UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 27, 2011

The Honorable Eric T. Schneiderman
Attorney General
State of New York
120 Broadway, 26th Floor
New York, NY 10271-0332

Dear Mr. Schneiderman:

On behalf of the U.S. Nuclear Regulatory Commission (NRC or Commission), I am responding to your letter dated March 18, 2011, regarding seismic risks at Indian Point Nuclear Generating Station Units 2 and 3 (IP2 and IP3). The recent events in Japan have heightened interest in the safety of U.S. reactors. U.S. reactors are designed to withstand natural events based on the specific site where the reactor is located, including earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches, without loss of capability to perform their safety functions. Moreover, the Commission has directed the NRC staff to establish a senior level agency task force to conduct a methodical and systematic review of our processes. The task force will conduct both short-term and long-term analyses of the lessons that can be learned from the situation in Japan. As part of this assessment, the NRC will determine if any changes should be made to our programs and regulations to enhance protection of public health and safety and the environment. Areas of investigation will include the ability to protect against natural disasters, response to station blackouts, severe accident and spent fuel accident management, and emergency preparedness, among others. We continue to believe the plants operate safely, but will make any changes necessary based on the review we are conducting.

In your letter, you refer to Generic Issue (GI)-199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern U.S. on Existing Plants." GI-199 is one of the generic issues that the NRC is evaluating as part of our well-established program to continually update our regulations based upon new information. The NRC began a review of seismic hazards using GI-199 after learning that data from the U.S. Geological Survey indicate that estimates of the potential for earthquake hazards for some nuclear power plants in the central and eastern United States are larger than previous estimates. While we have determined that currently operating plants remain safe, we also determined that the recent seismic data and models warrant further study and analysis. This further analysis will allow the NRC to better understand the current seismic hazards and to decide whether to make further improvements to licensed facilities in accordance with Title 10 of the *Code of Federal Regulations,* Section 50.109, "Backfitting." Further information on GI-199 is available on the NRC's Web site, www.nrc.gov.

The NRC considers evaluation of seismic hazards as part of ongoing regulatory activities; therefore, the NRC assesses seismic hazards as part of our operating experience and generic issues programs. As a result, the NRC does not separately reanalyze seismic hazards for the license renewal process. Your letter mentioned a 2008 study by the Lamont-Doherty Earth Observatory at Columbia University. The NRC has reviewed the study by Dr. Sykes and others, titled "Observations and Tectonic Setting of Historic and Instrumentally Located Earthquakes in the Greater New York City – Philadelphia Area," which was published in the *Bulletin of the Seismological Society of America* in August 2008. Although the NRC staff does not agree with some of the study's conclusions, we have reviewed that study for pertinent information.

As you may know, the NRC staff met with a New York State delegation, led by Lieutenant Governor Robert Duffy, on March 22, 2011. The New York delegation sought a better understanding of seismic implications for the Indian Point facility arising from the recent events in Japan. During that meeting, the NRC staff explained that the Japanese events would be evaluated as part of the NRC's oversight of the current operating licenses for IP2 and IP3, as these issues concern both the current license term as well as any period of extended operation. Further, the NRC staff agreed to a number of New York State requests, including that State inspectors be permitted to accompany the NRC staff when it performs seismic inspections at Indian Point, and that we would share with the State relevant non-proprietary data from our September 2010 seismic study. The NRC staff also agreed to give top priority to reviewing the Indian Point data we expect to receive sometime next year as a result of a data request to be made to a number of licensees regarding seismic issues. In addition, NRC Chairman Gregory Jaczko committed to personally visit the Indian Point facility in the coming weeks.

Your letter stated that many of the structures, systems, and components (SSCs) from Indian Point Nuclear Generating Station Unit 1 (IP1), which is permanently retired, are still used to support IP2 and IP3. You stated that this raises significant safety questions because IP1 was built to "inferior seismic specifications." The NRC has reviewed the use of IP1 SSCs at IP2 and IP3 in the past and found such use acceptable. All the safety-related systems at IP2 and IP3 are operable without reliance on IP1 systems. The only support system with any significance that is associated with IP1 is a backup non-safety-related diesel generator for IP2. This diesel is located in an IP1 building and can be used in the event of a fire or a failure of offsite power combined with a failure of all three of the safety-related emergency diesel generators (EDGs) at IP2 (i.e., station blackout). Because the EDGs are seismically qualified, to perform their safety function following a seismic event, there is no requirement that the backup diesel generator be seismically qualified. In this regard, the licensee has performed analyses to show that a seismic event will not cause IP1 structures to fail in a manner that would affect the safety-related systems at IP2 or IP3. Therefore, the NRC has concluded that this situation complies with NRC regulations.

Thank you for your interest in these matters.

Sincerely,

R. W. Borchardt

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Executive Director
for Operations

cc: Listserv

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/RA/

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