

UNITED STATES OF AMERICA  
FEDERAL POWER COMMISSION

Before Commissioners: John N. Nassikas, Chairman;  
Albert B. Brooke, Jr., and Rush Moody, Jr.

Consolidated Edison Company ) Project No. 2338  
of New York, Inc. )

ORDER DENYING PETITIONS TO REOPEN  
AND FOR FURTHER HEARINGS IN THIS PROCEEDING

(Issued May 31, 1973)

In Scenic Hudson Preservation Conference v. F.P.C., 354 F. 2d 608 (CA2 1965), cert. denied, 384 U.S. 941 (1966) (Scenic Hudson I), the Court set aside our order of March 9, 1965, granting a license to Consolidated Edison Company of New York, Inc. (Consolidated Edison) for the construction and operation of the Cornwall Pumped Storage Project, Project No. 2338. The Court directed that the whole question of conservation of the Hudson River fishery should be taken into consideration, on remand, before deciding whether to license the project. 1/ Among other things, the Court held that the record should be supplemented as to the availability of gas turbines as a possible alternative to the project on the basis of cost savings and other benefits, including the relative contribution of the alternative to the reliability of Consolidated Edison's system. 2/ The hearing on remand was also to include an investigation of the availability of sufficient power from interconnected systems to meet Consolidated Edison's peaking needs. 3/ The Court also directed

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1/ See Scenic Hudson I, 354 F. 2d 608, 624.

2/ Id. at 617-20.

3/ Id. at 621-22.

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EXHIBIT B

that the renewed proceedings should include as a "basic concern the preservation of natural beauty\* \*". 4/ The hearings on remand included not only the above issues but all matters relevant to the question whether a license should be granted. 5/

After the hearings on remand we issued a license to Consolidated Edison in an order accompanying our Opinion No. 584, 44 FPC 350, rehearing denied, 44 FPC 1189 (1970). The order was affirmed, the Court holding, among other things, that there was substantial evidence on the issues remanded and other challenged issues. See Scenic Hudson Preservation Conference v. F.P.C., 453 F. 2d 463 (CA2 1971), cert. denied, 407 U.S. 926 (1972) (Scenic Hudson II).

Scenic Hudson Preservation Conference (Scenic Hudson) and the Hudson River Fishermen's Association (HRFA) are numbered among several interveners who participated in hearings leading to the issuance of the license order affirmed by the Court. On February 2, 1973, HRFA filed a petition for a hearing and for an order forbidding operation of the project during the months of May, June and July of each year in order to preserve striped bass eggs, larvae, and young from the assumed effects of this as yet unconstructed project. 6/ On March 29, 1973, Scenic Hudson filed a motion to reopen the record to reassess the project as a whole on the ground that there was new evidence not only as to fish conservation but on other issues such as

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4/ Id. at 624.

5/ See 35 FPC 151, 152 (order fixing hearing on remand).

6/ In support of its petition HRFA cites Article 16 of the license, a standard condition which, in pertinent part, provides for reasonable modification of project operation in the interest of conservation of fish resources.

scenic beauty, Consolidated Edison's system plans, and the alleged superiority of gas turbines and combined cycle turbines over the Cornwall project in terms of economics and their contribution to the reliability of the Consolidated Edison system. Consolidated Edison filed answers and motions to dismiss the petitions. 7/

In Opinion No. 584 we officially noticed the report of the Hudson River Policy Committee entitled "Hudson River Fisheries Investigations 1965-1968", hereafter referred to as "Study Report". 8/ The studies are the result of our requirement, in 1965, that Consolidated Edison finance studies to evaluate the effect of the project on Hudson River fisheries. 9/ Upon Consolidated Edison's agreement to fund studies on the possible effects of the proposed plant, parallel committees (policy and technical), each consisting of representatives from the U.S. Bureau of Commercial Fisheries, U.S. Bureau of Sport Fisheries and Wildlife, N.Y. Conservation Department and N.J. Division of Fish and Game, were formed to oversee these studies. 10/

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7/ In support of its allegations summarized above (other than those relating to fish conservation) Scenic Hudson furnished the affidavit of Dr. Kusko, an electrical engineer who testified at the hearing. In answer the licensee provided an affidavit of Mr. Bram, an electrical engineer presently engaged in generation planning for Consolidated Edison. Mr. Bram states, among other things, that the Cornwall project has maintained an economic advantage over alternative forms of generation despite substantial cost increases in all forms of generation since the project was licensed. He also describes the project as superior in terms of system protection.

