



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

August 27, 1974

C. Billups
Directorate of Licensing

COMMENTS ON "A STRIPED-BASS POPULATION MODEL AND COMPUTER PROGRAM"

I have missed your 8/19 deadline obviously, because I learned of it only today. I am not prepared to make comments on the model per se; my comments on the meeting of 8/9 are as follows.

- (1) The presentations were excellent; the models are apparently realistic, useful, and flexible.
- (2) As recognized by Eraslin, Van Winkle, et al., the model is probably orders of magnitude more accurate than the input data. In the absence of adequate data the only avenue to prediction is to run the model utilizing a wide range of values for the critical input parameters. An example is the total number of striped bass eggs present in the river. If I understand correctly runs made to date have used a single estimate.
- (3) Eraslin is apparently a good tactician, and I agree with many of his points regarding QLMs F₂ calculations and other arguments. His input should greatly strengthen the regulatory position in any future hearings or testimony.
- (4) The ASLAB decision focused on the models. The uncertainties of the input data and efforts to allow for them ought to be explored in depth and made clear and explicit in any future proceedings. Given 100 randomly chosen locations in the pertinent segment of the river representing various depths, river miles, and distances from shore, can the applicant or anyone else predict with reasonable accuracy the concentration of eggs, yolk-sac larvae, post yolk-sac larvae, juvenile 1 or juvenile 2 within one spawning season or over several in different years at a significant number of such locations? If the answer is no, a range around the best estimates must be used and the resultant effects on model predictions be explored. It is not clear to me that this has been adequately done.

8111210099 740924
ADOCK 05000286

C. Billups

- 2 -

August 27, 1974

(5) I hope that we can discover further resources of time and competence to be focused on the adequacy of the model as described in ORNL-TM-4578. I will inform you should anything useful along these lines develop.

D. Heyward Hamilton, Jr.

D. Heyward Hamilton, Jr.
Marine Biologist
Environmental Programs
Division of Biomedical and
Environmental Research

LIST OF PARTICIPANTS FOR
ORNL BRIEFING ON INDIAN POINT 3

ORNL STAFF

Richard Rush
Arsef Eraslan
Webb Van Winkle

AEC STAFF

Billy Joe Youngblood, L:RP:EP
D. Heyward Hamilton, DBER
Ronald L. Ballard, L:TR:ESB
Charles W. Billups, L:TR:ESB
John J. Bolen, L:TR:ESB
Walter Pasciak, L:TR:ESB
Richard B. Codell, L:TR:SAB