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RELATED CORRESPONDENCE

August 27, 1976

U. S. Nuclear Regulatory Commission  
Attn: Director, Division of Site Safety  
and Environmental Analysis  
Washington, D.C. 20555

Dear Sir:

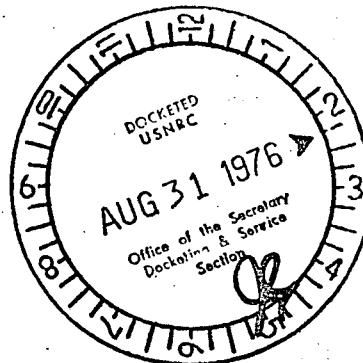
Enclosed are three copies of Comments of the  
Hudson River Fishermen's Association on the Draft  
Environmental Statement for Facility License Amendment  
for Extension of Operation with Once-Through Cooling for  
Indian Point Unit No. 2.

Yours sincerely,

*Sarah Chasis*  
Sarah Chasis, Esq.

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Encs.



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COMMENTS OF THE  
HUDSON RIVER FISHERMEN'S ASSOCIATION



On The  
DRAFT ENVIRONMENTAL STATEMENT  
FOR FACILITY LICENSE AMENDMENT  
For

EXTENSION OF OPERATION  
WITH ONCE-THROUGH COOLING FOR  
INDIAN POINT UNIT NO. 2

UNITED STATES NUCLEAR REGULATORY COMMISSION

By: SARAH CHASIS, ESQ.  
(Natural Resources Defense  
Council, Inc.)  
15 West 44th Street  
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August 27, 1976

## Introduction

The Hudson River Fishermen's Association is a non-profit association composed of approximately 750 members who actively fish the Hudson River, its tributaries and the coastal waters whose fisheries are dependent on the Hudson River's breeding and nursery ground. The purpose of the Association is to foster intelligent use of these waters and to protect and enhance the fishery resources. To this end, HRFA has been an intervenor in the licensing proceedings for both Indian Point 2 & 3 and has successfully sought and obtained license terms requiring closed-cycle cooling at both units. HRFA is also an intervenor in the license amendment proceeding for extension of operation of Indian Point Unit No. 2 with once-through cooling.

HRFA is deeply disturbed by the NRC Staff's recommendation that the applicant's proposed license amendment be granted, giving Con Edison a two-year extension until May, 1981 for operation of Indian Point Unit No. 2 with once-through cooling. The May 1, 1979 date for cessation of once-through cooling, as required by the present license for Indian Point Unit No. 2, was finally established after years of litigation and unsuccessful attempts by Con Edison to justify the exact same date the NRC Staff now propose accepting, i.e., May 1, 1981. The biological information presented by Con Edison in

support of its application no more justifies the 1981 date than the information that existed prior to the issuance of the license for Indian Point Unit No. 2. Nor is the information to be compiled by Con Edison in the future likely to provide conclusive answers to the major issues concerning the impact of once-through cooling, according to the NRC Staff itself. There is, therefore, no scientific justification for granting the extension.

Con Edison's rationale for the two-year extension is that data relevant to the need for closed-cycle cooling may be forthcoming. It must be remembered that Con Edison has had eleven years, since the Hudson River Fisheries Investigation was initiated in 1965, to collect data and present proof in support of its argument that closed-cycle cooling is not required at Indian Point 2. The licensee has been unable to make its case to date and still cannot do so.

It is time to put an end to the licensee's strategy of endless delay aimed ultimately at complete elimination of the closed-cycle cooling requirement. It is this agency's responsibility to uphold the license condition it imposed in the public interest and pursuant to the mandate of the National Environmental Policy Act.

The Draft Environmental Statement issued in support of the amendment is shockingly deficient. It provides no good rationale for granting the requested extension. The principal reason for the extension appears to be the NRC Staff's desire to let EPA take responsibility for insuring that closed-cycle cooling is required at Indian Point 2. This rationale is unacceptable. The NRC has its own duties under NEPA, separate from EPA's under the Federal Water Pollution Control Act Amendments. It may not shirk its responsibility. The DES is inadequate in that there is no analysis of the effect of the two-year deferral on the date for cessation of once-through cooling at Indian Point Unit No. 3, although such an impact would clearly result from the granting of the extension. Furthermore, the DES has limited itself to an analysis of only the "irreversible" impacts on the environment flowing from the two-year extension, though NEPA requires disclosure and consideration of all impacts, whether irreversible or not. There is no attempt to quantify the extent of the harm to the environment, either short-term or long-term.

