water to the surface for reoxygenation (R. 263). This situation would exist with or without the thermal discharge from the plant (R. 264). The study also shows that there are sufficient nutrients to support good algal, zooplankton, and fish populations (R. 264). There have been no nuisance algae blooms reported in the lake (R. 265). Sport fish have been improving over the period of the study.

It takes 2 1/2 miles for water that is warmed 20°F. above ambient, at the discharge point, to cool to 5°F. above ambient (R. 271).

Mr. Juracek states that in his professional opinion he expects to find lower incidence in fish disease, fish growing at $1\ 1/2$ to 2 times their normal size, and no adverse effects on aquatic biota in the lake (R. 280-281).

Mr. Harmsworth stated that in his professional opinion the lake is of good environmental quality (R. 271).

Mr. Bergstrom stated that in his professional opinion the damming of Clear Creek did not hurt the state's waters, but in fact improved them (R. 160).

The Agency offered no evidence other than the application filed by Edison.

The discussion of the evidence presented at hearing is being considered in relationship to the enforcement case, PCB 73-245. Under the Environmental Protection Act, the Board has wide discretion in writing its orders. The Board must take into consideration all the facts and circumstances bearing upon the reasonableness of the emissions, discharges, or deposits involved. Ill. Rev. Statutes, Chap. Ill 1/2, Sec. 1033 (c). Therefore, all the testimony submitted at hearing is being considered in writing an appropriate order as required under the Act.

Much of the above testimony is of little value in our determinations regarding the permit appeal case. The permit case rests solely on whether the Agency properly denied Edison an operating permit, and such determination can only be based on whether the Agency properly interpreted the intent of the applicable rules and regulations.

As mentioned above, the major question to be considered is whether Sangchris Lake is a water under Rule 104 of the Water Regulations.

Chapter 3 of the Board's Rules and Regulations was promulgated under the authority of Sec. 13 of the Environmental Protection Act. These regulations are enforceable under Sec. 12 (a) of the Environmental Protection Act, which states that,

"No person shall cause or threaten or allow the discharge of any contaminant into the environment in any state so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matter from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board under this Act." (emphasis added)

The Rules were adopted to basically protect "waters" of the State. Section 3 (b) of the Environmental Protection Act defines "waters" as,

"all accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this State."

The definition of waters in Chapter 3 of the Rules is more limited than the statutory definition. It provides that waters under the Sec. 3 (o) opinion are waters subject to the exception that,

"sewers or treatment works are not included, except as specifically mentioned; provided that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works, except that instream aeration under Agency permit is allowable."

The Board decides "water" cases on a case by case basis (Central Illinois Public Service Co. v. Environmental Protection Agency, PCB 73-384). This is done because no hard and fast rule can be set down as to what a water under the Rules is. It is very easy to define in the cases of bodies such as Lake Michigan or the Illinois River, but as one moves down the continuum of waters to the smallest streams or to different types of water bodies, a study of the facts in each case is the most appropriate to making a reasoned determination.

The Board finds that Clear Creek was and is a water of the State. It fits into the definition of both the Act and the Rules. Even though, as Dr. Ackermann testified, there are 63 days per annum where one would expect a zero flow (supra.), the Board's Rules do contemplate regulation of intermittent streams. Our Rule 302 (k) provides that certain intermittent streams under certain conditions could be classified as secondary contact rather than general use waters. The intent of this rule clearly indicates that in promulgating these regulations, a stream such as Clear Creek was intended to be covered by the Regulations, and a permit would have been needed to discharge into Clear Creek itself.

Having found that Clear Creek was and is in its present form a protected water, the Board cannot allow a person to change the character of a protected water by simply damming it up and thusly claiming it is no longer protected. One could extend the logic of any other Board determination to say that by damming up the Illinois or Sangamon River and creating a lake, that such a lake would not have to meet the effluent or water quality standards. Though this is an extreme example, it is the type of concept and premise that the Board can not allow.

The above finding leads the Board to the conclusion that Clear Creek is not only a natural water, but a protected one, and thusly takes Lake Sangchris out of the Rule 104 exemption for "treatment works."

