



*Rochester Committee  
for Scientific Information  
Rochester, NY*

*RCSI Bulletin 51  
Three Notes on Current Issues*

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May 1969*

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1. THE PAUSE AT CAYUGA

Recent press reports stated that the work on the Bell Nuclear Power Plant on Lake Cayuga has been suspended by the New York State Gas and Electric Company, while consideration is given to additional safeguards against thermal pollution. The reports mentioned only cooling towers, and it is not known whether pumped storage (R.C.S.I. Bulletin, February 1969) is also being considered.

The decision was made by the power company alone, as far as can be learned from public information. R.C.S.I. investigations some months ago led to the conclusion that there was no effective regulatory mechanism, and that the decision to build or halt rested with the power company.

The pause is probably due to the pressure of public opinion mobilized through the work of a science information group. Two pamphlets issued by the "Citizens to Save Cayuga Lake" (on Thermal Pollution and Radioactivity) were distributed to R.C.S.I. members. In addition, national attention has been directed to the problem both in writings concerned directly with the Bell Plant and with a more critical view of Nuclear plants in general. An unquestionably well documented article in Natural History (March, 1969) raised the most serious challenge to the assumed safety of the plants. At the same time Electrical World, a journal of the utilities industry, (April 1969) stated that the industry was concerned with thermal pollution and in "extending its traditional concern with the quality of the environment". A third pressure for the halt was the announcement by the Citizens Committee to Save Cayuga Lake that it would intervene legally at Federal level - and convincing evidence was furnished that it could actually raise the considerable amount of money necessary for the move. Finally, the New York State Gas and Electric Company has been sponsoring an increasing amount of scientific research on the biology of the Lake. The company began by engaging a consultant in limnology, and gradually provided support for research to several of the Cornell faculty. Although the sponsored scientists have backed the stand of the Citizens Committee, they were trusted and heard by the technical staff of the electric company. Apparently the message got through to the executive level.

It remains to be seen whether construction will be resumed as previously planned if, for example, opposition relaxes, or data is mustered to support the view that no significant damage will be done. Apparently, the State Health Department could act only after the plant is built, which seems highly unlikely. A Health Department spokesman (Don Stevens in letter to Rochester Democrat & Chronicle, April 12) has stated that site selection is the policy which is favored for reducing the effects of thermal pollution, but no mechanism to enforce site selection is evident. Bills aimed at controlling thermal pollution were introduced in the Assembly during the recent session. S. 4585, S. 4814, and S. 4560 all passed the Assembly overwhelmingly but failed completely in the Senate. The Citizens Committee to Save Cayuga Lake worked closely with Mrs. Cook, the assemblywoman who introduced

the bills, and they were introduced in the Senate by Senator Day, who readily incorporated some suggestions of the Health Department. Thus, these bills are technically good. Nevertheless, aside from their merit, they lack the necessary support by the Governor or the pressure of a sustained public campaign. The Associated Industries of New York Inc. "vigorously opposes" the bills. A sharp contrast is apparent between the action of the New York lobby, and the attitude expressed in the Electrical World (see above). In the absence of state laws, the only hope for regulation, aside from self-regulation, are administrative rulings (by the Health Department, for example), which can be effected sooner, but have less force than law (See R.C.S.I. Bulletin, November 1968).

## 2. REMOVAL OF NUTRIENTS FROM SEWAGE IN NEW YORK

The regulation which the Health Department has presented to the Water Resources Commission uses a figure of 80% phosphate removal for municipal and other critical sources. However, the results may be better, since plants will be required to design for a much higher level of removal to take care of accident, overload, groups for attainment at this time has been reached.

An advisory group to the Health Department has favored removal of Nitrogen (as ammonia) in certain cases where the removal of phosphate has had the secondary effect of creating an oxygen "demand" by ammonia. This is not a fertilizing effect. Two alternatives were presented. Either the plant capacity can be increased so that the ammonia is converted to nitrate (which is already oxidized) or the ammonia can be removed, which is more expensive. The basis of the decision was that the additional cost was a small part of the total treatment expense, and that the removal of some additional nutrient was an opportunity not to be overlooked. No administrative decision has been made on the recommendation.

## 3. WEED CONTROL

An increasing number of local lake associations have become concerned with the growth of rooted aquatic plants, and have translated their concern into demands for legislation. As a result, bills are being introduced, generally, "For the study of weed control on \_\_\_\_\_ (specific) lake." The Health Department advisory group recommended against support of these local bills, both because the approach is piecemeal and because no accepted approach which promises results has been offered.

In the long range view, nutrient control promises to reduce the rate of weed growth and accumulation, but there is no promise of dramatic reversal of the successional trend. Weeds can be killed easily, but the ecological consequences are considered much too damaging.