8/ The complete report was made available in February of 1970, which was after the close of the hearing on remand. However, earlier portions of the study were introduced into the record. See 44 FPC 350, 397.

9/ See 33 FPC 428, 457.

10/ The Connecticut State Board of Fisheries and Game also actively participated at the policy level.

Objectives of the studies, consisting of survey work on the river conducted from 1965 to 1968, were "to determine the distribution of life stages of fish in the Hudson River estuary which are potentially vulnerable to this plant and to consider the impact of possible losses on their populations." 11/ The Policy Committee concluded that "the evidence indicates that there would not be any significant adverse effects to the striped bass and American shad fisheries of the Hudson River from a pumped storage generating plant at Cornwall, New York." 12/

Article 36 of the license provides for continuing biological and engineering studies (pre-operational studies). 13/ Further, studies will be made during the first three years of operation of the project to assess fully the actual effect of project operations on the fish populations and their habitat. The pre-operational studies cover, among other things, propagation facilities and operation data, including pilot hatchery studies, needed to offset any losses to fish populations.

Pre-operational studies, under the general guidance of the Hudson River Policy Committee 14/, are presently being conducted in accordance with a study program approved by us on April 21, 1972. The scope of the work presently in progress includes sampling, study of fish distribution and movement, impingement studies, pressure studies, and dynamic prediction of the effects of entrainment, impingement, and long-term impact of the plant on fish populations using a life stage mathematical model. Presently under development are post-construction plans which will include, upon commencement of project operation, tests under actual operating conditions to study the actual survival of eggs, larvae, and non-screenable fin fishes and screenable fishes.

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11/ Study Report, p. 6.

12/ Id. at 4.

13/ 44 FPC 350, 434-5.

14/ The Hudson River Policy Committee is presently composed of representatives of the Bureau of Sport Fisheries

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In support of its allegation that there is new evidence warranting a hearing to establish operating limitations in aid of the fishery, HRFA attached to its petition extracts from the testimony of Dr. Goodyear, an Atomic Energy Commission research ecologist, given at the hearing on issuance of an operating permit for Indian Point Unit No. 2. In support of a similar allegation, Scenic Hudson provided an affidavit of Dr. Hall, an AEC biologist, who collaborated with Dr. Goodyear in the preparation of computer model studies in connection with the Unit No. 2 permit proceedings. The Study Report was the principal source of fisheries data used for the model studies. 15/ HRFC also supports its petition with an affidavit of Mr. Clark, a fishery scientist who is a consultant to HRFC in the Indian Point proceedings, who also relies on the basic data contained in the Study Report.

Based on the affidavit of Mr. Clark, HRVA asserts that the authors of the Study Report, in computing that less than 0.7% of striped bass eggs and 2.9% of the larvae would be subject to removal by the plant 16/, incorrectly failed to include the factor of tidal recycling of eggs and larvae. Mr. Clark states that, on the average, the organisms may be circulated past the plant ten or 12 times, and therefore the

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14/ (Footnote continued from preceding page).

and Wildlife of the U.S. Department of the Interior, the National Marine Fisheries Service of the U.S. Department of Commerce, the Fish and Wildlife Division of the N.Y. Department of Conservation and the Division of Fish, Game and Shell Fisheries of the N.J. Department of Environmental Protection.

15/ The permit matter is presently pending initial decision before an AEC licensing board. It appears that in the proceedings the adequacy of the model in relation to Indian Point has been questioned.