The treatment works exemption was placed in the Rules at the suggestion of Edison in testimony elicited at the time that Chapter 3 was promulgated. In that proceeding (R71-14) testimony of Dr. Wesley Pipes was offered by Edison. Dr. Pipes testified that the statutory and the originally proposed definition of water would tend to include water in waste treatment facilities (Sept. 9, 1971, R 347-356). This, he felt, would include: cooling ponds, oxidation ponds, tertiary treatment lagoons, and farm ponds. The Board agreed with Dr. Pipes. Cooling ponds were specifically included in the treatment works exemption by adding "waste energy" to the definition of industrial wastes. This was as far as the Edison proposal went at that time.

Dr. Pipes then went on to discuss the consequences of his requests, should they be incorporated in the regulation. He stated,

"The net effect of these proposed changes would be to create implicitly a new Water Use designation: 'Waste Water Treatment Facilities Waters.' Without more, the waters which fit this designation would not be required to meet any water quality criteria, except indirectly as the quality of water in the treatment facilities might cause effluent criteria to be violated. One could contend with strong factual support that the water in any private lake, pond, or stream contains some waste materials and was changing in quality and therefore fit this designation. The changes which I have suggested in the proposed regulations could in the long run provide a mechanism by which all private waters of the State would be exempt from application of any of the criteria of the proposed regulations contrary to the Board's apparent intention and to mine in making the suggestions.

"I believe that waste treatment and disposal is an appropriate use for some of the waters of the State. However, the use of waters for waste treatment and disposal should be regulated and controlled so that pollution, that is, interference with other uses, of other waters does not occur. The Board should be very careful to avoid a situation in which more and

more waters of the State might each year find themselves in the implicit category of Waste Water Treatment Facilities Waters and accordingly exempt from meeting the criteria established for other water use designations."

(Sept. 9, 1971, pp. 351-353)

The Board put the natural and protected waters exception to the treatment works exemption in order to protect the waters of the state from the possible impact as discussed by Dr. Pipes.

Just changing the configuration of a "water" does not change that "water" under the Regulations. Sangchris Lake is in effect Clear Creek. It is a treatment work created by the natural and protected waters of the state. As such, it falls under our Chapter 3 regulations.

It should be noted that this logic is not set out just to control cooling lakes such as Edison's. This interpretation applies to any kind of treatment facility made of natural and protected waters. Thermal energy itself is not being controlled alone. These rules are meant to protect the waters of the state from all other contaminants deemed to be harmful to the environment.

Even if a water of the state is materially changed, as far as regulations promulgated by the Board are concerned, that body will continue to be a "water" of the State. The rule stated above is similar to that of federal law relating to navigable waters. In the federal case law, once a body is classified as a navigable water, it will so remain.

Economy Light & Power Co. v. United States, 256 U.S. 113, 123 (1971), Ashwander v. Tennessee Valley Authority, 297 U.S. 288, 329 (1938). The Board does not use the federal law as controlling, but we do cite this as an example of power exercised by governmental units of the waters in their dominion.

It is the finding of the Board that Sangchris Lake is a "water" of the state under the Chapter 3, Rule 104, definition. Though it is used as a treatment work, as evidence has shown, it is constructed from and remains natural and protected waters. Commonwealth Edison is in violation of Rule 903 (a) of Chapter 3 for failing to have a valid operating permit for the Kincaid Generating Station. Since Edison failed to supply an application to the Agency with enough information to determine whether the Edison discharges comply with the Regulations, at the point they enter Sangchris Lake, the Agency did not err in denying Edison a permit, and so the permit appeal filed by Edison will be denied.

The evidence presented in this matter shows that Edison had and continues to have a great interest in preventing a degradation of the environment with its Kincaid Station. The evidence shows that Edison took a depressed piece of land and built a lake that the Department of Conservation considers a great recreational asset to the area. Edison also has taken steps to maintain adequate information as to the environmental condition of the lake. The evidence further showed that not

only is the lake an improvement over the previously existing waters, but it is possibly a better lake than natural lakes of its size and location.

