

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

LeBoeuf, Lamb, Leiby & MacRae

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Per M. J. [Signature]

In the Matter of)

Consolidated Edison Company)
of New York, Inc.)
(Indian Point Nuclear)
Generating Unit 3))

Docket No. 50-286

INTERROGATORIES TO
Applicant from Hudson River
Fishermen's Association and Save Our Stripers

Pursuant to 10 C.F.R. §2.740, §2.740b and §2.741 (1973), and to the schedule for interrogatories agreed to by the parties and allowed by the Board in the course of a Special Pre-hearing Conference held at Croton-on-Hudson, May 21, 1973, the Hudson River Fishermen's Association ("HRFA") and Save Our Stripers ("SOS") propound the following written interrogatories to the Consolidated Edison Company of New York ("Con Edison"), Applicant, for response on or before August 31, 1973.

HRFA and SOS request responses by such officers or agents of Applicant Con Edison as have personal knowledge of the matters here inquired into in accordance with

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EXHIBIT A

10 C.F.R. §2.740b (1973). Where Con Edison lacks the information sought, HRFA and SOS request Con Edison so state in response to any specific interrogatory.

1. Does Con Edison presently propose a condition for the Indian Point 3 operating license which would required the installation and operation of a closed cycle cooling system at Indian Point 3?

1.1. If so, please provide the full terms of that condition.

1.2. If so, what is the date after which Con Edison recommends that Indian Point 3 not operate without a closed cycle cooling system?

2. In the opinion of Con Edison, what is the earliest date at which a closed cycle cooling system can be installed and operating at Indian Point 3?

2.1. Describe the tasks which occupy this period.

3. Provide further answers to Questions IV.3, .4, .8, .14 of ERS VII (April 1973) covering the entire period set out in the responses to Questions 1 and 2.

4. For each of the units listed in the answers to Questions VI.2, .3 of ERS VII (April 1973), including such further units as are listed in response to Question 3 above, give the period of time needed to bring the unit from a cold state to (a) synchronization; (b) full power production.

4.1. For each plant listed in response to Question 4, describe the restraints limiting the time in which the unit can be brought to (a) synchronization, (b) full power production (e.g., thermal stress on turbines; pump start-up time; xenon override, etc.).

5. Describe any restraints on operating each of the units listed in response to Question 4 continuously for a period of days at (a) full power; (b) 50% of full power.

6. Indicate which units listed in response to Question 4 are used (a) primarily; (b) from time to time for (i) the production of steam for commercial sale; (ii) electricity for use in powering the New York City subway system.

6.1. Describe any restraints in employing the units listed in response to Question 5 for the production of electricity other than for the New York City subway system.

7. Describe any differences between Indian Point 2 and Indian Point 3 in the ability of the two units to operate on a schedule of daily fluctuation between (a) hot standby and full power; (b) 30% of full power and full power; (c) 50% of full power and full power (e.g., thermal stress, CVCS capacity, xenon override, etc.).

8. Give a month by month forecast of peak power demand on the Con Edison system for the period between the commencement of operation of Indian Point 3 and end of the longest period set forth in response to Questions 1 and 2.

9. Give a month by month prediction of the capacity of the Con Edison system for the period set out in Question 8.

10. Give a month by month prediction of the outage due to scheduled maintenance on the Con Edison system for the period set out in Question 8.

11. Give estimates of the costs of replacement power per KWHr both daytime and nighttime for the period set out in Question 8 if Indian Point 3 should not operate in that period.

12. Give estimates of the quantity of electricity available to Con Edison through firm purchases for the period set out in Question 8, giving the times at which various quantities of firm purchases will be available.

13. Indicate the lowest operating reserve which in the opinion of Con Edison is necessary for the reliable operation of the Con Edison system in the period before a closed cycle cooling system can be in operation at Indian Point 3 taking account of arrangements with other utilities. Give the basis by which these reserve figures were arrived at.

14. Please supply copies of all agreements with other utilities which involve in any manner electricity purchases from or by Con Edison from the present time until the operational date of a closed cycle cooling system at Indian Point 3.

15. How is prediction of daily demand on the Con Edison system used to schedule generation and supplementary and emergency purchases?

16. How are decisions on the dispatch of the Con Edison system made on a daily or weekly or other basis and how is the order of dispatch determined?

17. During typical summer operation, what is the mode of operation of capacity not actually putting power into the grid?

18. Has Con Edison or its consultants made any analyses, not already produced in the Indian Point 2 proceeding, of the cumulative impact on fish resources in the Hudson River fishery between the Tappan Zee and Coxsackie of any or all electrical energy generating plants operating or planned to operate on such portion of the River in the period before a closed cycle cooling system can be in operation at Indian Point 3?

18.1. If so, when was such analyses made and by whom?

18.2. If so, will Con Edison please produce copies of such analyses with its responses hereto.

19. As to each of the electrical power generating units at Lovett, each of the 2 units at Bowline Point, each of the 2 units at Roseton, each of the units at Danskammer, the unit at Cornwall (Storm King) and each of the 3 units at Indian Point, and as to the effects of each such unit on the Hudson River between Tappan Zee and Coxsackie, answer separately the following questions providing full responses to each question for each unit:

19.1. For full power operation at (i) full flow operation, (ii) minimum flow operation, how many gallons of water per minute will be withdrawn from the river by each unit?

19.2. What will be the rate of daily water withdrawal and discharge at the Cornwall project?

19.3. For full power operation at (i) full flow operation, (ii) minimum flow operation, how many degrees Fahrenheit will the water withdrawn from the river be heated before it is discharged again into the river?

19.4. What are the dimensions of the thermal plume for each unit in any given year during May through July, August through September, and November through February?

19.5. At what load levels with what consequent water withdrawal rates and T_s is it estimated that each unit will be operated during the months of May 1 through July 31 in the period before a closed cycle cooling unit is operating at Indian Point 3 assuming (i) Indian Point 3 operates, (ii) Indian Point 3 does not operate during this period. If a unit will operate on a fluctuating cycle during this period, please so indicate.

19.6. Have studies of alternative cooling systems, and especially closed-cycle cooling systems been made as to each unit?

19.6.1. If so, when were such studies made and by whom?

19.6.2. Will Con Edison please produce copies of such studies with its responses hereto.

19.7. What megawatt volume is estimated to be produced from each unit.

19.8. Has Con Edison or its consultants made any analyses, not already produced at the Indian Point 2 proceeding, of the absolute numbers or proportion of the population of a species of fish killed by entrainment and impingement at any unit? Please produce all such analyses with the responses hereto.

19.9. What is the reduction of dissolved oxygen levels, in river water attributable to each unit?

19.9.1. Have the reductions in dissolved oxygen levels on river water near the affluent source and in the river between Cossackie and the Tappan Zee attributable to each unit been estimated?

19.9.2. If so, when and by whom?

19.9.3. Will Con Edison please produce copies of reports of such studies with its responses hereto.

19.10. When is it estimated for each unit that it will be retired and closed?

19.11. As to each unit, what construction (i) has occurred or (ii) is to occur, or (iii) is under study to minimize the killing of fish by entrainment and impingement?

19.11.1. When was such construction complete or when will it be complete?

19.11.2. By what percentage will over-all fish kill be reduced at each unit when such construction is complete?

19.11.3. By what percentage will fish kills of striped bass and shad be reduced at each unit when such construction is complete?

19.11.4. What is the nature of each such construction and how does it operate?

20. What reduction of volume of water use is anticipated from the installation of a recirculation crossheader on existing circulation pumps at Indian Point 3?

20.1. How does this device function?

Dated: New York, New York
July 2, 1973

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