Perhaps most distressing is the overall tone and quality of the DES. It is an embarrassment to the NRC, which has previously produced the highest quality EIS' related to Indian Point 2 & 3. The low priority this DES very clearly

received is inexcusable in view of the NRC's extensive commitment of time and resources over the last five or six years to analysis and mitigation of the significant environmental impacts resulting from operation of the Indian Point plants. In HRFA's opinion, this DES must be drastically revised in order to comply with NEPA.

### History

After extensive proceedings, the U. S. Nuclear Regulatory Commission, acting pursuant to its mandate under the National Environmental Policy Act and the Atomic Energy Act, ordered that the existing Indian Point Unit No. 2 generating station could not operate after May 1, 1979 with a once-through cooling system. NRC Facility Operation License No. DPR-26, Amendment No. 6, issued on May 6, 1974.

The basis for the license amendment was the extensive record supporting the conclusion that the Indian Point plants pose an unacceptable environmental risk to the life and fishery of the Hudson River. The plants' three units withdraw for cooling purpose more than two million gallons of Hudson River water per minute. Such withdraws have disastrous impacts upon the River. At least one million fish a year are impinged upon the screens in front of the intake structures.

Worse, millions of eggs and larvae are entrained into the plant where they are affected by sudden pressure temperature and chemical changes, and mechanical abrasion. The Indian Point plants, along with other power plants along the lower Hudson River could potentially kill from 34% to 50% of young-of-the-year of the striped bass population.

Massive withdrawals of water can be eliminated by installation of a closed-cycle cooling system. Installing closed-cycle cooling at Indian Point Unit No. 2 alone will reduce the single unit's withdrawal of water from 870,000 gallons per minute to 30,000 gallons per minute. Based upon such evidence the NRC ordered the cessation of once-through cooling at Indian Point Unit No. 2 by May 1, 1979 and installation of a closed-cycle system.

Throughout the licensing proceeding for Indian Point 2, Con Edison repeatedly argued for a May, 1981 date for cessation of once-through cooling on the grounds that such a date would give the utility an opportunity to complete its research program. This position was thrice rejected by the NRC.

In its proposed findings of fact to the Licensing Board, Con Edison requested that 1981 be set as the date for cessation of operation with once-through cooling. The Licensing Board denied this request and set May 1, 1978 as the

date. On its appeal from the Licensing Board's decision, the Company again requested the same relief. The Appeal Board modified some of the critical findings of the Licensing Board,\* but found that even under facts more favorable to Con Edison, once-through cooling must cease by May 1, 1979, a date which did not allow for completion of the research program prior to initiation of construction of a closed-cycle cooling system. Con Edison again sought to have this date modified in its petition for rehearing of the Appeal Board's decision. This was denied.

Thus Con Edison has had three bites at the apple. The rationale for its present application has been fully litigated before. On a record such as this, it must be demonstrated to obtain the requested amendment that there is:

- new data which leads to findings different from those found by the Appeal Board.
- these findings compel a different resolution as to the appropriate cessation date.

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\*The full Commission subsequently found that the criticisms raised by the Appeal Board had been adequately dealt with in the FES for Indian Point Unit No. 3. In re Consolidated Edison (Indian Point Unit Nuclear Generating Station, No. 3), Docket No. 50-286 (Dec. 2, 1975).



Neither the Applicant's submissions nor the DES support such a conclusion. Where as here the issue has already been determined once with finality, the question of the appropriate cessation date should not be reopened without new and persuasive evidence. The DES in fact makes clear that it considers this not to be the case.

### Specific Comments

Improvements in Biological Evaluation. According to the applicant, the chief benefit to be derived from the two-year extension is the achievement of a substantial improvement in the biological data base through completion of its research program. See Con Edison's Environmental Report to Accompany Application for Facility License Amendment, Sections 1.2 and 4.1.1, pp. 1-3 and 4-1 to 4-6. The DES concludes that, at least a one-year extension is justified to obtain improvement in the biological evaluation. DES, Section 4.1.5, p. 4.2.

