

William J. Cahill, Jr.  
Vice President

REGULATORY DOCKET FILE COPY

Consolidated Edison Company of New York, Inc.  
4 Irving Place, New York, N Y 10003  
Telephone (212) 460-3819

May 11, 1978  
Re: I.P. Unit No. 2  
Docket No. 50-247

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SERVICES UNIT

Director of Nuclear Reactor Regulation  
Attn: Robert P. Geckler, Project Manager  
Environmental Projects Branch No. 1  
Division of Site Safety and  
Environmental Analysis  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Dr. Geckler:

This transmittal is in response to Enclosure 2 to Mr. George W. Knighton's letter of July 26, 1977 to Mr. William Cahill requesting information relative to our request titled "Request for License Amendment to Eliminate Requirement for Termination of Operation with Once Through Cooling System" dated March 1977.

Enclosed please find the supplemental information requested relative to our responses to questions nos. V-5 (part 2) and XVI (part 2).

Should you have any questions please contact me or Dr. Kenneth L. Marcellus (212-460-6059).

Sincerely yours,

*William J. Cahill, Jr.*  
William J. Cahill, Jr.

klm/klg

Enclosure:

cc: Dr. Richard Rush (ORNL)

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V-5

Provide in detail the methods used to calculate CPUA and growth increment from the above data. [Part 2] Explain the discrepancies between Figure VIII-4 of the First Multiplant Report (July 1975) and Figure 10.5-1 of the McFadden 1977 Report. If a different method of calculation or a different data set was used in preparing the McFadden 1977 Report, explain the nature of and the reason for the change.

Response  
(for Part 2)

Figure VIII-4 and 10.5-1 were both based on data collected from standard sampling stations in the vicinity of Indian Point. The basic methods used to calculate the growth and abundance indices were the same in both reports.

Figures VIII-4 and 10.5-1 do differ somewhat however. These differences resulted from the following:

A) For Figure VIII-4 the weekly catch per unit area (CPUA) values for all weeks in July and August were averaged to obtain each annual index of density. For Figure 10.5-1, each annual index of density was obtained by first summing all catches during July and August, and then dividing that sum by the sum of the area sampled in all the tows made. The reason for this change in the method for calculating yearly CPUA values was to alleviate potential biases which may have occurred when weekly CPUA's based on disproportionate levels of sampling effort, were averaged.

B) Catch data from both day and night samples taken in 1969 and 1970 by Raytheon were used to calculate density and growth indices in Figure VIII-4. In Figure 10.5-1 only day samples were used as these samples would provide a comparable set of data with respect to 1965-68 and 1972-1975 indices, and

C) Subsequent to the completion of the First Annual Multiplant Report, the data utilized in Figure VIII-4 were re-examined, errors were discovered, and corrected data were used for the preparation of Figure 10.5-1.

XVI

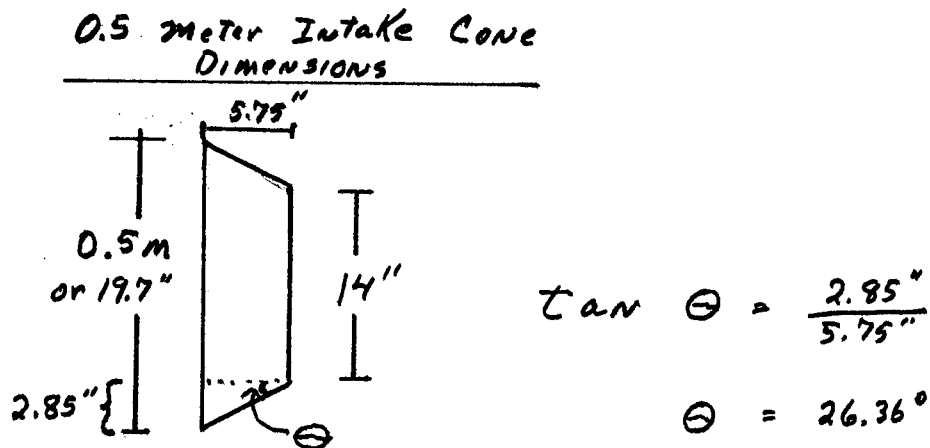
Question relating to the NYU special report entitled "Mortality Of Striped Bass Eggs And Larvae In Nets" (July 1976)

1. Please provide, with adequate documentation, the raw data on which this report is based [Part 2] Please indicate not only whether a velocity reduction cone was present or not but also the degree of taper.

Response (Part 2)

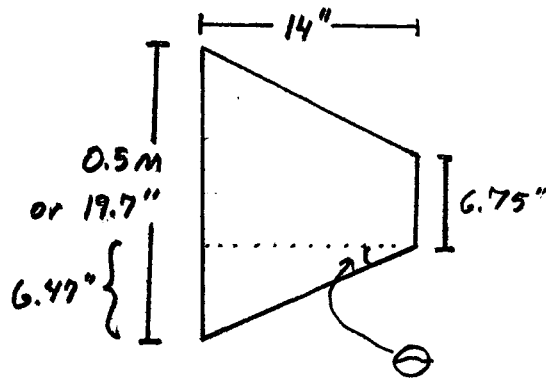
In the NYU net mortality study, certain tests were conducted with velocity reduction cones at the mouth of the net. (These tests are indicated on the data sheets that were provided in response to this question)

The cone used in all the tests in which organisms were released was the half meter "intake cone". The degree of taper of this cone is about  $26.36^\circ$  which was calculated as follows:



The discharge cone, which was not used when test organisms were placed in the flume, was used for some velocity measurement determinations. (See attached page from the data sheets already provided you which list the velocities recorded)

The degree of taper of the half meter "discharge cone" is about  $24.80^{\circ}$ , which was calculated as follows:



$$\tan \theta = \frac{6.47''}{14''}$$

$$\theta = 24.80^{\circ}$$

Date: 6/30/75

Stage: \_\_\_\_\_

Brood #: \_\_\_\_\_

Net length:      Fabric:      Water Velocity:      V.R.C.:      Time:

Total no. caught: \_\_\_\_\_

	Immediate observation	1 day			2 day			3 day			4 day	
		1st obs.	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd
Dead												
Alive												

	Immediate observation	1 day			2 day			3 day			4 day	
		1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd
Dead												
Alive												

Velocity Readings - ft./sec 6' net - Discharge Cone

In opening of net

1.37  
1.90  
2.94  
0.94

Behind cone

2.20  
2.73  
3.41  
1.50

3' in net

0.59  
0.61  
0.90  
0.29