Edison built this lake before our Chapter 3 rules were adopted to provide what in its opinion was the best possible method of providing cooling water at the time. To retrofit the station with cooling towers or with a spray canal may be unreasonable, considering the costs involved, and the potential environmental impact. The Board neither endorses nor bans cooling lake technology as a method of providing adequate cooling water for electric generating stations. In this Opinion the Board is enforcing a regulation that it adopted in the manner consistent with the intent behind the Regulations.

At this point there are two forms of relief open to petitioners before the Board, should Edison feel that compliance with the applicable rules is arbitrary or unreasonable, or should Petitioner feel that the regulations themselves are unreasonable. The Environmental Protection Act allows the Board the option of granting variance upon proof that a rule would impose an arbitrary or unreasonable hardship on Petitioner. Such a variance can be extended from year to year upon a showing of an attempt to comply (compliance plan) (Environmental Protection Act, Sect. 35-36). The Environmental Protection Act also has provision to allow any person to file with the Board a proposal for regulatory change. Should Edison feel that the applicable rules and regulations on the broad terms laid down are arbitrary as they apply to the particular type of situation with which they are faced, grounds for regulatory change may exist (Environmental Protection Act, Section 27). Exceptions from a major regulatory concept have been written into many Board regulations to reflect particular problems, and this Board is fully cognizant of its responsibilities to review its regulations when just cause is shown.

Such an exemption is presently in the proposed stage. As part of the adoption of the NPDES system by the state, Rule 410 is being considered. This rule, if adopted, would reflect the considerations of Sec. 316 of the FWPCA. 410 (c) as currently proposed, reads as follows:

"The Standards of Chapter 3 should apply to thermal discharges, unless, after public notice and opportunity for public hearing, in accordance with Sec.
316 of the FWPCA and applicable federal regulations,
the Administrator or the Board has determined that
different standards should apply to a particular
thermal discharge."

It is conceivable that should this rule be adopted, the Board would find that Edison's thermal discharge to Lake Sangchris should be given in essence a long-term permit to continue discharging.

Because of the rather unique situation surrounding this enforcement action, the Board has very carefully considered what type of order to issue. From the facts elicited, there has been no environmental dam-

age proven; in fact, Edison is attempting to further prove that no damage can be reasonably expected to occur. The social benefit to the community, from testimony elicited, would seem to far outweigh any wrongs which may have been incurred by operation without a permit. From considerations such as these, and being fully cognizant of the dictates of Section 33 (c) of the Environmental Protection Act, the Board sees no value in imposing a monetary penalty and will not order such payment.

However, to insure the integrity of our regulatory scheme, an order to cease and desist violations must be issued. Such an order must take the form of ordering Edison to take whatever steps are necessary to obtain an operating permit. The Board will allow significant time and options to Edison to conform with this order. Such time is being granted due to the complexity of the problem, and to allow Edison to gather and sort out data which will allow it to better judge which option will best suit its needs.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

ORDER

IT IS THE ORDER of the Pollution Control Board that:

PCB 73-248:

Petition of Commonwealth Edison Company requesting the Illinois Pollution Control Board to reverse the decision of the Environmental Protection Agency in its denial of an operating permit for Edison's Kincaid Generating Station is denied.

PCB 73-245:

- A. Respondent, Commonwealth Edison Company, is found in violation of Rule 903 (a) of Chapter 3 of the Board's Rules and Regulations.
- B. Respondent, Commonwealth Edison Company, shall within one year of the date of this Order cease and desist the violation of Rule 903 (a). Compliance with such cease and desist order shall consist of:
 - 1. Conformance with the applicable rules and regulations, or any other rules promulgated by the Board pursuant to Sec. 316 of the FWPCA, and receipt of an operating permit for the Kincaid Station, or,
 - Receipt of a variance from this Board after meeting the criteria of Title 9 of the Environmental Protection Act and Part IV of the Board's Procedural Rules, or,
 - 3. Grant of a regulation change by this Board pursu-

ant to Title 7 of the Environmental Protection Act and Part II of the Board's Procedural Rules.