16/ Study Report, p. 6.

removal rate should be increased from over 3% to approximately 35%. See Clark Affidavit, p. 4. The portion of Dr. Goodyear's testimony in the AEC proceeding, provided by HRFA, does not estimate a rate of removal but states it was a substantial error not to allow for repeated exposure of the organisms to entrainment. Dr. Hall says the range of withdrawal would be between 30 and 40%. 17/ Mr. Clark also asserts that the only safe assumption is to expect a 100% mortality rate for larvae and a high rate of mortality for eggs entrained by the plant. 18/

It is the view of the Hudson River Policy Committee that the assumption that the river's flow was unidirectional toward the sea, i.e., treating the plant as withdrawing a completely new volume of eggs and larvae during each pumping cycle, resulted in a more critical evaluation of the plant than would be possible if the river were considered tidal. 19/ The Committee also pointed out that an analysis of the basic

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17/ See Hall Affidavit, p. 5.

18/ See Clark Affidavit, p. 6. Dr. Hall does not agree with Mr. Clark as to the mortality rate of entrained eggs and larvae, recognizing that forty percent "withdrawal does not necessarily mean 40 percent mortality". See Hall Affidavit, p. 5. On this subject the Commission found that the evidence indicated "a reasonably high rate of survival of eggs, larvae, and young fish of the year drawn into the plant". See 44 FPC 350, 399-400. For the Court's review of this finding, see Scenic Hudson II, 453 F.2d 463, 476-7.

19/ These views were contained in a letter to HRFA from the N.Y. Deputy Commissioner for Environmental Management and a letter from the Hudson River Policy Committee to Consolidated Edison. See Consolidated Edison's Answer to HRFA, Exhibits B & C.

data based on tidal effects of the river would involve making assumptions about unknown basic relationships. 20/

It is pertinent here that there was evidence in the hearing record as to tidal effects. For example, the Hudson is about 3800 feet wide at Cornwall and a model study was made of the Cornwall area for the purpose of determining the project's effect upon river flows. These studies indicated no significant effects of pumping further out than 1000 feet from the plant. 21/ Also, on March 27, 1969 Staff biology witness Mr. Hauck, introduced into evidence tables provided by the Hudson River Investigations, showing the number of striped bass eggs and larvae collected in 1966 and 1967, station by station, per thousand feet of water strained. Mr. Hauck analyzed the collections in the light of ebb and flood tide transport distances and other data and introduced an exhibit indicating the limits of the spawning area from which eggs and larvae could be subjected to entrainment by the Cornwall project. 22/

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20/ In this connection the Policy Committee stated, in part: "Calculations based upon the tidal nature of the river must consider the natural and plant induced mortality of the organisms in the river when determining the number of times a single organism will pass the plant. The natural mortality rate of the fishes in the Hudson River is not known, nor for any other system of this size. However, it is estimated in excess of 90 percent. This high mortality would completely mask any possible effects that the plant alone might have on the fishes. The argument is not valid that plant effect will be higher by sifting organisms back and forth with the tide in front of the plant, since an organism can be killed only once."

21/ See 44 FPC 350, 492. An implicit assumption of Mr. Clark seems to be that the river flow opposite Cornwall is evenly exposed to withdrawal.

22/ Mr. Hauck's exhibit indicated where spawning occurred by applying to the catch locations the average rates of

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On May 10, 1973 we received a letter from the Assistant Secretary of the Interior recommending that we review and examine all available data, including full consideration of seasonal variations in numbers of fish and their larvae, fish food organisms, tidal flows, and entrainment. He did not request that the proceeding be reopened. Under Article 36 of the license, pre-operational studies are now in progress covering the subjects of interest to the Department of the Interior. A report on these studies will be submitted for our consideration in the Spring or early Summer of 1974.

HRFA and Scenic Hudson, while requesting a hearing on fish conservation, offer to present no new basic data but only differences of opinion and interpretation by professional biologists in connection with matters already in the record made on anticipated effects of the project. 23/ Scenic Hudson characterizes analysis of the tidal flow assumption in the Study Report as new evidence, despite the fact that it claimed that the Study Report "used erroneous data on tidal flows" in its application for rehearing of the order issuing license, filed September 17, 1970. In Scenic Hudson II the Conference did not apply to the Court, under Section 313(b) of the Federal Power Act, for leave to adduce additional evidence with reference to the Study Report. It seems clear, therefore, that the Court, in affirming the order issuing license, finally determined this issue. 24/

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22/ (Footnote continued from preceding page).

development of eggs and larvae, at an average or mid-spawning season water temperature of 65 degrees Fahrenheit, and an average transport of 4.5 miles for each ebb tide downstream and 2.8 miles for each flood tide upstream.