While additional data and analyses may be relevant, in order to justify a two-year extension, it must be shown that these data and analyses will provide answers to questions critical to the determination of once-through versus closed-cycle cooling. The DES, however, openly admits that such a consequence is unlikely to be the case. The NRC Staff quotes approvingly its earlier conclusion in the FES for Indian Point Unit No. 3:

"If there is to be a quantum jump in ability to forecast the impact of plant operation on the Hudson River ecosystem (and on the striped bass young-of-the-year population in particular), as a result of the extensive TI, NYU, and QLM environmental studies presently scheduled to be completed by January 1, 1977 (Fig. V-19), that quantum jump will be based primarily on the 1973-74 cycle of data and analysis. (FES, IP-3, p. V-209)." DES, Section 5.2, p. 5-1.

These 1973 and 1974 data which have already been presented to the NRC staff in support of the extension, have led to the following significant conclusions:

"The Staff has found no new information in the applicant's Environmental Report for a two-year extension that requires changes in the Staff's young-of-the-year striped bass model as applied to the 1973 data." Section 3.2.2, p. 3-2.

"However, the applicant's analyses [of compensation] do not remove the Staff's concern for the long-term consequences of protracted and uncontrolled density-independent mortality, such as the cropping imposed by power plants, since the range of cropping rates which could be offset by compensatory responses, and the degree of offset, are not known." Id.\*

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\* Nor will the further studies of Con Edison to be completed by Jan., 1977, provide answers to these critical questions. As the NRC Staff itself indicated in the FES, IP-3, p. V-143, Con Edison has not and will not be able to quantify the degree of natural compensation.

"The Staff emphasizes, however, that the 1974 data [on distribution and abundance of young-of-the-year life stages of striped bass and other fish species] do not provide and the 1975 data will not provide the basis for a quantum jump in ability to forecast the impact of plant operation on the Hudson River ecosystem or fish populations.  
Section 3.2.4, p. 3-7. (emphasis supplied).

The above quotes dramatically underline the fact that after over eleven years of research, the applicant has been unable to come up with any evidence to alter the conclusions reached by the NRC Staff with respect to both Indian Points 2 & 3, namely that the existing water withdrawal systems would result in significant irreversible impacts on the valuable Hudson River fishery. The critical 1973-74 data is already before the agency and does not justify elimination of the requirement for closed-cycle cooling.

The NRC Staff states that completion of Con Edison's research program may provide additional relevant results, and that completion of the other studies (which a one-year extension would permit) mentioned on p. 3-8, will add to a more complete and sound scientific basis for a reasoned decision. This may always be said of additional research. However, the fact is that the Staff has consistently taken the position, nowhere refuted in the DES, that the applicant's research effort is unlikely to conclusively demonstrate that operation of Indian Point Units 2 & 3 with once-through cooling will not have an

unacceptable adverse impact on the Hudson River fisheries. See, e.g., FES, IP-3, pp. V-199 to 2130. The NRC Staff therein makes the following comment:

"The difficulties in obtaining adequate data on major issues in controversy cast serious doubt on the applicant's claim that a final conclusion with respect to the date for closed-cycle cooling at Indian Point Unit No. 3 should await collection of further 'empirical' data."

FES, IP-3, p. V-209.

One and one-half years have passed since the issuance of the FES for Indian Point 3 and the data and analyses collected in the interim, admitted by the Staff to be the most relevant years for data collection, have produced nothing to alter the ultimate conclusions. Nor is the remaining information to be submitted in January, 1977, as the Staff again admits, likely to do so.

Thus, no sound rationale exists for deferring the closed-cycle cooling requirement because of biological data and evaluations which may be forthcoming. There has been no new evidence which could materially alter the original conclusion and the remaining studies will not produce the answers concerning long-term impact. There is, therefore, no reason for deferral. Certainly, no justification for a two-year extension on this basis exists.

