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In the Matter of Consolidated Edison Company of New York, Inc.,
Indian Point Nuclear Generating Unit No. 2
Docket No. 50-247

Gentlemen:

The regulatory staff has reviewed the applicant's "Proposed Findings of Fact and Conclusions of Law in the Form of a Proposed Initial Decision with Respect to Motion for 50 Percent Testing License Part II," submitted in this proceeding on February 8, 1972, and, subject to the modifications below, agrees with the substance thereof as being in conformance with the record, and the Commission's "Rules and Regulations." The applicant supplemented its proposed findings on February 8, 1972, with environmental findings in accordance with 10 CFR 50, Appendix D, Section D.2. In addition, the staff will, in the next few days, submit to the Board a proposed Amendment to Operating License DPR-26 to reflect the testing operation at limited power, together with proposed technical specifications for such operation.

The modifications which we propose are as follows:

1. Page 4, paragraph 7, line 4, delete "FSAR" and replace with "FFDSAR" (for abbreviation of the Final Facility Description and Safety Analysis Report). (P. 5, Staff Discussion & Conclusions, 12/30/71)
2. Page 6, paragraph 11, lines 14 through 18 should read "Heated water will be discharged through 12 ports spaced 20 feet apart. After the modifications to the discharge structure are completed in early April 1972, the thermal discharges will be discharged through the ports at a depth of 12 feet (center to surface) below mean water level rather than at an original depth of 18 feet. Ten ports are being equipped with adjustable gates in order to regulate

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the discharge velocity of the water. The two most southerly gates can be either completely opened or completely closed and are thus not adjustable. Positioning of these gates (opened or closed) will be dependent on operation of the Indian Point Units No. 1 and No. 2 to maintain a discharge velocity of 10 feet per second." (P. 12)

3. Page 7, paragraph 12, line 6, last sentence should read "They can only be confirmed by correlation of the temperature monitoring results of the thermal plume during actual operating experience of Indian Point Unit No. 2 at 100% steady state power along with full power operation of Indian Point Unit No. 1 throughout the entire year." (P. 13, P. 23)
4. Page 8, last sentence should read "It is anticipated that the thermal criteria of New York State can be met during the limited operation for testing up to 50% power of Indian Point Unit No. 2 during the 50- to 100-day testing period and operation at full power of Indian Point Unit No. 1. During limited operation for testing as well as during full power operation the applicant is required to meet State and Federal regulations." (Pp. 18, 22, 23)
5. Page 10, paragraph 6, the last sentence should read "For example, during the spring months, the applicant estimates from 3 to 21 pounds per day, or assuming an average weight of about 1/4 ounce per fish impinged, about 192 to 1344 fish will be collected at Unit No. 2." (P. 27)
6. Page 12, paragraph 18, the last two sentences should read "Although preliminary results of the current study of entrainment effects indicate no mortality to zooplankton due to condenser passage, these results may not be necessarily applicable for operation of the circulating water pumps for Indian Point Unit No. 2. Mortality to some fish larvae have not as yet been quantified. Responses of the phytoplankton community to the predicted temperature increase during the testing period of operation up to 50% power are not expected to be severe." (P. 27)
7. Page 12, paragraph 19, the last sentence should be deleted. (P. 31)
8. Page 13, paragraph 20, add the following sentences at the end of the paragraph: "Our concern is not only with the average level of dissolved oxygen but also the minimum critical level, which occurs at concentrations of 2-3 ppm. Any decrease in the dissolved oxygen concentration below this critical level due to greater oxygen consumption in the water, increased stratification of the Hudson River

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water or condenser effects of the water quality will be monitored during the testing period up to 50% power in order to determine whether any increased loss of dissolved oxygen is due to operation of Indian Point Unit No. 2." (Pp. 8, 21)

9. Page 14, paragraph 22, add after the word "exposure" on line 9, the following: "The combined output of chlorine from cleaning the three condensers in Indian Point Unit No. 2 and the one condenser in Indian Point Unit No. 1 will be 6 hours per week." (P. 21)
10. Page 15, paragraph 22, line 4, add the following "applicant will also conduct analytical tests for both residual chlorine (total available chlorine or active chlorine) and combined chlorine, particularly to determine the concentration of the toxic chloramines." (Pp 21,24)
11. Page 15, paragraph 23, line 4, add the words after "procedures," "During the testing period bioassays are also made to indicate any synergistic effects of residual chlorine and thermal discharges on aquatic biota." (P. 24)
12. Page 18, paragraph 28, line 3, the last sentence should be deleted and replaced by "The Technical Specifications to be agreed upon by the Commission outlines the required applicant's monitoring program for the proposed testing activities." (P. 33)
13. Page 19, paragraph 30, line 1, add the words after "standards," "during the testing period." (P. 33)
14. Page 19, paragraph 30, line 5, add the words after "expected," "during the testing period." (P. 33)
15. Page 20, paragraph 31, line 3, delete the next 5 lines and replace with the following: "During the limited testing period up to 50% power, any high mortality to young fish is not expected to result in an irreversible effect on the overall fish population of the Hudson River." (Pp. 23-33)
16. Page 20, paragraph 32, delete the second sentence on lines 3-8 and add "During the limited testing period, any loss of organisms which does occur as a result of condenser passage will have little ecological impact because of the large population of these organisms in the river. Although different planktonic species have different regeneration times, no shift in species population of plankton as a result of entrainment during the limited testing period is expected. Damage to fish larvae is dependent, in part, on the time of year.

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Since the testing period will occur in May and possibly June of this year during the spawning period of striped bass, damage to fish larvae of striped bass may be significant when the river water is withdrawn through the condensers." (Pp. 30-32)

- 17. Page 20, paragraph 33, add at the end of the sentence "during the limited testing period." (P. 21)
- 18. Page 21, paragraph 34, add in line 2 after the word "criticality," "This construction includes modification of the submerged discharge ports at a depth from 18 feet to 12 feet." (Pp. 9, 11, 12)
- 19. Paragraph 43, line 6, add after the word "expected," "during the limited testing period." (P. 49)

In accordance with the position of the staff, as evidenced in our response to intervenor's findings on March 10, 1972, we again urge the Board to:

- 1. Make appropriate findings on the issues specified in 10 CFR 50.57(c) for operation of the Indian Point Unit No. 2 facility at 50% power level for testing purposes.
- 2. Balance the factors for 20% power level for testing in accordance with 10 CFR Part 50, Appendix D, Section D-2.
- 3. Authorize the Director of Regulation to issue an amendment to Operating License No. DPR-26 authorizing operation up to 20% of power level for testing purposes.
- 4. Certify to the Commission, without recommendation, the record in this proceeding relating to the 50% testing application for its balancing of factors under Appendix D, and determination on the remaining 30% power level for testing.
- 5. Upon specific approval of the Commission, authorize the Director of Regulation to issue an amendment to Operating License No. DPR-26 authorizing operation up to 50% power level for testing purposes.

Sincerely,

Myron Karman
Counsel for AEC Regulatory Staff

cc: Leonard M. Trosten, Esq.
Anthony Z. Roisman, Esq.

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