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New York Denies Indian Point a Water Permit

By **DAVID M. HALBFINGER**

In a major victory for environmental advocates, New York State has ruled that outmoded cooling technology at the **Indian Point** nuclear power plant kills so many Hudson River fish, and consumes and contaminates so much water, that it violates the federal Clean Water Act.

The decision is a blow to the plant's owner, the Entergy Corporation, which now faces the prospect of having to spend hundreds of millions of dollars to build stadium-size cooling towers, or risk that Indian Point's two operating reactors — which supply 30 percent of the electricity used by New York City and Westchester County — could be forced to shut down.

Entergy officials said that they were "disappointed" in the ruling and that they might fight it in court. The original federal licenses for the two 1970s-era reactors expire in 2013 and 2015, and a water quality certificate is a prerequisite for a 20-year renewal by the United States **Nuclear Regulatory Commission**. But a prolonged appeal in New York could delay a shutdown, Diane Screnci, a spokeswoman for the commission, said late Saturday.

An Entergy spokesman said that converting Indian Point's cooling system would cost \$1.1 billion and would require shutting both reactors down entirely for 42 weeks.

The ruling in New York comes after **President Obama** pressed for the construction of new nuclear plants in his **State of the Union address**. But it is the second instance since of a state asserting its power to threaten an existing nuclear plant. In Vermont, the State Senate voted overwhelmingly in February to block operation of Entergy's Vermont Yankee plant after 2012, citing leaks of radioactive tritium, inaccurate testimony by company officials and other problems.

Nuclear proponents said they hoped that the federal government would determine that the nation's energy needs should take precedence over such state-level actions. "The N.R.C. may

decide this is not a policy they're going to give credence to," said Arthur J. Kremer, chairman of the [New York Affordable Reliable Electricity Alliance](#), of which Entergy is a member. "It's bad news for investors in new power facilities and in upgrading old ones."

The battle over Indian Point, which is in Buchanan, about 35 miles north of Midtown Manhattan, has been raging for decades, and the latest decision will not soon end that fight.

But the strongly worded letter from the Department of Environmental Conservation, issued late Friday, said flatly that Indian Point's cooling systems, even if modified in a less expensive way proposed by Entergy, "do not and will not comply" with New York's water quality standards.

It said the power plant's water-intake system kills nearly a billion aquatic organisms a year, including the [shortnose sturgeon](#), an endangered species. The letter also said that radioactive material had polluted the Hudson after leaking into the groundwater.

The ruling concerned the cooling system at Indian Point Units 2 and 3, which were commissioned in the early 1970s. (Indian Point 1 was shut down in 1974.) Both take in enormous volumes of river water — a combined 2.5 billion gallons a day, or more than twice the average daily water consumption of all of New York City — and use it to create steam for turbines and to cool the reactors. The water is then pumped back into the Hudson, 20 or 30 degrees hotter.

Sucking so much water causes plankton, eggs and larvae to be drawn into the plant's machinery, or entrained, and the water pressure also causes fish to be trapped, or impinged, against intake screens, the state said.

The plant's "once-through" cooling system was obsolete by the late 1970s, when the state of the art became "closed-cycle" cooling — more akin to a car's radiator — which consumes less than 10 percent as much water and kills fewer organisms.

"Conversion from a once-through cooling system to a closed-cycle cooling system, while expensive and involving a potentially lengthy construction process, is nevertheless the only available and technically feasible technology" for Indian Point to satisfy the "best technology available" requirement of state water-quality regulations, an official of the Department of Environmental Conservation official wrote.

If Entergy fails to overturn the state's ruling, it could take the fight to Washington. And the New York region's economic reliance on Indian Point could give the corporation considerable leverage. Even Assemblyman [Richard L. Brodsky](#), a Westchester Democrat who is one of the plant's loudest critics, said he expected Entergy to "try to get the N.R.C. to back off the

requirement” for a water quality certificate.

Other opponents of the plant hailed the ruling.

“The era in which you can take 2.5 billion gallons of water from the Hudson River every day, and return it to the river untreated and polluted — those days are over,” said Mr. Brodsky, who, with the folk singer [Pete Seeger](#), successfully sued to get the state to enforce the clean-water laws at Indian Point. “Entergy has to either stop polluting the river or close the plant. End of discussion.”

Alex Matthiessen, president of the environmental group [Riverkeeper](#), said it was conceivable that Entergy could spend the money to retrofit its cooling system and then reapply to the state. But that would cause a huge delay, he added.

“For all we know, this is it — the beginning of the end,” he said.

Ms. Screnci, the spokeswoman for the Nuclear Regulatory Commission, said the commission was “a ways away from reaching a decision on whether to renew the license.” But she added: “It’s my understanding that the law says that this certification must be in place for us to renew the license. So we’ll be watching to see what occurs in the meantime.”