

CO INQUIRY REPORT NO. 50-247/72-12

Licensee: Consolidated Edison Company
Buchanan, New York

Facility: Indian Point 2 - PWR

License No.: DPR-26

Docket No.: 50-247

Title: Fish Kill Resulting from Testing of the Circulating Water
System

Prepared By: G. L. Madsen 4/7/72
G. L. Madsen, Reactor Inspector Date

A. Date and Manner AEC was Informed:

As previously reported*, Commissioner Diamond, New York State Department of Environmental Conservation (DEC) issued an order to halt testing of the circulating water pumps for Unit No. 2 because of substantial fish kills. The press release of Commissioner Diamond and the April 1, 1972 edition of the New York State Environment paper, published by the New York DEC, contained recommendations relating to penalties and conditions under which circulating system testing could be resumed. (Articles attached)

B. Description of Particular Event or Circumstance:

The articles state that Commissioner Diamond has asked New York Attorney General Lefkowitz to seek fines from Consolidated Edison for "substantial fish kills" which occurred at Unit No. 2 in February and that Consolidated Edison might be liable for penalties as high as \$1.6 million. The article also states that the DEC has agreed to resume testing provided:

1. Water intake velocity is reduced to 60 percent of capacity
2. Double air bubble screens are installed in front of all intakes at Units 1 and 2 before December 1, 1972.
3. Plans are developed for a screened lagoon which would keep all fish away from the intakes if the above measures do not provide adequate protection.

*CO Inquiry Report No. 50-247/72-08

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C. Action by Licensee:

Mr. W. Cobean, Manager of Nuclear Power Generation, was contacted on April 7, 1972. He informed CO:I that Con Ed has received notification from the DEC on this matter and that the provisional conditions are under evaluation. Mr. Cobean stated that the circulating pumps have not been operated since the initial DEC order was received.

DEC Seeks Fines From Con Ed For Indian Point Fish Kills

By Sandy Marvinney

Commissioner Henry L. Diamond has asked Attorney General Louis Lefkowitz to seek fines from Consolidated Edison for "substantial fish kills" which occurred at Con Edison's new Indian Point No. 2 nuclear power plant in February. Con Edison might be liable for penalties as high as \$1.6 million for violation of the conservation law prohibiting the taking of fish by drawing off water.

"My investigation of the massive fish kill indicates that Consolidated Edison should have known the techniques they were using would cause irreversible harm to the fish life of the river," Commissioner Diamond said. "In the light of this disregard for the quality of the environment, I am asking the Attorney General to seek the substantial penalties the law provides."

Commissioner Diamond had

ordered Con Edison to cease testing its water intake facilities at Indian Point No. 2 after nearly 160,000 fish were killed during operation of the plant from February 22-27. A public hearing was held in Albany on March 9 at which Con Edison was ordered to produce their records of fish kills during January and February.

"Under the law," Commissioner Diamond explained, "the department has the authority to protect the fish by closing down the plant, which we did, but it has no authority to impose a fine directly upon the company. Consequently, I am asking the Attorney General to bring this before the courts."

Preliminary Tests

The \$160 million 873,000 kilowatt plant is not yet in operation but has been undergoing preliminary start up tests prior to low power testing of its nuclear generator which is scheduled for April.

The department has agreed to let Con Edison resume its tests provided it takes the following strong safeguards for protection of fish life in the Hudson River:

1. Reduction of water intake velocity to 60 percent of capacity.
2. Installation of double air bubble screens in front of all water intakes at both Indian Point No. 1 and No. 2 before December 1, 1972.
3. Development of plans for screened lagoons which would keep all fish away from the intakes if the above measures do not provide adequate protection.

Winter Months

The fish kill problem is particularly severe during the winter months when the temperature and salinity conditions near the Indian Point plants provide a more favorable habitat than other areas of the river, causing fish to congregate there

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Con Ed Fish Kills

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in large numbers. Furthermore, fish tend to be lethargic in cold weather and are less able to swim away from the plant's intake channels during operation of the circulators which draw water from the river at a rate of approximately 140,000 gallons per minute.

The dead fish, mainly white perch up to two inches long, were killed when they were drawn in by the circulators and became impinged on protective screens designed to keep debris from entering the plant's cooling system.

Con Edison has been experimenting with air bubble screens at Indian Point No. 1 with some success in reducing fish kills there.

Harry G. Woodbury, Con Edison's executive vice president for environmental affairs, testified at the hearings that the February tests at Indian Point No. 2 were part of the company's winter service effectiveness program to obtain data to help minimize fish kill problems in the future. "We were aware that the test would inevitably catch some fish," Woodbury stated, "but we need the test to get data on which to design a better intake system."

Woodbury stated that "plant operation at Indian Point has not and will not have a significant impact on the fish life of the Hudson River." He repeated an earlier Con Edison proposal to build a hatchery to replace any fish in the river killed by the plant operation.

Con Edison has been operating its Indian Point No. 1 plant for nearly ten years and has experienced recurring fish kill problems. The utility hopes to have the No. 2 plant producing substantial amounts of power by July.

"We are requiring that Con Edison give us 24 hours advance notice during business hours before any testing is resumed at Indian Point No. 2," Commissioner Diamond stated. "Enforcement personnel from the department will be on hand during future tests to assure that proper safeguards are taken."

April 1, 1972 Edition of the New York State Environment
paper, published by the New York DEC

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12201
HENRY L. DIAMOND, COMMISSIONER

FOR RELEASE: A.M., FRIDAY, MARCH 31, 1972

Commissioner of Environmental Conservation Henry L. Diamond today asked Attorney General Louis Lefkowitz to seek fines from Consolidated Edison for "substantial fish kills" which occurred at Con Ed's Indian Point No. 2 nuclear power plant in February. Testimony at recent Department hearings indicate the utility might be liable for penalties as high as \$1.6 million.

"My investigation of the massive fish kill indicates that Consolidated Edison should have known the techniques they were using would cause irreversible harm to the fish life of the river," Commissioner Diamond said. "In the light of this disregard for the quality of the environment, I am asking the Attorney General to seek the substantial penalties the law provides."

"Under the law," Commissioner Diamond explained, "the Department has the authority to protect the fish by closing down the plant which we did, but it has no authority to impose a fine directly upon the company. Consequently, I am asking the Attorney General to bring this before the courts."

The Department has agreed to let the company resume the testing of the \$160 million plant with strong safeguards for fish protection. These include:

1. Reduction of the velocity of water intake to 60 percent of capacity.
2. Installation of double air bubble screens in front of all water intakes at both Indian Point No. 1 and No. 2 before December 1, 1972.
3. Development of plans for screened lagoons which would keep all fish away from intakes.

"The crucial time for fish comes during the winter months when the water is cold and the fish are less mobile," Commissioner Diamond said. "Cutting back the velocity

(more)

of water intake during cold weather is expected to provide adequate protection for fish until December. The air bubbling system will provide added safeguards then. If the intake cutbacks and the bubbling systems do not provide sufficient protection, we will insist that a screened lagoon be built to provide a zone of safety so that fish will not get close to the intake."

"We are requiring that Con Ed give us 24 hours advance notice during business hours before any testing is started," Commissioner Diamond added. "Enforcement personnel from the Department of Environmental Conservation will be on hand during future tests to assure that proper safeguards are taken."

The incidents in February killed more than 160,000 fish, mainly white perch with some striped bass and other species.

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3/30/72

FOR FURTHER INFORMATION, CALL:
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