#### Other Alleged Benefits Associated with Deferral

The DES points to two other bases for its recommendation that the requested deferral be granted: 1) not to delay the start of construction would foreclose possible selection

of a different type of closed-cycle cooling system in the NRC proceeding to designate the preferred closed-cycle cooling system; 2) delay would permit the EPA proceedings to proceed without requiring Con Edison to begin construction prior to EPA's final decision. Neither of these rationales is justifiable.

The question of whether deferral of the 1979 date should occur because of the NRC's failure to date to finally designate the preferred closed-cycle cooling system is an issue appropriate to the proceeding for the designation of such system, not to this proceeding. That determination must be tied to consideration of whether Con Edison has sought with due diligence all approvals necessary for construction of a closed-cycle cooling system, whether all such approvals have been received, and the effect of failure to obtain timely approvals on the May 1, 1979 date. Those issues will be raised in that proceeding and should not be the basis of this two-year extension. Furthermore, were such a rationale to be relied on herein, the DES should have analyzed such issues, prior to deciding that additional time was warranted.

Awaiting EPA's decision is particularly unjustified. There is absolutely no assurance that EPA will finally act within two years. Under the DES' rationale, even if it were several years before EPA completed its proceedings and reached a final decision, the NRC would agree to defer. This kind of open-ended rationale is entirely unsatisfactory. Second, by granting the two-year deferral to 1981 the NRC undercuts EPA's permit requirement for Indian Point 2 which requires cessation of closed-cycle

cooling by May 1, 1979. Con Edison can use the NRC's action to whipsaw EPA into a deferral as well. Third and most important, the NRC has its own mandate under NEPA which is completely separate and distinct from EPA's mandate under the Federal Water Pollution Control Act Amendments of 1972. The NRC has a statutory responsibility to meet the demands of NEPA and may not avoid these demands by deferral to another agency for decision. This is effectively what the DES recommends doing.

#### Harm to the Fishery

The CEQ Guidelines 1500.8 on the content of environmental statements requires the assessment of probable impacts on the environment. The NRC's regulations implementing NEPA, 10 C.F.R. Part 51, require quantification of impacts and benefits, to the fullest extent practicable. Section 51.23. Neither of these requirements has been met.

The EIS perverts NEPA's purposes by looking only to whether or not any irreversible impacts will flow from the two-year extension. However, NEPA requires consideration of all adverse impacts, not just those which are irreversible. A significant short-term loss in young-of-the-year recruitment to the fishery represents a very real loss. Even if the population is likely to recover over time, the loss in yield during the

interim is irretrievable. For a fisherman, the immediate short-term impacts of such loss can be very significant. By concentrating only on the incremental, long-term impact and the irreversibility of that impact, the NEPA process is perverted. Further, the loss which will occur as a result of two additional years of entrainment and impingement is never quantified. See Section 6.4.2, p. 6-1.

Finally, even using the criteria of irreversibility, it is never made clear that there will be no irreversible harm if and only if the closed-cycle cooling requirement is maintained and no extension beyond 1981 is granted. A very possible scenario is that Con Edison will come in at the end of its research program and request the license term requiring closed-cycle cooling be eliminated. The DES has failed to discuss the possibility of the potential for further delay resulting from such an application and the resulting impacts of a further extension.

### Indian Point 3

One of the most serious and blatant failings of the EIS is its failure to discuss the impact of a two-year deferral on Indian Point Unit No. 3, scheduled to cease operation with once-through cooling in September, 1980.\* The schedules for installation of closed-cycle cooling at Indian Point Units No. 2 & 3 are inextricably linked and any deferral in the schedule for Unit 2 affects the schedule for Unit 3. The environmental

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\*There has been a one-year slippage to September, 1981 because of the fact that the unit was not fully operational in the spawning season, 1975.

consequences of a deferral for Unit 3 must be disclosed and considered in the DES and instead it has been totally ignored. This failing alone is sufficient to render the DES inadequate. It is absolutely unconscionable that this has not been considered in light of the NRC's own recognition of the overlap and the intervenor's repeated statement of concern on this subject.

#### CONCLUSION

HRFA is deeply concerned about the gross inadequacies of the DES, its overall tone and attitude. It contains sloppy and incomplete analyses and insufficient justifications for the proposed action. The DES should be revised. The proposed license amendment should be rejected.