## ILLINOIS POLLUTION CONTROL BOARD December 2, 1971

MISSISSIPPI THERMAL STANDARDS ) R70-16

Supplemental Statement (by Mr. Dumelle)

While I agree with the standard adopted here and with the bulk of the Board opinion I am not certain that the maximum temperatures established in the standard are correct. These maximum temperatures may have been set too low.

Dr. Robert Morris of Iowa has stated, at a joint Federal-Iowa-Illinois meeting in Chicago on November 12, 1971 that Iowa temperature monitoring stations have detected a maximum 2°F rise in daily temperatures on the Mississippi River. The hottest portion of this daily cycle comes as would be expected in late afternoon according to Dr. Morris.

The Alton data, received late in the proceedings of this matter, are the basis for the revision now adopted. But these are 8:00 a.m. data and thus on the "cool" side. It is thus possible that we may be setting these temperature maxima as much as 2°F too low with consequent great and unnecessary economic effects to those who might legitimately want to use the Mississippi River for cooling purposes.

However, the only answer would be to obtain better temperature data for other hours of the day. This obviously must be acquired starting now since it does not now exist. I would hope that the Federal Environmental Protection Agency through its monitoring by the U.S. Geological Survey would begin to acquire such data. When such data are available the Board should re-examine the maximum temperatures set herein.

I do not agree with the portion of the opinion (p.7) which accepts the diffuser as a safe way in which to discharge heated water to the Mississippi River. See my dissent on Quad-Cities Nuclear Plant (PCB 71-20) of November 15, 1971 (p.3-4). Just because there are interstices of cool water in the cross section of the stream does not mean that fish will in fact use the plume as a zone of passage. What is lacking in the record and what is still needed are actual experiments with diffusers and fish to prove that passage will occur.

I am also disturbed by the failure of the Board to obtain and examine the transcript of the Iowa Water Pollution Control Commission meeting of November 2, 1971 after which Iowa rejected the permit appli-

cation by Commonwealth Edison Company and Iowa-Illinois Electric Company for a diffuser. The temperature standards here enacted can stand without an opinion either way on the merits of a jet diffuser which are more properly the subject of the permit proceeding. I feel that it was not necessary in these temperature standards proceedings to endorse the diffuser as a satisfactory method of heat dissipation.

Our rules state:

...the Hearing Officer may receive material, relevant evidence which would be relied upon by a reasonably prudent person in the conduct of serious affairs which is reasonably reliable and reasonably necessary to resolution of the issue for which it is offered...(Procedural Rules Sec. 320(a))

Our sister state, Iowa, relied on some evidence which we do not now have that was evidently highly persuasive to them. We ought to have delayed a favorable diffuser opinion in this proceeding until we had received and looked at the Iowa evidence.

Jacob D. Dumelle