NorthCountyNews

http://www.northcountynews.com/news/ncn_news2.asp

DEC says Indian Point affecting aquatic life

August 28, 2008

By Abby Luby



Photo courtesy of the NRC

An example of a cooling tower – this one is about 70-feet tall; a mechanical draft cooling tower at the Vermont Yankee nuclear power plant.

State wants new cooling system

In a long-awaited landmark decision, New York State has formally ruled that the water cooling system at the Indian Point Nuclear Power Plants adversely affects aquatic life in the Hudson River and that the system has to be replaced.

For the last 30 years local environmental groups have been appealing to the New York State Department of Environmental Conservation (DEC) to enforce the Clean Water Act by ordering Indian Point to replace its outdated water cooling system. Studies have shown the system has been responsible for killing about 1.2 billion fish a year. That number includes fish eggs, as well as small and large fish.

The water cooling system takes in and flushes out over 2.5 billion gallons of river water daily. Water going inside the plant absorbs the heat of the turbines that produce electricity and then the heated water returns to the river

affecting aquatic life.

The DEC ruling signals the first time the state has gone on record saying Indian Point's current cooling system kills fish. The news pleased environmental groups such as Riverkeeper, Natural Resources Defense Council (NRDC) and Scenic Hudson, who have long argued for a new water cooling system.

"We've won the argument that the water cooling system has adverse affects," said Phillip Museegas of Riverkeeper. "That's a big one for us." Hearings will now be held next spring to hear arguments to determine what cooling system is best for Indian Point.

Jim Steets, a spokesman for Entergy, which owns Indian Point, said the DEC decision was fair because it allows for the energy company's input.

"The process that was laid out gives us ample opportunity to make our case about the cooling methods which will make the most sense for Indian Point," he said. In effect, the DEC ruling said Entergy can no longer argue that its system doesn't impact fish, said DEC spokesperson Yancy Roy.

"The decision means that the state is recommending Indian Point use closed cycle cooling," Roy said. "But there are other mileposts to be met." Now both sides can raise questions about feasibility, impacts and alternatives to closed cycle cooling.

Indian Point currently uses a water cooling system known as "once-through" cooling, a relatively inexpensive system that helps generate power efficiently. The down side of once-through cooling is that the system traps larger fish against the intake screens. The smaller fish and larvae are sucked past the screens and into the cooling system. To date, 60 nuclear power plants of the 103 in the United States use once-through cooling systems. The environmentally friendly "closed-cycle" cooling recirculates the water in a closed system, substantially reducing the large amount of water needed from the Hudson River. The system also cools the returning water, lessening the effects on aquatic life. The DEC has been extending Indian Point's Clean Water Act permit using the once-through system since 1981. At that time a deal was made with then owner Con Ed that allowed the utility to operate without installing closed cycle cooling by agreeing not to construct a pump storage facility at Storm King, on the west side of the Hudson River.

Con Ed's permit expired in 1992 but the DEC continued to issue temporary operating permits. In 2003, the DEC granted another permit stipulating that Entergy, who purchased Indian Point in 2001, install closed cycle cooling. Entergy has been challenging that ruling for the last five years.

Taking years to get a DEC ruling on the negative impacts on aquatic life seemed to be a convoluted process compounded by the industry deregulation of the 1990s, said Warren Reiss, general counsel for Scenic Hudson.

"Privately owned utilities were fighting tooth and nail against installing closed cycle cooling," Reiss said. "These utilities have huge resources and hire hordes of lawyers, engineers and biologists - the best money can buy. If closed cycle cooling costs them tens of millions of dollars to install, they are very happy to spend just \$1 million a year on lawyers to avoid that. To date, they have been very successful."

Entergy has maintained that a new closed cycle cooling system would mean building huge cooling towers similar to the large concrete chimneys at Three Mile Island in Pennsylvania and would be cost prohibitive.

"We've done a study of cost estimates and the system that would be most appropriate for Indian Point will cost about \$1.5 billion," said Steets. "The towers wouldn't be quite as big as Three Mile Island, but they would be about 100 feet wide and 150 feet tall. That would triple the footprint of Indian Point."

Grassroot groups working to shutter Indian Point, such as Westchester Citizens Awareness Network (WESTCAN), have said the large, expensive cooling towers proposed by Entergy are propaganda.

"They talk about the costliest and most obtrusive

technology available," said Marilyn Elie, co-founder of WESTCAN. "They say that it's economically unfeasible when they really have no intention of using such a system. It's a bait-and-switch tactic geared towards scaring the public."

Don Jackson, branch chief of Region One for the Nuclear Regulatory Commission (NRC), said there are many different types of cooling systems from which to choose. "It all depends on the needs of the plant," he said. "Engineers from Indian Point will have to make a business decision on that."

The NRC doesn't have an opinion on what kind of cooling system is chosen because it doesn't usually impact the safe, day-to-day operation of the plant, Jackson added. The Vermont Yankee Nuclear Power Plant on the Connecticut River in Vermont is also owned by Entergy and employs a cooling system with banks of 20 towers that are 70-feet tall.

Steets said that millions of dollars have already been spent upgrading the cooling system at Indian Point. The upgraded system now has variable speed pumps that limit the intake of water from the river and a fishery turn-screen that intercepts fish before being brought into the plant.

"In the last 15 years, Entergy, and Con Ed have spent over \$40 million upgrading the cooling system for units 1 and 2," Steets said. "So does it really make sense to replace the cooling system that has just a marginal impact? That's the question that needs to be resolved."

The DEC spring hearings will resemble a trial setting and will be open to the public.

"We are cautiously optimistic that this will result in a final decision requiring Indian Point to implement closed cycle cooling," said Reiss