

State of New York
Petition submitted to the U.S. Nuclear Regulatory Commission
November 30, 2007
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**Application of Entergy Nuclear Operations, Inc., for the 20-year Relicensing of
Indian Point Nuclear Power Plants 1 & 2, Buchanan, New York**

Summaries of Some of the Key Contentions

Introduction

The story of Indian Point is one that is almost forty years in the making, and it involves complex, technical but also common sense issues that are set forth in the State of New York's petition to the Nuclear Regulatory Commission. For the first time, these issues, which are critical to the future of the Hudson Valley and to the millions who live in the region, can be addressed in an open and comprehensive public process. The State of New York urges the granting of its petition by the NRC, particularly given the twenty years of consequences of such a significant decision. In the end, the process will clearly show that the license renewal for Indian Point should not be granted by the NRC.

Evacuation Contention

There has been no catastrophic radiological release from Indian Point requiring evacuation of the surrounding communities in the three plus decades it has been operating. These surrounding communities are home to twenty million people and include the financial capital of the world, New York City. It is fortuitous that no such disaster has occurred. Any radiation release scenario is sure to be a complex and profound event, particularly if it is sudden and fast moving. The law, prudence, and common sense dictate that the applicant account for its evacuation plans under the environmental review of the license renewals and to address precisely how it plans to react to and protect these communities and their families and children should the unthinkable event happen at Indian Point. The law requires these plans, and it also requires that they work. The applicant's *Environmental Report* has not addressed evacuation planning. This is not an issue that should be allowed to fall to chance, nor succumb to circular legal reasoning about why a full review and analysis of evacuation issues is not necessary. The NRC rules and regulations create a legal fiction that has allowed evacuation planning to become categorized and compartmentalized, but never specifically and directly addressed for each nuclear facility. In fact, despite efforts to do so, those members of the public and their governments seeking full review have been unable to do so because of NRC actions and conclusions. Before the Board determines whether a license renewal application should be approved for operation of Indian Point for another twenty years, the State of New York contends that such review must be conducted as a matter of law to protect the health and safety of the public.

Risk of Terrorist Attack on Spent Fuel Pool Contention

The Environmental Report and the license renewal documents submitted by the applicant address to varying degrees a radiological release from the containment structures located on-site at Indian Point. The spent fuel pools, which store significant volumes of radioactive material -- far more than inside the active nuclear reactors, have no containment structure. However implausible it may be that this radioactive waste is exposed and unsecured, that is the case at Indian Point. It is also vulnerable to attack. The NRC asserts that if a radiological release occurred from these pools, it "would be no worse than expected from internal events." There is absolutely no basis for such a statement, and such a conclusion should not serve as a basis to avoid analysis and review of this crucial public health and safety issue. Experts agree that such analysis is needed, and the State of New York contends it must be done as part of this application.

Groundwater Contamination by Leaking Radionuclides Contention

Radionuclides are leaking into the groundwater from the aging structures of Indian Point. Amongst others, are strontium-90 and tritium, which exceed drinking water standards by 14 times and 30 times, respectively. These radioactive substances have been linked to various forms of cancer. The radionuclides in the groundwater beneath Indian Point are also getting into the Hudson River. These leaks and their obvious public health and safety impacts are not being considered as part of this license renewal proceeding. A decade-old generic review and limited NRC investigation are no substitute for the mandatory and complete review required by law. The State of New York contends that the groundwater leaks must be considered in this proceeding.

Impingement and Entrainment Contention

The operation of Indian Point consumes and returns approximately 2.5 billion gallons of Hudson River water each day. The River is an important estuarine ecosystem, and this operation has significant adverse impacts to the fish that call the Hudson home. Large fish are "impinged" on screens at the water intake where they are severely stressed and then suffocated. Smaller fish are "entrained" in the water intake, pulled through the operating plant and killed. This relentless process has continued relatively unabated for almost 40 years, and the applicant now seeks 20 more years. This must not continue because the environmental costs are too high. The NRC must fully consider the alternative of closed cycle cooling to mitigate these significant adverse impacts in this license renewal proceeding.

Heat Shock/Thermal Contention

Indian Point's 40-year-old design uses massive quantities of Hudson River water when operating and returns significantly heated water back to the river. The Hudson River would be a far more productive estuarine ecosystem if the heat shock impacts from Indian Point could be mitigated. Tens of millions of fish are impacted – from behavioral and growth impacts to fatalities. These impacts cannot be mitigated and they violate the requirements of the Clean Water Act. The State of New York contends that these thermal impacts must be fully analyzed and addressed in this license renewal proceeding.

Endangered Species Contention

The Endangered Species Act became the law of the United States to stop the disappearance of species in jeopardy of extinction. The NRC must implement and follow this important legal obligation in the license renewal application process. Operation of Indian Point impinges shortnose sturgeon – an endangered species – and impinges and entrains the Atlantic sturgeon, a candidate threatened species under the Act. The applicant argues that Indian Point does not jeopardize these fish. The State of New York contends that there are serious questions about the applicant's views. The Endangered Species Act and common sense dictate that a full and thorough analysis is needed before the NRC makes a decision that could determine the fate of the sturgeon in the Hudson.