23/ HRFA asks for "an evidentiary hearing in which \* \* conflicting opinions can be tested under oath." Answer to Consolidated Edison, p. 4.

24/ HRFA did not apply for rehearing of the license order. Under Section 313(b) of the Federal Power Act, "an

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In accordance with our responsibilities under Section 10(a) of the Federal Power Act, we have provided in this license for adaption of project operations and modification of fish protective facilities when need therefor arises. Viewed in the light of the continued fish protective studies and the close monitoring of post-construction effects which we are requiring, the petitions of HRFA and Scenic Hudson for a hearing on the fish conservation issue are premature.

As we noticed at the outset, Scenic Hudson requests, in effect, a reopening of the entire proceeding, including all issues which were the subject of the Court's remand, such as economic feasibility and the relative merits of alternatives. These issues have been determined by the final order of the Court affirming the license order in Scenic Hudson II. See City of Tacoma v. Taxpayers, 357 U.S. 320, 336-7 (1958). Were this not so, the following admonition would still be pertinent:

If upon the coming down of the order litigants might demand rehearings as a matter of law because some new circumstance has arisen, some new trend has been observed, or some new fact discovered, there would be little hope that the administrative process could ever be consummated in an order that would not be subject to reopening. 25/.

Consolidated Edison applied for this license on January 21, 1963 and, as the Court noted in Scenic Hudson II (453 F. 2d 463, 469), extensive hearings preceded issuance of the license. On June 19, 1972 the Supreme Court declined to review the final judgment of the United States Court of Appeals for the Second Circuit, affirming the license order. On July 25, 1972 we extended

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24/ (Footnote continued from preceding page).

objection in an application for rehearing by the Commission 'is an indispensable prerequisite to the exercise of power of judicial review of the order on such ground.'" Utah Power & Light Company, v. F.P.C., 339 F. 2d 436, 438 (CA10 1964). See also California v. F.P.C., 345 F. 2d 917, 926 (CA9 1965).

25/ I.C.C. v. Jersey City, 322 U.S. 487, 514 (1944).

the time to commence project construction. The extension of time was granted on the ground that Consolidated Edison did not wish to commence construction until all pending litigation was resolved, including any application for rehearing of the denial of certiorari. In this connection the licensee called to our attention that proceedings were in progress in the State courts, on behalf of Scenic Hudson, questioning the water quality certification filed with the Commission on August 18, 1971, in compliance with Section 21(b) of the Federal Water Pollution Control Act. On March 14, 1973 the validity of the certification was upheld in deRham v. Diamond, 5 ERC 1113 (N.Y. Ct. App. 1973).

It thus appears that all appeals in both Federal and State courts have been concluded and that the finality of the Commission's order issuing a license authorizing construction of the project is no longer in doubt. The question of whether construction of the project is in the public interest has been litigated to a final conclusion. The question of operation of the project in relation to fishery resources under Article 36 of the license is subject to ongoing studies. The results of these studies will be the subject of continuous review and additional measures to protect the fishery resources which will be taken as the need is shown.

The Commission finds:

The Hudson River Fishermen's Association's petition for hearing and for order regulating operation of pumped storage project and Scenic Hudson Preservation Conference's petition to reopen and for further hearings should be denied.

The Commission orders:

The petitions described in the above finding are hereby denied.

By the Commission.

( S E A L )

Kenneth F. Plumb,  
Secretary.

UNITED STATES OF AMERICA

ATOMIC ENERGY COMMISSION

In the Matter of )  
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CONSOLIDATED EDISON COMPANY ) Docket No. 50-286  
OF NEW YORK, INC. )  
(Indian Point Station, Unit )  
No. 3) )

CERTIFICATE OF SERVICE

I hereby certify that I have this 19th day of July, 1973, served copies of the foregoing document entitled "Applicant's Motion for Protective Order" by mailing them first class, postage prepaid and properly addressed to the following persons:

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